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14. ABSTRACT This document presents a summary of the facility-wide quarterly groundwater monitoring conducted during the October 2007 through July 2008 time frame. Included in the report are: <ul style="list-style-type: none"> <li>• Summary of the groundwater elevations and water level measurements taken for each of the wells sampled.</li> <li>• Results of well inspections conducted in July 2008.</li> <li>• Summary of well repair activities in 2008.</li> <li>• Analytical summary tables.</li> <li>• Discussion of analytes detected above the identified clean levels.</li> </ul>						
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**DRAFT**  
**FACILITY-WIDE GROUNDWATER MONITORING PROGRAM**  
**ANNUAL REPORT FOR 2008**

**RAVENNA ARMY AMMUNITION PLANT,  
RAVENNA, OHIO**

**MARC Contract Number W912QR-04-D-0036  
Delivery Order No. 0006**

**Prepared for:**

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**December 12, 2008**

## **FWGWMP Annual Report (Draft) 2008 Distribution List**

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Ohio EPA – Ohio EPA Twinsburg Office

OHARNG – RTLS/ENV – Ohio Army National Guard Ravenna Training and Logistics  
Site/Environmental

RVAAP – Ravenna Army Ammunition Plant

USACE – U.S. Army Corps of Engineers

USAEC – U.S. Army Environmental Center

EQM – Environmental Quality Management, Inc.

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Plate 2	Potentiometric Map of Unconsolidated Aquifer (July 2008)
Plate 3	Potentiometric Surface of Bedrock – Homewood and Sharon Aquifer (July 2008)

## LIST OF GENERAL ACRONYMS

1		
2		
3	AGS	Above Ground Surface
4	amsl	Above Mean Sea Level
5	AOC	Area of Concern
6	BGS	Below Ground Surface
7	BTOC	Bottom of Casing
8	CERCLA	Comprehensive Environmental Response Compensation and Liability Act
9	DOD	Department of Defense
10	EPA	Environmental Protection Agency
11	EQM	Environmental Quality Management, Inc.
12	°F	Degrees Fahrenheit
13	FWGWMP	Facility-wide Groundwater Monitoring Program
14	FWSAP	Facility-wide Sampling and Analysis Plan
15	GOCO	Government Owned, Contractor Operated
16	IRP	Installation Restoration Program
17	LCS	Laboratory Control Sample
18	LCG	Louisville Chemistry Guidelines
19	IDW	Investigation Derived Waste
20	µg/L	microgram per Liter
21	MARC	Multiple Award Remediation Contract
22	MCL	Maximum Contaminant Level
23	mw	Monitoring Well
24	NOAA	National Oceanographic and Atmospheric Administration
25	OHARNG	Ohio Army National Guard
26	PCB	Polychlorinated Biphenyl
27	PQLs	Practical Quantitation Limits
28	PRGs	Preliminary Remediation Goals
29	PVC	Polyvinyl Chloride
30	QAPP	Quality Assurance Project Plan
31	RCRA	Resource Conservation and Recovery Act
32	RI	Remedial Investigations
33	RLs	Reporting Limits
34	RTLS	Ravenna Training and Logistics Site
35	RVAAP	Ravenna Army Ammunition Plant
36	SVOC	Semi-volatile Organic Compound
37	TA	TestAmerica
38	USACE	U.S. Army Corps of Engineers
39	USDA	U.S. Department of Agriculture
40	USP&FO	United States Property and Fiscal Officer
41	VOC	Volatile organic compound
42		

**LIST OF AREA OF CONCERN ACRONYMS**

1		
2		
3	B12	Building 1200
4	BKG	Background
5	CBL	C-Block
6	CBP	Central Burn Pits
7	CP	Cobbs Pond
8	DA2	Demolition Area #2
9	EBG	Erie Burning Grounds
10	FBQ	Fuze and Booster Quarry
11	LNW	Landfill North of Winklepeck
12	LL	Load Line
13	MBS	Mustard Burial Site
14	NACA	National Advisory Committee for Aeronautics
15	NTA	NACA Test Area
16	RQL	Ramsdale Quarry Landfill
17	WBG	Winklepeck Burning Grounds
18		



## SECTION 1

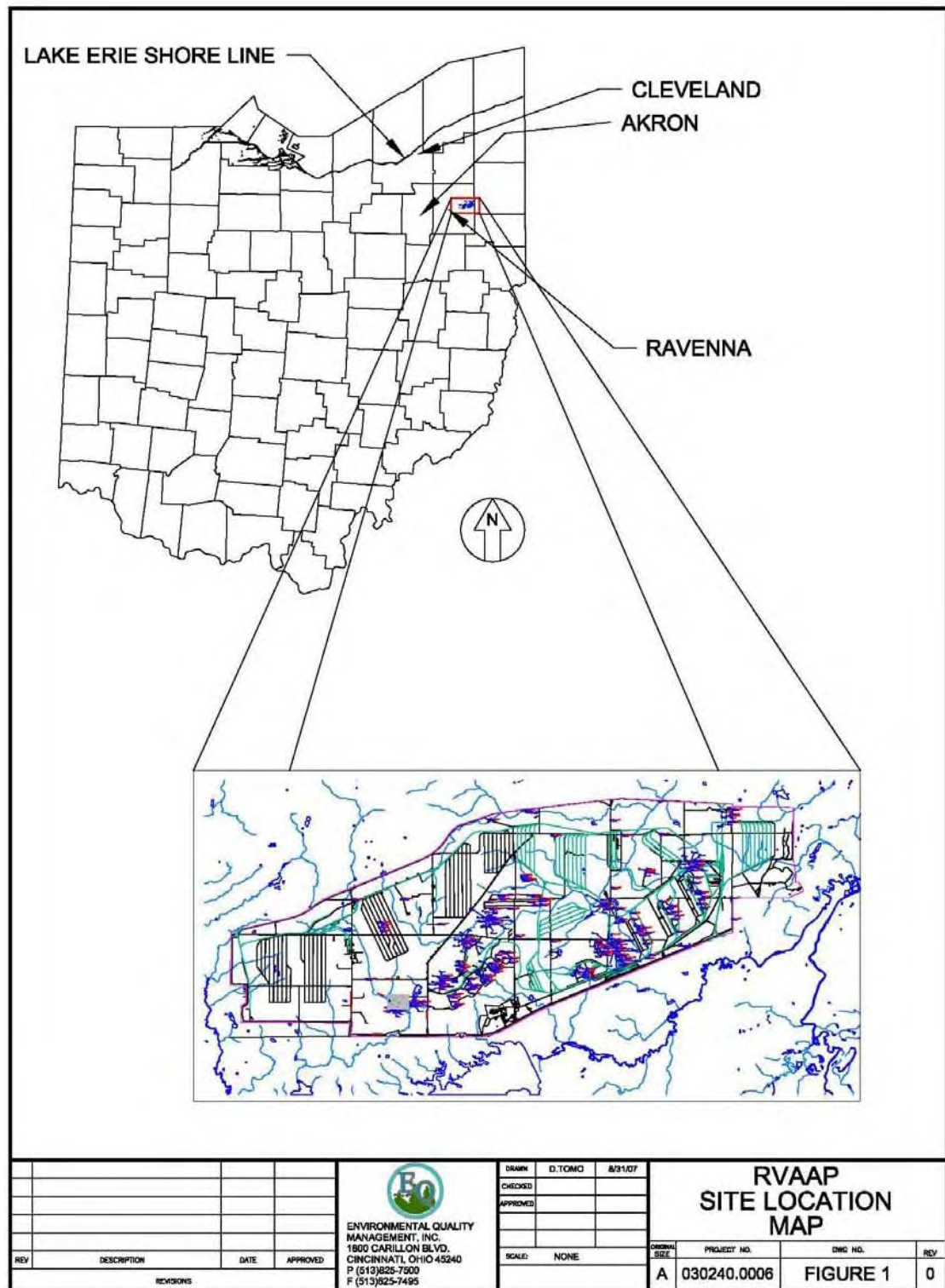
### INTRODUCTION

#### 1.1 Facility Description

Past Department of Defense (DOD) activities at the Ravenna Army Ammunition Plant (RVAAP) date to 1940 and include the manufacturing, loading, handling and storage of military explosives and ammunition. Until 1999, the RVAAP was identified as a 21,419-acre installation. The property boundary was resurveyed by the Ohio Army National Guard (OHARNG) over a two year period from 2002 and 2003 and the actual total acreage of the property was found to be 21,683.289 acres. As of February 2006, a total of 20,403 acres of the former 21,683 acre RVAAP have been transferred to the United States Property and Fiscal Officer (USP&FO) for Ohio for use by the OHARNG as a military training site. The current RVAAP consists of 1,280 acres in several distinct parcels scattered throughout the confines of the OHARNG Ravenna Training and Logistics Site (RTLS). The RVAAP and the RTLS are collocated on contiguous parcels of property and the RTLS perimeter fence completely encloses the remaining parcels of the RVAAP. The RTLS is in northeastern Ohio within Portage and Trumbull Counties, approximately 4.8 kilometers (3 miles) east-northeast of the city of Ravenna and approximately 1.6 kilometers (1 mile) northwest of the city of Newton Falls (Figure 1-1). The RVAAP portions of the property are solely located within Portage County. The RTLS (inclusive of the RVAAP) is a parcel of property approximately 17.7 kilometers (11 miles) long and 5.6 kilometers (3.5 miles) wide bounded by State Route 5, the Michael J. Kirwan Reservoir, and the CSX System Railroad on the south; Garret, McCormick, and Berry roads on the west; the Norfolk Southern Railroad on the north; and State Route 534 on the east (see Figures 1-1 and 1-2). The RTLS is surrounded by several communities: Windham on the north; Garrettsville 9.6 kilometers (6 miles) to the northwest; Newton Falls 1.6 kilometers (1 mile) to the southeast; Charlestown to the southwest; and Wayland 4.8 kilometers (3 miles) to the south. When the RVAAP was operational the RTLS did not exist and the entire 21,683-acre parcel was a government-owned, contractor-operated (GOCO) industrial facility. The RVAAP Installation Restoration Program (IRP) encompasses investigation and cleanup of past activities over the entire 21,683 acres of the former RVAAP and therefore references to the RVAAP in this document are considered to be inclusive of the historical extent of the RVAAP, which is inclusive of the combined acreages of the current RTLS and RVAAP, unless otherwise specifically stated.

#### 1.2 Project Description

In 2004 the U.S. Army and the Ohio Environmental Protection Agency (EPA) finalized the Facility-wide Groundwater Monitoring Program (FWGWMP) Plan which details the requirements of the program. The FWGWMP was initiated in 2005 with three consecutive quarters of FWGWMP well



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3

**Figure 1-1 General Location Map**





1  
2 **Figure 1-2 RVAAP Facility Map**

sampling. Quarterly sampling has continued in 2006 and 2007. All FWGWMP wells were sampled once every quarter, with the exception of the Ramsdell Quarry Landfill (RQL) wells RQLmw-007, -008, and -009, and two Demolition Area #2 (DA2) wells, DA2mw-DET3 and -DET4. These are wells monitored under the Resource Conservation and Recovery Act (RCRA) program. The RQL and DA2 wells were sampled twice a year, during the second (April) and fourth (October) sampling events.

Details of the program design and requirements are contained in the *RVAAP Facility-Wide Groundwater Monitoring Program Plan*, (Portage Environmental, September 2004). This document contains the Facility-wide Sampling and Analysis Plan (FWSAP), Site Safety and Health Plan, and Quality Assurance Project Plan (QAPP) addenda that pertain to the proposed work. Additional details pertaining to performance of field and laboratory activities are contained in the *RVAAP Facility-Wide Sampling and Analysis Plan/Quality Assurance Project Plan (FWSAP)*, (SAIC, March 2001). As detailed in the FWGWMP Plan, the initial monitoring program consisted of the sampling of 36 wells specified in Table 4-1 of the FWGWMP Plan. Fourteen of these wells were “Background Wells” and the remainder were wells situated at various Areas of Concern (AOCs) at RVAAP. The first sampling event for the FWGWMP was conducted in April 2005.

By agreement with the U.S. Army and the Ohio EPA and in accordance with Amendment No. 1 to the FWGWMP Plan, the Annual Report for 2008 summarizes the October 2007, as well as the January, April, and July, 2008 sampling events. Amendment No. 1 changed the annual reporting period from 1 January – 31 December to 1 October – 30 September. The change to the program was made so that the Annual Report for 2006 would include monitoring activities performed in the 4th quarter of 2005, and the 1st, 2nd, and 3rd quarters of 2006. Subsequent annual monitoring periods would also follow this pattern, such as the 2007 annual report, which covers the fourth quarter of 2006 and the first, second, and third quarters of 2007. This change was made because it was discovered that requiring the 4th quarter data to be included in the current years’ Annual Report did not allow sufficient time to collect samples, analyze samples, verify and validate data, assess results and still make the December deadline for including these results in the Annual Report.

The results of the sampling events covered under this Annual Report are presented in the following documents:

- *Facility-Wide Groundwater Monitoring Program, Report on the October 2007 Sampling Event, Ravenna Army Ammunition Plant, Ravenna, Ohio*, dated April 2008 (EQM).
- *Facility-Wide Groundwater Monitoring Program, Report on the January 2008 Sampling Event, Ravenna Army Ammunition Plant, Ravenna, Ohio*, dated August 2008 (EQM).

- *Facility-Wide Groundwater Monitoring Program, Report on the April 2008 Sampling Event, Ravenna Army Ammunition Plant, Ravenna, Ohio, dated November 2008 (EQM).*
- *Draft Facility-Wide Groundwater Monitoring Program, Report on the July 2008 Sampling Event, Ravenna Army Ammunition Plant, Ravenna, Ohio, dated October 2008 (EQM).*

The results for the October 2008 sampling event will be submitted in a separate document and will be summarized in the Annual Report for 2009.

### **1.3 Summary of the Scope of Work for 2008**

Environmental Quality Management, Inc. (EQM) has been contracted (MARC Contract Number W912QR-04-D-0036) by the U.S. Army Corps of Engineers, Louisville District (USACE) to conduct the 2007 FWGWMP monitoring program beginning in April 2007. Prior to the April 2007 monitoring event, SpecPro conducted groundwater monitoring activities under the FWGWMP. The objective of this project is to continue quarterly monitoring under the RVAAP Facility-wide Groundwater Monitoring Program. The following tasks were performed in accordance with specifications contained in the FWGWMP Plan, the FWSAP, and the Scope of Work written by the USACE:

- Performed groundwater sampling of select wells for four consecutive quarters. The wells sampled are identified in Section 1.5.1 of this report. The wells were sampled by EQM. RQL (3 wells) and DA2 wells (DET-3 and DET-4) were only sampled in October 2007 and April 2008 as required.
- Water-level measurements from the 237 RVAAP monitoring wells were measured immediately prior to the July 2008 sampling event which were used to generate updated potentiometric maps. The next scheduled water level measurement event for all wells is January 2009.
- Performed laboratory analyses and data validation for the collected samples.
- Reduced quarterly data and preparation of individual sampling event reports.
- Prepared the requisite Investigation Derived Waste (IDW) characterization, and disposal report.
- Prepared the 2008 annual report, including the overall program review requirement.
- Performed maintenance on selected groundwater monitoring wells.



## 1.4 Annual Report Requirements and Report Presentation

This report presents the FWGWMP 2008 Annual Report. The report is structured in the following way:

- Section 1 – Introduction
- Section 2 – Summary of Monitoring Wells Installed or Abandoned in 2008
- Section 3 – Summary of Annual FWGWMP Events
- Section 4 – Summary and Assessment of Annual FWGWMP Analytical Results
- Section 5 – FWGWMP Annual Recommendations/Review
- Section 6 – References

The appendices contain the following items:

- Appendix A – Correspondence Documenting the Change in Wells to be Sampled in 2008
- Appendix B – List of Wells Sampled
- Appendix C – Perchlorate Addendum and Ohio EPA Approval Letter
- Appendix D – Benzoic Acid Approval Letter
- Appendix E – Water Level Measurement Field Sheets
- Appendix F – Well Inspection Sheets
- Appendix G – Time-Trend Graphs
- Appendix H – Maps of FWGWMP Study Areas
- Appendix I - Reporting Limits that Currently Do Not Meet the RVAAP QAPP Practical Quantitation Limits (PQLs) and/or Region 9 Preliminary Remediation Goals (PRGs)

The following lists the information required for the annual report as detailed in Section 5.2 of the FWGWMP Plan, as well as where this information is presented in this report:

- An evaluation of the current groundwater flow direction(s) based on water-level elevation data collected in July 2008 is discussed in Section 3.1.
- An evaluation of the trends of contamination detected in groundwater, as well as an assessment of the effectiveness of any groundwater remediation activities is presented in Section 4.0.
- The plots of concentration trends are presented in Appendix G, and are discussed in Section 4.0
- The facility map is presented in Section 1.0. The monitoring well network map and groundwater flow maps are presented in Plates 1, 2, and 3. Additional FWGWMP monitoring well locations are shown in Appendix H.
- The results of the monitoring well inspections are presented in Appendix F and summarized in Section 3.2.

- FWGWMP annual recommendations and review are presented in Section 5.0.

## **1.5 Changes to the FWGWMP in 2008**

The following changes were made to the FWGWMP during sampling and analysis for the 2008 reporting period.

### **1.5.1 Changes to Wells Being Monitored**

During this reporting period the wells sampled during the October 2007 were those presented in the FWGWMP. Beginning with the January 2008 event the wells previously sampled (from 2005 through October 2007) were dropped from the monitoring program and replaced as detailed below.

On October 22, 2007 the USACE submitted to the Ohio EPA the *Draft Proposal to Update the Facility-Wide Ground Water Monitoring Program* (USACE October 2007) at the Ravenna Army Ammunition Plant. This proposal presented recommendations for modifications to the FWGWMP, the Director's Final Findings and Orders, and the Conceptual Plan in Appendix F of the Findings and Orders as presented below.

Section 3.1.2.2 of the FWGWMP Plan establishes a protocol for adding and removing wells from the FWGWMP: "Future wells installed as part of individual AOC investigations conducted under the ongoing Comprehensive Environmental Response Compensation and Liability Act (CERCLA) process at RVAAP will be evaluated for incorporation into the FWGWMP upon completion of at least four quarterly groundwater sampling events to be conducted as part of the Remedial Investigation (RI) phase at each AOC. The frequency of the initial sampling events may be other than quarterly if agreed upon by the Army and Ohio EPA". Based on this protocol the USACE notified the Ohio EPA on December 12, 2007 that the wells to be sampled would be changed effective with the January 2008 monitoring event. The Ohio EPA provided concurrence with this change in an email dated January 8, 2008. The Ohio EPA was notified of an additional change on February 27, 2008 increasing the number of wells to be sampled for the April 2008 event. The Ohio EPA was notified on March 21, 2008 that the number of FWGWMP wells to be sampled in April 2008 would be increased to 132 plus the 5 RCRA wells sampled semi-annually. Copies of this correspondence are presented in Appendix A.

The list of FWGWMP wells monitored for the October 2007 through July 2008 events are presented in Appendix B.

### **1.5.2 Perchlorate Analysis**

Performed perchlorate analysis per the modification approved by the Ohio EPA on August 6, 2007. Appendix C presents the perchlorate sampling modification and Ohio

1 EPA approval Letter. Perchlorate analysis was performed on the wells identified in  
2 Section 4 of this report.

### 3 4 **1.5.3 Reporting Limit Change**

5  
6 As potassium is naturally occurring in environmental samples, and has consistently been  
7 above the specified QAPP reporting limit (RL) in historical RVAAP samples, the need to  
8 detect potassium concentrations down to the level specified in the QAPP may not be  
9 necessary. Given the background criteria for filtered samples (5,770 µg/L) for bedrock  
10 wells, and 2,890 µg/L for unconsolidated wells ) as well as the reporting limit  
11 considerations described above, it was requested that the reporting limit in the  
12 FWGWMP for potassium be raised to 1,000 µg/L. This change to the reporting limit was  
13 approved by the Ohio EPA in a letter dated March 6, 2008.

14  
15 No other changes to the FWGWMP were implemented during the 2008 reporting period.  
16

## 17 18 **1.6 Changes to the FWGWMP for 2009**

19  
20 The LCG specifies control limits for Laboratory Control Sample (LCS) recoveries. The  
21 Army and EQM have requested to use these limits in the process of evaluating data with  
22 the exception of an 8270C compound (Benzoic acid) which is commonly accepted as  
23 being a poor responder. The specified liquid LCS recovery limit from the LCG is 30-  
24 136%. Based upon EQM's review of TestAmerica's (TA) LCS control charts, recoveries  
25 in LCS samples for this compound is rarely above the Louisville Chemistry Guidelines  
26 (LCG) lower control limit. The control charts demonstrate that the calculated lower  
27 control limit would actually be below 0%. However, based upon sound laboratory  
28 practice, TA has set an in-house lower control limit at 10%. Historically for this project,  
29 TA has automatically re-extracted entire batches of 8270 samples when recoveries for  
30 this compound have been below in-house limits.

31  
32 It was proposed to the Ohio EPA to use laboratory in-house limits (i.e., lower control  
33 limits = 10%) for Benzoic acid when evaluating data specific to this project. This request  
34 was approved by the Ohio EPA in a letter dated September 18, 2008. A copy of this  
35 approval is presented in Appendix D.



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## **SECTION 2**

### **SUMMARY OF WELLS INSTALLED OR ABANDONED IN 2008**

No FWGWMP wells were installed or abandoned during the 2008 reporting period.

## SECTION 3

### SUMMARY OF 2007 FWGWMP EVENTS

#### 3.1 Groundwater Elevation Monitoring

Groundwater elevations were measured at 237 RVAAP monitoring wells on June 30 and July 1, 2008. The locations of monitoring wells at RVAAP are shown on Plate 1. The water level measurement field sheets are presented in Appendix E.

Water-level measurements were made in accordance with procedures in Section 4.3.3.1 of the RVAAP Facility-Wide Sampling and Analysis Plan (SAIC, 2001). Water-level measurements were made from the top of the inner casing to the top of the groundwater surface using an electronic measuring tape. The depth to the bottom of the well from the top of the inner casing also was measured with the electronic measuring tape. Depth-to-water and groundwater elevations for the RVAAP wells are presented in Table 3-1. Well construction details and depth to well bottom are presented in Table 3-2.

Each monitoring well was inspected at the time of water-level measurement and the results are discussed in Section 3.2. The monitoring well inspection sheets are presented in Appendix F.

Two RVAAP-wide potentiometric maps have been prepared. These maps represent the upper unconsolidated aquifer (Plate 2) and the deeper bedrock system (Plate 3). The bedrock system is differentiated by geologic formation to represent the Homewood Member of the Pennsylvania-age Pottsville Formation in the western half of the facility and the Sharon Member of the Pottsville Formation in the eastern half of the facility, per methods suggested by the USACE (Hockett, 2007). Note that 4 wells in Load Line 12 have been designated as being completed in the Sharon Shale. These four wells were not used to prepare the potentiometric maps.

Because of the variability of monitoring well density at RVAAP, the facility-wide potentiometric maps are general representations of groundwater flow patterns. If desired, the data collect in July 2008 and presented in Table 3-1 can be used to create a more detailed representation of potentiometric conditions for individual areas (e.g., southeastern (Load Lines 1 through 4 area) or central (Fuze and Booster Quarry, Demolition Area 2, and Winklepeck Burning Grounds, etc.) of RVAAP.

Plate 2 represents facility-wide groundwater flow in wells completed into the unconsolidated aquifer. The unconsolidated aquifer includes glacial till, glacial outwash, alluvium, and soil. Plate 2 illustrates that the potentiometric surface (i.e., water table) of the unconsolidated aquifer is a subdued expression of the surface topography of the RVAAP. Groundwater potentiometric elevation decreases approximately 207 ft from

*RVAAP Facility-Wide Groundwater Monitoring Program 2008 Annual Report*

**Table 3-1. Depth to Water and Potentiometric Elevation (July 2008)**

RVAAP Area	Well ID	Monitored Zone	TOC Elevation (ft, amsl)	July 2008 Depth to Water (ft, BTOC)	Potentiometric Elevation July 2008 (ft, amsl)
Background	BKGmw-004	Unconsolidated	967.66	13.14	954.52
	BKGmw-005	Unconsolidated	1151.94	12.02	1139.92
	BKGmw-006	Sharon	1028.88	22.38	1006.50
	BKGmw-008	Sharon	972.90	16.69	956.21
	BKGmw-010	Sharon	1006.18	16.46	989.72
	BKGmw-012	Sharon	1000.07	9.41	990.66
	BKGmw-013	Unconsolidated	989.09	12.27	976.82
	BKGmw-015	Sharon	1040.40	48.80	991.60
	BKGmw-016	Unconsolidated	1100.92	6.34	1094.58
	BKGmw-017	Unconsolidated	1135.30	18.10	1117.20
	BKGmw-018	Sharon	1045.56	15.62	1029.94
	BKGmw-019	Unconsolidated	1110.74	19.99	1090.75
	BKGmw-020	Unconsolidated	1067.50	9.41	1058.09
	BKGmw-021	Unconsolidated	974.66	13.37	961.29
Load Line 1	LL1mw-063	Sharon	994.84	23.94	970.90
	LL1mw-064	Unconsolidated	935.10	2.12	932.98
	LL1mw-065	Unconsolidated	944.41	11.85	932.56
	LL1mw-067	Sharon	980.36	16.95	963.41
	LL1mw-078	Sharon	995.84	30.22	965.62
	LL1mw-079	Sharon	997.87	30.26	967.61
	LL1mw-080	Sharon	996.27	9.68	986.59
	LL1mw-081	Sharon	998.92	29.57	969.35
	LL1mw-082	Sharon	1006.45	27.28	979.17
	LL1mw-083	Sharon	995.20	31.20	964.00
	LL1mw-084	Sharon	998.73	27.76	970.97
	LL1mw-085	Sharon	996.84	33.53	963.31
Load Line 2	LL2mw-059	Sharon	966.67	12.75	953.92
	LL2mw-060	Sharon	961.57	9.77	951.80
	LL2mw-261	Sharon	1011.40	7.09	1004.31
	LL2mw-262	Sharon	1012.62	8.55	1004.07
	LL2mw-263	Sharon	1011.47	8.63	1002.84
	LL2mw-264	Sharon	1011.88	7.02	1004.86
	LL2mw-265	Sharon	961.24	9.33	951.91
	LL2mw-266	Sharon	1016.28	11.87	1004.41
	LL2mw-267	Sharon	1014.81	9.92	1004.89
	LL2mw-268	Sharon	1017.28	15.02	1002.26
	LL2mw-269	Sharon	1011.62	17.01	994.61
	LL2mw-270	Sharon	1010.18	9.25	1000.93
Load Line 3	LL3mw-232	Sharon	1000.41	19.61	980.80
	LL3mw-233	Sharon	1004.36	26.28	978.08
	LL3mw-234	Sharon	1006.56	10.77	995.79
	LL3mw-235	Sharon	1009.94	18.30	991.64
	LL3mw-236	Sharon	1011.17	16.40	994.77
	LL3mw-237	Sharon	1005.57	15.98	989.59
	LL3mw-238	Sharon	1006.91	15.90	991.01
	LL3mw-239	Sharon	1003.50	25.26	978.24
	LL3mw-240	Sharon	1007.52	28.80	978.72
	LL3mw-241	Sharon	994.65	12.12	982.53
	LL3mw-242	Sharon	999.32	16.16	983.16
	LL3mw-243	Sharon	991.16	15.63	975.53

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**Table 3-1. Depth to Water and Potentiometric Elevation (July 2008)**

RVAAP Area	Well ID	Monitored Zone	TOC Elevation (ft, amsl)	July 2008 Depth to Water (ft, BTOC)	Potentiometric Elevation July 2008 (ft, amsl)
Load Line 4	LL4mw-193	Unconsolidated	982.92	7.32	975.60
	LL4mw-194	Unconsolidated	983.76	8.78	974.98
	LL4mw-195	Unconsolidated	982.59	10.82	971.77
	LL4mw-196	Unconsolidated	984.55	12.85	971.70
	LL4mw-197	Unconsolidated	985.46	14.06	971.40
	LL4mw-198	Unconsolidated	983.42	8.37	975.05
	LL4mw-199	Unconsolidated	977.28	7.02	970.26
Load Line 5	LL4mw-200	Unconsolidated	987.93	17.47	970.46
	LL5mw-001	Homewood	1127.92	20.19	1107.73
	LL5mw-002	Homewood	1128.68	21.90	1106.78
	LL5mw-003	Unconsolidated	1127.70	19.59	1108.11
	LL5mw-004	Homewood	1125.81	18.15	1107.66
	LL5mw-005	Homewood	1129.42	21.70	1107.72
Load Line 6	LL5mw-006	Homewood	1128.00	20.32	1107.68
	LL6mw-001	Unconsolidated	1124.16	13.92	1110.24
	LL6mw-002	Unconsolidated	1129.36	21.19	1108.17
	LL6mw-003	Homewood	1125.38	16.14	1109.24
	LL6mw-004	Homewood	1125.39	17.25	1108.14
	LL6mw-005	Homewood	1120.47	12.20	1108.27
	LL6mw-006	Unconsolidated	1124.37	14.05	1110.32
Load Line 7	LL6mw-007	Homewood	1115.62	6.82	1108.80
	LL7mw-001	Homewood	1129.64	20.26	1109.38
	LL7mw-002	Homewood	1129.55	15.25	1114.30
	LL7mw-003	Homewood	1120.84	11.19	1109.65
	LL7mw-004	Homewood	1126.32	14.55	1111.77
	LL7mw-005	Homewood	1135.87	21.43	1114.44
Load Line 8	LL7mw-006	Homewood	1123.56	10.92	1112.64
	LL8mw-001	Unconsolidated	1121.46	11.24	1110.22
	LL8mw-002	Unconsolidated	1124.51	18.03	1106.48
	LL8mw-003	Unconsolidated	1119.05	11.77	1107.28
	LL8mw-004	Unconsolidated	1115.75	10.79	1104.96
	LL8mw-005	Homewood	1115.73	13.24	1102.49
Load Line 9	LL8mw-006	Homewood	1117.17	19.75	1097.42
	LL9mw-001	Homewood	1134.62	15.79	1118.83
	LL9mw-002	Homewood	1127.30	12.60	1114.70
	LL9mw-003	Homewood	1135.76	12.70	1123.06
	LL9mw-004	Homewood	1131.83	20.45	1111.38
	LL9mw-005	Homewood	1130.93	16.59	1114.34
Load Line 10	LL9mw-006	Homewood	1129.88	19.20	1110.68
	LL9mw-007	Homewood	1119.99	9.57	1110.42
	LL10mw-001	Homewood	1132.77	23.74	1109.03
	LL10mw-002	Homewood	1127.13	17.69	1109.44
	LL10mw-003	Homewood	1130.28	21.34	1108.94
	LL10mw-004	Homewood	1122.39	13.38	1109.01
Load Line 10	LL10mw-005	Homewood	1125.67	15.69	1109.98
	LL10mw-006	Unconsolidated	1123.83	12.63	1111.20

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**Table 3-1. Depth to Water and Potentiometric Elevation (July 2008)**

RVAAP Area	Well ID	Monitored Zone	TOC Elevation (ft, amsl)	July 2008 Depth to Water (ft, BTOC)	Potentiometric Elevation July 2008 (ft, amsl)
Load Line 11	LL11mw-001	Unconsolidated	1100.16	9.74	1090.42
	LL11mw-002	Unconsolidated	1080.00	2.82	1077.18
	LL11mw-003	Unconsolidated	1088.48	2.49	1085.99
	LL11mw-004	Unconsolidated	1084.72	1.55	1083.17
	LL11mw-005	Unconsolidated	1079.40	7.89	1071.51
	LL11mw-006	Unconsolidated	1086.50	4.71	1081.79
	LL11mw-007	Unconsolidated	1082.00	14.30	1067.70
	LL11mw-008	Unconsolidated	1087.74	3.04	1084.70
	LL11mw-009	Unconsolidated	1091.54	3.85	1087.69
	LL11mw-010	Unconsolidated	1082.68	4.60	1078.08
Load Line 12	LL12mw-088	Unconsolidated	981.06	6.23	974.83
	LL12mw-107	Unconsolidated	980.15	8.83	971.32
	LL12mw-113	Sharon Shale	980.18	6.28	973.90
	LL12mw-128	Unconsolidated	978.24	9.38	968.86
	LL12mw-153	Unconsolidated	977.85	5.87	971.98
	LL12mw-154	Unconsolidated	979.06	8.29	970.77
	LL12mw-182	Unconsolidated	984.42	9.61	974.81
	LL12mw-183	Sharon Shale	982.98	11.73	971.25
	LL12mw-184	Unconsolidated	983.16	11.97	971.19
	LL12mw-185	Unconsolidated	981.31	6.93	974.38
	LL12mw-186	Sharon Shale	978.31	5.57	972.74
	LL12mw-187	Unconsolidated	979.94	9.06	970.88
	LL12mw-188	Unconsolidated	980.63	5.63	975.00
	LL12mw-189	Sharon Shale	978.04	5.08	972.96
	LL12mw-242	Unconsolidated	981.20	8.75	972.45
	LL12mw-243	Unconsolidated	980.79	8.42	972.37
	LL12mw-244	Unconsolidated	980.65	9.70	970.95
	LL12mw-245	Unconsolidated	980.04	7.16	972.88
	LL12mw-246	Unconsolidated	984.83	15.85	968.98
Atlas Scrap Yard	ASYmw-001	Sharon	981.13	11.43	969.70
	ASYmw-002	Sharon	985.24	13.64	971.60
	ASYmw-003	Sharon	982.21	12.40	969.81
	ASYmw-004	Sharon	979.66	9.42	970.24
	ASYmw-005	Sharon	979.80	8.18	971.62
	ASYmw-006	Sharon	983.01	13.62	969.39
	ASYmw-007	Unconsolidated	984.16	14.69	969.47
	ASYmw-008	Unconsolidated	978.85	5.56	973.29
	ASYmw-009	Sharon	982.70	12.29	970.41
	ASYmw-010	Unconsolidated	981.05	12.84	968.21
Building 1200	B12mw-010	Sharon	1005.92	17.19	988.73
	B12mw-011	Sharon	1006.70	19.32	987.38
	B12mw-012	Sharon	1006.32	18.71	987.61
C-Block Quarry	CBLmw-001	Homewood	1181.08	40.65	1140.43
	CBLmw-002	Homewood	1175.24	35.31	1139.93
	CBLmw-003	Homewood	1175.06	33.13	1141.93
	CBLmw-004	Homewood	1174.84	33.59	1141.25

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**Table 3-1. Depth to Water and Potentiometric Elevation (July 2008)**

RVAAP Area	Well ID	Monitored Zone	TOC Elevation (ft, amsl)	July 2008 Depth to Water (ft, BTOC)	Potentiometric Elevation July 2008 (ft, amsl)
Central Burn Pits	CBPmw-001	Unconsolidated	975.84	12.67	963.17
	CBPmw-002	Unconsolidated	970.04	7.86	962.18
	CBPmw-003	Unconsolidated	974.67	11.71	962.96
	CBPmw-004	Unconsolidated	971.13	10.64	960.49
	CBPmw-005	Unconsolidated	971.59	11.98	959.61
	CBPmw-006	Unconsolidated	967.64	7.70	959.94
	CBPmw-007	Unconsolidated	976.37	15.32	961.05
	CBPmw-008	Unconsolidated	973.19	15.61	957.58
Cobbs Pond	CPmw-001	Unconsolidated	975.26	4.50	970.76
	CPmw-002	Unconsolidated	972.31	0.99	971.32
	CPmw-003	Unconsolidated	972.92	2.12	970.80
	CPmw-004	Unconsolidated	981.20	11.89	969.31
	CPmw-005	Unconsolidated	973.58	11.01	962.57
	CPmw-006	Unconsolidated	965.13	8.78	956.35
Demolition Area 2	DET-001B	Unconsolidated	1065.85	22.78	1043.07
	DET-002	Unconsolidated	1061.24	32.75	1028.49
	DET-003	Unconsolidated	1036.81	9.72	1027.09
	DET-004	Unconsolidated	1038.68	10.93	1027.75
	DA2mw-104	Unconsolidated	1073.89	20.52	1053.37
	DA2mw-105	Unconsolidated	1045.34	3.58	1041.76
	DA2mw-106	Unconsolidated	1043.79	5.25	1038.54
	DA2mw-107	Unconsolidated	1041.63	7.05	1034.58
	DA2mw-108	Unconsolidated	1032.36	6.20	1026.16
	DA2mw-109	Unconsolidated	1071.29	13.77	1057.52
	DA2mw-110	Unconsolidated	1063.78	8.93	1054.85
	DA2mw-111	Unconsolidated	1042.12	4.26	1037.86
	DA2mw-112	Unconsolidated	1037.44	7.82	1029.62
	DA2mw-113	Unconsolidated	1037.11	8.38	1028.73
Erie Burning Grounds	EBGmw-123	Unconsolidated	947.82	9.57	938.25
	EBGmw-124	Unconsolidated	941.39	3.19	938.20
	EBGmw-125	Unconsolidated	949.89	11.72	938.17
	EBGmw-126	Unconsolidated	940.61	2.29	938.32
	EBGmw-127	Unconsolidated	943.07	6.35	936.72
	EBGmw-128	Unconsolidated	945.13	6.82	938.31
	EBGmw-129	Unconsolidated	944.36	6.13	938.23
	EBGmw-130	Unconsolidated	944.00	6.70	937.30
Fuze and Booster Quarry	FBQmw-166	Unconsolidated	1108.86	5.15	1103.71
	FBQmw-167	Unconsolidated	1115.90	4.89	1111.01
	FBQmw-168	Homewood	1133.91	12.24	1121.67
	FBQmw-169	Homewood	1120.58	6.88	1113.70
	FBQmw-170	Homewood	1142.26	18.64	1123.62
	FBQmw-171	Homewood	1143.55	18.12	1125.43
	FBQmw-172	Homewood	1150.09	25.78	1124.31
	FBQmw-173	Homewood	1165.94	42.25	1123.69
	FBQmw-174	Homewood	1139.97	16.02	1123.95
	FBQmw-175	Homewood	1140.73	16.88	1123.85
	FBQmw-176	Unconsolidated	1131.91	9.10	1122.81
	FBQmw-177	Homewood	1128.57	12.75	1115.82

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**Table 3-1. Depth to Water and Potentiometric Elevation (July 2008)**

RVAAP Area	Well ID	Monitored Zone	TOC Elevation (ft, amsl)	July 2008 Depth to Water (ft, BTOC)	Potentiometric Elevation July 2008 (ft, amsl)
Landfill North of Winklepeck	LNWmw-024	Unconsolidated	1038.00	12.10	1025.90
	LNWmw-025	Unconsolidated	1029.13	4.96	1024.17
	LNWmw-026	Unconsolidated	1027.80	5.63	1022.17
	LNWmw-027	Unconsolidated	1027.13	6.72	1020.41
NACA Test Area	NTAmw-107	Unconsolidated	1080.30	12.75	1067.55
	NTAmw-108	Unconsolidated	1085.62	17.79	1067.83
	NTAmw-109	Unconsolidated	1079.84	12.12	1067.72
	NTAmw-110	Unconsolidated	1082.62	14.30	1068.32
	NTAmw-111	Unconsolidated	1080.94	3.89	1077.05
	NTAmw-112	Unconsolidated	1078.33	8.96	1069.37
	NTAmw-113	Unconsolidated	1075.68	6.95	1068.73
	NTAmw-114	Unconsolidated	1078.71	6.17	1072.54
	NTAmw-115	Unconsolidated	1089.65	14.05	1075.60
	NTAmw-116	Unconsolidated	1094.33	6.35	1087.98
	NTAmw-117	Unconsolidated	1094.54	13.65	1080.89
	NTAmw-118	Unconsolidated	1081.44	8.77	1072.67
Ramsdell Quarry Landfill	RQLmw-006	Sharon	995.39	33.09	962.30
	RQLmw-007	Sharon	965.91	5.16	960.75
	RQLmw-008	Sharon	966.08	5.20	960.88
	RQLmw-009	Sharon	964.58	3.97	960.61
	RQLmw-010	Sharon	982.14	24.23	957.91
	RQLmw-011	Sharon	976.57	20.90	955.67
	RQLmw-012	Sharon	977.65	20.72	956.93
	RQLmw-013	Sharon	980.71	24.32	956.39
	RQLmw-014	Sharon	973.49	19.03	954.46
	RQLmw-015	Sharon	991.26	29.49	961.77
	RQLmw-016	Sharon	996.60	33.80	962.80
	RQLmw-017	Sharon	991.23	28.23	963.00
Winklepeck Burning Grounds	WBGmw-005	Unconsolidated	1054.70	5.83	1048.87
	WBGmw-006	Unconsolidated	1014.66	7.99	1006.67
	WBGmw-007	Unconsolidated	1000.59	17.37	983.22
	WBGmw-008	Unconsolidated	1008.21	14.99	993.22
	WBGmw-009	Unconsolidated	1047.53	13.59	1033.94
	WBGmw-010	Unconsolidated	1069.85	8.06	1061.79
	WBGmw-011	Unconsolidated	1072.38	10.61	1061.77
	WBGmw-012	Unconsolidated	1079.11	15.61	1063.50
	WBGmw-013	Unconsolidated	1071.70	10.49	1061.21
	WBGmw-014	Unconsolidated	996.78	16.33	980.45
	WBGmw-015	Unconsolidated	1011.60	12.56	999.04
	WBGmw-016	Unconsolidated	997.03	17.12	979.91
	WBGmw-017	Unconsolidated	1006.62	9.13	997.49
Suspected Mustard Agent Burial Site	MBS-001	Unconsolidated	1082.20	17.59	1064.61
	MBS-002	Unconsolidated	1083.22	18.01	1065.21
	MBS-003	Unconsolidated	1084.45	18.53	1065.92
	MBS-004	Unconsolidated	1081.80	16.67	1065.13
	MBS-005	Unconsolidated	1082.42	17.85	1064.57
	MBS-006	Unconsolidated	1081.83	17.30	1064.53

*TOC = top of casing*

*amsl = above mean sea level*

*BTOC = below top of casing*

Table 3-2. Well Construction Details, Including July 2008 Depth to Bottom Measurements

RVAAP Area	Well ID	Ohio State Plane Easting	Ohio State Plane Northing	Ground Level Elevation <sup>a</sup>	Total Drilled Depth <sup>b</sup>	TOC Elevation <sup>a</sup>	Well Head Type <sup>c</sup>	Monitored Zone	Top of Screen (ft, BGS)	Bottom of Screen (ft, BGS)	Bottom of Inner Casing Plug or End Cap (ft, BGS)	Stickup height (ft, AGS)	Reported Bottom of Inner Casing (ft, BTOC)	July 2008 Measured Bottom of Inner Casing (ft, BTOC)	Sediment Accumulation (ft)	Description of Bottom
Background	BKGmw-004	2368852.97	569464.76	965.16	19.5	967.66	A	Unconsolidated	9.2	19.2	19.5	2.50	22.0	22.42	-0.42	Hard
	BKGmw-005	2340835.86	562288.45	1,149.44	19.0	1,151.94	A	Unconsolidated	8.2	18.2	18.5	2.50	21.0	21.07	-0.07	Hard
	BKGmw-006	2358643.96	571910.47	1,026.38	35.1	1,028.88	A	Sharon	24.7	34.7	35.1	2.50	37.6	37.69	-0.09	Hard
	BKGmw-008	2372741.08	569654.23	970.40	25.0	972.90	A	Sharon	14.7	24.7	25.0	2.50	27.5	27.58	-0.08	Hard
	BKGmw-010	2371372.86	565540.54	1,003.80	22.0	1,006.18	A	Sharon	8.9	18.9	19.2	2.38	21.6	22.10	-0.50	Hard
	BKGmw-012	2367795.23	563918.86	997.57	59.8	1,000.07	A	Sharon	38.6	59.6	59.8	2.50	62.3	62.06	0.24	Soft
	BKGmw-013	2361627.39	558269.16	986.59	25.5	989.09	A	Unconsolidated	15.2	25.2	25.5	2.50	28.0	28.08	-0.08	Hard
	BKGmw-015	2361482.22	569339.87	1,037.90	51.0	1,040.40	A	Sharon	30.1	50.1	50.4	2.50	52.9	53.17	-0.27	Hard
	BKGmw-016	2342407.08	553983.50	1,098.42	19.0	1,100.92	A	Unconsolidated	8.4	18.5	18.6	2.50	21.1	21.35	-0.25	Hard
	BKGmw-017	2346115.35	562452.04	1,132.80	34.8	1,135.30	A	Unconsolidated	23.2	33.3	33.6	2.50	36.1	36.15	-0.05	Hard
	BKGmw-018	2354993.91	570873.35	1,043.06	24.7	1,045.56	A	Sharon	14.5	24.5	24.7	2.50	27.2	27.70	-0.50	Hard
	BKGmw-019	2349882.14	559864.55	1,108.24	34.0	1,110.74	A	Unconsolidated	23.0	33.0	33.2	2.50	35.7	35.85	-0.15	Hard
	BKGmw-020	2357856.24	558756.24	1,065.00	30.7	1,067.50	A	Unconsolidated	20.5	30.5	30.7	2.50	33.2	33.31	-0.11	Hard
	BKGmw-021	2367622.95	571016.75	972.16	19.0	974.66	A	Unconsolidated	7.7	17.8	18.1	2.50	20.6	21.67	-1.07	Hard
Load Line 1	LL1mw-063	2376841.36	563650.53	992.20	27.4	994.84	A	Sharon	17.1	27.1	27.4	2.64	30.0	30.01	-0.01	Hard
	LL1mw-064	2380286.97	563118.74	932.32	18.4	935.10	A	Unconsolidated	8.0	18.0	18.4	2.78	21.1	21.01	0.09	Hard
	LL1mw-065	2380452.00	560916.92	941.53	20.5	944.41	A	Unconsolidated	10.2	20.2	20.5	2.88	23.4	23.01	0.39	Hard
	LL1mw-067	2376545.30	565201.14	977.55	22.8	980.36	A	Sharon	12.8	22.5	22.8	2.81	25.6	25.69	-0.09	Hard
	LL1mw-078	2376275.85	564623.87	993.40	38.7	995.84	A	Sharon	28.7	38.2	38.7	2.44	41.1	41.18	-0.08	Soft
	LL1mw-079	2376228.31	563739.63	995.30	29.5	997.87	A	Sharon	29.5	38.9	39.5	2.57	42.0	41.82	0.18	Hard
	LL1mw-080	2376845.07	562479.73	993.70	19.5	996.27	A	Sharon	9.5	19.0	19.5	2.57	22.0	22.28	-0.28	Hard
	LL1mw-081	2376672.66	563462.73	996.40	39.4	998.92	A	Sharon	29.4	38.9	39.4	2.52	41.9	41.96	-0.06	Hard
	LL1mw-082	2376977.38	562956.86	1,003.70	39.0	1,006.45	A	Sharon	28.9	38.5	39.0	2.75	41.8	41.48	0.32	Soft
	LL1mw-083	2377074.80	563612.75	992.80	39.3	995.20	A	Sharon	29.1	38.6	39.3	2.40	41.7	41.51	0.19	Hard
	LL1mw-084	2377316.02	563160.44	996.40	37.0	998.73	A	Sharon	26.7	36.3	37.0	2.33	39.3	38.97	0.33	Hard
	LL1mw-085	2377246.94	562046.25	994.30	42.1	996.84	A	Sharon	32.2	41.6	42.1	2.54	44.7	45.16	-0.46	Hard
	LL2mw-059	2375453.00	558020.00	964.33	19.5	966.67	A	Sharon	9.3	19.1	19.5	2.34	21.8	21.84	-0.04	Hard
Load Line 2	LL2mw-060	2375978.00	558022.00	958.93	18.3	961.57	A	Sharon	8.1	17.9	18.3	2.64	20.9	17.22	3.68	Soft
	LL2mw-261	2373317.81	561898.25	1,009.55	22.5	1,011.40	A	Sharon	9.8	19.8	20.0	1.85	21.9	22.55	-0.65	Hard
	LL2mw-262	2373970.79	562219.87	1,011.12	21.2	1,012.62	A	Sharon	10.6	20.6	20.8	1.50	22.3	22.75	-0.45	Hard
	LL2mw-263	2374289.51	561591.19	1,009.42	22.2	1,011.47	A	Sharon	10.8	20.8	21.0	2.05	23.0	22.65	0.35	Hard
	LL2mw-264	2374532.00	561173.60	1,010.10	20.5	1,011.88	A	Sharon	9.8	19.8	20.0	1.78	21.7	22.47	-0.77	Hard
	LL2mw-265	2375594.06	557972.91	959.47	22.5	961.24	A	Sharon	11.8	21.8	22.0	1.77	23.8	24.52	-0.72	Hard
	LL2mw-266	2373744.03	561981.86	1,014.09	20.5	1,016.28	A	Sharon	9.8	19.8	20.0	2.19	22.2	22.80	-0.60	Medium
	LL2mw-267	2373715.04	561393.22	1,012.81	20.5	1,014.81	A	Sharon	9.8	19.8	20.0	2.00	22.0	22.80	-0.80	Hard
	LL2mw-268	2374157.30	560831.04	1,015.47	28.8	1,017.28	A	Sharon	17.3	27.3	27.5	1.81	29.3	30.00	-0.70	Hard
	LL2mw-269	2374756.07	559484.12	1,009.49	28.0	1,011.62	A	Sharon	17.1	27.1	27.3	2.13	29.4	30.39	-0.99	Hard
	LL2mw-270	2372858.41	562655.93	1,009.93	20.5	1,010.18	A	Sharon	9.8	19.8	20.0	0.25	20.3	22.50	-2.20	Hard
	LL3mw-232	2369862.96	561365.91	998.59	37.8	1,000.41	A	Sharon	26.8	36.8	37.0	1.82	38.8	39.91	-1.11	Hard
	LL3mw-233	2369934.52	560750.41	1,002.47	31.1	1,004.36	A	Sharon	20.1	30.1	30.3	1.89	32.2	32.86	-0.66	Hard
Load Line 3	LL3mw-234	2370297.47	560058.89	1,004.47	20.5	1,006.56	A	Sharon	9.8	19.8	20.0	2.09	22.1	22.74	-0.64	Hard
	LL3mw-235	2370642.47	559812.63	1,008.05	21.2	1,009.94	A	Sharon	10.1	20.1	20.3	1.89	22.2	23.05	-0.85	Medium
	LL3mw-236	2371178.58	559866.75	1,008.94	25.5	1,011.17	A	Sharon	13.8	23.8	24.0	2.23	26.2	26.68	-0.48	Hard
	LL3mw-237	2371475.00	559328.09	1,003.57	23.9	1,005.57	A	Sharon	12.7	22.7	22.9	2.00	24.9	25.62	-0.72	Hard
	LL3mw-238	2370625.34	559569.06	1,004.75	20.7	1,006.91	A	Sharon	10.5	20.5	20.7	2.16	22.9	23.44	-0.54	Hard
	LL3mw-239	2370895.01	559101.39	1,001.70	35.7	1,003.50	A	Sharon	24.9	34.9	35.0	1.80	36.8	37.20	-0.40	Soft
	LL3mw-240	2371309.57	558204.34	1,005.60	35.5	1,007.52	A	Sharon	24.4	34.4	34.6	1.92	36.5	36.74	-0.24	Medium
	LL3mw-241	2370332.80	559298.09	992.41	23.8	994.65	A	Sharon	12.7	22.7	22.9	2.24	25.1	25.66	-0.56	Hard
	LL3mw-242	2371993.30	557034.21	997.39	20.5	999.32	A	Sharon	9.8	19.8	20.0	1.93	21.9	22.61	-0.71	Hard
	LL3mw-243	2371532.61	556688.92	989.36	24.5	991.16	A	Sharon	13.8	23.8	24.0	1.80	25.8	26.41	-0.61	Hard



Table 3-2. Well Construction Details, Including July 2008 Depth to Bottom Measurements

RVAAP Area	Well ID	Ohio State Plane Easting	Ohio State Plane Northing	Ground Level Elevation <sup>a</sup>	Total Drilled Depth <sup>b</sup>	TOC Elevation <sup>a</sup>	Well Head Type <sup>c</sup>	Monitored Zone	Top of Screen (ft, BGS)	Bottom of Screen (ft, BGS)	Bottom of Inner Casing Plug or End Cap (ft, BGS)	Stickup height (ft, AGS)	Reported Bottom of Inner Casing (ft, BTOC)	July 2008 Measured Bottom of Inner Casing (ft, BTOC)	Sediment Accumulation (ft)	Description of Bottom
Load Line 4	LL4mw-193	2364237.44	554959.74	980.88	21.9	982.92	A	Unconsolidated	11.3	21.3	21.5	2.04	23.5	24.40	-0.90	Hard
	LL4mw-194	2364584.76	555088.18	981.87	22.0	983.76	A	Unconsolidated	11.3	21.3	21.5	1.89	23.4	23.91	-0.51	Medium
	LL4mw-195	2365198.84	555045.69	980.83	21.0	982.59	A	Unconsolidated	10.3	20.3	20.5	1.76	22.3	22.98	-0.68	Hard
	LL4mw-196	2365297.28	555212.59	982.56	20.0	984.55	A	Unconsolidated	9.2	19.2	19.4	1.99	21.4	21.89	-0.49	Hard
	LL4mw-197	2365385.95	555396.55	983.79	21.7	985.46	A	Unconsolidated	10.8	20.8	21.0	1.67	22.7	23.70	-1.00	Hard
	LL4mw-198	2364991.12	555440.99	981.61	22.0	983.42	A	Unconsolidated	10.3	20.3	20.5	1.81	22.3	20.90	1.40	Medium
	LL4mw-199	2365421.66	554621.06	975.20	22.0	977.28	A	Unconsolidated	10.3	20.3	20.5	2.08	22.6	23.31	-0.71	Medium
Load Line 5	LL4mw-200	2365904.12	554579.72	985.97	23.5	987.93	A	Unconsolidated	12.6	22.6	23.0	1.96	25.0	25.32	-0.32	Hard
	LL5mw-001	2354625.07	554319.25	1,125.00	24.0	1,127.92	A	Homewood	14.0	24.0	24.0	2.92	26.9	27.22	-0.32	Hard
	LL5mw-002	2354571.52	554604.01	1,125.80	25.0	1,128.68	A	Homewood	15.0	25.0	25.0	2.88	27.9	27.04	0.86	Soft
	LL5mw-003	2354964.47	554535.41	1,124.70	21.0	1,127.70	A	Unconsolidated	11.0	21.0	21.0	3.00	24.0	24.15	-0.15	Hard
	LL5mw-004	2355006.44	554073.73	1,122.90	22.4	1,125.81	A	Homewood	12.0	22.0	22.0	2.91	24.9	25.58	-0.68	Hard
	LL5mw-005	2354422.02	554152.73	1,126.50	27.8	1,129.42	A	Homewood	17.0	27.0	27.0	2.92	29.9	29.89	0.01	Hard
	LL5mw-006	2354730.78	553984.82	1,125.10	24.5	1,128.00	A	Homewood	14.0	24.0	24.0	2.90	26.9	27.27	-0.37	Hard
Load Line 6	LL6mw-001	2353153.23	554214.84	NA	18.0	1,124.16	F	Unconsolidated	7.0	17.0	17.0	0.00	17.0	17.78	-0.78	Hard
	LL6mw-002	2353820.09	553589.88	NA	23.0	1,129.36	F	Unconsolidated	12.5	22.5	22.5	0.00	22.5	24.65	-2.15	Hard
	LL6mw-003	2353048.68	553544.34	NA	23.4	1,125.38	A	Homewood	12.5	22.5	22.5	3.35	25.9	25.91	-0.01	Hard
	LL6mw-004	2353368.79	553431.82	NA	23.0	1,125.39	A	Homewood	12.5	22.5	22.5	2.58	25.1	24.70	0.40	Hard
	LL6mw-005	2353194.52	553170.76	NA	19.9	1,120.47	A	Homewood	9.5	19.5	19.5	2.96	22.5	22.44	0.06	Hard
	LL6mw-006	2352419.15	553165.28	NA	20.0	1,124.37	A	Unconsolidated	7.0	17.0	17.0	0.00	17.0	17.95	-0.95	Hard
	LL6mw-007	2353354.89	552677.17	NA	20.0	1,115.62	F	Homewood	9.5	19.5	19.5	0.00	19.5	19.53	-0.03	Hard
Load Line 7	LL7mw-001	2352192.91	554925.77	1,126.90	30.0	1,129.64	A	Homewood	19.5	29.5	29.5	2.74	32.2	33.22	-1.02	Hard
	LL7mw-002	2351918.23	555126.55	1,126.70	26.5	1,129.55	A	Homewood	15.0	25.0	25.0	2.85	27.8	27.37	0.43	Hard
	LL7mw-003	2352351.04	555417.04	1,118.23	31.5	1,120.84	A	Homewood	21.0	31.0	31.0	2.61	33.6	33.71	-0.11	Hard
	LL7mw-004	2352035.20	555581.14	1,123.30	29.5	1,126.32	A	Homewood	19.5	29.5	29.5	3.02	32.5	32.38	0.12	Hard
	LL7mw-005	2351741.47	555581.80	1,133.30	28.2	1,135.87	A	Homewood	18.0	28.0	28.0	2.57	30.6	30.53	0.07	Hard
	LL7mw-006	2351879.92	555990.59	1,120.70	28.0	1,123.56	A	Homewood	17.5	27.5	27.5	2.86	30.4	30.49	-0.09	Hard
Load Line 8	LL8mw-001	2351666.10	552607.06	1,118.69	24.0	1,121.46	A	Unconsolidated	14.0	24.0	24.0	2.77	26.8	27.09	-0.29	Soft
	LL8mw-002	2351010.33	552408.18	1,121.67	30.4	1,124.51	A	Unconsolidated	20.0	30.0	30.0	2.84	32.8	32.74	0.06	Soft
	LL8mw-003	2351359.25	552231.14	1,116.30	21.0	1,119.05	A	Unconsolidated	10.5	20.5	20.5	2.75	23.3	23.20	0.10	Hard
	LL8mw-004	2351261.83	551807.58	1,112.73	20.5	1,115.75	A	Unconsolidated	10.0	20.0	20.0	3.02	23.0	22.87	0.13	Medium
	LL8mw-005	2351748.32	551522.48	1,112.51	24.0	1,115.73	A	Homewood	14.0	24.0	24.0	3.22	27.2	27.34	-0.14	Hard
	LL8mw-006	2351483.58	551296.77	1,114.33	24.2	1,117.17	A	Homewood	14.0	24.0	24.0	2.84	26.8	27.28	-0.48	Hard
Load Line 9	LL9mw-001	2355817.04	556125.81	NA	21.6	1,134.62	A	Homewood	10.5	20.5	20.5	2.78	23.3	23.49	-0.19	Hard
	LL9mw-002	2355907.76	556755.11	NA	21.0	1,127.30	A	Homewood	10.0	20.0	20.0	2.42	22.4	22.90	-0.50	Hard
	LL9mw-003	2356635.21	556445.31	NA	22.0	1,135.76	A	Homewood	11.5	21.5	21.5	2.30	23.8	24.32	-0.52	Hard
	LL9mw-004	2357338.76	556002.00	NA	33.0	1,131.83	A	Homewood	22.0	32.0	32.0	2.91	34.9	35.83	-0.93	Hard
	LL9mw-005	2356505.95	557063.36	NA	20.6	1,130.93	A	Homewood	10.0	20.0	20.0	3.30	23.3	23.66	-0.36	Hard
	LL9mw-006	2357446.67	556434.79	NA	26.8	1,129.88	A	Homewood	16.0	26.0	26.0	2.90	28.9	28.98	-0.08	Hard
	LL9mw-007	2357024.34	557000.56	NA	19.0	1,119.99	F	Homewood	8.5	18.5	18.5	0.00	18.5	18.28	0.22	Hard
Load Line 10	LL10mw-001	2355272.22	555816.25	1,130.00	28.0	1,132.77	A	Homewood	17.0	27.0	27.0	2.77	29.8	29.74	0.06	Hard
	LL10mw-002	2355710.51	555523.36	1,124.40	28.0	1,127.13	A	Homewood	17.0	27.0	27.0	2.73	29.7	29.95	-0.25	Hard
	LL10mw-003	2355389.92	555494.71	1,127.40	26.4	1,130.28	A	Homewood	16.0	26.0	26.0	2.88	28.9	28.70	0.20	Hard
	LL10mw-004	2355438.20	555236.59	1,119.60	31.2	1,122.39	A	Homewood	21.0	31.0	31.0	2.79	33.8	33.69	0.11	Hard
	LL10mw-005	2355943.55	555380.53	1,122.90	27.0	1,125.67	A	Homewood	16.5	26.5	26.5	2.77	29.3	29.39	-0.09	Hard
	LL10mw-006	2355654.80	554995.25	1,121.20	24.0	1,123.83	A	Unconsolidated	13.5	23.5	23.5	2.63	26.1	26.67	-0.57	Hard

Table 3-2. Well Construction Details, Including July 2008 Depth to Bottom Measurements

RVAAP Area	Well ID	Ohio State Plane Easting	Ohio State Plane Northing	Ground Level Elevation <sup>a</sup>	Total Drilled Depth <sup>b</sup>	TOC Elevation <sup>a</sup>	Well Head Type <sup>c</sup>	Monitored Zone	Top of Screen (ft, BGS)	Bottom of Screen (ft, BGS)	Bottom of Inner Casing Plug or End Cap (ft, BGS)	Stickup height (ft, AGS)	Reported Bottom of Inner Casing (ft, BTOC)	July 2008 Measured Bottom of Inner Casing (ft, BTOC)	Sediment Accumulation (ft)	Description of Bottom
Load Line 11	LL11mw-001	2352778.89	557505.03	1,097.46	23.0	1,100.16	A	Unconsolidated	11.4	21.4	21.4	2.70	24.1	21.65	2.45	Hard
	LL11mw-002	2353354.28	558310.52	1,080.29	20.0	1,080.00	F	Unconsolidated	6.3	16.3	16.3	-0.29	16.0	16.59	-0.59	Hard
	LL11mw-003	2352737.87	557999.62	1,088.45	17.0	1,088.48	F	Unconsolidated	5.9	15.9	15.9	0.03	15.9	16.22	-0.32	Hard
	LL11mw-004	2352737.24	558164.36	1,084.60	17.0	1,084.72	F	Unconsolidated	6.1	16.1	16.1	0.12	16.2	16.33	-0.13	Hard
	LL11mw-005	2352847.56	558501.02	1,079.60	17.0	1,079.40	F	Unconsolidated	6.2	16.2	16.2	-0.20	16.0	16.58	-0.58	Hard
	LL11mw-006	2352521.36	558263.28	1,086.61	17.0	1,086.50	F	Unconsolidated	5.6	15.6	15.6	-0.11	15.5	15.85	-0.35	Hard
	LL11mw-007	2352094.81	558189.71	1,079.22	23.0	1,082.00	A	Unconsolidated	12.4	22.4	22.4	2.78	25.2	25.46	-0.26	Hard
	LL11mw-008	2352388.60	557981.17	1,087.90	17.0	1,087.74	F	Unconsolidated	5.6	15.6	15.6	-0.16	15.4	15.86	-0.46	Hard
	LL11mw-009	2352577.18	557901.18	1,088.38	17.0	1,091.54	F	Unconsolidated	6.7	16.7	16.7	-0.10	16.6	19.68	-3.08	Hard
Load Line 12	LL12mw-088	2368667.75	556393.79	978.94	29.0	981.06	A	Unconsolidated	14.8	24.8	25.0	2.12	27.1	27.32	-0.22	Hard
	LL12mw-107	2368595.67	556759.02	978.03	33.0	980.15	A	Unconsolidated	20.7	30.7	31.0	2.12	33.1	33.77	-0.67	Hard
	LL12mw-113	2368223.73	558345.37	977.67	23.0	980.18	A	Sharon Shale	12.3	22.3	22.5	2.51	25.0	18.96	6.04	Soft
	LL12mw-128	2368293.20	557371.54	976.21	34.0	978.24	A	Unconsolidated	21.1	31.1	31.3	2.03	33.3	34.23	-0.93	Hard
	LL12mw-153	2368138.87	557823.23	975.34	26.0	977.85	A	Unconsolidated	12.3	22.3	22.5	2.51	25.0	24.87	0.13	Hard
	LL12mw-154	2368183.88	557754.56	977.00	29.0	979.06	A	Unconsolidated	16.4	26.4	26.6	2.06	28.7	28.72	-0.02	Hard
	LL12mw-182	2368853.20	555890.35	982.20	36.1	984.42	A	Unconsolidated	25.2	35.2	35.5	2.22	37.7	38.06	-0.36	Hard
	LL12mw-183	2369224.36	556068.15	980.59	36.0	982.98	A	Sharon Shale	23.3	33.3	33.6	2.39	36.0	36.41	-0.41	Hard
	LL12mw-184	2368997.48	556399.46	980.96	29.5	983.16	A	Unconsolidated	18.8	28.8	29.0	2.20	31.2	31.13	0.07	Hard
	LL12mw-185	2368829.86	556946.75	979.09	24.0	981.31	A	Unconsolidated	10.8	20.8	21.0	2.22	23.2	23.02	0.18	Hard
	LL12mw-186	2367912.39	559065.95	976.34	23.0	978.31	A	Sharon Shale	8.8	18.8	19.0	1.97	21.0	21.11	-0.11	Hard
	LL12mw-187	2368524.14	557633.10	977.90	29.0	979.94	A	Unconsolidated	17.2	27.2	27.4	2.04	29.4	29.68	-0.28	Hard
	LL12mw-188	2367908.82	558132.59	978.46	20.5	980.63	A	Unconsolidated	9.8	19.8	20.0	2.17	22.2	22.26	-0.06	Soft
	LL12mw-189	2367945.92	558569.27	976.17	18.5	978.04	A	Sharon Shale	7.5	17.5	17.7	1.87	19.6	19.85	-0.25	Hard
	LL12mw-242	2368545.29	558020.51	978.40	26.3	981.20	A	Unconsolidated	15.5	25.5	25.5	2.80	28.3	29.14	-0.84	Soft
	LL12mw-243	2368190.04	557376.32	978.10	24.0	980.79	A	Unconsolidated	13.0	23.0	23.0	2.69	25.7	25.47	0.23	Soft
	LL12mw-244	2368751.42	557377.17	978.10	30.0	980.65	A	Unconsolidated	19.5	29.5	29.5	2.55	32.1	30.97	1.13	Soft
Atlas Scrap Yard	LL12mw-245	2368370.74	557044.55	977.50	29.0	980.04	A	Unconsolidated	18.0	28.0	28.0	2.54	30.5	30.19	0.31	Hard
	LL12mw-246	2369432.17	556658.89	982.00	32.0	984.83	A	Unconsolidated	21.5	31.5	31.5	2.83	34.3	35.07	-0.77	Hard
	ASYmw-001	2366260.85	558404.04	978.40	22.0	981.13	A	Sharon	11.0	21.0	21.0	2.73	23.7	23.30	0.40	Hard
	ASYmw-002	2366170.86	557887.86	982.00	20.0	985.24	A	Sharon	10.0	19.5	19.5	3.24	22.7	23.10	-0.40	Hard
	ASYmw-003	2366651.49	558015.94	979.70	21.5	982.21	A	Sharon	11.0	21.0	21.0	2.51	23.5	23.60	-0.10	Hard
	ASYmw-004	2367166.04	557640.81	977.10	27.8	979.66	A	Sharon	17.0	27.0	27.0	2.56	29.6	29.94	-0.34	Hard
	ASYmw-005	2367448.16	557783.01	977.60	25.0	979.80	A	Sharon	14.0	24.0	24.0	2.20	26.2	27.39	-1.19	Hard
	ASYmw-006	2366746.73	557257.72	980.20	27.0	983.01	A	Sharon	16.0	26.0	26.0	2.81	28.8	29.08	-0.28	Hard
	ASYmw-007	2366834.49	556818.08	981.40	28.0	984.16	A	Unconsolidated	16.0	26.0	26.0	2.76	28.8	28.82	-0.02	Hard
	ASYmw-008	2367475.07	557087.66	976.20	26.0	978.85	A	Unconsolidated	15.0	25.0	25.0	2.65	27.7	27.69	0.01	Hard
Building 1200	ASYmw-009	2366631.94	557603.68	979.90	22.0	982.70	A	Sharon	11.5	21.5	21.5	2.80	24.3	24.69	-0.39	Hard
	ASYmw-010	2366985.37	557270.61	978.20	28.0	981.05	A	Unconsolidated	17.0	27.0	27.0	2.85	29.8	31.25	-1.45	Hard
	B12mw-010	2371292.81	565827.43	1,002.72	21.0	1,005.92	A	Sharon	10.0	20.0	20.0	3.20	23.2	22.91	0.29	Hard
C-Block Quarry	B12mw-011	2371416.15	565687.82	1,003.76	24.7	1,006.70	A	Sharon	14.0	24.0	24.0	2.94	26.9	26.82	0.08	Hard
	B12mw-012	2371430.41	565828.01	1,003.43	22.3	1,006.32	A	Sharon	12.0	22.0	22.0	2.89	24.9	24.90	0.00	Hard
	CBLmw-001	2343657.08	559403.12	1,178.50	50.0	1,181.08	A	Homewood	39.0	49.0	49.0	2.58	51.6	49.95	1.65	Hard
Central Burn Pits	CBLmw-002	2343845.22	559044.48	1,172.50	45.3	1,175.24	A	Homewood	34.5	44.5	44.5	2.74	47.2	47.52	-0.32	Hard
	CBLmw-003	2343970.00	559695.52	1,172.22	44.0	1,175.06	A	Homewood	33.0	43.0	43.0	2.84	45.8	44.92	0.88	Hard
	CBLmw-004	2343688.76	559951.58	1,172.08	45.0	1,174.84	A	Homewood	34.0	44.0	44.0	2.76	46.8	47.22	-0.42	Hard
Central Burn Pits	CBPmw-001	2367095.37	561616.01	972.71	32.3	975.84	A	Unconsolidated	21.8	31.8	31.8	3.13	34.9	32.81	2.09	Soft
	CBPmw-002	2367295.66	561865.83	967.33	30.0	970.04	A	Unconsolidated	19.5	29.5	29.5	2.71	32.2	32.14	0.06	Medium
	CBPmw-003	2366768.68	561944.14	972.04	25.0	974.67	A	Unconsolidated	14.5	24.5	24.5	2.63	27.1	30.31	-3.21	Hard
	CBPmw-004	2366978.80	562123.80	968.58	27.5	971.13	A	Unconsolidated	17.0	27.0	27.0	2.55	29.5	29.76	-0.26	Medium
	CBPmw-005	2366919.66	562311.88	968.83	25.0	971.59	A	Unconsolidated	14.5	24.5	24.5	2.76	27.3	27.52	-0.22	Medium
	CBPmw-006	2367243.68	562311.87	965.01	23.0	967.64	A	Unconsolidated	12.5	22.5	22.5	2.63	25.1	25.38	-0.28	Soft
	CBPmw-007	2366512.62	562006.41	973.47	30.0	976.37	A	Unconsolidated	19.5	29.5	29.5	2.90	32.4	31.88	0.52	Medium
	CBPmw-008	2366757.21	562668.84	970.57	25.5	973.19	A	Unconsolidated	15.0	25.0	25.0	2.62	27.6	28.03	-0.43	Hard

Table 3-2. Well Construction Details, Including July 2008 Depth to Bottom Measurements

RVAAP Area	Well ID	Ohio State Plane Easting	Ohio State Plane Northing	Ground Level Elevation <sup>a</sup>	Total Drilled Depth <sup>b</sup>	TOC Elevation <sup>a</sup>	Well Head Type <sup>c</sup>	Monitored Zone	Top of Screen (ft, BGS)	Bottom of Screen (ft, BGS)	Bottom of Inner Casing Plug or End Cap (ft, BGS)	Stickup height (ft, AGS)	Reported Bottom of Inner Casing (ft, BTOC)	July 2008 Measured Bottom of Inner Casing (ft, BTOC)	Sediment Accumulation (ft)	Description of Bottom
Cobbs Pond	CPmw-001	2368948.81	560440.91	975.46	16.0	975.26	F	Unconsolidated	5.5	15.5	15.5	-0.20	15.3	14.81	0.49	Hard
	CPmw-002	2368239.23	560311.26	972.72	16.0	972.31	F	Unconsolidated	5.5	15.5	15.5	-0.41	15.1	15.08	0.02	Hard
	CPmw-003	2368796.49	560676.30	973.27	18.5	972.92	F	Unconsolidated	8.0	18.0	18.0	-0.35	17.6	17.83	-0.23	Hard
	CPmw-004	2368674.31	561843.46	978.51	20.0	981.20	A	Unconsolidated	9.5	19.5	19.5	2.69	22.2	22.66	-0.46	Hard
	CPmw-005	2367900.41	561846.78	970.71	40.0	973.58	A	Unconsolidated	29.5	39.5	39.5	2.87	42.4	43.30	-0.90	Hard
	CPmw-006	2367727.13	562830.13	962.97	18.5	965.13	A	Unconsolidated	8.0	18.0	18.0	2.16	20.2	20.75	-0.55	Hard
Demolition Area 2	DET-001B	2354959.47	560820.03	1,064.35	39.0	1,065.85	A	Unconsolidated	34.0	39.0	39.0	1.50	40.5	38.69	1.81	Hard
	DET-002	2355360.33	560664.71	1,060.24	39.0	1,061.24	A	Unconsolidated	34.0	39.0	39.0	1.00	40.0	42.21	-2.21	Hard
	DET-003	2355204.94	560456.10	1,035.81	15.0	1,036.81	A	Unconsolidated	7.0	12.0	12.0	1.00	13.0	11.09	1.91	Hard
	DET-004	2355072.36	560454.22	1,037.68	11.0	1,038.68	A	Unconsolidated	6.0	11.0	11.0	1.00	12.0	13.89	-1.89	Hard
	DA2mw-104	2354773.79	561129.59	1,070.82	27.0	1,073.89	A	Unconsolidated	16.3	26.3	26.5	3.07	29.6	29.38	0.22	Hard
	DA2mw-105	2354557.62	560572.58	1,042.66	14.0	1,045.34	A	Unconsolidated	8.3	13.3	13.5	2.68	16.2	16.40	-0.20	Hard
	DA2mw-106	2354848.85	560560.49	1,041.19	16.0	1,043.79	A	Unconsolidated	8.3	15.3	15.5	2.60	18.1	16.97	1.13	Hard
	DA2mw-107	2354924.29	560480.05	1,039.18	15.0	1,041.63	A	Unconsolidated	8.8	13.8	14.0	2.45	16.5	17.02	-0.52	Hard
	DA2mw-108	2355604.43	560181.78	1,029.92	15.0	1,032.36	A	Unconsolidated	9.3	14.3	14.5	2.44	16.9	17.34	-0.44	Hard
	DA2mw-109	2354793.14	559897.89	1,068.66	24.0	1,071.29	A	Unconsolidated	11.3	21.3	21.5	2.63	24.1	24.42	-0.32	Medium
	DA2mw-110	2355195.91	559927.02	1,061.39	20.0	1,063.78	A	Unconsolidated	9.3	19.3	19.5	2.39	21.9	22.47	-0.57	Hard
	DA2mw-111	2354728.33	560222.94	1,039.63	12.6	1,042.12	A	Unconsolidated	7.1	12.1	12.3	2.49	14.8	14.90	-0.10	Hard
	DA2mw-112	2355018.98	560378.36	1,034.87	15.0	1,037.44	A	Unconsolidated	8.8	13.8	14.0	2.57	16.6	17.17	-0.57	Hard
	DA2mw-113	2355153.13	560394.81	1,034.51	14.0	1,037.11	A	Unconsolidated	8.3	13.3	13.5	2.60	16.1	16.41	-0.31	Hard
Erie Burning Grounds	EBGmw-123	2380049.21	571747.04	945.59	32.0	947.82	A	Unconsolidated	21.0	31.0	31.5	2.23	33.7	34.90	-1.20	Medium
	EBGmw-124	2380030.24	571618.07	939.02	32.0	941.39	A	Unconsolidated	20.0	30.0	30.5	2.37	32.9	32.84	0.06	Medium
	EBGmw-125	2379679.20	571655.63	947.55	25.0	949.89	A	Unconsolidated	14.0	24.0	24.5	2.34	26.8	27.56	-0.76	Hard
	EBGmw-126	2380307.31	572348.81	938.20	28.0	940.61	A	Unconsolidated	15.2	25.2	25.5	2.41	27.9	27.85	0.05	Hard
	EBGmw-127	2380172.16	571083.61	940.21	30.0	943.07	A	Unconsolidated	19.0	29.0	29.5	2.86	32.4	32.94	-0.54	Hard
	EBGmw-128	2379892.79	570970.32	942.47	28.0	945.13	A	Unconsolidated	15.0	25.0	25.3	2.66	28.0	28.33	-0.33	Hard
	EBGmw-129	2379240.52	572035.68	941.97	29.0	944.36	A	Unconsolidated	16.0	26.0	26.0	2.39	28.4	31.14	-2.74	Hard
	EBGmw-130	2379220.69	570695.61	941.18	26.0	944.00	A	Unconsolidated	15.2	25.2	25.5	2.82	28.3	28.46	-0.16	Hard
Fuze and Booster Quarry	FBQmw-166	2349584.33	553123.86	1,104.87	16.0	1,108.86	A	Unconsolidated	5.5	15.5	15.5	3.99	19.5	19.90	-0.40	Hard
	FBQmw-167	2349675.45	553556.12	1,112.05	18.0	1,115.90	A	Unconsolidated	5.0	15.0	15.0	3.85	18.9	19.16	-0.26	Hard
	FBQmw-168	2350066.87	553620.85	1,131.27	19.5	1,133.91	A	Homewood	9.0	19.0	19.0	2.64	21.6	21.42	0.18	Hard
	FBQmw-169	2349730.90	553681.21	1,117.36	16.0	1,120.58	A	Homewood	5.0	15.0	15.0	3.22	18.2	18.26	-0.06	Hard
	FBQmw-170	2350102.41	553975.40	1,139.67	30.5	1,142.26	A	Homewood	20.0	30.0	30.0	2.59	32.6	32.88	-0.28	Hard
	FBQmw-171	2350072.44	554230.93	1,140.49	30.0	1,143.55	A	Homewood	18.0	28.0	28.0	3.06	31.1	31.60	-0.50	Hard
	FBQmw-172	2349907.37	554322.17	1,145.71	33.0	1,150.09	A	Homewood	20.0	30.0	30.0	4.38	34.4	34.56	-0.16	Hard
	FBQmw-173	2350449.01	554491.35	1,162.43	50.0	1,165.94	A	Homewood	29.5	49.5	49.5	3.51	53.0	51.89	1.11	Hard
	FBQmw-174	2350289.81	554142.44	1,135.78	22.5	1,139.97	A	Homewood	12.0	22.0	22.0	4.19	26.2	23.04	3.16	Hard
	FBQmw-175	2350297.98	553989.24	1,137.16	22.5	1,140.73	A	Homewood	12.0	22.0	22.0	3.57	25.6	26.00	-0.40	Hard
	FBQmw-176	2350219.45	553273.33	1,129.57	21.5	1,131.91	A	Unconsolidated	11.0	21.0	21.0	2.34	23.3	24.23	-0.93	Soft
Landfill North of Winklepeck	FBQmw-177	2350112.18	553321.94	1,125.73	22.5	1,128.57	A	Homewood	12.0	22.0	22.0	2.84	24.8	25.04	-0.24	Soft
	LNWmw-024	2358403.21	564825.89	1,035.30	24.0	1,038.00	A	Unconsolidated	10.0	20.0	20.0	2.70	22.7	22.44	0.26	Hard
	LNWmw-025	2358417.06	565071.92	1,027.20	19.0	1,029.13	A	Unconsolidated	8.0	18.0	18.0	1.93	19.9	20.42	-0.52	Hard
	LNWmw-026	2358952.24	564658.16	1,025.00	24.0	1,027.80	A	Unconsolidated	13.0	23.0	23.0	2.80	25.8	26.11	-0.31	Hard
NACA Test Area	LNWmw-027	2358628.75	564517.41	1,024.40	25.0	1,027.13	A	Unconsolidated	14.0	24.0	24.0	2.73	26.7	26.98	-0.28	Medium
	NTAmw-107	2345433.40	551697.29	1,077.65	23.0	1,080.30	A	Unconsolidated	12.0	22.0	22.0	2.65	24.6	24.56	0.04	Hard
	NTAmw-108	2345781.60	551916.22	1,083.22	23.0	1,085.62	A	Unconsolidated	12.0	22.0	22.0	2.40	24.4	24.69	-0.29	Soft
	NTAmw-109	2345997.72	551293.25	1,076.89	19.0	1,079.84	A	Unconsolidated	8.0	18.0	18.0	2.95	20.9	21.10	-0.20	Hard
	NTAmw-110	2346438.94	551351.46	1,080.03	28.0	1,082.62	A	Unconsolidated	17.0	27.0	27.0	2.59	29.6	29.95	-0.35	Hard
	NTAmw-111	2346638.01	551538.60	1,078.07	20.0	1,080.94	A	Unconsolidated	9.5	19.5	19.5	2.87	22.4	22.28	0.12	Hard
	NTAmw-112	2346889.48	551712.14	1,075.36	23.9	1,078.33	A	Unconsolidated	13.9	23.9	23.9	2.97	26.9	26.84	0.06	Hard
	NTAmw-113	2347082.83	551488.52	1,072.61	27.5	1,075.68	A	Unconsolidated	17.0	27.0	27.5	3.07	30.6	29.79	0.81	Hard
	NTAmw-114	2347301.57	551592.94	1,075.61	20.0	1,078.71	A	Unconsolidated	9.5	19.5	19.5	3.10	22.6	22.98	-0.38	Hard
	NTAmw-115	2347581.16	551791.78	1,086.91	24.0	1,089.65	A	Unconsolidated	12.5	22.5	22.5	2.74	25.2	25.43	-0.23	Hard
	NTAmw-116	2348196.39	551748.00	1,091.68	22.0	1,094.33	A	Unconsolidated	10.0	20.0	20.0	2.65	22.6	22.76	-0.16	Hard
	NTAmw-117	2347994.83	551584.57	1,091.67	25.0	1,094.54	A	Unconsolidated	14.5	24.5	24.5	2.87	27.4	27.70	-0.30	Hard
	NTAmw-118	2347609.41	551335.04	1,078.86	22.5	1,081.44	A	Unconsolidated	12.0	22.0	22.0	2.58	24.6	24.89	-0.29	Hard

Table 3-2. Well Construction Details, Including July 2008 Depth to Bottom Measurements

RVAAP Area	Well ID	Ohio State Plane Easting	Ohio State Plane Northing	Ground Level Elevation <sup>a</sup>	Total Drilled Depth <sup>b</sup>	TOC Elevation <sup>a</sup>	Well Head Type <sup>c</sup>	Monitored Zone	Top of Screen (ft, BGS)	Bottom of Screen (ft, BGS)	Bottom of Inner Casing Plug or End Cap (ft, BGS)	Stickup height (ft, AGS)	Reported Bottom of Inner Casing (ft, BTOC)	July 2008 Measured Bottom of Inner Casing (ft, BTOC)	Sediment Accumulation (ft)	Description of Bottom
Ramsdell Quarry Landfill	RQLmw-006	2375927.71	566091.26	993.52	42.1	995.39	A	Sharon	19.4	39.4	39.6	1.87	41.4	41.82	-0.42	Hard
	RQLmw-007	2375872.56	566544.36	963.86	18.7	965.91	A	Sharon	6.0	16.0	16.2	2.05	18.2	18.70	-0.50	Hard
	RQLmw-008	2376011.08	566327.94	963.82	18.7	966.08	A	Sharon	6.0	16.0	16.2	2.26	18.5	18.74	-0.24	Hard
	RQLmw-009	2376253.65	566351.20	962.60	18.8	964.58	A	Sharon	5.9	15.9	16.4	1.98	18.4	18.63	-0.23	Hard
	RQLmw-010	2376048.58	566857.39	980.04	35.4	982.14	A	Sharon	12.5	32.5	33.0	2.10	35.1	35.12	-0.02	Hard
	RQLmw-011	2376398.19	566819.66	974.60	35.4	976.57	A	Sharon	12.4	32.4	32.6	1.97	34.6	35.43	-0.83	Hard
	RQLmw-012	2376558.19	566551.95	975.12	30.5	977.65	A	Sharon	19.8	29.8	30.0	2.53	32.5	32.75	-0.25	Hard
	RQLmw-013	2376204.93	566928.09	978.04	34.4	980.71	A	Sharon	23.7	33.7	33.9	2.67	36.6	36.55	0.05	Hard
	RQLmw-014	2376519.38	566941.29	970.83	29.4	973.49	A	Sharon	18.6	28.6	28.9	2.66	31.6	31.25	0.35	Soft
	RQLmw-015	2375490.96	566560.90	989.19	40.1	991.26	A	Sharon	29.2	39.2	39.5	2.07	41.6	42.11	-0.51	Soft
	RQLmw-016	2375649.55	566177.68	994.02	39.5	996.60	A	Sharon	28.5	38.5	39.0	2.58	41.6	41.75	-0.15	Hard
	RQLmw-017	2376124.18	565931.38	988.69	30.5	991.23	A	Sharon	19.8	29.8	30.0	2.54	32.5	32.85	-0.35	Hard
Winklepeck Burning Grounds	WBGmw-005	2357163.55	563037.18	1,052.20	19.0	1,054.70	A	Unconsolidated	8.3	18.3	18.6	2.50	21.1	21.24	-0.14	Hard
	WBGmw-006	2359087.79	563008.87	1,012.16	19.0	1,014.66	A	Unconsolidated	7.6	17.6	17.9	2.50	20.4	20.27	0.13	Hard
	WBGmw-007	2360420.44	562479.87	998.09	24.0	1,000.59	A	Unconsolidated	13.5	23.5	23.8	2.50	26.3	26.50	-0.20	Hard
	WBGmw-008	2359700.57	562010.35	1,005.71	18.5	1,008.21	A	Unconsolidated	8.1	18.2	18.5	2.50	21.0	20.96	0.04	Hard
	WBGmw-009	2357159.20	561603.54	1,045.03	24.0	1,047.53	A	Unconsolidated	11.4	21.4	21.5	2.50	24.0	24.44	-0.44	Hard
	WBGmw-010	2356051.96	562893.20	1,067.10	21.0	1,069.85	A	Unconsolidated	10.5	20.5	20.8	2.75	23.6	23.48	0.12	Soft
	WBGmw-011	2356187.29	562609.18	1,069.70	22.0	1,072.38	A	Unconsolidated	11.0	21.0	21.3	2.68	24.0	23.96	0.04	Medium
	WBGmw-012	2354810.65	562240.90	1,076.50	30.0	1,079.11	A	Unconsolidated	19.0	29.0	29.4	2.61	32.0	31.75	0.25	Hard
	WBGmw-013	2355223.25	561518.27	1,069.10	22.0	1,071.70	A	Unconsolidated	11.0	21.0	21.3	2.60	23.9	24.24	-0.34	Medium
	WBGmw-014	2360439.22	562061.26	994.10	23.0	996.78	A	Unconsolidated	12.0	22.0	22.3	2.68	25.0	25.10	-0.10	Soft
	WBGmw-015	2359182.41	562340.12	1,009.10	22.0	1,011.60	A	Unconsolidated	11.0	21.0	21.3	2.50	23.8	23.63	0.17	Hard
	WBGmw-016	2360645.88	562709.13	994.90	24.0	997.03	A	Unconsolidated	13.0	23.0	23.3	2.13	25.4	25.32	0.08	Soft
Suspected Mustard Agent Burial Site	WBGmw-017	2359603.84	562913.24	1,004.00	22.0	1,006.62	A	Unconsolidated	11.0	21.0	21.3	2.62	23.9	23.78	0.12	Medium
	MBS-001	2345323.00	550759.50	1,079.68	30.0	1,082.20	A	Unconsolidated	19	28.7	29	2.52	31.5	31.10	0.40	Hard
	MBS-002	2345322.30	550886.20	1,080.50	30.0	1,083.22	A	Unconsolidated	18	27.3	28	2.72	30.7	30.52	0.18	Hard
	MBS-003	2345172.40	550922.80	1,082.45	30.0	1,084.45	A	Unconsolidated	18.5	28.2	28.5	2.00	30.5	30.87	-0.37	Hard
	MBS-004	2345134.20	550767.90	1,079.55	26.0	1,081.80	A	Unconsolidated	14.7	24.4	24.7	2.25	27.0	26.70	0.30	Hard
	MBS-005	2345354.10	550800.70	1,080.50	30.0	1,082.42	A	Unconsolidated	18	28	28.08	1.92	30.2	30.19	0.01	Soft
	MBS-006	2345282.30	550726.10	1,080.29	28.0	1,081.83	A	Unconsolidated	16.5	26.5	26.56	1.54	28.2	28.30	-0.10	Medium

a elevations are in feet above mean sea level (amsl)  
b total drilled well borehole depth relative to ground surface.  
c A = above grade completion; F = flush-mount completion

NA = Not available  
AGS = above ground surface  
BGS = below ground surface  
BTOC = below top of casing

west to east across RVAAP; with a maximum measured elevation of 1,139.92 ft above mean sea level (amsl) at well BKGmw-005 in the northwest portion of the facility and a minimum measured elevation of 932.56 ft amsl southeast of Load Line 1 (well LL1mw-065). At the watershed scale (e.g., Hinkley Creek, Sand Creek, and Eagle Creek), groundwater flow patterns are influenced by topography and the drainage patterns of the streams. The influence of surface topography on groundwater flow is especially observed within the Hinkley Creek watershed (e.g., NACA Test Area, Suspected Mustard Agent Burial Site, and Demolition Area 1 vicinity) where groundwater flow is toward the southwestern RVAAP boundary.

Plate 3 represents facility-wide groundwater flow in wells completed into bedrock. Pre-glacial erosion has resulted in bedrock highs (i.e., islands) surrounded and topped by glacial and recent deposits (i.e., unconsolidated aquifer). At least three such islands have been interpreted to exist at RVAAP. Two are topped by the Homewood Member and one by the Sharon Member. These islands may not be in hydraulic communication with each other but there is hydraulic communication with the unconsolidated aquifer. Plate 3 illustrates that groundwater in bedrock of the Sharon Member flows radially outward from bedrock into the surrounding unconsolidated aquifer. The potentiometric high is located beneath Load Line 2. Plate 3 indicates that groundwater in bedrock of the Homewood Member flows through these bedrock islands from and to the unconsolidated aquifer. Groundwater flow of the Homewood member is to the southeast toward the Michael J. Kerwin Reservoir on the Mahoning River, which is a regional hydraulic sink.

Groundwater elevation measurements were collected each time a groundwater sample was collected as part of the FWGWMP. Through January 2008, 36 wells were sampled on a quarterly basis; starting in April 2008, 132 wells were sampled on a quarterly basis. Table 3-3 presents the water-level elevations between September 2005 and July 2008 for all wells that have been sampled as a part of the FWGWMP.

## **3.2 Monitoring Well Inspection/Repair Results**

### **3.2.1 Inspection Results – July 2008**

All FWGWMP monitoring wells at RVAAP were inspected during the week of June 30, 2008. Inspection of the physical condition of all existing facility monitoring wells was conducted at the same time potentiometric surface measurements were collected. The well inspection survey consisted of the following elements:

- Following collection of water-level measurements, the total depth of each monitoring well was sounded using the water-level indicator. These data allow a determination of the degree of siltation and comparison of the constructed depths recorded in the well construction logs.

Table 3-3. Groundwater Elevations

RVAAP Area	Well	Monitoring Zone	Top of Casing (TOC) Elevation (ft, amsl)	Groundwater Elevation, September 2005 (ft, amsl)	Groundwater Elevation, March 2006 (ft, amsl)	Groundwater Elevation, July 2006 (ft, amsl)	Groundwater Elevation, September 2006 (ft, amsl)	Groundwater Elevation, January 2007 (ft, amsl)	Groundwater Elevation, April 2007 (f., amsl)	Groundwater Elevation, July 2007 (ft, amsl)	Groundwater Elevation, October 2007 (ft, amsl)	Groundwater Elevation, January 2008 (ft, amsl)	Groundwater Elevation, April 2008 (ft, amsl)	Groundwater Elevation, July 2008 (ft, amsl)
Background	BKGmw-004	Unconsolidated	967.66	953.24	953.93	954.08	953.74	953.74	955.45	954.08	952.87	NM	NM	954.52
	BKGmw-005	Unconsolidated	1,151.94	1,137.82	1,140.86	1,141.91	1,138.51	1,138.54	1,141.89	1,137.92	1,136.95	NM	NM	1,139.92
	BKGmw-006	Sharon	1,028.88	1,005.66	1,006.20	1,007.03	1,006.20	1,006.20	1,006.49	1,006.46	1,005.70	NM	NM	1,006.50
	BKGmw-008	Sharon	972.90	954.36	956.32	957.53	955.54	955.54	959.32	956.38	953.70	NM	NM	956.21
	BKGmw-010	Sharon	1,006.18	985.84	993.11	993.87	992.39	994.80	993.31	988.84	984.93	NM	NM	989.72
	BKGmw-012	Sharon	1,000.07	988.40	992.30	992.35	989.74	993.02	993.05	989.21	987.79	NM	NM	990.66
	BKGmw-013	Unconsolidated	989.09	976.26	977.03	977.50	976.68	978.00	978.07	976.65	975.97	NM	NM	976.82
	BKGmw-015	Sharon	1,040.40	989.43	991.66	991.99	991.11	992.42	992.73	990.66	988.87	NM	NM	991.60
	BKGmw-016	Unconsolidated	1,100.92	1,093.73	1,095.28	1,095.71	1,094.04	1,095.88	1,095.70	1,093.00	1,092.82	NM	NM	1,094.58
	BKGmw-017	Unconsolidated	1,135.30	1,115.02	1,118.77	1,118.72	1,116.16	1,119.32	1,119.41	1,115.32	1,113.97	NM	NM	1,117.20
	BKGmw-018	Sharon	1,045.56	1,029.33	1,029.69	1,030.16	1,029.62	1,030.39	1,030.63	1,029.96	1,029.16	NM	NM	1,029.94
	BKGmw-019	Unconsolidated	1,110.74	1,090.06	1,092.24	1,092.64	1,091.02	1,093.59	1,095.64	1,091.38	1,089.63	NM	NM	1,090.75
	BKGmw-020	Unconsolidated	1,067.50	1,055.92	1,059.47	1,059.85	1,057.25	1,060.51	1,060.41	1,055.69	1,054.64	NM	NM	1,058.09
	BKGmw-021	Unconsolidated	974.66	955.67	956.00	959.32	956.29	961.80	962.33	960.00	954.99	NM	NM	961.29
Load Line 1	LL1mw-078	Sharon	995.84	964.46	963.39	965.80	965.05	966.85	968.58	966.51	963.60	NM	NM	965.62
	LL1mw-080	Sharon	996.27	984.78	986.07	987.04	985.60	987.15	986.98	984.18	981.97	NM	NM	986.59
	LL1mw-083	Sharon	995.20	962.67	961.76	964.12	963.36	965.35	967.14	964.78	961.68	NM	NM	964.00
	LL1mw-063	Sharon	994.84	968.39	NM	NM	NM	NM	NM	NM	967.10	966.51	972.12	970.90
	LL1mw-064	Unconsolidated	935.10	931.59	NM	NM	NM	NM	NM	NM	931.24	FROZEN	934.47	932.98
	LL1mw-065	Unconsolidated	944.41	932.20	NM	NM	NM	NM	NM	NM	929.82	932.50	934.63	932.56
	LL1mw-079	Sharon	997.87	966.51	NM	NM	NM	NM	NM	NM	965.58	965.25	967.15	967.61
Load Line 2	LL2mw-059	Sharon	966.67	953.09	954.45	954.99	953.56	955.77	956.66	954.22	952.79	NM	NM	953.92
	LL2mw-262	Sharon	1,012.62	1,001.63	1,005.65	1,006.01	1,003.52	1,006.20	1,006.86	1,002.58	1,001.28	NM	NM	1,004.07
	LL2mw-263	Sharon	1,011.47	1,000.50	1,004.26	1,004.94	1,002.79	1,002.79	1,005.14	1,001.28	1,000.04	NM	NM	1,002.84
	LL2mw-060	Sharon	961.57	951.16	NM	NM	NM	NM	NM	NM	950.66	951.42	953.03	951.80
	LL2mw-261	Sharon	1,011.40	1,011.40	NM	NM	NM	NM	NM	NM	1,003.30	1,004.08	1,005.00	1,004.31
	LL2mw-264	Sharon	1,011.88	1,003.06	NM	NM	NM	NM	NM	NM	1,001.73	1,005.01	1,006.43	1,004.86
	LL2mw-265	Sharon	961.24	951.20	NM	NM	NM	NM	NM	NM	950.76	951.39	952.69	951.91
	LL2mw-268	Sharon	1,017.28	1,002.23	NM	NM	NM	NM	NM	NM	1,001.08	1,002.32	1,003.21	1,002.26
Load Line 3	LL2mw-270	Sharon	1,010.18	1,000.02	NM	NM	NM	NM	NM	NM	998.65	1,002.04	1,002.98	1,000.93
	LL3mw-238	Sharon	1,006.91	989.83	991.29	992.07	990.76	992.80	992.31	988.20	989.47	NM	NM	991.01
	LL3mw-242	Sharon	999.32	980.60	984.32	985.12	981.99	986.53	986.04	981.95	980.42	NM	NM	983.16
	LL3mw-232	Sharon	1,000.41	977.49	NM	NM	NM	NM	NM	NM	977.08	979.18	982.28	980.80
	LL3mw-233	Sharon	1,004.36	977.75	NM	NM	NM	NM	NM	NM	977.36	977.96	978.56	978.08
	LL3mw-234	Sharon	1,006.56	966.22	NM	NM	NM	NM	NM	NM	995.57	995.77	996.84	995.79
	LL3mw-235	Sharon	1,009.94	988.37	NM	NM	NM	NM	NM	NM	988.11	991.39	993.71	991.64
	LL3mw-237	Sharon	1,005.57	986.96	NM	NM	NM	NM	NM	NM	985.77	989.87	991.72	989.59
	LL3mw-240	Sharon	1,007.52	978.65	NM	NM	NM	NM	NM	NM	978.59	978.75	982.79	978.72
	LL3mw-241	Sharon	994.65	979.72	NM	NM	NM	NM	NM	NM	979.68	983.70	987.12	982.53
Load Line 4	LL3mw-243	Sharon	991.16	980.60	NM	NM	NM	NM	NM	NM	972.80	977.61	982.51	975.53
	LL4mw-198	Unconsolidated	983.42	973.60	976.61	977.54	973.99	978.02	978.07	974.09	972.68	NM	NM	975.05
	LL4mw-199	Unconsolidated	977.28	969.47	970.36	970.96	969.83	971.78	971.90	969.99	969.06	NM	NM	970.26
	LL4mw-193	Unconsolidated	982.92	974.29	NM	NM	NM	NM	NM	NM	972.69	975.47	976.72	975.60
	LL4mw-194	Unconsolidated	983.76	974.42	NM	NM	NM	NM	NM	NM	973.07	975.81	977.17	974.98
	LL4mw-195	Unconsolidated	982.59	971.44	NM	NM	NM	NM	NM	NM	970.92	972.02	973.34	971.77
Load Line 5	LL4mw-200	Unconsolidated	987.93	970.07	NM	NM	NM	NM	NM	NM	969.54	970.29	970.98	970.46
	LL5mw-001	Homewood	1,127.92	1,106.65	NM	NM	NM	NM	NM	NM	1,106.18	NM	1,109.97	1,107.73
	LL5mw-002	Homewood	1,128.68	1,106.63	NM	NM	NM	NM	NM	NM	1,106.20	NM	1,110.13	1,106.78
	LL5mw-003	Unconsolidated	1,127.70	1,106.85	NM	NM	NM	NM	NM	NM	1,106.36	NM	1,110.85	1,108.11
	LL5mw-004	Homewood	1,125.81	1,106.64	NM	NM	NM	NM	NM	NM	1,106.11	NM	1,110.33	1,107.66
	LL5mw-005	Homewood	1,129.42	1,106.65	NM	NM	NM	NM	NM	NM	1,106.17	NM	1,110.05	1,107.72
	LL5mw-006	Homewood	1,128.00	1,106.67	NM	NM	NM	NM	NM	NM	1,106.17	NM	1,110.05	1,107.68

Table 3-3. Groundwater Elevations

RVAAP Area	Well	Monitoring Zone	Top of Casing (TOC) Elevation (ft, amsl)	Groundwater Elevation, September 2005 (ft, amsl)	Groundwater Elevation, March 2006 (ft, amsl)	Groundwater Elevation, July 2006 (ft, amsl)	Groundwater Elevation, September 2006 (ft, amsl)	Groundwater Elevation, January 2007 (ft, amsl)	Groundwater Elevation, April 2007 (f., amsl)	Groundwater Elevation, July 2007 (ft, amsl)	Groundwater Elevation, October 2007 (ft, amsl)	Groundwater Elevation, January 2008 (ft, amsl)	Groundwater Elevation, April 2008 (ft, amsl)	Groundwater Elevation, July 2008 (ft, amsl)
Load Line 6	LL6mw-001	Unconsolidated	1,124.16	1,108.38	NM	NM	NM	NM	NM	NM	1,107.79	NM	1,113.01	1,110.24
	LL6mw-002	Unconsolidated	1,129.36	1,107.15	NM	NM	NM	NM	NM	NM	1,106.64	NM	1,111.34	1,108.17
	LL6mw-003	Homewood	1,125.38	1,107.98	NM	NM	NM	NM	NM	NM	1,107.51	NM	1,111.33	1,109.24
	LL6mw-004	Homewood	1,125.39	1,107.30	NM	NM	NM	NM	NM	NM	1,106.78	NM	NM	1,108.14
Load Line 11	L L11mw-002	Unconsolidated	1,080.00	1,076.99	1,078.30	1,079.10	1,077.86	1,079.08	1,079.10	1,074.88	1,073.95	NM	NM	1,077.18
	LL11mw-007	Unconsolidated	1,082.00	1,066.26	1,068.31	1,068.66	1,067.62	1,069.00	1,068.85	1,066.18	1,065.61	NM	NM	1,067.70
Load Line 12	LL12mw-153	Unconsolidated	977.85	970.28	972.21	972.73	971.60	972.70	973.55	971.63	970.30	NM	NM	971.98
	LL12mw-182	Unconsolidated	984.42	971.90	975.51	975.90	974.10	976.54	976.63	973.94	971.30	NM	NM	974.81
	LL12mw-183	Sharon Shale	982.98	969.07	971.58	972.16	970.49	972.66	973.74	970.72	968.42	NM	NM	971.25
	LL12mw-186	Sharon Shale	978.31	970.92	972.91	973.25	972.28	973.73	973.48	971.21	971.02	NM	NM	972.74
	LL12mw-088	Unconsolidated	981.06	973.60	NM	NM	NM	NM	NM	NM	973.03	973.58	974.21	974.83
	LL12mw-107	Unconsolidated	980.15	969.46	NM	NM	NM	NM	NM	NM	969.02	969.27	971.25	971.32
	LL12mw-113	Sharon Shale	980.18	972.52	NM	NM	NM	NM	NM	NM	972.06	970.70	971.58	973.90
	LL12mw-128	Unconsolidated	978.24	967.51	NM	NM	NM	NM	NM	NM	967.24	968.44	968.55	968.86
	LL12mw-154	Unconsolidated	979.06	969.08	NM	NM	NM	NM	NM	NM	968.66	970.44	971.17	970.77
	LL12mw-184	Unconsolidated	983.16	969.47	NM	NM	NM	NM	NM	NM	968.89	970.32	971.37	971.19
	LL12mw-185	Unconsolidated	981.31	970.98	NM	NM	NM	NM	NM	NM	970.68	973.11	973.98	974.38
	LL12mw-187	Unconsolidated	979.94	968.62	NM	NM	NM	NM	NM	NM	968.02	970.54	971.55	970.88
	LL12mw-188	Unconsolidated	980.63	973.93	NM	NM	NM	NM	NM	NM	972.98	975.78	976.45	975.00
	LL12mw-189	Sharon Shale	978.04	971.97	NM	NM	NM	NM	NM	NM	970.36	974.24	966.04	972.96
	LL12mw-242	Unconsolidated	981.20	969.75	NM	NM	NM	NM	NM	NM	969.40	972.55	973.43	972.45
	LL12mw-243	Unconsolidated	980.79	970.42	NM	NM	NM	NM	NM	NM	970.86	971.04	971.74	972.37
	LL12mw-244	Unconsolidated	980.65	968.73	NM	NM	NM	NM	NM	NM	968.07	970.55	971.68	970.95
	LL12mw-245	Unconsolidated	980.04	971.20	NM	NM	NM	NM	NM	NM	970.92	971.69	971.52	972.88
	LL12mw-246	Unconsolidated	984.83	967.04	NM	NM	NM	NM	NM	NM	966.42	967.73	968.94	968.98
Building 1200	BL12mw-010	Sharon	1,005.92	985.95	NM	NM	NM	NM	NM	NM	985.29	NM	991.19	988.73
	BL12mw-011	Sharon	1,006.70	984.89	NM	NM	NM	NM	NM	NM	983.68	NM	984.77	987.38
	BL12mw-012	Sharon	1,006.32	984.75	NM	NM	NM	NM	NM	NM	983.87	NM	982.20	987.61
C-Block Quarry	CBLmw-001	Homewood	1,181.08	1,137.58	NM	NM	NM	NM	NM	NM	1,136.55	NM	1,141.78	1,140.43
	CBLmw-002	Homewood	1,175.24	1,137.15	NM	NM	NM	NM	NM	NM	1,136.21	NM	1,141.14	1,139.93
	CBLmw-003	Homewood	1,175.06	1,138.38	NM	NM	NM	NM	NM	NM	1,137.36	NM	1,144.92	1,141.93
	CBLmw-004	Homewood	1,174.84	1,138.47	NM	NM	NM	NM	NM	NM	1,137.44	NM	1,142.99	1,141.25
Central Burn Pits	CBPmw-005	Unconsolidated	971.59	958.58	960.20	960.84	959.46	961.50	NM	NM	NM	NM	NM	959.61
	CBPmw-006	Unconsolidated	967.64	NM	NM	NM	NM	NM	962.01	959.70	958.32	NM	NM	959.94
	CBPmw-007	Unconsolidated	976.37	958.82	961.38	962.35	960.21	963.20	963.29	960.29	958.22	NM	NM	961.05
	CBPmw-001	Unconsolidated	975.84	961.76	NM	NM	NM	NM	NM	NM	961.17	NM	963.69	963.17
	CBPmw-002	Unconsolidated	970.04	969.81	NM	NM	NM	NM	NM	NM	958.95	NM	962.02	962.18
	CBPmw-003	Unconsolidated	974.67	961.06	NM	NM	NM	NM	NM	NM	959.89	NM	963.73	962.96
	CBPmw-004	Unconsolidated	971.13	959.35	NM	NM	NM	NM	NM	NM	958.81	NM	961.57	960.49
	CBPmw-008	Unconsolidated	973.19	956.24	NM	NM	NM	NM	NM	NM	956.11	NM	958.39	957.58
Cobbs Pond	CPmw-001	Unconsolidated	975.26	969.49	NM	NM	NM	NM	NM	NM	968.44	NM	973.31	970.76
	CPmw-002	Unconsolidated	972.31	969.84	NM	NM	NM	NM	NM	NM	967.86	NM	972.31	971.32
	CPmw-003	Unconsolidated	972.92	970.89	NM	NM	NM	NM	NM	NM	969.48	NM	971.65	970.80
	CPmw-004	Unconsolidated	981.20	969.10	NM	NM	NM	NM	NM	NM	967.70	NM	971.71	969.31
	CPmw-005	Unconsolidated	973.58	961.48	NM	NM	NM	NM	NM	NM	961.02	NM	963.76	962.57
	CPmw-006	Unconsolidated	965.13	957.16	NM	NM	NM	NM	NM	NM	955.95	NM	957.18	956.35

Table 3-3. Groundwater Elevations

RVAAP Area	Well	Monitoring Zone	Top of Casing (TOC) Elevation (ft, amsl)	Groundwater Elevation, September 2005 (ft, amsl)	Groundwater Elevation, March 2006 (ft, amsl)	Groundwater Elevation, July 2006 (ft, amsl)	Groundwater Elevation, September 2006 (ft, amsl)	Groundwater Elevation, January 2007 (ft, amsl)	Groundwater Elevation, April 2007 (f., amsl)	Groundwater Elevation, July 2007 (ft, amsl)	Groundwater Elevation, October 2007 (ft, amsl)	Groundwater Elevation, January 2008 (ft, amsl)	Groundwater Elevation, April 2008 (ft, amsl)	Groundwater Elevation, July 2008 (ft, amsl)
Demolition Area 2	DET-003	Unconsolidated	1,036.81	1,031.08	1,027.53	NM	1,026.86	1,027.98	1,027.85	NM	1,026.97	NM	NM	1,027.09
	DET-004	Unconsolidated	1,038.68	NM	NM	NM	NM	NM	1,028.48	NM	1,027.57	NM	NM	1,027.75
	DA2mw-107	Unconsolidated	1,041.63	1,032.75	1,033.99	1,034.93	1,033.62	1,035.29	1,035.23	1,032.87	1,033.22	NM	NM	1,034.58
	DA2mw-104	Unconsolidated	1,073.89	1,052.89	NM	NM	NM	NM	NM	NM	1,052.19	NM	1,053.74	1,053.37
	DA2mw-105	Unconsolidated	1,045.34	1,042.01	NM	NM	NM	NM	NM	NM	1,041.64	NM	1,041.99	1,041.76
	DA2mw-106	Unconsolidated	1,043.79	1,036.16	NM	NM	NM	NM	NM	NM	1,038.12	NM	1,039.76	1,038.54
	DA2mw-108	Unconsolidated	1,032.36	1,026.24	NM	NM	NM	NM	NM	NM	1,025.69	NM	1,027.01	1,026.16
	DA2mw-109	Unconsolidated	1,071.29	1,054.81	NM	NM	NM	NM	NM	NM	1,053.92	NM	1,059.92	1,057.52
	DA2mw-110	Unconsolidated	1,063.78	1,051.82	NM	NM	NM	NM	NM	NM	1,051.29	NM	1,057.37	1,054.85
	DA2mw-111	Unconsolidated	1,042.12	1,034.88	NM	NM	NM	NM	NM	NM	1,037.45	NM	1,037.88	1,037.86
	DA2mw-112	Unconsolidated	1,037.44	1,033.06	NM	NM	NM	NM	NM	NM	1,029.36	NM	1,030.48	1,029.62
	DA2mw-113	Unconsolidated	1,037.11	1028.96	NM	NM	NM	NM	NM	NM	1,028.32	NM	1,029.97	1,028.73
Erie Burning Grounds	EBGmw-123	Unconsolidated	947.82	937.80	NM	NM	NM	NM	NM	NM	936.01	NM	937.81	938.25
	EBGmw-124	Unconsolidated	941.39	937.74	NM	NM	NM	NM	NM	NM	935.86	NM	937.44	938.20
	EBGmw-125	Unconsolidated	949.89	937.77	NM	NM	NM	NM	NM	NM	935.67	NM	937.33	938.17
	EBGmw-126	Unconsolidated	940.61	937.72	NM	NM	NM	NM	NM	NM	936.32	NM	938.59	938.32
	EBGmw-127	Unconsolidated	943.07	938.67	NM	NM	NM	NM	NM	NM	936.15	NM	938.92	936.72
	EBGmw-128	Unconsolidated	945.13	937.79	NM	NM	NM	NM	NM	NM	935.91	NM	938.46	938.31
	EBGmw-129	Unconsolidated	944.36	937.46	NM	NM	NM	NM	NM	NM	936.01	NM	939.25	938.23
Fuze and Booster Quarry	EBGmw-130	Unconsolidated	944.00	937.33	NM	NM	NM	NM	NM	NM	935.43	NM	937.63	937.30
	FBQmw-166	Unconsolidated	1,108.86	1,103.55	NM	NM	NM	NM	NM	NM	1,102.53	NM	1,104.11	1,103.71
	FBQmw-167	Unconsolidated	1,115.90	1,110.70	NM	NM	NM	NM	NM	NM	1,109.69	NM	1,111.72	1,111.01
	FBQmw-168	Homewood	1,133.91	1,121.38	NM	NM	NM	NM	NM	NM	1,120.63	NM	1,125.12	1,121.67
	FBQmw-169	Homewood	1,120.58	1,114.28	NM	NM	NM	NM	NM	NM	1,112.22	NM	1,115.88	1,113.70
	FBQmw-170	Homewood	1,142.26	1,123.72	NM	NM	NM	NM	NM	NM	1,122.45	NM	1,128.26	1,123.62
	FBQmw-171	Homewood	1,143.55	1,124.30	NM	NM	NM	NM	NM	NM	1,122.81	NM	1,129.95	1,125.43
	FBQmw-172	Homewood	1,150.09	1,122.99	NM	NM	NM	NM	NM	NM	1,121.95	NM	1,126.51	1,124.31
	FBQmw-173	Homewood	1,165.94	1,123.86	NM	NM	NM	NM	NM	NM	1,122.64	NM	1,124.26	1,123.69
	FBQmw-174	Homewood	1,139.97	1,123.02	NM	NM	NM	NM	NM	NM	1,121.83	NM	1,127.80	1,123.95
	FBQmw-175	Homewood	1,140.73	1,122.96	NM	NM	NM	NM	NM	NM	1,121.88	NM	1,126.85	1,123.85
	FBQmw-176	Unconsolidated	1,131.91	1,121.18	NM	NM	NM	NM	NM	NM	1,120.80	NM	1,125.06	1,122.81
Landfill North of Winklepeck	FBQmw-177	Homewood	1,128.57	1,113.61	NM	NM	NM	NM	NM	NM	1,112.87	NM	1,118.17	1,115.82
	LNWmw-024	Unconsolidated	1,038.00	1,024.13	NM	NM	NM	NM	NM	NM	1,023.11	NM	1,027.58	1,025.90
	LNWmw-025	Unconsolidated	1,029.13	1,023.83	NM	NM	NM	NM	NM	NM	1,023.37	NM	1,025.25	1,024.17
	LNWmw-026	Unconsolidated	1,027.80	1,019.15	NM	NM	NM	NM	NM	NM	1,015.08	NM	1,024.25	1,022.17
NACA Test Area	LNWmw-027	Unconsolidated	1,027.13	1,019.51	NM	NM	NM	NM	NM	NM	1,016.99	NM	1,021.38	1,020.41
	NTAmw-107	Unconsolidated	1,080.30	1,067.18	NM	NM	NM	NM	NM	NM	1,067.00	NM	1,068.92	1,067.55
	NTAmw-108	Unconsolidated	1,085.62	1,067.51	NM	NM	NM	NM	NM	NM	1,067.28	NM	1,069.21	1,067.83
	NTAmw-109	Unconsolidated	1,079.84	1,067.46	NM	NM	NM	NM	NM	NM	1,067.11	NM	1,069.51	1,067.72
	NTAmw-110	Unconsolidated	1,082.62	1,067.65	NM	NM	NM	NM	NM	NM	1,067.42	NM	1,069.83	1,068.32
	NTAmw-111	Unconsolidated	1,080.94	1,077.13	NM	NM	NM	NM	NM	NM	1,074.39	NM	1,072.68	1,077.05
	NTAmw-112	Unconsolidated	1,078.33	1,068.66	NM	NM	NM	NM	NM	NM	1,068.35	NM	1,070.57	1,069.37
	NTAmw-113	Unconsolidated	1,075.68	1,067.91	NM	NM	NM	NM	NM	NM	1,067.57	NM	1,069.94	1,068.73
	NTAmw-114	Unconsolidated	1,078.71	1,071.46	NM	NM	NM	NM	NM	NM	1,070.71	NM	1,073.58	1,072.54
	NTAmw-115	Unconsolidated	1,089.65	1,073.85	NM	NM	NM	NM	NM	NM	1,073.20	NM	1,076.53	1,075.60
	NTAmw-116	Unconsolidated	1,094.33	1,086.22	NM	NM	NM	NM	NM	NM	1,086.31	NM	1,089.70	1,087.98
	NTAmw-117	Unconsolidated	1,094.54	1,078.67	NM	NM	NM	NM	NM	NM	1,077.98	NM	1,081.85	1,080.89
	NTAmw-118	Unconsolidated	1,081.44	1,071.40	NM	NM	NM	NM	NM	NM	1,070.85	NM	1,073.72	1,072.67
Ramsdell Quarry Landfill	RQLmw-007	Sharon	965.91	959.95	958.74	NM	961.63	961.63	962.31	NM	957.81	NM	NM	960.75
	RQLmw-008	Sharon	966.08	960.06	959.14	NM	961.49	961.49	962.38	NM	958.11	NM	NM	960.88
	RQLmw-009	Sharon	964.58	959.84	958.78	NM	961.27	961.27	962.08	NM	957.85	NM	NM	960.61
	RQLmw-012	Sharon	977.65	955.02	NM	NM	NM	NM	NM	NM	954.11	NM	957.46	956.93
	RQLmw-013	Sharon	980.71	954.95	NM	NM	NM	NM	NM	NM	953.84	NM	955.97	956.39
	RQLmw-014	Sharon	973.49	952.73	NM	NM	NM	NM	NM	NM	951.97	NM	955.16	954.46
	RQLmw-015	Sharon	991.26	960.11	NM	NM	NM	NM	NM	NM	958.94	NM	960.46	961.77
	RQLmw-016	Sharon	996.6	962.15	NM	NM	NM	NM	NM	NM	960.97	NM	961.71	962.80
	RQLmw-017	Sharon	991.23	961.50	NM	NM	NM	NM	NM	NM	960.58	NM	962.54	963.00



Table 3-3. Groundwater Elevations

RVAAP Area	Well	Monitoring Zone	Top of Casing (TOC) Elevation (ft, amsl)	Groundwater Elevation, September 2005 (ft, amsl)	Groundwater Elevation, March 2006 (ft, amsl)	Groundwater Elevation, July 2006 (ft, amsl)	Groundwater Elevation, September 2006 (ft, amsl)	Groundwater Elevation, January 2007 (ft, amsl)	Groundwater Elevation, April 2007 (f., amsl)	Groundwater Elevation, July 2007 (ft, amsl)	Groundwater Elevation, October 2007 (ft, amsl)	Groundwater Elevation, January 2008 (ft, amsl)	Groundwater Elevation, April 2008 (ft, amsl)	Groundwater Elevation, July 2008 (ft, amsl)
Winklepeck Burning Grounds	WBGmw-006	Unconsolidated	1,014.66	1,005.56	1,008.27	1,009.56	1,006.87	1,009.76	1,009.88	1,005.40	1,004.41	NM	NM	1,006.67
	WBGmw-007	Unconsolidated	1,000.59	981.96	983.54	984.06	982.53	984.47	984.39	982.47	981.64	NM	NM	983.22
	WBGmw-009	Unconsolidated	1,047.53	1,032.50	1,035.06	1,036.02	1,033.64	1,036.77	1,037.28	1,033.03	1,031.49	NM	NM	1,033.94
	WBGmw-005	Unconsolidated	1,054.70	1047.86	NM	NM	NM	NM	NM	NM	1,046.38	NM	1,050.38	1,048.87
	WBGmw-008	Unconsolidated	1,008.21	992.58	NM	NM	NM	NM	NM	NM	991.83	NM	993.89	993.22
	WBGmw-010	Unconsolidated	1,069.85	1,060.85	NM	NM	NM	NM	NM	NM	1,060.07	NM	1,063.85	1,061.79
	WBGmw-011	Unconsolidated	1,072.38	1,060.95	NM	NM	NM	NM	NM	NM	1,060.11	NM	1,063.43	1,061.77
	WBGmw-012	Unconsolidated	1,079.11	1060.17	NM	NM	NM	NM	NM	NM	1,054.90	NM	1,060.21	1,063.50
	WBGmw-013	Unconsolidated	1,071.70	1059.71	NM	NM	NM	NM	NM	NM	1,059.04	NM	1,062.52	1,061.21
	WBGmw-014	Unconsolidated	996.78	979.48	NM	NM	NM	NM	NM	NM	978.88	NM	982.09	980.45
	WBGmw-015	Unconsolidated	1,011.60	993.9	NM	NM	NM	NM	NM	NM	996.77	NM	1,001.40	999.04
	WBGmw-016	Unconsolidated	997.03	978.51	NM	NM	NM	NM	NM	NM	978.30	NM	981.80	979.91
	WBGmw-017	Unconsolidated	1,006.62	996.5	NM	NM	NM	NM	NM	NM	995.58	NM	999.47	997.49
Suspected Mustard Agent Burial Site	MBSmw-001	Unconsolidated	1,082.20	1,064.19	NM	NM	NM	NM	NM	NM	1,064.11	NM	1,065.75	1,064.61
	MBSmw-002	Unconsolidated	1,083.22	1,064.84	NM	NM	NM	NM	NM	NM	1,064.70	NM	1,066.38	1,065.21
	MBSmw-003	Unconsolidated	1,084.45	1,065.17	NM	NM	NM	NM	NM	NM	1,065.22	NM	1,066.91	1,065.92
	MBSmw-004	Unconsolidated	1,081.80	1,064.44	NM	NM	NM	NM	NM	NM	1,064.51	NM	1,066.11	1,065.13
	MBSmw-005	Unconsolidated	1,082.42	NM	NM	NM	NM	NM	NM	NM	1,064.07	NM	1,065.70	1,064.57
	MBSmw-006	Unconsolidated	1,081.83	NM	NM	NM	NM	NM	NM	NM	1,064.03	NM	1,065.64	1,064.53

NM = Not Measured  
Note: CPMw-002 was an artesian well with a negative water level.

- Visual examination of the condition of the above-ground components of each well was performed. The examination included the condition of access roads to the well, well identification tags or markings, protective casing condition, traffic guard posts, protective covers and locks, protective pads, weep holes, and watertight inner casing caps.
- Recording of well inspection data and any maintenance needs were done using a well inspection/maintenance checklist.

The well inspections did not reveal irreparable damage to any specific monitoring wells. General well conditions include:

- Many of the outer well casings and guard posts are showing signs of rust and peeling paint. The following areas had a majority of the wells in need of painting:
  - Background Wells
  - Load Lines 5, 6, 7, 8, 9, 10
  - Atlas Scrap Yard
  - C-Block
  - Demolition Area 2
  - Landfill North of Winklepeck
  - NACA Test Area

All of the FWGWMP wells should be considered for repainting within the next 2 years.

- The vegetation around the wells was cleared in late June, early July of 2008 [the Winklepeck Burning Ground wells were not cleared of vegetation at the request of the USACE, and the immediate (<3-foot area only) around the Demolition 2 Area wells were cleared]. Access roads were passable.
- At many of the wells (e.g., BKG 20, Central Burn Pit wells, Building 1200 wells, and Winklepeck Burning Ground wells) the guard posts were missing the concrete plugs at the top of the post. This does not appear to affect the integrity or life of the posts. Additionally as presented in the attached Table 3-4 several well posts were loose and in need of concrete repair at the base.
- Overall the locks associated with the wells were in good condition with the few exceptions noted on the attached table.
- As detailed in Table 3-4 several wells had pads that were either cracked or had stability issues (wobbling). The integrity of the wells did not, however appear to be compromised.

Table 3-4 presents a list of specific wells that have conditions potentially requiring attention. Appendix F presents the well inspection sheets.

**Table 3-4. Well Inspection Summary (July 2008)**

Area	Well Number	Well Condition/Issue	Recommendation
Background	BKGmw-004	Lock cap is missing.	Lock is in good working condition. No action at this time.
	BKGmw-006	Concrete pad cracked, although still stable.	Repair cracks with concrete patch to prevent infiltration.
	BKGmw-016	Concrete around one of the guard posts is broken, post is still upright but not stable.	Well is not located in a high traffic area - there is no immediate danger to the well casing. Old concrete should be removed and new concrete should be installed.
Load Line 4	LL4mw-197	One of guard posts is leaning, but secure.	No action at this time.
Load Line 5	LL5mw-003	Lock cap is missing.	Lock is in good working condition. No action at this time.
	LL5mw-006	Lock cap is missing.	Lock is in good working condition. No action at this time.
Load Line 6	LL6mw-003	Lock cap is missing.	Lock is in good working condition. No action at this time.
	LL6mw-004	Lock cap is missing.	Lock is in good working condition. No action at this time.
	LL6mw-006	Lock is hard to open.	Take lock in to be repaired or replaced.
	LL6mw-007	Lock is hard to open.	Take lock in to be repaired or replaced.
Load Line 8	LL8mw-003	The steel outer casing is dented but does not appear to be damaged. One of the guard posts has damaged concrete. The concrete is cracked and wobbles but is still stable.	There does not appear to be any structural damage to the inner casing or well - no action at this time.
	LL8mw-005	There are cracks between the outer casing and the concrete pad.	Repair cracks with concrete patch to prevent infiltration.
	LL8mw-006	Concrete pad cracked, although still stable.	Repair crack with concrete patch to prevent infiltration.
Load Line 9	LL9mw-003	Concrete around the guard posts is broken, posts are still upright but not stable.	Well is not located in a high traffic area - there is no immediate danger to the well casing. Old concrete should be removed and new concrete should be installed.
	LL9mw-007	There was no lock on the well cap.	Obtain new lock.
Load Line 10	LL10mw-004	Concrete pad cracked, although still stable.	Repair crack with concrete patch to prevent infiltration.
Load Line 11	LL11mw-004	1. Needs new well cap. 2. Lock is hard to open.	1. Replace well cap. 2. Take lock in to be repaired or replaced.
	LL11mw-006	1. Needs new well cap. 2. Lock is hard to open.	1. Replace well cap. 2. Take lock in to be repaired or replaced.

**Table 3-4. Well Inspection Summary (July 2008)**

Area	Well Number	Well Condition/Issue	Recommendation
Load Line 11	LL11mw-009	1.Flush-mounted well had no gasket around well cover. 2.Concrete pad is not secure (wobbles). Appears to be void underneath. 3. Lock is hard to open and has no gasket.	1.Replace gasket. 2.Fill in void or replace pad. 3.Take lock in to be repaired or replaced.
Cobbs Pond	CPmw-003	Outer casing box was full of water. Flush-mounted well had no gasket around well cover	EQM replaced the gasket during the inspection.
Detonation Area 2	DA2mw-106	Soil is eroded away from the concrete pad. Pad is stable at this time. No change from the October 2007 inspection.	Monitor the erosion during subsequent inspections.
	DET-1	Concrete pad is not secure (wobbles).	Stabilize or replace pad.
	DA2mw-109	Well cap was missing.	The cap was replaced by EQM during the inspection.
Erie Burning Grounds	EBGmw-126	This well is consistetly under water due to low topography and marshy conditions. The integrity pof the pad and casing do not appear to be compromised.	Monitor the water during subsequent inspections for signs of deterioration of the pad.
Fuze and Booster Quarry	FBQmw-176	Concrete around one of the guard posts is broken. Post is stabile.	Monitor post during subsequent inspections.
Winklepeck Burning Grounds	WBGmw-012	One of the guard posts is leaning and appears to have been hit.	Post is secure. Monitor during future inspections.
Mustard Agent Burial Site	MBSmw-001	This well is consistetly under water due to low topography and marshy conditions. The integrity of the pad and casing do not appear to be compromised.	Monitor the water during subsequent inspections for signs of deterioration of the pad.
	MBSmw-004	Soil is eroded away from the concrete pad. Pad is stable at this time.	Monitor the erosion during subsequent inspections.

### 3.2.2 Well Repair and Maintenance - 2008

The following well maintenance/repair activities were conducted during 2008:

- Flush-mounted wells LL6mw-001, LL6mw-006, LL6mw-007, LL11mw-002, LL11mw-003, LL11mw-004, LL11mw-005, LL11mw-006, LL11mw-008, CPmw-001, CPmw-002, and CPmw-003 had the well cover gaskets replaced.
- Locks for several wells were replaced because they were becoming difficult to open.
- Cracks in the pad at BKGmw-017 were repaired using caulk.
- The top of the outer casings at RQLmw-008, RQLmw-009 and WBGmw-005 were replaced with new square tops. The original tops had become rusted and the hinges were broken. BKGmw-021 had been identified for top replacement during the October 2007 inspections but upon further inspection it was determined that this top was stiff but not broken. No action was taken.
- The concrete pad at NTAmw109 was not secure (wobbled). The area beneath the pad was stabilized using a combination of washed pea gravel and bentonite to secure the pad. The area around the pad was then covered with native soil. Note that LL6mw-006 had also been reported as loose, but upon further inspection this pad was secure.
- The pad at LL11mw-009 had a large void (believed to be from frost heave), beneath the pad that could not be repaired by filling with bentonite/gravel. This well was repaired in late October 2007 by removing the pad and flush mount and adding a polyvinyl chloride (PVC) coupler to make this well an aboveground well. The concrete pad was then replaced. The elevation for this well was reshot for water level measurement purposes.

### 3.3 Sedimentation/Turbidity of the Wells

Using the data obtained during the July 2008 comprehensive evaluation of all wells at RVAAP, the sediment accumulation and the description of bottom for the wells was determined. The majority of wells at RVAAP indicate a <0.20-foot accumulation of sediment with a hard well bottom indicated. Several wells indicated a >0.50-foot accumulation when compared to the original reported construction depths and most were not highly turbid wells. The correlation of well with sediment accumulation versus high turbidity has not been established. Additionally, the sediment accumulation in July 2008 versus October 2007 (i.e., the date of the last comprehensive well survey) compared to historical data has not established a correlation to a potential increase of sediment accumulation. Neither has the turbidity in these wells shown a trend of increases during the 2008 sampling events. However, due to the amount of apparent sediment

1 accumulation it appears that well LL2mw-060 may need to be redeveloped (+3.68-feet of  
2 sediment).

3  
4 To minimize turbid samples, low flow purging and sampling techniques are used. The  
5 pumps are suspended at least one foot above the bottom of the well to avoid agitation of  
6 the sediment potentially accumulating in the well sump. High turbidity readings will  
7 continue to be monitored to determine if redevelopment and other efforts (e.g., well  
8 replacement, etc.) are needed for any affected wells.

9  
10 Two wells in LL12 (mw-113 and mw-244) continue to show elevated sediment levels in  
11 the well. These wells were redeveloped prior to the July 2008 sampling event. The  
12 viscosity of the sediment in the two LL12 wells has resulted in clogging of the pumps  
13 being used to develop the wells. Additionally, LL12mw-113 is an artesian well that  
14 generally takes up to one-hour to stabilize depth to water after removing the well cap.  
15 Despite the apparent sediment accumulation in this well there is still 7.9-feet of well  
16 screen exposed. This situation will continue to be monitored to ensure that representative  
17 samples of the groundwater from this well are being collected.

### 18 19 20 **3.4 Summary of Groundwater Sampling Results**

21  
22 This was a transitional year for the FWGWMP. With the October 2007 sampling event,  
23 sampling of one set of wells was terminated and with the January 2008 sampling event  
24 sampling of previously un-sampled wells was begun. Section 1.5.1 of this report  
25 addresses the wells sampled during this reporting period. The list of FWGWMP wells  
26 monitored for the October 2007 through July 2008 events are presented in Appendix B.

#### 27 28 **3.4.1 October 2007**

29  
30 The October 2007 FWGWMP sampling event was performed between October 8 and 11,  
31 2007. Forty-one wells, including the 5 RCRA wells, were sampled for this event. The  
32 results of this sampling event are reported in the *Facility-Wide Groundwater Monitoring*  
33 *Program, Report on the October 2007 Sampling Event, Ravenna Army Ammunition*  
34 *Plant, Ravenna, Ohio*, dated April 2008 (EQM). The results of this sampling event are  
35 summarized in Section 4.0 of this report.

36  
37 During the October 2007 sampling event at the RVAAP the water level measurement in  
38 BKGmw-010 showed less than 5-inches of water in the well. The well was purged using a  
39 bailer in order to determine recharge of the well. There was no measurable amount of  
40 water in the well the next day. Given the insufficient volume of water necessary to fill the  
41 sample bottles this well was not sampled during the October event. It was noted that the  
42 water level in this well had decreased over the previous 3 quarters. The water level was  
43 down 4.47 feet between the April and July 2007 events, and another 3.93 feet between July  
44 and October 2007. It was also noted that this decrease in water levels was not isolated to  
45 BKG-mw010. Most of the wells at the site were down an average of 3 to 4-feet over the  
46 same time period (this includes both the bedrock and unconsolidated wells). The other

1 wells at the site experienced slower than normal recharge, but the remainder of the wells  
2 scheduled for the October 2007 event had adequate water volumes and were sampled.

3  
4 Reference Section 3.4.6 of this report for a discussion of water levels related to rainfall  
5 for this reporting period.

### 6 7 **3.4.2 January 2008**

8  
9 The January 2008 FWGWMP sampling event was performed between January 28 and 31,  
10 2008. Thirty-two (32) wells were sampled for this event. The results of this sampling  
11 event are reported in the *Facility-Wide Groundwater Monitoring Program, Report on the*  
12 *January 2008 Sampling Event, Ravenna Army Ammunition Plant, Ravenna, Ohio*, dated  
13 August 2008 (EQM). The results of this sampling event are summarized in Section 4.0  
14 of this report.

15  
16 During the January 2008 sampling event at the Ravenna Army Ammunition Plant  
17 (RVAAP) the water in the casing of LL1mw-064 well was frozen. The frozen water in  
18 the well was measured at a depth of 1.5 feet below top of casing which is approximately  
19 1.5 feet above ground surface. The well measurement was attempted at 1000 hours  
20 Monday 28 January and the water was solid. Attempts were made to measure the water  
21 again at 1700 hours on January 28, 2008 and again at 0800 hours January 29, 2008, but the  
22 well water was still frozen. While the air temperature at the time of the measurements on  
23 January 28 and 29, 2008 was in the 40s° Fahrenheit (F), the daily average air temperature,  
24 as measured by the Weather Bureau, had not been above freezing since January 14, 2008.  
25 Thus freezing of water in the well casing that is above ground surface is not unexpected  
26 in the cold weather conditions encountered.

27  
28 Since the forecast was for temperatures to drop below freezing, it was decided that the  
29 well water was not going to thaw during this monitoring event. R. Hockett (USACE)  
30 was contacted and it was agreed that sampling of this well would be delayed and added to  
31 the next group of wells to be sampled. When this well is next scheduled for a January  
32 sampling, provisions will be made to sample this well during warmer weather conditions  
33 that result in no ice being present in the well. Additionally, it should be noted that the  
34 freezing of the water in the well did not appear to have damaged or compromised the  
35 integrity of the well. Quarterly sampling of LL1mw-064 was initiated during the April  
36 2008 event.

37  
38 In order to maintain the current 36 wells being monitored for 2008, the next well in the  
39 monitoring well sequence table (reference the sampling sequence in Appendix G of the  
40 *FWGWMP Annual Report for 2007*) was added. This well is LL12 mw-246, which was  
41 sampled during the 2008 sampling events.

### 42 43 **3.4.3 April 2008**

44  
45 The April 2008 FWGWMP sampling event was performed between April 7 and 16, 2008.  
46 One-hundred-thirty-six wells, including the 5 RCRA wells, were sampled for this event.

The results of this sampling event are reported in the *Facility-Wide Groundwater Monitoring Program, Report on the April 2008 Sampling Event, Ravenna Army Ammunition Plant, Ravenna, Ohio*, dated November 2008 (EQM). The results of this sampling event are summarized in Section 4.0 of this report.

### 3.4.4 July 2008

The July 2008 FWGWMP sampling event was performed between July 7 and 16, 2008. One-hundred-thirty-two wells were sampled for this event. The results of this sampling event are reported in the Draft *Facility-Wide Groundwater Monitoring Program, Report on the July 2008 Sampling Event, Ravenna Army Ammunition Plant, Ravenna, Ohio*, dated September 2008 (EQM). The results of this sampling event are summarized in Section 4.0 of this report.

The annual facility-wide monitoring well inspection for all 237 wells was completed in conjunction with the July sampling event. The results of the well inspections and the associated potentiometric map are included in this report as discussed in Section 3.2.

### 3.4.5 Groundwater pH

Groundwater pH values of less than 5 have been noted in several wells (i.e., LL1mw-063, LL3mw-237, LL12mw-107, B12mw-010, CBLmw-002, FBQmw-171, FBQmw-174, FBQmw-175, RQLmw-012, and RQLmw-013) over the past few sampling events. The historical purge records for these wells were reviewed. The pH readings are for these wells are presented in Table 3-5.

**Table 3-5. pH Levels for Selected Wells**

Well ID	January 2008 pH Range	April 2008 pH Range	July 2008 pH Range
LL1mw-063	7.41 – 7.71	5.05 – 4.23	4.64 – 4.77
LL3mw-237	6.04 – 6.19	2.64 – 3.15	6.19 – 6.76
LL12mw-107	7.05 – 7.4	3.88 – 4.59	6.12 – 6.42
B12mw-010	Not analyzed	4.32 – 4.42	4.95 – 5.51
CBLmw-002	Not analyzed	3.84 – 4.62	4.8 – 4.84
FBQmw-171	Not analyzed	4.87 – 4.88	4.84 – 4.94
FBQmw-174	Not analyzed	4.66 – 4.92	4.83 – 4.91
FBQmw-175	Not analyzed	4.35 – 4.41	5.06 – 5.09
RQLmw-012	Not analyzed	4.8 – 6.03	4.41 – 4.5
RQLmw-013	Not analyzed	4.5 – 4.51	3.54 – 3.63

The April 2008 pH measurements for LL3mw-237 and LL12mw-107 appear to be anomalous and may be due to equipment error. The pH measurements for LL1mw-063 do appear to be declining over time. This well is centrally located to previous operations at Load Line 1. No other Load Line 1 wells are exhibiting low or declining pH levels. Conditions at this well will be closely monitored during the October 2008 sampling event



to determine if this trend is continuing. The pH measured during the purging of the other wells has remained consistently at or below 5 during the sampling timeframe. This could be indicative of groundwater contamination; however a full evaluation of the conditions at these wells will be conducted once all of the wells have been sampled. Finally it should be noted that all of the referenced wells are bedrock wells, with the exception of LL12mw-107. Most are Sharon wells, which have high silica content sandstone. The Homewood wells are also a sandstone formation. High silica content results in little, if any, buffering capacity which can result in lower pH.

#### 3.4.6 Groundwater Levels

During the July and October 2007 monitoring events, which are addressed in the 2007 Annual Report, EQM determined that groundwater levels in some wells had declined significantly from April 2007 levels. EQM initiated an evaluation of conditions, which may have caused this decline. Through reviewing data available from the U.S. Department of Agriculture (USDA) and National Oceanographic and Atmospheric Administration (NOAA) it was determined that starting about June 1, 2007 the RVAAP area was experiencing abnormally dry weather conditions. This condition lasted until about August 10, 2007.

*Ohio EPA's Technical Guidance for Ground Water Investigations – Chapter 3 (Characterization of Site Hydrogeology)* (October 2006) indicates that the fluctuation of groundwater levels are affected by groundwater recharge (i.e., infiltration to the water table) and evapotranspiration and phreatophytic consumption (i.e., utilization of groundwater by plants to sustain growth and health).

During an abnormal dry period it can be expected that the amount of recharge to groundwater will be less than “normal” and that the amount of plant use will be above “normal” resulting in abnormal (i.e., lower than “normal”) groundwater levels.

For the purpose of comparison, the changes in groundwater elevation in sampled wells were determined for the Spring to Summer sampling events for 2006 and 2007. In 2006, groundwater levels in wells increased by an average of 0.79 feet (actual range was up to 2.4 feet). USDA and NOAA records indicate that the RVAAP area was not experiencing abnormally dry conditions during that time.

During the 2007 monitoring events groundwater levels in wells at RVAAP declined an average of 2.94 feet (actual range was up to 8 feet). As previously indicated USDA and NOAA record indicate that the RVAAP area was experiencing abnormally dry conditions during this time. Thus, EQM concluded that the low water levels measured in wells in 2007 were climatically controlled.

During the January 2008 monitoring event it was observed that the groundwater levels in wells at RVAAP were elevated an average of just under 2 feet from the October 2007 groundwater elevation monitoring. Significantly depressed water tables were not observed in October 2008.

## SECTION 4

### SUMMARY/ASSESSMENT OF ANNUAL FWGWMP ANALYTICAL RESULTS

#### 4.1 Introduction

A summary of the constituents detected above background levels or above RLs at each of the FWGWMP wells during the 2008 reporting period is discussed in the following subsections. Table 4.1 presents the Primary Chemicals of Potential Concern at the RVAAP Facility. Samples were collected on the following dates:

- October 8 through 11, 2007
- January 28 through 31, 2008
- April 7 through 16, 2008
- July 7 through 16, 2008

A summary of all compounds detected in 2008 are presented in Tables 4-2 and 4-3. The Maximum Contaminant Levels (MCLs) are provided, where applicable, in the following sections. MCLs and United States EPA Region 9 Preliminary Remediation Goals (PRGs) are also provided where applicable in Tables 4-2 and 4-3. RVAAP facility-wide background levels are presented in Table 4-4.

**Table 4.1 Primary Chemicals of Potential Concern at the RVAAP Facility**

Dinitrotoluene-2,4	Dinitrotoluene-2,6
Trinitrotoluene-2,4,6	RDX (cyclotrimethylenetrinitramine)
Composition B [RDX + Trinitrotoluene (TNT)]	HMX [high melting point explosive (octogen)]
Nitrocellulose	Nitroglycerine
Nitroguanidine	Perchlorate
Aluminum	Arsenic
Barium	Cadmium
Chromium	Lead
Mercury	Selenium
Silver	Zinc
<b>Other Chemicals of Potential Concern at the Facility</b>	
1,3,5-trinitrobenzene	1,3-Dinitrobenzene
Nitrobenzene	o-Nitrotoluene
n-nitrotoluene	p-Nitrotoluene
Manganese	VOCs
SVOCs	PCBs

**Table 4-2. Summary of Constituents Detected - October 2007**

Area	Well Number	Monitored Zone	Compound or Element Detected	October 2007 Level (ug/L)	MCL (ug/L)	Region 9 PRG (ug/L)	Facility-Wide Background (ug/L)
Background Wells	BKGmw-004	Unconsolidated	Antimony	0.28 J	6	15	0
			Barium	21.9	2000	2600	82.1
			Calcium	20700	NS	NS	53100
			Iron	60 J	300	11000	279
			Magnesium	6250	NS	NS	43300
			Manganese	0.65 J	50	880	1020
			Perchlorate	0.12 J	NS	3.6	*
			Potassium	707 J	NS	NS	2890
			Sodium	15900	NS	NS	45700
			Zinc	5.5 J	5000	11000	60.9
Background Wells	BKGmw-005	Unconsolidated	Barium	16.3	2000	2600	82.1
			Calcium	85100 J	NS	NS	53100
			Iron	251.0 J	300	11000	279
			Magnesium	19500	NS	NS	43300
			Manganese	2.9 J	50	880	1020
			Nickel	3.6 J	NS	730	0
			Perchlorate	0.013 J	NS	3.6	*
			Potassium	1230	NS	NS	2890
			Sodium	10800	NS	NS	45700
			Zinc	5 J	5000	11000	60.9
Background Wells	BKGmw-006	Bedrock	Barium	16.1	2000	2600	82.1
			Calcium	69900	NS	NS	53100
			bis(2-Ethylhexyl) phthalate	1.8 J	NS	4.8	*
			delta-BHC	0.025 J	NS	NS	*
			Iron	742 J	300	11000	279
			Magnesium	21800	NS	NS	43300
			Manganese	191 J	50	880	1020
			Perchlorate	0.02 J	NS	3.6	*
			Potassium	2170	NS	NS	2890
			Sodium	43600	NS	NS	45700
Background Wells	BKGmw-008	Bedrock	Antimony	0.26 J	6	15	0
			Barium	4.7 J	2000	2600	256
			Calcium	24700	NS	NS	53100
			Iron	64.2 J	300	11000	1430
			Magnesium	9750	NS	NS	15000
			Manganese	29.1 J	50	880	1340
			Perchlorate	0.028 J	NS	3.6	*
			Potassium	511 J	NS	NS	5770
			Sodium	8760	NS	NS	51400
			Zinc	6.4 J	5000	11000	52.3
Background Wells	BKGmw-010	Bedrock	Aluminum	117	200	36000	0
			Barium	18.6	2000	2600	256
			Beryllium	0.13 J	4	NS	0
			Cadmium	0.12 J	5	NS	0
			Calcium	11100	NS	NS	53100
			Iron	84.9	300	11000	1430
			Magnesium	14200	NS	NS	15000
			Manganese	509	50	880	1340
			Nickel	78.4	100	730	83.4
			Potassium	706	NS	NS	5770
			Sodium	3800	NS	NS	51400
			Tetryl	0.71 J	NS	360	*
			Zinc	14.7	5000	11000	52.3

**Table 4-2. Summary of Constituents Detected - October 2007**

Area	Well Number	Monitored Zone	Compound or Element Detected	October 2007 Level (ug/L)	MCL (ug/L)	Region 9 PRG (ug/L)	Facility-Wide Background (ug/L)
Background Wells	BKGmw-012	Bedrock	Aluminum	27.2 J	200	36000	0
			Barium	245	2000	2600	256
			beta-BHC	0.026 J	NS	0.037	*
			bis(2-Ethylhexyl) phthalate	1.5 J	NS	4.8	*
			Calcium	26900	NS	NS	53100
			Iron	142	300	11000	1430
			Magnesium	9320	NS	NS	15000
			Manganese	37	50	880	1340
			Nickel	3.3 J	NS	730	83.4
			Potassium	4050 J	NS	NS	5770
			Sodium	45300	NS	NS	51400
			Zinc	7.5 J	5000	11000	52.3
Background Wells	BKGmw-013	Unconsolidated	Arsenic	11.4	10	0.007	11.7
			Barium	89.4	2000	2600	82.1
			Calcium	76300	NS	NS	115000
			Iron	844	300	11000	279
			Magnesium	26100	NS	NS	43300
			Manganese	417	50	880	1020
			Potassium	1970 J	NS	NS	2890
			Sodium	13100	NS	NS	45700
			Zinc	5.1 J	5000	11000	60.9
Background Wells	BKGmw-015	Bedrock	Barium	281	2000	2600	256
			Calcium	30700	NS	NS	53100
			Iron	95.7 J	300	10000	1430
			Magnesium	13000	NS	NS	15000
			Manganese	11 J	50	880	1340
			Nickel	3.7 J	100	730	83.4
			Potassium	4670	NS	NS	5770
			Sodium	12500	NS	NS	51400
			Zinc	14.2	5000	11000	52.3
Background Wells	BKGmw-016	Unconsolidated	Aluminum	24.7 J	200	36000	0
			Barium	14.1	2000	2600	82.1
			beta-BHC	0.0093 J	NS	0.037	*
			Calcium	9190	NS	NS	115000
			Iron	28.3 J	300	10000	279
			Magnesium	4050	NS	NS	43300
			Manganese	8.2 J	50	880	1020
			Perchlorate	0.057 J	NS	3.6	*
			Potassium	576 J	NS	NS	2890
			Sodium	2690	NS	NS	45700
			Zinc	4.5 J	5000	11000	60.9
Background Wells	BKGmw-017	Unconsolidated	Aluminum	41.6 J	200	3600	0
			Arsenic	20.2	10	0.007	11.7
			Barium	33.8	2000	2600	82.1
			bis(2-Ethylhexyl) phthalate	4.3 J	NS	4.8	*
			Calcium	100000	NS	NS	115000
			Iron	1780	300	10000	279
			Magnesium	42800	NS	NS	43300
			Manganese	213	50	880	1020
			Potassium	1990 J	NS	NS	2890
			Sodium	21400	NS	NS	45700
			Zinc	4.9 J	5000	11000	60.9

**Table 4-2. Summary of Constituents Detected - October 2007**

Area	Well Number	Monitored Zone	Compound or Element Detected	October 2007 Level (ug/L)	MCL (ug/L)	Region 9 PRG (ug/L)	Facility-Wide Background (ug/L)
Background Wells	BKGmw-018	Bedrock	Barium	19.5	2000	2600	256
			bis(2-Ethylhexyl) phthalate	1.4 J	NS	4.8	*
			Calcium	55700	NS	NS	53100
			Iron	141 J	300	10000	1430
			Magnesium	6480	NS	NS	15000
			Manganese	13 J	50	880	1340
			Nitrocellulose	0.23 J	NS	NS	*
			Perchlorate	0.023 J	NS	3.6	*
			Potassium	1070	NS	NS	5770
			Sodium	2350	NS	NS	51400
			Zinc	3.5 J	5000	11000	52.3
Background Wells	BKGmw-019	Unconsolidated	Barium	41.9	2000	2600	82.1
			beta-BHC	0.0073 J	NS	0.037	*
			Calcium	112000	NS	NS	115000
			Iron	551 J	300	10000	279
			Magnesium	32400	NS	NS	43300
			Manganese	189 J	50	880	1020
			Potassium	1110	NS	NS	2890
			Sodium	9120	NS	NS	45700
			Zinc	2.9 J	5000	11000	60.9
Background Wells	BKGmw-020	Bedrock	Barium	130	2000	2600	256
			beta-BHC	0.013 J	NS	0	*
			Calcium	51800	NS	NS	53100
			Iron	2390 J	300	10000	1430
			Magnesium	16300	NS	NS	15000
			Manganese	756 J	50	880	1340
			Nitrobenzene	0.071 J	NS	3	*
			Potassium	2390	NS	NS	5770
			Sodium	7820	NS	NS	51400
			Zinc	5 J	NS	1100	52.3
Background Wells	BKGmw-021	Unconsolidated	Barium	43.4	2000	2600	82.1
			bis(2-Ethylhexyl) phthalate	0.89 J	NS	4.8	*
			Calcium	79900	NS	NS	115000
			Iron	204 J	300	10000	279
			Magnesium	453000	NS	NS	43300
			Manganese	0.64 J	50	880	1020
			Perchlorate	0.078 J	NS	3.6	*
			Potassium	1420	NS	NS	2890
			Sodium	9400	NS	NS	45700
			Zinc	10.7	5000	11000	60.9
Load Line 1	LL1mw-078	Bedrock	Aluminum	69.8 J	200	36000	0
			Antimony	0.2 J	6	15	0
			Barium	16.3	2000	2600	82.1
			bis(2-Ethylhexyl) phthalate	1.8 JB	NS	4.8	*
			Calcium	47400	NS	NS	115000
			Cobalt	2 J	NS	730	0
			Iron	158	300	11000	279
			Magnesium	8980	NS	NS	43300
			Manganese	120	50	880	1020
			Nickel	6.8 J	NS	730	83.4
			Perchlorate	0.068 J	NS	3.6	*
			Potassium	3340 J	NS	NS	2890
			Sodium	4610	NS	NS	45700
			Thallium	0.33 J	2	2	0
			Zinc	6.3 J	5000	11000	60.9

**Table 4-2. Summary of Constituents Detected - October 2007**

Area	Well Number	Monitored Zone	Compound or Element Detected	October 2007 Level (ug/L)	MCL (ug/L)	Region 9 PRG (ug/L)	Facility-Wide Background (ug/L)
Load Line 1	LL1mw-080	Bedrock	2,4-Dinitrotoluene	0.45 J	NS	73	*
			2,6-Dinitrotoluene	0.49 J	NS	36	*
			2-Amino-4,6-dinitrotoluene	4.5	NS	NS	*
			4-Amino-2,6-Dinitrotoluene	4.3	NS	NS	*
			Barium	19.1	2000	2600	82.1
			Calcium	298000	NS	NS	115000
			HMX	7.9	NS	1800	*
			Iron	685	300	11000	279
			Magnesium	14800	NS	NS	43300
			Manganese	56.1	50	880	1020
			Nickel	4.8 J	NS	730	83.4
			Perchlorate	0.012 J	NS	3.6	*
			Potassium	4110	NS	NS	2890
			RDX	38	NS	0.61	*
			Sodium	1960	NS	NS	45700
			Toluene	0.22 J	1000	720	0
			Zinc	3.9 J	5000	11000	60.9
Load Line 1	LL1mw-083	Bedrock	1,3,5-Trinitrobenzene	9.2 J	NS	1100	*
			2,4,6-Trinitrotoluene	9.2 J	NS	2	*
			2,4-Dinitrotoluene	5.2 J	NS	73	*
			2,4-Dinitrotoluene	3.6 J	NS	73	*
			2,6-Dinitrotoluene	2.2 J	NS	36	*
			2,6-Dinitrotoluene	1.6 J	NS	36	*
			2-Amino-4,6-dinitrotoluene	22	NS	NS	*
			4-Amino-2,6-Dinitrotoluene	24	NS	NS	*
			Aluminum	989.0 J	200	36000	0
			Antimony	0.2 J	6	15	0
			Barium	18.3	2000	2600	82.1
			Beryllium	0.24 J	4	NS	0
			bis(2-Ethylhexyl) phthalate	1.7 JB	NS	4.8	*
			Cadmium	0.78	5	NS	0
			Calcium	18800	NS	NS	115000
			Cobalt	14	NS	730	0
			Copper	4.6 J	1300	1500	0
			Iron	90.4	300	11000	279
			Magnesium	5070	NS	NS	43300
			Manganese	765	50	880	1020
			Nickel	43.6	NS	730	83.4
			Perchlorate	0.025 J	NS	3.6	*
			Potassium	2340 J	NS	NS	2890
			RDX	0.6 J	NS	0.61	*
			Sodium	18500	NS	NS	45700
			Zinc	45.8	5000	11000	60.9
Load Line 2	LL2mw-059	Bedrock	1,3,5-Trinitrobenzene	4.1	NS	1100	*
			2,4,6-Trinitrotoluene	0.15	NS	2	*
			2,4-Dinitrotoluene	0.08 J	NS	73	*
			2,4-Dinitrotoluene	0.64 J	NS	73	*
			2,6-Dinitrotoluene	0.86	NS	36	*
			2-Amino-4,6-dinitrotoluene	1	NS	NS	*
			4-Amino-2,6-Dinitrotoluene	0.97	NS	NS	*
			Aluminum	10.7 J	200	36000	0
			Barium	5.4 J	2000	2600	82.1
			beta-BHC	0.021 J	NS	0.037	*
			bis(2-Ethylhexyl) phthalate	1.7 JB	NS	4.8	*
			Calcium	23400	NS	NS	115000
			HMX	0.14 J	NS	1800	*
			Iron	71.7	300	11000	279
			Magnesium	8960	NS	NS	43300
			Manganese	136	50	880	1020
			Nickel	5.9 J	NS	730	83.4
			Perchlorate	0.012 J	NS	3.6	*
			Potassium	748.0 J	NS	NS	2890
			Sodium	4820	NS	NS	45700
			Zinc	6.8 J	5000	11000	60.9

**Table 4-2. Summary of Constituents Detected - October 2007**

Area	Well Number	Monitored Zone	Compound or Element Detected	October 2007 Level (ug/L)	MCL (ug/L)	Region 9 PRG (ug/L)	Facility-Wide Background (ug/L)
Load Line 2	LL2mw-262	Bedrock	Barium	19.4	2000	2600	82.1
			beta-BHC	0.011 J	NS	0.037	*
			bis(2-Ethylhexyl) phthalate	1.6 JB	NS	4.8	*
			Calcium	55400	NS	NS	115000
			Cobalt	5	NS	730	0
			HMX	0.27 J	NS	1800	*
			Iron	159	300	11000	279
			Magnesium	37800	NS	NS	43300
			Manganese	922	50	880	1020
			Nickel	23.3	NS	730	83.4
			Perchlorate	0.061 J	NS	3.6	*
			Potassium	2080 J	NS	NS	2890
			Sodium	8430	NS	NS	45700
			Zinc	4.9 J	5000	11000	60.9
			Arsenic	16.8	10	0	11.7
			Barium	27	2000	2600	82.1
Load Line 2	LL2mw-263	Bedrock	beta-BHC	0.007 J	NS	0.037	*
			bis(2-Ethylhexyl) phthalate	3.9 JB	NS	4.8	*
			Calcium	37500	NS	NS	115000
			Cobalt	3 J	NS	730	0
			Iron	5140	300	11000	279
			Magnesium	16900	NS	NS	43300
			Manganese	1590	50	880	1020
			Nickel	7 J	NS	730	83.4
			Potassium	822 J	NS	NS	2890
			Sodium	5130	NS	NS	45700
			Zinc	2.6 J	5000	11000	60.9
Load Line 3	LL3mw-238	Bedrock	1,3-Dinitrobenzene	42.0 J	NS	3.6	*
			2,4-Dinitrotoluene	96.0 J	NS	73	*
			2-Nitrotoluene	13.0 J	NS	110	*
			4-Nitrotoluene	37.0 J	NS	3.2	*
			Aluminum	16.5 J	200	36000	0
			Barium	6.7 J	2000	2600	82.1
			bis(2-Ethylhexyl) phthalate	1.4 JB	NS	4.8	*
			Calcium	38800	NS	NS	115000
			Iron	123.0	300	11000	279
			Magnesium	4260	NS	NS	43300
			Manganese	1.9 J	50	880	1020
			Perchlorate	0.15	NS	3.6	*
			Potassium	1920 J	NS	NS	2890
			RDX	6.6 J	NS	0.61	*
			Sodium	2320	NS	NS	45700
			Zinc	4.1 J	5000	11000	60.9
Load Line 3	LL3mw-242	Bedrock	Aluminum	16.2 J	200	36000	0
			Barium	4.3 J	2000	2600	82.1
			beta-BHC	0.012 J	NS	0.037	*
			bis(2-Ethylhexyl) phthalate	3.4 JB	NS	4.8	*
			Calcium	18000	NS	NS	115000
			Carbon disulfide	0.58 J	NS	1000	*
			Iron	37.2	300	11000	279
			Magnesium	7210	NS	NS	43300
			Manganese	25.1	50	880	1020
			Perchlorate	0.0099 J	NS	3.6	*
			Potassium	1060 J	NS	NS	2890
			Sodium	14200	NS	NS	45700
			Zinc	4.5 J	5000	11000	60.9

**Table 4-2. Summary of Constituents Detected - October 2007**

Area	Well Number	Monitored Zone	Compound or Element Detected	October 2007 Level (ug/L)	MCL (ug/L)	Region 9 PRG (ug/L)	Facility-Wide Background (ug/L)
Load Line 4	LL4mw-198	Unconsolidated	Aluminum	22.0 J	200	36000	0
			Barium	15.3	2000	2600	82.1
			Calcium	34400	NS	NS	115000
			Iron	4330	300	11000	279
			Magnesium	15600	NS	NS	43300
			Manganese	1460	50	880	1020
			Nickel	46.9	NS	730	0
			Potassium	1240	NS	NS	2890
			Sodium	10200	NS	NS	45700
			Zinc	91.5	5000	11000	60.9
Load Line 4	LL4mw-199	Unconsolidated	Aluminum	12.4 J	200	36000	0
			Arsenic	10.8	10	0	11.7
			Barium	126	2000	2600	82.1
			beta-BHC	0.02 J	NS	0.037	*
			Calcium	98900	NS	NS	115000
			Iron	4910	300	11000	279
			Magnesium	24300	NS	NS	43300
			Manganese	636	50	880	1020
			Potassium	1540	NS	NS	2890
			Sodium	10500	NS	NS	45700
			Zinc	4.9 J	5000	11000	60.9
Load Line 11	LL11mw-002	Unconsolidated	alpha-Chordane	0.015 J	NS	NS	*
			Aluminum	556 J	200	36000	0
			Antimony	0.3 J	6	15	0
			Barium	31.8	2000	2600	82.1
			Cadmium	0.18 J	5	NS	0
			Calcium	88100	NS	NS	115000
			Iron	1310 J	300	11000	279
			Magnesium	29700	NS	NS	43300
			Manganese	191	50	880	1020
			Nickel	3.7 J	NS	730	0
			Perchlorate	0.0094 J	NS	3.6	*
			Potassium	1640	NS	NS	2890
			Sodium	9960	NS	NS	45700
			Vanadium	1.3 J	NS	36	0
			Zinc	21.6	5000	11000	60.9
Load Line 11	LL11mw-007	Unconsolidated	Arsenic	23.1	10	0	11.7
			Barium	94.5	2000	2600	82.1
			bis(2-Ethylhexyl) phthalate	4 JB	NS	4.8	*
			Calcium	95300	NS	NS	115000
			Iron	1350	300	11000	279
			Magnesium	34000	NS	NS	43300
			Manganese	224	50	880	1020
			Perchlorate	0.2	NS	3.6	*
			Potassium	1430 J	NS	NS	2890
			Sodium	14200	NS	NS	45700
			Zinc	3.9 J	5000	11000	60.9
Load Line 12	LL12mw-153	Unconsolidated	Antimony	0.2 J	6	15	0
			Arsenic	24.6	10	0	11.7
			Barium	79.4	2000	2600	82.1
			beta-BHC	0.01 J	NS	0.04	*
			Calcium	147000	NS	NS	115000
			HMX	0.052 J	NS	1800	*
			Iron	4180	300	11000	279
			Magnesium	80500	NS	NS	43300
			Manganese	206	50	880	1020
			Nitrate-Nitrite	0.02 J	10000	1000	*
			Potassium	2150	NS	NS	2890
			Sodium	26900	NS	NS	45700
			Zinc	6.2 J	5000	11000	60.9



**Table 4-2. Summary of Constituents Detected - October 2007**

Area	Well Number	Monitored Zone	Compound or Element Detected	October 2007 Level (ug/L)	MCL (ug/L)	Region 9 PRG (ug/L)	Facility-Wide Background (ug/L)
Load Line 12	LL12mw-182	Unconsolidated	Arsenic	40.5	10	0	11.7
			Barium	72.4	2000	2600	82.1
			beta-BHC	0.019 J	NS	0.04	*
			bis(2-Ethylhexyl) phthalate	3 J	NS	4.8	*
			Calcium	81500	NS	NS	115000
			HMX	0.066 J	NS	1800	*
			Iron	1100	300	11000	279
			Magnesium	65300	NS	NS	43300
			Manganese	56.1	50	880	1020
			Methoxychlor	0.01 J	40	180.00	*
			Potassium	3230	NS	NS	2890
			Sodium	25500	NS	NS	45700
			Zinc	3.1 J	5000	11000	60.9
Load Line 12	LL12mw-183	Unconsolidated	Antimony	0.2 J	6	15	0
			Arsenic	34.9	10	0	11.7
			Barium	78.1	2000	2600	82.1
			Calcium	120000	NS	NS	115000
			Carbon disulfide	0.47 J	NS	1000	*
			Chromium	5.6 J	100	NS	0
			Iron	1460	300	11000	279
			Magnesium	48400	NS	NS	43300
			Manganese	74.6	50	880	1020
			Nickel	5.1 J	NS	730	0
			Nitrate-Nitrite	0.02 J	10000	1000	*
			Potassium	3470	NS	NS	2890
			Sodium	18100	NS	NS	45700
			Zinc	3.9 J	5000	11000	60.9
Load Line 12	LL12mw-186	Unconsolidated	Barium	45.9	2000	2600	82.1
			beta-BHC	0.014 J	NS	0.04	*
			bis(2-Ethylhexyl) phthalate	2.2 JB	NS	4.8	*
			Calcium	134000	NS	NS	115000
			Iron	861	300	11000	279
			Magnesium	59100	NS	NS	43300
			Manganese	347	50	880	1020
			Nitrate-Nitrite	0.6	10000	1000	*
			Potassium	1450 J	NS	NS	2890
			Sodium	15200	NS	NS	45700
			Zinc	4.3 J	5000	11000	60.9
Load Line 12	LL12mw-187	Unconsolidated	Nitrate-Nitrite	1600	10000	1000	*
			Perchlorate	0.025 J	NS	3.6	*
Central Burn Pits	CBPmw-006	Unconsolidated	Aluminum	11800	200	36000	0
			Antimony	0.1 J	6	15	0
			Arsenic	34.3	10	0	11.7
			Barium	212	2000	2600	82.1
			Beryllium	1.1	4	NS	0
			bis(2-Ethylhexyl) phthalate	0.91 J	NS	4.8	*
			Calcium	76700	NS	NS	115000
			Chromium	36.7	100	NS	0
			Cobalt	17 J	NS	730	0
			Copper	21.2	1300	1500	0
			HMX	0.053 J	NS	1800	*
			Iron	27400	300	11000	279
			Lead	12	15	NS	0
			Magnesium	31900	NS	NS	43300
			Manganese	466	50	880	1020
			Nickel	37.8	NS	730	0
			Nitrobenzene	0.071 J	NS	3	*
			Perchlorate	0.13	NS	3.6	*
			Potassium	7950 J	NS	NS	2890
			Sodium	13300	NS	NS	45700
			Vanadium	37.7 J	NS	36	0
			Zinc	66.7	5000	11000	60.9

Table 4-2. Summary of Constituents Detected - October 2007

Area	Well Number	Monitored Zone	Compound or Element Detected	October 2007 Level (ug/L)	MCL (ug/L)	Region 9 PRG (ug/L)	Facility-Wide Background (ug/L)
Central Burn Pits	CBPmw-007	Unconsolidated	Arsenic	36.8	10	0	11.7
			Barium	10.5	2000	2600	82.1
			bis(2-Ethylhexyl) phthalate	1.2 J	NS	4.8	*
			Calcium	224000	NS	NS	115000
			Carbon disulfide	0.52 J	NS	1000	*
			Cobalt	3 J	NS	730	0
			Iron	4290	300	11000	279
			Magnesium	120000	NS	NS	43300
			Manganese	228	50	880	1020
			Nickel	4.5 J	NS	730	0
			Potassium	4510	NS	NS	2890
			Sodium	100000	NS	NS	45700
			Zinc	2.5 J	5000	11000	60.9
Demolition Area 2	DA2mw-107	Unconsolidated	Arsenic	6.4	10	0	11.7
			Barium	37.8	2000	2600	82.1
			Calcium	91100	NS	NS	115000
			Iron	1800	300	11000	279
			Magnesium	30400	NS	NS	43300
			Manganese	203	50	880	1020
			Potassium	1770 J	NS	NS	2890
			Sodium	10700	NS	NS	45700
			Zinc	2.5 J	5000	11000	60.9
Demolition Area 2	DETmw-003	Unconsolidated	Arsenic	12.4	10	0	11.7
			Barium	55.4	2000	2600	82.1
			Calcium	92800	NS	NS	115000
			Iron	1960	300	11000	279
			Magnesium	34000	NS	NS	43300
			Manganese	294	50	880	1020
			Potassium	1830 J	NS	NS	2890
			Sodium	13100	NS	NS	45700
			Zinc	3 J	5000	11000	60.9
Demolition Area 2	DETmw-004	Unconsolidated	Barium	49.4	2000	2600	82.1
			beta-BHC	0.017 J	NS	0.04	*
			bis(2-Ethylhexyl) phthalate	4.9 J	NS	4.8	*
			Calcium	138000	NS	NS	115000
			HMX	0.93	NS	1800	*
			Iron	396.0	300	11000	279
			Magnesium	27600	NS	NS	43300
			Manganese	12.7	50	880	1020
			Potassium	1750 J	NS	NS	2890
			Sodium	5230	NS	NS	45700
			Zinc	46.3 J	5000	11000	60.9
Ramsdell Quarry Landfill	RQLmw-007	Bedrock	Aluminum	15.3 J	200	36000	0
			Arsenic	51.4	10	0	11.7
			Barium	55.7	2000	2600	82.1
			beta-BHC	0.0098 J	NS	0.037	*
			Calcium	140000	NS	NS	115000
			Cobalt	6.9 J	NS	730	0
			Iron	20800	300	11000	279
			Magnesium	106000	NS	NS	43300
			Manganese	2730	50	880	1020
			Nickel	12.3	NS	730	83.4
			Potassium	8750	NS	NS	2890
			Sodium	10400	NS	NS	45700
			Zinc	13.4	5000	11000	60.9

**Table 4-2. Summary of Constituents Detected - October 2007**

Area	Well Number	Monitored Zone	Compound or Element Detected	October 2007 Level (ug/L)	MCL (ug/L)	Region 9 PRG (ug/L)	Facility-Wide Background (ug/L)
Ramsdell Quarry Landfill	RQLmw-008	Bedrock	1,3,5-Trinitrobenzene	0.41 J	10	0	11.7
			Arsenic	61.2	10	0	11.7
			Barium	173	2000	2600	82.1
			beta-BHC	0.035 J	NS	0.037	*
			Beryllium	0.77 J	4	NS	0
			Calcium	84800	NS	NS	115000
			Cobalt	5.3 J	NS	730	0
			Iron	141000	300	11000	279
			Magnesium	36700	NS	NS	43300
			Manganese	1280	50	880	1020
			Methoxychlor	0.055 J	40	180	*
			Nickel	17.6	NS	730	83.4
			Potassium	6990	NS	NS	2890
			Silver	2.2 J	100	180	0
			Sodium	19700	NS	NS	45700
			Toxaphene	0.64 J	3	0.061	*
			Vanadium	1.3 J	NS	36	0
			Zinc	6.6 J	5000	11000	60.9
Ramsdell Quarry Landfill	RQLmw-009	Bedrock	Arsenic	36	10	0	11.7
			Barium	62.5	2000	2600	82.1
			beta-BHC	0.0092 J	NS	0.037	*
			Calcium	33900	NS	NS	115000
			Cobalt	5.4 J	NS	730	0
			Iron	17500	300	11000	279
			Magnesium	52000	NS	NS	43300
			Manganese	2400	50	880	1020
			Nickel	6 J	NS	730	83.4
			Potassium	5120	NS	NS	2890
			Sodium	2480	NS	NS	45700
			Thallium	0.15 J	2	2	0
			Zinc	3.6 J	5000	11000	60.9
			Barium	24.1	2000	2600	82.1
Winklepeck Burning Ground	WBGmw-006	Unconsolidated	Calcium	64400	NS	NS	115000
			HMX	13	NS	1800	*
			Iron	193	300	11000	279
			Magnesium	21300	NS	NS	43300
			Manganese	56	50	880	1020
			Perchlorate	0.032 J	NS	3.6	*
			Potassium	820 J	NS	NS	2890
			RDX	58	NS	0.61	*
			Sodium	5970	NS	NS	45700
			Zinc	3.2 J	5000	11000	60.9
Winklepeck Burning Ground	WBGmw-007	Unconsolidated	Arsenic	4.5 J	10	0	11.7
			Barium	39.7	2000	2600	82.1
			Calcium	66100	NS	NS	115000
			Cyanide	0.01 J	0.2	730	*
			Iron	427	300	11000	279
			Magnesium	17900	NS	NS	43300
			Manganese	130	50	880	1020
			Potassium	1150 J	NS	NS	2890
			Sodium	5030	NS	NS	45700
			Zinc	3.2 J	5000	11000	60.9

**Table 4-2. Summary of Constituents Detected - October 2007**

Area	Well Number	Monitored Zone	Compound or Element Detected	October 2007 Level (ug/L)	MCL (ug/L)	Region 9 PRG (ug/L)	Facility-Wide Background (ug/L)
Winklepeck Burning Ground	WBGmw-009	Unconsolidated	Antimony	0.24 J	6	15	0
			Barium	14	2000	2600	82.1
			Calcium	78300	NS	NS	115000
			HMX	2.1	NS	1800	*
			Iron	244	300	11000	279
			Magnesium	24200	NS	NS	43300
			Manganese	12.3	50	880	1020
			Potassium	878 J	NS	NS	2890
			RDX	8.5	NS	0.61	*
			Sodium	4080	NS	NS	45700
			Zinc	2.4 J	5000	11000	60.9

Notes:

NS = no standard NT = not tested

All inorganics are filtered, all organics are not filtered

\* There are no background levels for organic constituents

J = estimated result. Results have been qualified "J" For more details refer to Data Verification/Validation Reports in the FWGWMP October 2007 and January, April and July 2008 Sampling Reports

R = Rejected data

U = analyzed but not detected at or above the reporting limit

Bold = inorganic constituent detected above Facility-Wide background levels

Italics = inorganic constituent detected below the Facility-Wide background levels

Shaded boxes indicate any constituent, which does not have a background value, detected above the reporting limit.

Table 4-3. Summary of Constituents Detected - January, April and July 2008

Area	Well Number	Monitored Zone	Compound or Element Detected	Jan-08 Level (ug/L)	Apr-08 Level (ug/L)	Jul-08 Level (ug/L)	MCL (ug/L)	Region 9 PRG (ug/L)	Facility-Wide Background (ug/L)
Load Line 1	LL1mw-063	Bedrock	1,3,5-Trinitrobenzene	0.042 J	0.087 J	0.14	NS	1100	*
			1,3-Dinitrobenzene	0.11 U	0.11 U	0.082 J	NS	NS	*
			2,4,6-TNT	0.11 U	0.27	0.99	NS	2.2	*
			2,4-Dinitrotoluene	0.13	0.13	0.27	NS	73	*
			2,6-Dinitrotoluene	0.19	0.32	0.63	NS	36	*
			2-Amino-4,6-dinitrotoluene	0.69	0.99	1.9	NS	NS	*
			4-Amino-2,6-Dinitrotoluene	0.11 U	3.2	6.4	NS	NS	*
			Aluminum	460	325	237	200	36000	0
			Barium	23.2	25.9	24.1	2000	2600	256
			beta-BHC	0.013 J	0.016 J	0.03 U	NS	0.037	*
			bis(2-Ethylhexyl) phthalate	1.9 J	10 U	10 U	NS	4.8	*
			Cadmium	0.33 J	0.5 U	0.5 U	5	NS	0
			Calcium	7810	3620	3420	NS	NS	53100
			Cobalt	12.2	4.3 JB	4.9 J	NS	730	0
			Copper	12.3	5 U	5 U	1300	1500	0
			delta-BHC	1.4	0.03 U	0.016 J	NS	0.052	*
			HMX	8420	1.2	1.7	NS	1800	*
			Magnesium	348	3850	3510	NS	NS	15000
			Manganese	56.4	288	251	50	880	1340
			Nickel	10 U	20.3 J	20.7	NS	730	83.4
			Perchlorate	NT	NT	0.021 J	NS	3.6	*
			Potassium	1490	1220 J	1300 J	NS	NS	5770
			RDX	0.18	0.54	0.25	NS	0.61	*
			Sodium	8810	5800	6160 J	NS	NS	51400
			Zinc	10 U	29.3	29.1	5000	11000	52.3
Load Line 1	LL1mw-064	Unconsolidated	Arsenic	NT	4.8 JB	6.3	10	0.045	11.7
			Barium	NT	51.3	51.2	2000	2600	82.1
			bis(2-Ethylhexyl) phthalate	NT	10 U	1 J	NS	4.8	*
			Calcium	NT	57400	60000	NS	NS	115000
			Cyanide	NT	0.01 U	0.011	NS	730	*
			Iron	NT	671	660	300	11000	279
			Magnesium	NT	10000	10200	NS	NS	43300
			Manganese	NT	125	127	50	880	1020
			Potassium	NT	755 J	738 J	NS	NS	2890
			Sodium	NT	5270	5260 J	NS	NS	45700
Load Line 1	LL1mw-065	Unconsolidated	Aluminum	50 U	50 U	19.5 J	200	36000	0
			Barium	58.6	58.4	50.5	2000	2600	82.1
			bis(2-Ethylhexyl) phthalate	8.6 J	10 U	8 J	NS	4.8	*
			Calcium	84300	83400	81800	NS	NS	115000
			Chloromethane	0.32 J	1 U	1 U	NS	1.5	*
			Iron	116	50 U	56.2	300	11000	279
			Magnesium	21000	25100	20600	NS	NS	43300
			Manganese	185	87.7	186	50	880	1020
			Potassium	1140 J	1170 J	1000 J	NS	NS	2890
			RDX	0.064 J	0.11 U	0.11 U	NS	0.61	*
			Sodium	11500	14000	10300 J	NS	NS	45700
			Zinc	2.5 J	10 U	2.4 J	5000	11000	60.9
Load Line 1	LL1mw-079	Bedrock	1,3,5-Trinitrobenzene	0.037 J	0.039 J	0.052 J	NS	1100	*
			2,4,6-TNT	0.11 U	0.1 U	0.062 J	NS	2.2	*
			2,4-Dinitrotoluene	0.086 J	0.078 J	0.085 J	NS	73	*
			2,6-Dinitrotoluene	0.057 J	0.1 U	0.054 J	NS	36	*
			2-Amino-4,6-dinitrotoluene	1.5	1.6	1.5	NS	NS	*
			4-Amino-2,6-Dinitrotoluene	1.8	2.1	2	NS	NS	*
			Aluminum	50 U	50 U	25.8 J	200	36000	0
			Barium	5.4 J	7 J	5.7 J	2000	2600	256
			beta-BHC	0.018 J	0.018 J	0.03 U	NS	0.037	*
			bis(2-Ethylhexyl) phthalate	10 U	0.92 J	0.92 J	NS	4.8	*
			Cadmium	0.21 J	0.23 J	0.33 J	5	NS	0
			Calcium	23900	16100	17800	NS	NS	53100
			HMX	0.68	0.77	0.77	NS	1800	*
			Magnesium	12800	9440	9680	NS	NS	15000
			Manganese	13.3	36.5	22.2	50	880	1340
			Nickel	12.8 J	14.8 J	16.7	NS	730	83.4
			Nitrobenzene	0.071 J	0.1 U	0.075 J	NS	3	*
			Perchlorate	NT	NT	0.029 J	NS	3.6	*
			Potassium	3330 J	2760 J	2640 J	NS	NS	5770
			RDX	1.8	1.9	2.2	NS	0.61	*
			Sodium	9170	6970	5770 J	NS	NS	51400
			Zinc	48.9 J	94	68.4	5000	11000	52.3

Table 4-3. Summary of Constituents Detected - January, April and July 2008

Area	Well Number	Monitored Zone	Compound or Element Detected	Jan-08 Level (ug/L)	Apr-08 Level (ug/L)	Jul-08 Level (ug/L)	MCL (ug/L)	Region 9 PRG (ug/L)	Facility-Wide Background (ug/L)
Load Line 2	LL2mw-060	Bedrock	2-Amino-4,6-dinitrotoluene	0.1 J	0.13 U	0.31	NS	NS	*
			4-Amino-2,6-Dinitrotoluene	0.19	0.13 U	0.44	NS	NS	*
			Acetone	10 U	10 U	10 JB	NS	610	*
			Antimony	0.18 J	0.31 J	0.23 J	6	15	0
			Barium	31.9	29.6	24.7	2000	2600	256
			beta-BHC	0.03 U	0.011 J	0.03 U	NS	0.037	*
			bis(2-Ethylhexyl) phthalate	10 U	21	2.4 J	NS	4.8	*
			Calcium	55900	58900	45800	NS	NS	53100
			Cyanide	0.01 U	0.019	0.01 U	NS	730	*
			Iron	32.2 J	50 U	42.1 J	300	11000	1430
			Magnesium	8920	7330	8480	NS	NS	15000
			Manganese	16.7	0.53 J	47.3	50	880	1340
			Nitrocellulose	0.21 J	0.11 U	0.11 U	NS	NS	*
			Perchlorate	NT	NT	0.027 J	NS	3.6	*
			Potassium	451 J	369 J	473 J	NS	NS	5770
			Sodium	1640	2060	1850 J	NS	NS	51400
			Zinc	3.4 J	10 U	3.1 J	5000	11000	52.3
Load Line 2	LL2mw-261	Bedrock	Arsenic	13.4	15.2 B	15.7	10	0.045	11.7
			Barium	18.7	19.7	20.5	2000	2600	256
			bis(2-Ethylhexyl) phthalate	10 U	10 U	4.5 J	NS	4.8	*
			Calcium	56100	61100	62700	NS	NS	53100
			Cobalt	1.9 J	5 U	5 U	NS	730	0
			Iron	2380	2630	2480	300	11000	1430
			Magnesium	20200	22300	22500	NS	NS	15000
			Manganese	369	393	386	50	880	1340
			Nickel	4 J	3.8 J	10 U	NS	730	83.4
			Potassium	1130 J	1060 J	1180 J	NS	NS	5770
			Sodium	9850	10400	10800 J	NS	NS	51400
			Zinc	10 U	10 U	3.3 J	5000	11000	52.3
			Arsenic	5 U	5 U	3.7 J	10	0.045	11.7
			Barium	4.8 J	4.9 J	5.3 J	2000	2600	256
			bis(2-Ethylhexyl) phthalate	10 U	10 U	1.7 J	NS	4.8	*
			Calcium	47200	48100	49700	NS	NS	53100
			Iron	249	219	363	300	11000	1430
Load Line 2	LL2mw-264	Bedrock	Magnesium	16600	17400	17800	NS	NS	15000
			Manganese	144	191	334	50	880	1340
			Potassium	607 J	550 J	601 J	NS	NS	5770
			Sodium	7340	7260	7270 J	NS	NS	51400
			Thallium	0.15 J	1 U	1 U	2	2	0
			Zinc	2.4 J	3.1 J	3.6 J	5000	11000	52.3
			2,6-Dinitrotoluene	0.059 J	0.092 J	0.11 U	NS	36	*
			Acetone	1.2 J	10 U	10 U	NS	610	*
			Barium	6.2 J	4.6 J	8.2 J	2000	2600	256
			bis(2-Ethylhexyl) phthalate	10 U	0.92 J	3.1 J	NS	4.8	*
			Calcium	52800	38400	66900	NS	NS	53100
			Cobalt	5 U	5 U	6.2	NS	730	0
			HMX	0.1 U	0.04 J	0.1 U	NS	1800	*
			Iron	222	146	2230	300	11000	1430
			Magnesium	12200	7630	21400	NS	NS	15000
			Manganese	193	33	1120	50	880	1340
			Nickel	8.2 J	10 U	10 U	NS	730	83.4
Load Line 2	LL2mw-268	Bedrock	Potassium	561 J	471 J	679 J	NS	NS	5770
			Sodium	2900	2110	7950 J	NS	NS	51400
			Zinc	2.8 J	2.4 J	2.6 J	5000	11000	52.3
			Arsenic	5.4 J	3.7 JB	8.2	10	0.045	11.7
			Barium	37.9	40.5	39.3	2000	2600	256
			Calcium	58000	59100	61900	NS	NS	53100
			Cobalt	5 U	5 U	1.8 J	NS	730	0
			Iron	2500	2440	2770	300	11000	1430
			Magnesium	23900	24900	26100	NS	NS	15000
			Manganese	362	341	366	50	880	1340
			Potassium	1600 J	1520 J	1570 J	NS	NS	5770
			Sodium	11200	12500	12800 J	NS	NS	51400
			Thallium	1 U	0.16 J	1 U	2	2	0
			Vanadium	10 U	10 U	1.5 J	NS	36	0

Table 4-3. Summary of Constituents Detected - January, April and July 2008

Area	Well Number	Monitored Zone	Compound or Element Detected	Jan-08 Level (ug/L)	Apr-08 Level (ug/L)	Jul-08 Level (ug/L)	MCL (ug/L)	Region 9 PRG (ug/L)	Facility-Wide Background (ug/L)
Load Line 2	LL2mw-270	Bedrock	Barium	19.5	33.3	16.1	2000	2600	256
			beta-BHC	0.03 U	0.029 J	0.03 U	NS	0.037	*
			bis(2-Ethylhexyl) phthalate	14	10 U	2.5 J	NS	4.8	*
			Calcium	49400	68500	43800	NS	NS	53100
			Cobalt	13.5 J	25.5	12.1	NS	730	0
			delta-BHC	0.03 U	0.023 J	0.03 U	NS	0.052	*
			HMX	0.059 J	0.1 U	0.11 U	NS	1800	*
			Iron	4420	6030	4780	300	11000	1430
			Magnesium	18600	24000	17100	NS	NS	15000
			Manganese	1160	3600	561	50	880	1340
			Nickel	25.6 J	44.5 J	20.6	NS	730	83.4
			Pentachlorophenol	1.3 J	4.7 J	5 U	NS	0.56	*
			Potassium	1430 J	1550 J	1330 J	NS	NS	5770
			Sodium	3750	6330	2380 J	NS	NS	51400
			Zinc	12.6 J	16	9.8 J	5000	11000	52.3
Load Line 3	LL3mw-232	Bedrock	Barium	28.2	26.1	26.8	2000	2600	256
			bis(2-Ethylhexyl) phthalate	4.3 J	1.5 J	1.3 J	NS	4.8	*
			Calcium	55800	54100	60600	NS	NS	53100
			Cyanide	0.01 U	0.012 J	0.01 U	NS	730	*
			Iron	292	208 J	102 J	300	11000	1430
			Magnesium	36200	35700	38900	NS	NS	15000
			Manganese	458	366	275	50	880	1340
			Nickel	6.1 J	4.6 J	6.9 J	NS	730	83.4
			Potassium	4350	3830	3860	NS	NS	5770
			Sodium	8180	8160	8500	NS	NS	51400
			Thallium	1 U	0.16 J	1 U	2	2	0
			Zinc	8.1 U/J	7.2 J	7.8 J	5000	11000	52.3
Load Line 3	LL3mw-233	Bedrock	Antimony	0.14 J	2 U	0.79 J	6	15	0
			Barium	25.7	24.8	12.5	2000	2600	256
			bis(2-Ethylhexyl) phthalate	1.2 J	10 U	2.3 J	NS	4.8	*
			Calcium	39500	38400	25200	NS	NS	53100
			Cobalt	3.5 J	1.9 J	2.6 J	NS	730	0
			Iron	4840	3350 J	50 U	300	11000	1430
			Magnesium	17500	18600	8920	NS	NS	15000
			Manganese	1410	904	1.1 J	50	880	1340
			Nickel	21.2	15.4	4.2 J	NS	730	83.4
			Perchlorate	NT	NT	0.0093 J	NS	3.6	*
			Potassium	2200	2330	903 J	NS	NS	5770
			Sodium	8970	11400	4560 J	NS	NS	51400
			Thallium	1 U	0.15 J	1 U	2	2	0
			Zinc	18.2 B	15	3.6	5000	11000	52.3
Load Line 3	LL3mw-234	Bedrock	2,4,6-TNT	0.1 U	0.061 J	0.1 U	NS	2.2	*
			2,6-Dinitrotoluene	0.13 J	0.1 U	0.1 U	NS	36	*
			2-Amino-4,6-dinitrotoluene	0.31 J	0.41 J	0.1 U	NS	NS	*
			4-Amino-2,6-dinitrotoluene	0.58 J	0.72 J	0.14 J	NS	NS	*
			Acetone	10 JB	10 U	10 U	NS	610	*
			alpha-BHC	0.03 U	0.03 U	0.027 J	NS	0.011	*
			Barium	8.6 J	7.8 J	9.7 J	2000	2600	256
			beta-BHC	0.03 U	0.03 U	0.014 J	NS	0.037	*
			bis(2-Ethylhexyl) phthalate	10 U	0.89 J	10 U	NS	4.8	*
			Calcium	42500	37800	48600	NS	NS	53100
			Cobalt	5 U	5 U	1.7 J	NS	730	0
			Cyanide	0.021 J	0.01 R	0.01 U	NS	730	*
			HMX	0.052 J	0.046 J	0.11 U	NS	1800	*
			Iron	512	571 J	595 J	300	11000	1430
			Magnesium	17200	15700	19200	NS	NS	15000
			Manganese	1480	1440	2070	50	880	1340
			Nickel	5.2 J	4 J	7.2 J	NS	730	83.4
			Perchlorate	NT	NT	0.053	NS	3.6	*
			Potassium	2010	1470	1760	NS	NS	5770
			RDX	0.49 J	0.45 J	0.21 J	NS	0.61	*
			Sodium	7770	6920	7780	NS	NS	51400
			Zinc	2.5 JB	10 U	10 U	5000	11000	52.3

Table 4-3. Summary of Constituents Detected - January, April and July 2008

Area	Well Number	Monitored Zone	Compound or Element Detected	Jan-08 Level (ug/L)	Apr-08 Level (ug/L)	Jul-08 Level (ug/L)	MCL (ug/L)	Region 9 PRG (ug/L)	Facility-Wide Background (ug/L)
Load Line 3	LL3mw-235	Bedrock	2-Butanone	10 U	0.71 J	10 U	NS	1900	*
			Acetone	10 U	10 U	10 JB	NS	610	*
			Barium	2.5 J	3 J	3 J	2000	2600	256
			bis(2-Ethylhexyl) phthalate	10 U	10 U	2 J	NS	4.8	*
			Cadmium	0.28 J	0.31 J	0.5 U	5	NS	0
			Calcium	35200	35200	32100	NS	NS	53100
			Iron	703 J	76.2	50 U	300	11000	1430
			Magnesium	15400	15700	13600	NS	NS	15000
			Manganese	172	435	44.5	50	880	1340
			Nickel	8.9 J	7.9 J	10 U	NS	730	83.4
			Perchlorate	NT	NT	0.0097 J	NS	3.6	*
			Potassium	757 J	673 J	708 J	NS	NS	5770
			Sodium	9790	9550	8220	NS	NS	51400
			Zinc	16.6 U	26.4	12.7 J	5000	11000	52.3
			1,3,5-Trinitrobenzene	0.42 J	0.11 U	0.29	NS	1100	*
			2,4,6-TNT	3.4 J	0.11 U	2.8	NS	2.2	*
Load Line 3	LL3mw-237	Bedrock	2,4-Dinitrotoluene	0.12 J	0.06 J	0.085 J	NS	73	*
			2,6-Dinitrotoluene	0.083 J	0.061 J	0.057 J	NS	36	*
			2-Amino-4,6-dinitrotoluene	7.8 J	3	6.2	NS	NS	*
			4-Amino-2,6-Dinitrotoluene	13 J	4.9	11	NS	NS	*
			Antimony	0.13 J	2 U	2 U	6	15	0
			Barium	2.7 J	2.2 J	2.5 J	2000	2600	256
			beta-BHC	0.061	0.034 J	0.03 U	NS	0.037	*
			bis(2-Ethylhexyl) phthalate	10 U	3.3 J	10 U	NS	4.8	*
			Calcium	35300	28700	40700	NS	NS	53100
			HMX	0.16 J	0.086 J	0.1 U	NS	1800	*
			Iron	62.3	50 U	50 U	300	11000	1430
			Magnesium	9210	9050	11200	NS	NS	15000
			Manganese	7.6 J	783	66.9	50	880	1340
			Perchlorate	NT	NT	0.13	NS	3.6	*
			Potassium	1970	1830	1650	NS	NS	5770
			RDX	0.34 J	0.16	0.27	NS	0.61	*
			Sodium	7240	3700	4980	NS	NS	51400
			Zinc	4.6 JB	5.5 J	3.5 J	5000	11000	52.3
Load Line 3	LL3mw-240	Bedrock	Acetone	10 U	10 U	10 JB	NS	610	*
			Aluminum	40.4 J	50 U	50 U	200	36000	0
			Antimony	1.1 J	0.33 J	2 U	6	15	0
			Barium	11.8	9.7 J	8.7 J	2000	2600	256
			bis(2-Ethylhexyl) phthalate	1.6 J	3.7 J	2.8 J	NS	4.8	*
			Calcium	22800	21300	22800	NS	NS	53100
			Iron	44.2 J	50 U	50 U	300	11000	1430
			Magnesium	8760	7590	7560	NS	NS	15000
			Manganese	1.7 J	10 U	13.7 J	50	880	1340
			Nickel	4.7 J	10 U	10 U	NS	730	83.4
			Perchlorate	NT	NT	0.064	NS	3.6	*
			Potassium	964 J	774 J	1150 J	NS	NS	5770
			Sodium	4300	3360	4270 J	NS	NS	51400
			Zinc	4.3 JB	4.8 J	3.1 J	5000	11000	52.3
Load Line 3	LL3mw-241	Bedrock	1,3,5-Trinitrobenzene	6.1	24	6.3	NS	1100	*
			2,4,6-TNT	7.4	12	4.7	NS	2.2	*
			2,4-Dinitrotoluene	0.19 J	0.54 U	0.18 J	NS	73	*
			2,6-Dinitrotoluene	0.24	0.3 J	0.15	NS	36	*
			2-Amino-4,6-dinitrotoluene	6.4	5	4.8	NS	NS	*
			4-Amino-2,6-Dinitrotoluene	5.9	5	4.6	NS	NS	*
			Barium	9.7 J	1.1 J	8.7 J	2000	2600	256
			beta-BHC	0.03 U	0.038 J	0.052 J	NS	0.037	*
			bis(2-Ethylhexyl) phthalate	10 U	1.2 J	1 J	NS	4.8	*
			Calcium	18700	15200	22800	NS	NS	53100
			HMX	0.47	0.47 J	0.43	NS	1800	*
			Magnesium	6570	6620	7560	NS	NS	15000
			Manganese	97.2	2.5 J	13.7	50	880	1340
			Perchlorate	NT	NT	0.081	NS	3.6	*
			Potassium	1190	575 J	1150 J	NS	NS	5770
			RDX	0.09 U	1.6	1.6	NS	0.61	*
			Sodium	4510	2040	4270 J	NS	NS	51400
			Zinc	4.9 JB	10 U	3.1 J	5000	11000	52.3



Table 4-3. Summary of Constituents Detected - January, April and July 2008

Area	Well Number	Monitored Zone	Compound or Element Detected	Jan-08 Level (ug/L)	Apr-08 Level (ug/L)	Jul-08 Level (ug/L)	MCL (ug/L)	Region 9 PRG (ug/L)	Facility-Wide Background (ug/L)
Load Line 3	LL3mw-243	Bedrock	1,3,5-Trinitrobenzene	0.1 U	0.12 U	0.033 J	NS	1100	*
			2,6-Dinitrotoluene	0.079 J	0.12 U	0.1 U	NS	36	*
			Antimony	0.4 J	0.31 J	0.31 J	6	15	0
			Barium	17.9	15.5	18.2	2000	2600	256
			bis(2-Ethylhexyl) phthalate	10 U	10 U	1.6 J	NS	4.8	*
			Calcium	17500	14500	18700	NS	NS	53100
			Cyanide	0.02	0.01 R	0.01 U	NS	730	*
			Magnesium	6750	5740	7250	NS	NS	15000
			Manganese	1.1 J	0.89 J	0.8 J	50	880	1340
			Nitrocellulose	0.02	0.5 UJ	0.11 U	NS	NS	*
			Perchlorate	NT	NT	0.065	NS	3.6	*
			Potassium	1290 J	1050	1180 J	NS	NS	5770
			Sodium	2960	3080	3890 J	NS	NS	51400
			Zinc	5.3 J	4.6 J	3.8 J	5000	11000	52.3
			2,6-Dinitrotoluene	0.06 J	0.099 U	0.077 J	NS	36	*
Load Line 4	LL4mw-193	Unconsolidated	Aluminum	20.4 J	76.8	28.1 J	200	36000	0
			Barium	55.7	54.8	45.6	2000	2600	82.1
			beta-BHC	0.03 UJ	0.021 J	0.03 U	NS	0.037	*
			bis(2-Ethylhexyl) phthalate	10 U	10 U	0.89 J	NS	4.8	*
			Calcium	118000	115000	111000	NS	NS	115000
			delta-BHC	0.03 UJ	0.016 J	0.03 U	NS	0.052	*
			Iron	1240	1390 J	974 J	300	11000	279
			Magnesium	35500	35600	33800	NS	NS	43300
			Manganese	482	452	443	50	880	1020
			Potassium	1020	934 J	935 J	NS	NS	2890
			Sodium	9640	9130	10600	NS	NS	45700
			Thallium	0.41 J	1 U	1 U	2	2	0
			Zinc	3.7 JB	5.3 J	4.7 J	5000	11000	60.9
			2,6-Dinitrotoluene	0.07 J	0.11 U	0.051 J	NS	36	*
			Aluminum	50 U	50 U	202	200	36000	0
Load Line 4	LL4mw-194	Unconsolidated	Arsenic	5 U	3.4 J	5 U	10	0.045	11.7
			Barium	29.6	31.6	37.9	2000	2600	82.1
			bis(2-Ethylhexyl) phthalate	10 U	10 U	0.99 J	NS	4.8	*
			Calcium	103000	99600	116000	NS	NS	115000
			Iron	183	80.5	448	300	11000	279
			Magnesium	29900	29500	33500	NS	NS	43300
			Manganese	242	189	271	50	880	1020
			Potassium	917	773 J	1200 J	NS	NS	2890
			Sodium	6780	6460	6870 J	NS	NS	45700
			Thallium	0.15 J	1 U	1 U	2	2	0
			Zinc	3.2 JB	2.8 J	3 J	5000	11000	60.9
			Arsenic	5 U	5 U	4.2 J	10	0.045	11.7
			Barium	29.8	26.8	28.4	2000	2600	82.1
			bis(2-Ethylhexyl) phthalate	10 U	10 U	4.8 J	NS	4.8	*
			Cadmium	0.13 J	0.5 U	0.5 U	5	NS	0
Load Line 4	LL4mw-195	Unconsolidated	Calcium	221000	208000	218000	NS	NS	115000
			Cobalt	2.2 J	2.5 J	2.6 J	NS	730	0
			Iron	9560	8900	9580	300	11000	279
			Magnesium	61100	58400	59000	NS	NS	43300
			Manganese	3660	3470	3450	50	880	1020
			Perchlorate	NT	NT	0.018 J	NS	3.6	*
			Potassium	1180	960 J	1160 J	NS	NS	2890
			Sodium	8380	7520	8620 J	NS	NS	45700
			Thallium	0.27 J	0.16 J	1 U	2	2	0
			Toluene	1 U	1 U	1 JB	1000	720	*
			Zinc	7.1 JB	5.6 J	5.8 J	5000	11000	60.9
			Aluminum	50 U	29.7 J	262	200	36000	0
			Barium	11.1	11.2	11.7	2000	2600	82.1
			bis(2-Ethylhexyl) phthalate	10 U	0.93 J	10 U	NS	4.8	*
			Calcium	168000	162000	172000	NS	NS	115000
Load Line 4	LL4mw-200	Unconsolidated	Iron	50 U	59.7	854 J	300	11000	279
			Magnesium	50900	48500	53300	NS	NS	43300
			Manganese	11.1	7.6 J	20.7	50	880	1020
			Nitrocellulose	0.16 J	0.5 U	0.5 UJ	NS	NS	*
			Perchlorate	NT	NT	0.01 J	NS	3.6	*
			Potassium	635 J	573 J	630 J	NS	NS	2890
			Sodium	8330	7860	8160	NS	NS	45700
			Zinc	2.3 JB	10 U	3.3 J	5000	11000	60.9
			Barium	NT	24.9 J	22.7 J	2000	2600	256
			bis(2-Ethylhexyl) phthalate	NT	10 U	1.1 J	NS	4.8	*
			Calcium	NT	62000 J	60300 J	NS	NS	53100
			Iron	NT	431 J	35.2 J	300	11000	1430
			Magnesium	NT	25800 J	24000	NS	NS	15000
			Manganese	NT	2.6 J	1.6 J	50	880	1340
			Nitrocellulose	NT	0.5 U	0.13 J	NS	NS	*
Load Line 5	LL5mw-001	Bedrock	Potassium	NT	1380 J	1290	NS	NS	5770
			Sodium	NT	5450 J	5080	NS	NS	51400
			Zinc	NT	2.5 J	10 U	5000	11000	52.3

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Area	Well Number	Monitored Zone	Compound or Element Detected	Jan-08 Level (ug/L)	Apr-08 Level (ug/L)	Jul-08 Level (ug/L)	MCL (ug/L)	Region 9 PRG (ug/L)	Facility-Wide Background (ug/L)
Load Line 5	LL5mw-002	Bedrock	Barium	NT	39.8 J	45.8 J	2000	2600	256
			bis(2-Ethylhexyl) phthalate	NT	10 U	3 J	NS	4.8	*
			Calcium	NT	59700 J	60600 J	NS	NS	53100
			Iron	NT	123 J	261	300	11000	1430
			Magnesium	NT	19800 J	19200	NS	NS	15000
			Manganese	NT	91.3 J	122	50	880	1340
			Potassium	NT	1340 J	1140	NS	NS	5770
			Sodium	NT	8340 J	8280	NS	NS	51400
			Zinc	NT	3.2 J	6.9 BJ	5000	11000	52.3
Load Line 5	LL5mw-003	Unconsolidated	Acetone	NT	2 J	10 JB	NS	610	*
			Aluminum	NT	50 U	1720	200	36000	0
			Barium	NT	19.8 J	32.8	2000	2600	82.1
			bis(2-Ethylhexyl) phthalate	NT	10 U	1.5 J	NS	4.8	*
			Calcium	NT	93500 J	103000	NS	NS	115000
			Chromium	NT	5 UJ	2.8 J	100	NS	0
			Cobalt	NT	5 UJ	1.8 J	NS	730	0
			HMX	NT	0.11 U	0.061 J	NS	1800	*
			Iron	NT	50 U	3280	300	11000	279
			Magnesium	NT	24200 J	25200	NS	NS	43300
			Manganese	NT	10 U	52.8	50	880	1020
			Nitrocellulose	NT	0.5 U	0.15 J	NS	NS	*
			Potassium	NT	356 J	1030 J	NS	NS	2890
			Sodium	NT	3850 J	3120	NS	NS	45700
			Vanadium	NT	10 U	3.7 J	NS	36	0
			Zinc	NT	10 U	11.4 BJ	5000	11000	60.9
			Aluminum	NT	680	740 J	200	36000	0
			Barium	NT	22.4 J	24 J	2000	2600	256
Load Line 5	LL5mw-004	Bedrock	bis(2-Ethylhexyl) phthalate	NT	10 U	2.6 J	NS	4.8	*
			Calcium	NT	67700 J	53800 J	NS	NS	53100
			Iron	NT	50 U	1520	300	11000	1430
			Magnesium	NT	24800 J	21100	NS	NS	15000
			Manganese	NT	0.44 J	33.5	50	880	1340
			Potassium	NT	325 J	667 J	NS	NS	5770
			Sodium	NT	2270 J	2490	NS	NS	51400
			Vanadium	NT	10 UJ	1.4 J	NS	36	0
			Zinc	NT	5 J	9 BJ	5000	11000	52.3
			2-Nitrotoluene	NT	0.2 J	0.11 U	NS	61	*
			Aluminum	NT	606	50 U	200	36000	0
			Barium	NT	14.9	9.9 J	2000	2600	256
			bis(2-Ethylhexyl) phthalate	NT	10 U	2.2 J	NS	4.8	*
			Calcium	NT	61000	64100	NS	NS	53100
			HMX	NT	0.066 J	0.046 J	NS	1800	*
			Iron	NT	1940 J	50 U	300	11000	1430
			Magnesium	NT	27000	26600	NS	NS	15000
			Manganese	NT	461	290	50	880	1340
Load Line 5	LL5mw-005	Bedrock	Nitrobenzene	NT	0.1 U	0.081 J	NS	3	*
			Nitrocellulose	NT	0.5 UJ	0.13 J	NS	NS	*
			Potassium	NT	1870 J	1570 J	NS	NS	5770
			Sodium	NT	6660	6960	NS	NS	51400
			Zinc	NT	7.4 J	2.4 JB	5000	11000	52.3
			4-Nitrotoluene	NT	0.5 U	0.14 J	NS	61	*
			Acetone	NT	10 U	10 JB	NS	610	*
			Aluminum	NT	60.7 J	50 U	200	36000	0
			Barium	NT	16.8	15.7 J	2000	2600	256
			bis(2-Ethylhexyl) phthalate	NT	10 U	1.8 J	NS	4.8	*
			Calcium	NT	59700	64200 J	NS	NS	53100
			Iron	NT	145 J	133 J	300	11000	1430
			Magnesium	NT	34000	34300	NS	NS	15000
			Manganese	NT	6.6 J	0.56 J	50	880	1340
			Nitrocellulose	NT	0.5 UJ	0.13 J	NS	NS	*
			Potassium	NT	985 J	1180	NS	NS	5770
			Sodium	NT	8300	5950	NS	NS	51400
			Zinc	NT	10 U	2.4 JB	5000	11000	52.3

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Area	Well Number	Monitored Zone	Compound or Element Detected	Jan-08 Level (ug/L)	Apr-08 Level (ug/L)	Jul-08 Level (ug/L)	MCL (ug/L)	Region 9 PRG (ug/L)	Facility-Wide Background (ug/L)
Load Line 6	LL6mw-001	Unconsolidated	Acetone	NT	1.3 J	10 U	NS	610	*
			Aluminum	NT	24.2 J	70.8	200	36000	0
			Barium	NT	17.4	14.7 J	2000	2600	82.1
			bis(2-Ethylhexyl) phthalate	NT	10 U	1.3 J	NS	4.8	*
			Calcium	NT	68800	71700	NS	NS	115000
			Cyanide	NT	0.01 U	0.0073 J	NS	730	*
			Iron	NT	50 U	125	300	11000	279
			Magnesium	NT	43900	40300	NS	NS	43300
			Manganese	NT	2.3 J	6.4 J	50	880	1020
			Perchlorate	NT	NT	0.076	NS	3.6	*
			Potassium	NT	1310 J	1350 J	NS	NS	2890
			Sodium	NT	7290	6880 J	NS	NS	45700
			Zinc	NT	10 U	4.6 J	5000	11000	60.9
			Acetone	NT	1.5 J	10 JB	NS	610	*
Load Line 6	LL6mw-002	Unconsolidated	Aluminum	NT	50 U	515	200	36000	0
			Barium	NT	21.6	23.6 J	2000	2600	82.1
			bis(2-Ethylhexyl) phthalate	NT	10 UJ	1.3 J	NS	4.8	*
			Calcium	NT	129000	130000	NS	NS	115000
			Iron	NT	50 U	893	300	11000	279
			Magnesium	NT	29700	31500	NS	NS	43300
			Manganese	NT	1.4 J	11.6	50	880	1020
			Perchlorate	NT	NT	0.06	NS	3.6	*
			Potassium	NT	775 J	1140 J	NS	NS	2890
			Selenium	NT	4.2 J	5 U	50	180	0
			Sodium	NT	2100	2560	NS	NS	45700
			Vanadium	NT	10 U	0.68 J	NS	36	0
			Zinc	NT	3.6 J	5.5 J	5000	11000	60.9
			Barium	NT	7 J	7.5 J	2000	2600	256
Load Line 6	LL6mw-003	Bedrock	bis(2-Ethylhexyl) phthalate	NT	10 U	1.4 J	NS	4.8	*
			Calcium	NT	68400	73100	NS	NS	53100
			Iron	NT	30.2 J	50 U	300	11000	1430
			Magnesium	NT	34300	35300	NS	NS	15000
			Manganese	NT	88.8	76.7	50	880	1340
			Nitroglycerine	NT	0.64 U	0.35 J	NS	4.8	*
			Perchlorate	NT	NT	0.038 J	NS	3.6	*
			Potassium	NT	1890 J	1860 J	NS	NS	5770
			Sodium	NT	11200	11800	NS	NS	51400
			Zinc	NT	10 U	2.9 J	5000	11000	52.3
			Barium	NT	NT	35.6 J	2000	2600	256
			bis(2-Ethylhexyl) phthalate	NT	NT	1.3 J	NS	4.8	*
			Calcium	NT	NT	71700	NS	NS	53100
			HMX	NT	NT	0.04 J	NS	1800	*
Load Line 6	LL6mw-004	Bedrock	Iron	NT	NT	798	300	11000	1430
			Magnesium	NT	NT	32900	NS	NS	15000
			Manganese	NT	NT	114	50	880	1340
			Perchlorate	NT	NT	0.031 J	NS	3.6	*
			Sodium	NT	NT	11,400	NS	NS	51400
			Potassium	NT	NT	1320 J	NS	NS	5770
Load Line 12	LL12mw-088	Unconsolidated	2,6-Dinitrotoluene	0.1 U	0.055 J	0.1 U	NS	36	*
			2-Butanone	6.6 J	10 U	10 U	NS	1900	*
			4-Methyl-2-pentanone	0.36 J	10 U	10 U	NS	1900	*
			Acetone	58 JB	10 U	10 U	NS	610	*
			Arsenic	16.8	21.9	14.2 U	10	0.045	11.7
			Barium	301	379	363	2000	2600	82.1
			beta-BHC	0.03 U	0.03 U	0.015 J	NS	0.037	*
			bis(2-Ethylhexyl) phthalate	10 U	10 U	1 J	NS	4.8	*
			Calcium	114000	149000	150000	NS	NS	115000
			Iron	2860 J	3100	2470	300	11000	279
			Magnesium	41400	52500	52600	NS	NS	43300
			Manganese	304	412	371	50	880	1020
			Nickel	6.4 J	10 U	3.7 J	NS	730	0
			Nitrate as N (NO3-N)	0.1 U	0.1 U	0.04 J	10000	1000	*
			Nitrobenzene	0.11 U	0.11 U	0.092 J	NS	3	*
			Potassium	5490	2410 J	2370	NS	NS	2890
			Selenium	5 U	4.3 J	5 U	50	180	0
			Sodium	13600	12800	12500	NS	NS	45700
			Thallium	1 U	1 U	0.17 J	2	2	0
			Zinc	3.3 JB	10 U	7.3 J	5000	11000	60.9

Table 4-3. Summary of Constituents Detected - January, April and July 2008

Area	Well Number	Monitored Zone	Compound or Element Detected	Jan-08 Level (ug/L)	Apr-08 Level (ug/L)	Jul-08 Level (ug/L)	MCL (ug/L)	Region 9 PRG (ug/L)	Facility-Wide Background (ug/L)
Load Line 12	LL12mw-107	Unconsolidated	4,4'-DDT	0.03 U	0.03 U	0.019 J	NS	0.2	*
			Arsenic	17.4	5 U	7.3 B	10	0.045	11.7
			Barium	27	27.7	28.4	2000	2600	82.1
			bis(2-Ethylhexyl) phthalate	0.91 J	10 U	1.7 J	NS	4.8	*
			Calcium	157000	162000	172000	NS	NS	115000
			Cobalt	5 U	5 U	2.1 J	NS	730	0
			Cyanide	0.01 U	0.01 R	0.015	NS	730	*
			Iron	2090 J	50.8 J	1690 J	300	11000	279
			Magnesium	67800	68500	71800	NS	NS	43300
			Manganese	225	277	280	50	880	1020
			Nitrate as N (NO3-N)	0.3 J	0.1 U	0.03 J	10000	1000	*
			Nitrocellulose	0.5 U	0.5 U	0.21 J	NS	NS	*
			Perchlorate	NT	NT	0.013 J	NS	3.6	*
			Potassium	3560	2240	2570	NS	NS	2890
			Sodium	17700	16800	17300	NS	NS	45700
			Vanadium	10 U	1 J	10 U	NS	36	0
			Zinc	3.9 JB	10 U	7.2 J	5000	11000	60.9
Load Line 12	LL12mw-113	Bedrock	Aluminum	28500	1350	10400 J	200	36000	0
			Antimony	0.56 J	0.33 J	0.34 J	6	15	0
			Arsenic	54.3	4.9 J	23.8	10	0.045	11.7
			Barium	111	28.5	63	2000	2600	256
			Benzene	1 U	0.25 J	1 U	5	0.34	*
			Beryllium	1.5	1 U	0.42 J	4	NS	0
			beta-BHC	0.03 U	0.021 J	0.03 U	NS	0.037	*
			Cadmium	0.45 J	0.19 J	0.2 J	5	NS	0
			Calcium	296000	186000	230000	NS	NS	53100
			Chromium	41.3	2.2 J	15.7	100	NS	7.3
			Cobalt	38.8	4.2 J	15.6	NS	730	0
			Copper	84.4	5 U	21.2	1300	1500	0
			Cyanide	0.0087 J	0.01 U	0.01 U	NS	730	*
			HMX	0.11 U	0.058 J	0.11 U	NS	1800	*
			Iron	88300	3660	29100	300	11000	1430
			Lead	47	2.1 J	10.4	15	NS	23
			Magnesium	122000	75200	101000	NS	NS	15000
			Manganese	4410	1510	2450	50	880	1340
			Nickel	77.1	5.1 J	36.2	NS	730	83.4
			Nitrate as N (NO3-N)	0.6	0.1 U	1.1 J	10000	1000	*
			Nitrocellulose	0.5 U	0.13 J	0.14 J	NS	NS	*
			Potassium	11800	4580 J	8160	NS	NS	5770
			Sodium	24200	23000	23500	NS	NS	51400
			Thallium	0.42 J	1 U	0.25 J	2	2	0
			Vanadium	46.7 J	0.83 J	16.9	NS	36	0
			Zinc	178	13.1	66.2	5000	11000	52.3
Load Line 12	LL12mw-128	Unconsolidated	3-Nitrotoluene	0.098 J	0.52 U	0.5 U	NS	61	*
			Aluminum	1340	6570	50 U	200	36000	0
			Antimony	2 U	0.28 J	0.29 J	6	15	0
			Arsenic	40.1	52.9	51.5	10	0.045	11.7
			Barium	68.1	75.5	58.6	2000	2600	82.1
			Beryllium	1 U	0.29 J	1 U	4	NS	0
			bis(2-Ethylhexyl) phthalate	10 U	2.2 J	1.3 J	NS	4.8	*
			Calcium	180000	165000	209000	NS	NS	115000
			Chromium	5 U	8.9	5 U	100	NS	0
			Cobalt	5 U	6.3	5 U	NS	730	0
			Copper	5 U	6 J	5 U	1300	1500	0
			Iron	7310	17400 J	5480 J	300	11000	279
			Lead	3 U	5.2	3 U	15	NS	0
			Magnesium	108000	101000	126000	NS	NS	43300
			Manganese	199	333	189	50	880	1020
			Nickel	10 U	14.4	10 U	NS	730	0
			Nitrate as N (NO3-N)	0.09 JB	0.1 U	0.1 U	10000	1000	*
			Potassium	2970	3630 J	2170	NS	NS	2890
			Sodium	23700	19000	24700	NS	NS	45700
			Thallium	1 U	0.18 J	1 U	2	2	0
			Vanadium	10 U	9.6 J	10 U	NS	36	0
			Zinc	12.4 B	30.5	3.1 J	5000	11000	60.9

Table 4-3. Summary of Constituents Detected - January, April and July 2008

Area	Well Number	Monitored Zone	Compound or Element Detected	Jan-08 Level (ug/L)	Apr-08 Level (ug/L)	Jul-08 Level (ug/L)	MCL (ug/L)	Region 9 PRG (ug/L)	Facility-Wide Background (ug/L)
Load Line 12	LL12mw-154	Unconsolidated	Acetone	10 U	1.6 JB	10 U	NS	610	*
			Aluminum	4820	50 U	50 U	200	36000	0
			Antimony	0.33 J	2 U	2 U	6	15	0
			Arsenic	651	8	16.3 B	10	0.045	11.7
			Barium	117	43.3	47.7	2000	2600	82.1
			Beryllium	0.24 J	1.0 U	1 U	4	NS	0
			beta-BHC	0.026 J	0.03 U	0.012 J	NS	0.037	*
			bis(2-Ethylhexyl) phthalate	1.3 J	10 U	10 U	NS	4.8	*
			Calcium	130000	130000	148000	NS	NS	115000
			Chromium	5.9	5 U	5 U	100	NS	0
			Cobalt	4.7 J	5 U	5 U	NS	730	0
			Copper	10.7	5 U	5 U	1300	1500	0
			Cyanide	0.01 U	0.01 R	0.057	NS	730	*
			Iron	53200 J	162 J	2580 J	300	11000	279
			Lead	5.4	3 U	3 U	15	NS	0
			Magnesium	58300	60500	72400	NS	NS	43300
			Manganese	273	70.5	95.9	50	880	1020
			Nickel	11.3	10 U	10 U	NS	730	0
			Nitrate as N (NO3-N)	0.06 JB	0.1 U	0.05 J	10000	1000	*
			Nitrocellulose	0.14 J	0.5 UJ	0.13 J	NS	NS	*
			Potassium	3430	1950	1920	NS	NS	2890
			Sodium	20100	21400	24200	NS	NS	45700
			Vanadium	7.8 J	10 U	10 U	NS	36	0
			Zinc	39.3 J	10 U	4.1 J	5000	11000	60.9
Load Line 12	LL12mw-184	Unconsolidated	Arsenic	13.5	16.7	11.9 B	10	0.045	11.7
			Barium	10.9	9.9 J	10.2	2000	2600	82.1
			bis(2-Ethylhexyl) phthalate	10 U	2.5 J	10 U	NS	4.8	*
			Calcium	203000	208000	224000	NS	NS	115000
			Heptachlor epoxide	0.03 U	0.0082 J	0.03 U	NS	0.0074	*
			Iron	2410 J	2680 J	3130 J	300	11000	279
			Magnesium	149000	157000	166000	NS	NS	43300
			Manganese	498	527	557	50	880	1020
			Nitrate as N (NO3-N)	0.07 JB	0.1 U	0.03 J	10000	1000	*
			Potassium	3130	2670	2660	NS	NS	2890
			Sodium	37900	39000	39600	NS	NS	45700
			Zinc	6 JB	7.4 J	6.6 J	5000	11000	60.9
			4,4'-DDT	0.03 U	0.03 U	0.019 J	NS	0.2	*
			Barium	57.2	54.6	54.7	2000	2600	82.1
Load Line 12	LL12mw-185	Unconsolidated	bis(2-Ethylhexyl) phthalate	10 U	10 U	2.1 J	NS	4.8	*
			Cadmium	0.24 J	0.27 J	0.25 J	5	NS	0
			Calcium	R	695000	677000	NS	NS	115000
			Carbon disulfide	1 U	1 U	0.36 J	NS	1000	*
			Cobalt	2.6 J	2.3 J	2.7 J	NS	730	0
			delta-BHC	0.03 U	0.03 U	0.021 J	NS	0.052	*
			HMX	0.11 U	0.067 J	0.11 U	NS	1800	*
			Magnesium	304000	297000	308000	NS	NS	43300
			Manganese	1780	1580	1530	50	880	1020
			Nickel	6.9 J	4.6 J	5.6 J	NS	730	0
			Nitrate as N (NO3-N)	220	0.8	240 J	10000	1000	*
			Nitrobenzene	0.071 J	0.1 U	0.075 J	NS	3	*
			Nitrocellulose	1.4 J	0.49 J	3.5 J	NS	NS	*
			Perchlorate	NT	NT	0.065	NS	3.6	*
			Potassium	9220	7680 J	7730	NS	NS	2890
			Sodium	58300	55800	56200	NS	NS	45700
			Zinc	5.3 JB	4 J	6 JB	5000	11000	60.9
			Aluminum	26.8 J	50.0 U	20.7 J	200	36000	0
			Antimony	0.17 J	0.13 J	2 U	6	15	0
Load Line 12	LL12mw-187	Unconsolidated	Barium	339	338	301	2000	2600	82.1
			bis(2-Ethylhexyl) phthalate	10 U	2.2 J	1.7 J	NS	4.8	*
			Calcium	969000 R	932000	944000	NS	NS	115000
			Cobalt	10.1	9.1	10.4	NS	730	0
			Iron	50 U	50 U	33.5 J	300	11000	279
			Magnesium	295000	286000	306000	NS	NS	43300
			Manganese	2110	2030	2130	50	880	1020
			Nickel	14.1	12.4	14.5 J	NS	730	0
			Nitrate as N (NO3-N)	1800	200	1600 J	10000	1000	*
			Nitrocellulose	4 J	6.3 J	18.8 J	NS	NS	*
			Potassium	53500	51100	50700	NS	NS	2890
			Sodium	35900	34600	36100	NS	NS	45700
			Thallium	0.52 J	0.59 J	0.6 J	2	2	0
			Zinc	9.7 JB	6 J	5.7 J	5000	11000	60.9

Table 4-3. Summary of Constituents Detected - January, April and July 2008

Area	Well Number	Monitored Zone	Compound or Element Detected	Jan-08 Level (ug/L)	Apr-08 Level (ug/L)	Jul-08 Level (ug/L)	MCL (ug/L)	Region 9 PRG (ug/L)	Facility-Wide Background (ug/L)
Load Line 12	LL12mw-188	Unconsolidated	2-Butanone	10 U	0.68 J	10 U	NS	1900	*
			Aluminum	1770	23.8 J	72.3	200	36000	0
			Barium	44	40.5	38	2000	2600	82.1
			beta-BHC	0.03 U	0.013 J	0.017 J	NS	0.037	*
			bis(2-Ethylhexyl) phthalate	10 U	0.94 J	0.9 J	NS	4.8	*
			Calcium	116000	140000	151000	NS	NS	115000
			Chromium	2.4 J	3.3 J	5 U	100	NS	0
			Cobalt	2.4 J	4.7 J	5 U	NS	730	0
			Copper	4.8 J	5 U	5 U	1300	1500	0
			delta-BHC	0.03 U	0.011 J	0.03 U	NS	0.052	*
			HMX	0.069 J	0.11 U	0.037 J	NS	1800	*
			Iron	4120	227 J	362 J	300	11000	279
			Magnesium	89600	112000	112000	NS	NS	43300
			Manganese	485	664	646	50	880	1020
			Nickel	5.3 J	3.6 J	10 U	NS	730	0
			Nitrate as N (NO3-N)	1.3	0.05 J	0.3 J	10000	1000	*
			Potassium	2570	2190	2220	NS	NS	2890
			RDX	0.083 J	0.11 U	0.11 U	NS	0.61	*
			Silver	5 U	3.6 J	5 U	NS	180	0
			Sodium	27100	31800	30800	NS	NS	45700
			Vanadium	1.8 J	2.2 J	10 U	NS	36	0
			Zinc	14.4 B	2.6 J	3 J	5000	11000	60.9
Load Line 12	LL12mw-189	Bedrock	2-Butanone	10 UJ	0.7 J	10 U	NS	1900	*
			4,4'-DDD	0.03 UJ	0.03 U	0.013 J	NS	0.28	*
			Aluminum	49.9 J	37.2 J	50 U	200	36000	0
			Arsenic	5 U	3.9 J	5 U	10	0.045	11.7
			Barium	14.4	18.7	15.1	2000	2600	256
			bis(2-Ethylhexyl) phthalate	1.1 J	10 U	34	NS	4.8	*
			Calcium	150000	162000	159000	NS	NS	53100
			HMX	0.044 J	0.11 U	0.097 U	NS	1800	*
			Iron	119	491	430	300	11000	1430
			Magnesium	70500	78500	75100	NS	NS	15000
			Manganese	235	327	319	50	880	1340
			Nitrate as N (NO3-N)	0.1 U	0.1 U	0.05 J	10000	1000	*
			Nitrocellulose	0.5 U	0.5 UJ	0.13 J	NS	NS	*
			Potassium	2230	1940 J	1920	NS	NS	5770
			Sodium	49700	51200	48600	NS	NS	51400
			Thallium	1 U	0.17 J	1 U	2	2	0
			Zinc	6.4 JB	10 U	4.6 JB	5000	11000	52.3
			1,3,5-Trinitrobenzene	0.045 J	0.11 U	0.11 U	NS	1100	*
Load Line 12	LL12mw-242	Unconsolidated	Aluminum	27300	36.5 BJ	1440	200	36000	0
			Antimony	0.73 J	2 U	2 U	6	15	0
			Arsenic	53.5	19	24.7	10	0.045	11.7
			Barium	129	23.3	28.2	2000	2600	82.1
			Benzene	0.55 J	1 U	1 U	5	0.34	*
			Beryllium	1.3	1 U	1 U	4	NS	0
			bis(2-Ethylhexyl) phthalate	10 U	10 U	2 J	NS	4.8	*
			Cadmium	0.2 J	0.5 U	0.5 U	5	NS	0
			Calcium	95700	69300	63000	NS	NS	115000
			Chromium	41.6	5 U	5 U	100	NS	0
			Cobalt	27.5	5 U	2 J	NS	730	0
			Copper	53.3	5 U	5 U	1300	1500	0
			Iron	65800	565 J	4390 J	300	11000	279
			Lead	24.3	3 U	3 U	15	NS	0
			m&p-Xylenes	0.31 J	2.0 U	2 U	10000	210	*
			Magnesium	59900	46500	41400	NS	NS	43300
			Manganese	1070	67.3	99.8	50	880	1020
			Nickel	61.6	10 U	10 U	NS	730	0
			Nitrate as N (NO3-N)	0.04 JB	0.1 U	0.1 U	10000	1000	*
			o-Xylene	0.17 J	1 U	1 U	10000	210	*
			Perchlorate	NT	NT	0.056	NS	3.6	*
			Potassium	8310	1840 J	2090	NS	NS	2890
			Sodium	32400	33400	28200	NS	NS	45700
			Thallium	0.29 J	1 U	1 U	2	2	0
			Toluene	1 BJ	1 U	1 U	1000	720	*
			Total Xylenes	0.48 J	1.4 J	2 U	10000	210	*
			Vanadium	46.4 J	10 U	2.5 J	NS	36	0
			Zinc	159	4.2 J	12.3 J	5000	11000	60.9

Table 4-3. Summary of Constituents Detected - January, April and July 2008

Area	Well Number	Monitored Zone	Compound or Element Detected	Jan-08 Level (ug/L)	Apr-08 Level (ug/L)	Jul-08 Level (ug/L)	MCL (ug/L)	Region 9 PRG (ug/L)	Facility-Wide Background (ug/L)
Load Line 12	LL12mw-243	Unconsolidated	2,6-Dinitrotoluene	0.11 U	0.12 U	0.059 J	NS	36	*
			2-Butanone	10 U	0.57 J	10 U	NS	1900	*
			alpha-BHC	0.03 U	0.03 U	0.0082 J	NS	0.011	*
			Aluminum	67.8	220 B	50 U	200	36000	0
			Antimony	2 U	2 U	0.21 J	6	15	0
			Arsenic	7.5	16.5	20.1	10	0.045	11.7
			Barium	32.4	34.6	37.9	2000	2600	82.1
			beta-BHC	0.03 U	0.011 J	0.017 J	NS	0.037	*
			Calcium	125000	126000	129000	NS	NS	115000
			Cobalt	2.1	5 U	5 U	NS	730	0
			Iron	2460 J	2180 J	2540 J	300	11000	279
			m&p-Xylenes	2 U	0.9 J	2 U	10000	210	*
			Magnesium	83000 J	84800	84200	NS	NS	43300
			Manganese	1070	928	862	50	880	1020
			Nitrate as N (NO3-N)	1.1	0.1 U	0.04 J	10000	1000	*
			Nitrobenzene	0.051 J	0.12 U	0.11 U	NS	3	*
			Nitrocellulose	0.16 J	0.15 J	0.5 U	NS	NS	*
			Potassium	3640 J	3270 J	3090	NS	NS	2890
			Sodium	23300	23200	22700	NS	NS	45700
			Total Xylenes	2 U	0.9 J	2 U	10000	210	*
			Zinc	5.6 JB	3.2 J	5.8 J	5000	11000	60.9
Load Line 12	LL12mw-244	Unconsolidated	2-Butanone	10 U	0.84 J	10 U	NS	1900	*
			4-Nitrotoluene	0.11 U	0.1 J	0.11 U	NS	61	*
			Aluminum	83.5	9040	26.8 J	200	36000	0
			Antimony	0.34 J	0.95 J	1.1 J	6	15	0
			Arsenic	7.5	21.4	5 U	10	0.045	11.7
			Barium	98.9	145	125	2000	2600	82.1
			Beryllium	1 U	0.4 J	1 U	4	NS	0
			Calcium	79700	73500	83300	NS	NS	115000
			Chromium	5 U	12.4	5 U	100	NS	0
			Cobalt	5 U	9.5	5 U	NS	730	0
			Copper	5 U	14.2 J	5 U	1300	1500	0
			Iron	332	20700 J	61.8 J	300	11000	279
			Lead	3 U	6.9	3 U	15	NS	0
			m&p-Xylenes	2 U	0.88 J	2 U	10000	210	*
			Magnesium	25100	26300	25500	NS	NS	43300
			Manganese	115	360	108	50	880	1020
			Nickel	10 U	22	10 U	NS	730	0
			Nitrate as N (NO3-N)	0.01 U	0.1 U	0.03 J	10000	1000	*
			Nitrocellulose	0.2 J	0.5 UJ	0.5 U	NS	NS	*
			Perchlorate	NT	NT	0.015 J	NS	3.6	*
			Potassium	2790	4340 J	2320	NS	NS	2890
			Sodium	9120	7430	8210	NS	NS	45700
			Total Xylenes	2 U	0.88 J	2 U	10000	210	*
Load Line 12	LL12mw-245	Unconsolidated	Vanadium	10 U	14.1	10 U	NS	36	0
			Zinc	3 JB	46.4	3.2 J	5000	11000	60.9
			2,6-Dinitrotoluene	0.1 U	0.1 J	0.1 U	NS	36	*
			Acetone	10 U	1.1 J	10 U	NS	610	*
			Aluminum	27.6 J	50 U	52.9 J	200	36000	0
			Arsenic	24.4 J	5 U	7.3 B	10	0.045	11.7
			Barium	32.6	30.2	29	2000	2600	82.1
			beta-BHC	0.03 U	0.03 U	0.012 J	NS	0.032	*
			bis(2-Ethylhexyl) phthalate	3.9 J	10 U	0.012 J	NS	4.8	*
			Calcium	150000	130000	146000	NS	NS	115000
			Iron	1670 J	73.5 J	426 J	300	11000	279
			Magnesium	72100	63700	69800	NS	NS	43300
			Manganese	307	56.5	186	50	880	1020
			Nitrate as N (NO3-N)	0.1 B	0.08 J	0.02 J	10000	1000	*
			Potassium	3640	3140 J	3280	NS	NS	2890
			Selenium	5 U	5 U	4.7 J	50	180	0
			Sodium	24000	21300	22600	NS	NS	45700
			Zinc	2.5 UJ	2.9 J	2.8 J	5000	11000	60.9
Load Line 12	LL12mw-246	Unconsolidated	2-Butanone	10 U	0.86 J	10 U	NS	1900	*
			Aluminum	50 U	19.7 JB	50 U	200	36000	0
			Arsenic	32.7	29.5	41.6	10	NS	11.7
			Barium	40.6	42.4	42.2	2000	2600	82.1
			bis(2-Ethylhexyl) phthalate	10 U	10 U	2.9 J	NS	4.8	*
			Calcium	103000	108000	110000	NS	NS	115000
			Iron	1430	1130 J	2120	300	11000	279
			Magnesium	50900	53900	52900	NS	NS	43300
			Manganese	73.2	78.6	69.3	50	880	1020
			Mercury	0.2 U	0.2 U	0.15 BJ	2	11	0
			Nitrocellulose	0.5 U	0.5 UJ	0.13 J	NS	NS	*
			Potassium	7430	7520 J	5250	NS	NS	2890
			Sodium	22400	23300	22400	NS	NS	45700
			Zinc	3.7 UJ	5.1 J	4.8 JB	5000	11000	60.9

Table 4-3. Summary of Constituents Detected - January, April and July 2008

Area	Well Number	Monitored Zone	Compound or Element Detected	Jan-08 Level (ug/L)	Apr-08 Level (ug/L)	Jul-08 Level (ug/L)	MCL (ug/L)	Region 9 PRG (ug/L)	Facility-Wide Background (ug/L)
Building 1200	B12mw-010	Bedrock	Aluminum	NT	240	1.4 J	200	36000	0
			Barium	NT	5.4 J	50 U	2000	2600	256
			Benzo(ghi)perylene	NT	1	0.2 U	NS	NS	*
			bis(2-Ethylhexyl) phthalate	NT	1.2 J	3 J	NS	4.8	*
			Calcium	NT	4820	6760	NS	NS	53100
			Indeno(1,2,3-cd)pyrene	NT	0.72	0.2 U	NS	0.092	*
			Iron	NT	428 J	50 U	300	11000	1430
			Magnesium	NT	4780	4130	NS	NS	15000
			Manganese	NT	62 J	31.5	50	880	1340
			Nickel	NT	18.8 J	11.9	NS	730	83.4
			Nitrocellulose	NT	0.19 J	0.13 J	NS	NS	*
			Potassium	NT	675 J	660 J	NS	NS	5770
			Sodium	NT	3250	3680	NS	NS	51400
			Zinc	NT	7.9 J	9.5 JB	5000	11000	52.3
			Barium	NT	1.6 J	3.4 J	2000	2600	256
Building 1200	B12mw-011	Bedrock	Calcium	NT	11900	11900	NS	NS	53100
			Iron	NT	50 U	4570	300	11000	1430
			m&p--Xylenes	NT	0.87 J	2 U	10000	210	*
			Magnesium	NT	9100	8940	NS	NS	15000
			Manganese	NT	52	538	50	880	1340
			Nickel	NT	10 U	3.3 J	NS	730	83.4
			o-Xylene	NT	0.49 J	1 U	10000	210	*
			Potassium	NT	1340 J	1280	NS	NS	5770
			Sodium	NT	5020	4620	NS	NS	51400
			Total Xylenes	NT	1.4 J	2 U	10000	210	*
			Vanadium	NT	10 U	0.69 J	NS	36	0
			Zinc	NT	3.6 J	5.9 JB	5000	11000	52.3
			Acetone	NT	1.2 J	10 JB	NS	610	*
			Barium	NT	7.8 J	7.4 J	2000	2600	256
			bis(2-Ethylhexyl) phthalate	NT	2.1 J	1.4 J	NS	4.8	*
Building 1200	B12mw-012	Bedrock	Calcium	NT	52300	43000	NS	NS	53100
			Iron	NT	29.7 J	464	300	11000	1430
			Magnesium	NT	38600	32500	NS	NS	15000
			Manganese	NT	9.5 J	262	50	880	1340
			Nickel	NT	10 U	7.7 J	NS	730	83.4
			Potassium	NT	2260	2050	NS	NS	5770
			Sodium	NT	17700	15800	NS	NS	51400
			Zinc	NT	9.4 J	8.5 JB	5000	11000	52.3
			Aluminum	NT	24.3 J	50 U	200	36000	0
			Barium	NT	34.3	35 J	2000	2600	256
			bis(2-Ethylhexyl) phthalate	NT	10 U	3.7 J	NS	4.8	*
			Calcium	NT	2860	3220 J	NS	NS	53100
			Iron	NT	32.4 J	50 U	300	11000	1430
			Magnesium	NT	1780	1910	NS	NS	15000
			Manganese	NT	4.8 JB	4.4 J	50	880	1340
C-Block Quarry	CBLmw-001	Bedrock	Nickel	NT	5.8 J	4.7 J	NS	730	83.4
			Perchlorate	NT	NT	0.053	NS	3.6	*
			Potassium	NT	739 J	745 J	NS	NS	5770
			Silver	NT	3.2 J	5 U	NS	180	0
			Sodium	NT	2100	633 J	NS	NS	51400
			Vanadium	NT	1.8 J	10 U	NS	36	0
			Zinc	NT	5.9 J	14.2 J	5000	11000	52.3
			Aluminum	NT	30.2 J	50 U	200	36000	0
			Barium	NT	64.3	64.1	2000	2600	256
			bis(2-Ethylhexyl) phthalate	NT	10 U	1.9 J	NS	4.8	*
			Cadmium	NT	5 U	0.16 J	5	NS	0
			Calcium	NT	6650	7360	NS	NS	53100
			Iron	NT	50 U	28.1 J	300	11000	1430
			Magnesium	NT	4350	4670	NS	NS	15000
			Manganese	NT	9.5 JB	10.6	50	880	1340
C-Block Quarry	CBLmw-002	Bedrock	Nickel	NT	7.7 J	8 J	NS	730	83.4
			Nitrocellulose	NT	0.5 U	0.14 J	NS	NS	*
			Perchlorate	NT	NT	0.088	NS	3.6	*
			Potassium	NT	1320	1390 J	NS	NS	5770
			Sodium	NT	2070	1740	NS	NS	51400
			Zinc	NT	37.2	30.2 J	5000	11000	52.3
			Acetone	NT	1.2 J	10 JB	NS	610	*
			Barium	NT	45.7	44.3 J	2000	2600	256
			bis(2-Ethylhexyl) phthalate	NT	10 U	2.6 J	NS	4.8	*
			Calcium	NT	13900	14300 J	NS	NS	53100
			Magnesium	NT	3500	3020	NS	NS	15000
			Manganese	NT	3.6 JB	2.7 J	50	880	1340
			Nickel	NT	3.4 J	4.4 J	NS	730	83.4
			Nitrocellulose	NT	0.5 U	0.15 J	NS	NS	*
			Perchlorate	NT	NT	0.087	NS	3.6	*
C-Block Quarry	CBLmw-003	Bedrock	Potassium	NT	917 J	950 J	NS	NS	5770
			Sodium	NT	1140	1130	NS	NS	51400
			Zinc	NT	7.6 J	10.1 JB	5000	11000	52.3



Table 4-3. Summary of Constituents Detected - January, April and July 2008

Area	Well Number	Monitored Zone	Compound or Element Detected	Jan-08 Level (ug/L)	Apr-08 Level (ug/L)	Jul-08 Level (ug/L)	MCL (ug/L)	Region 9 PRG (ug/L)	Facility-Wide Background (ug/L)
C-Block Quarry	CBLmw-004	Bedrock	Acetone	NT	1.5 J	10 JB	NS	610	*
			Aluminum	NT	469	50 U	200	36000	0
			Barium	NT	19.1	16 J	2000	2600	256
			Calcium	NT	7150	6260 J	NS	NS	53100
			Iron	NT	40.7 J	54.2	300	11000	1430
			Magnesium	NT	2340	2360	NS	NS	15000
			Manganese	NT	21.4 J	20.1	50	880	1340
			Perchlorate	NT	NT	0.058	NS	3.6	*
			Potassium	NT	1190	1910 J	NS	NS	5770
			Sodium	NT	1300	1470 J	NS	NS	51400
			Zinc	NT	9 J	9 J	5000	11000	52.3
			1,3,5-Trinitrobenzene	NT	0.031 J	0.11 U	NS	1100	*
			Arsenic	NT	80.6	77.3 J	10	0.045	11.7
Central Burn Pits	CBPmw-001	Unconsolidated	Barium	NT	6.8 J	7 J	2000	2600	82.1
			bis(2-Ethylhexyl) phthalate	NT	1.6 J	2.3 J	NS	4.8	*
			Calcium	NT	326000	338000	NS	NS	115000
			Cobalt	NT	5 U	2.1 J	NS	730	0
			Iron	NT	6940 J	7960	300	11000	279
			m&p--Xylenes	NT	0.88 J	2 U	10000	210	*
			Magnesium	NT	177000	178000	NS	NS	43300
			Manganese	NT	104	104	50	880	1020
			Potassium	NT	18400 J	11200 J	NS	NS	2890
			Sodium	NT	72200	67300	NS	NS	45700
			Total Xylenes	NT	0.88 J	2 U	10000	210	*
			Zinc	NT	4.6 J	3 JB	5000	11000	60.9
			2,6-Dinitrotoluene	NT	0.098 U	0.075 J	NS	36	*
			Aluminum	NT	24.9 JB	51.3 J	200	36000	0
			Arsenic	NT	15.3	17.5	10	0.045	11.7
			Barium	NT	11.2	10 J	2000	2600	82.1
			bis(2-Ethylhexyl) phthalate	NT	1.6 J	2.2 J	NS	4.8	*
Central Burn Pits	CBPmw-002	Unconsolidated	Calcium	NT	166000	160000 J	NS	NS	115000
			Cobalt	NT	5 U	1.9 J	NS	730	0
			Iron	NT	426	1310	300	11000	279
			Magnesium	NT	106000	99800	NS	NS	43300
			Manganese	NT	66.7	111	50	880	1020
			Nitrocellulose	NT	0.5 R	0.13 J	NS	3.6	*
			Potassium	NT	3490 J	3210	NS	NS	2890
			Sodium	NT	52700	48900	NS	NS	45700
			Zinc	NT	3.5 J	2.6 JB	5000	11000	60.9
			1,3-Dinitrobenzene	NT	0.11 U	0.054 J	NS	NS	*
			2,6-Dinitrotoluene	NT	0.11 U	0.063 J	NS	36	*
			Arsenic	NT	17.2	20.7 J	10	0.045	11.7
			Barium	NT	14	13.3	2000	2600	82.1
			bis(2-Ethylhexyl) phthalate	NT	1.1 J	3 J	NS	4.8	*
			Calcium	NT	147000	159000	NS	NS	115000
			Iron	NT	929 J	1440	300	11000	279
			Magnesium	NT	87800	93100	NS	NS	43300
Central Burn Pits	CBPmw-003	Unconsolidated	Manganese	NT	49	107	50	880	1020
			Nitrobenzene	NT	0.059 J	0.085 J	NS	3	*
			Nitrocellulose	NT	0.5 R	0.2 J	NS	NS	*
			Potassium	NT	5670 J	4760 J	NS	NS	2890
			Sodium	NT	94100	89500	NS	NS	45700
			Zinc	NT	3.5 J	2.3 JB	5000	11000	60.9
			Aluminum	NT	243 JB	50 U	200	36000	0
			Arsenic	NT	42.1 J	29.8	10	0.045	11.7
			Barium	NT	72	61.7 J	2000	2600	82.1
			beta-BHC	NT	0.03 U	0.012 J	NS	0.037	*
			bis(2-Ethylhexyl) phthalate	NT	10 U	3.7 J	NS	4.8	*
			Calcium	NT	70700	71700 J	NS	NS	115000
			Carbon disulfide	NT	0.42 J	1 U	NS	1000	*
			Iron	NT	1150 J	1150	300	11000	279
			Magnesium	NT	34800	31500	NS	NS	43300
			Manganese	NT	51.3	54	50	880	1020
			Nitrocellulose	NT	0.13 J	0.13 J	NS	NS	*
Central Burn Pits	CBPmw-004	Unconsolidated	Potassium	NT	2080 J	1760	NS	NS	2890
			Sodium	NT	18800	16200	NS	NS	45700
			Thallium	NT	0.16 J	1 U	2	2	0
			Zinc	NT	3.3 J	10 U	5000	11000	60.9
			Aluminum	NT	24.8 JB	NT	200	36000	0
			Arsenic	NT	4.2 J	NT	10	0.045	11.7
			Barium	NT	115 J	NT	2000	2600	82.1
			Calcium	NT	70,000 J	NT	NS	NS	115000
			Iron	NT	276	NT	300	11000	279
			Magnesium	NT	27800 J	NT	NS	NS	43300
Central Burn Pits	CBPmw-006	Unconsolidated	Manganese	NT	45.5 J	NT	NS	NS	43300
			Potassium	NT	1650 J	NT	NS	NS	2890
			Sodium	NT	15700 J	NT	NS	NS	45700
			Zinc	NT	2.9 J	NT	5000	11000	60.9

**Table 4-3. Summary of Constituents Detected - January, April and July 2008**

Area	Well Number	Monitored Zone	Compound or Element Detected	Jan-08 Level (ug/L)	Apr-08 Level (ug/L)	Jul-08 Level (ug/L)	MCL (ug/L)	Region 9 PRG (ug/L)	Facility-Wide Background (ug/L)
Central Burn Pits	CBPmw-008	Unconsolidated	2,6-Dinitrotoluene	NT	0.053 J	0.1 U	NS	36	*
			Acetone	NT	1.7 J	10 U	NS	610	*
			Aluminum	NT	76.5 B	50 U	200	36000	0
			Arsenic	NT	4.2 J	5 U	10	0.045	11.7
			Barium	NT	11.2 J	10.6	2000	2600	82.1
			bis(2-Ethylhexyl) phthalate	NT	10 U	3.4 J	NS	4.8	*
			Calcium	NT	191000 J	192000	NS	NS	115000
			Iron	NT	526 J	719	300	11000	279
			Magnesium	NT	83300 J	80500	NS	NS	43300
			Manganese	NT	78.8 J	28.8	50	880	1020
			Nitrocellulose	NT	0.5 U	0.18 J	NS	NS	*
			Potassium	NT	4460 J	4580 J	NS	NS	2890
			Sodium	NT	110000 J	121000	NS	NS	45700
			Zinc	NT	10 U	2.8 JB	5000	11000	60.9
Cobbs Pond	CPmw-001	Unconsolidated	Aluminum	NT	50.8 B	50 U	200	36000	0
			Barium	NT	9.4 J	23.8	2000	2600	82.1
			bis(2-Ethylhexyl) phthalate	NT	10 U	3.1 J	NS	4.8	*
			Calcium	NT	32900	62600	NS	NS	115000
			Cyanide	NT	0.01 U	0.0072 J	NS	730	*
			HMX	NT	0.11 U	0.053 J	NS	1800	*
			Iron	NT	36.6 J	50 U	300	11000	279
			Magnesium	NT	7840	13700	NS	NS	43300
			Manganese	NT	1.2 J	1.4 J	50	880	1020
			Nitrocellulose	NT	0.5 UJ	0.14 J	NS	NS	*
			Potassium	NT	246 J	718 J	NS	NS	2890
			Sodium	NT	4940	6520	NS	NS	45700
			Zinc	NT	2.6 J	3.3 JB	5000	11000	60.9
			Acetone	NT	10 U	10 JB	NS	610	*
Cobbs Pond	CPmw-002	Unconsolidated	Aluminum	NT	59.2 B	50 U	200	36000	0
			Barium	NT	50.3	48.2	2000	2600	82.1
			bis(2-Ethylhexyl) phthalate	NT	10 U	16	NS	4.8	*
			Calcium	NT	101000	96400	NS	NS	115000
			Iron	NT	44.4 J	50 U	300	11000	279
			Magnesium	NT	30400	28100	NS	NS	43300
			Manganese	NT	300	282	50	880	1020
			Nitrocellulose	NT	0.5 UJ	0.15 J	NS	NS	*
			Potassium	NT	697 J	733 J	NS	NS	2890
			Sodium	NT	13600	13700	NS	NS	45700
			Zinc	NT	3.5 J	4.9 JB	5000	11000	60.9
			2,6-Dinitrotoluene	NT	0.054 J	0.073 J	NS	36	*
			2-Butanone	NT	0.58 J	10 U	NS	1900	*
			Aluminum	NT	41.1 JB	50 U	200	36000	0
Cobbs Pond	CPmw-003	Unconsolidated	Arsenic	NT	7.1	9 B	10	0.045	11.7
			Barium	NT	43.2	80.2 J	2000	2600	82.1
			beta-BHC	NT	0.016 J	0.012 J	NS	0.037	*
			bis(2-Ethylhexyl) phthalate	NT	10 U	2.3 J	NS	4.8	*
			Calcium	NT	22300	41000 J	NS	NS	115000
			delta-BHC	NT	0.012 J	0.03 U	NS	0.052	*
			Iron	NT	757 J	584	300	11000	279
			Magnesium	NT	3500	7040	NS	NS	43300
			Manganese	NT	96.5	177	50	880	1020
			Potassium	NT	1250 J	1570	NS	NS	2890
			Sodium	NT	17700	20100	NS	NS	45700
			Zinc	NT	2.4 J	2.9 JB	5000	11000	60.9
			2-Butanone	NT	0.63 J	10 U	NS	1900	*
			Barium	NT	16	14.9	2000	2600	82.1
Cobbs Pond	CPmw-004	Unconsolidated	bis(2-Ethylhexyl) phthalate	NT	10 U	2.2 J	NS	4.8	*
			Calcium	NT	60600	57300	NS	NS	115000
			Magnesium	NT	23300	21600	NS	NS	43300
			Manganese	NT	0.51 J	1.6 J	50	880	1020
			Nitrocellulose	NT	0.5 UJ	0.17 J	NS	NS	*
			Potassium	NT	808 J	805 J	NS	NS	2890
			Sodium	NT	6340	7180	NS	NS	45700
			Acetone	NT	1.2 J	10 U	NS	610	*
			Arsenic	NT	29.3	30.3 J	10	0.045	11.7
			Barium	NT	154	144	2000	2600	82.1
			bis(2-Ethylhexyl) phthalate	NT	10 U	1.6 J	NS	4.8	*
			Calcium	NT	58800	59300	NS	NS	115000
			Iron	NT	408 J	384	300	11000	279
			Magnesium	NT	25000	24500	NS	NS	43300
Cobbs Pond	CPmw-005	Unconsolidated	Manganese	NT	43.6	44.7	50	880	1020
			Nitrocellulose	NT	0.18 J	0.17 J	NS	NS	*
			Potassium	NT	2540 J	2430 J	NS	NS	2890
			Sodium	NT	36700	35300	NS	NS	45700
			Zinc	NT	3.2 J	10 U	5000	11000	60.9

Table 4-3. Summary of Constituents Detected - January, April and July 2008

Area	Well Number	Monitored Zone	Compound or Element Detected	Jan-08 Level (ug/L)	Apr-08 Level (ug/L)	Jul-08 Level (ug/L)	MCL (ug/L)	Region 9 PRG (ug/L)	Facility-Wide Background (ug/L)
Cobbs Pond	CPmw-006	Unconsolidated	2-Butanone	NT	0.68 J	10 U	NS	1900	*
			Acetone	NT	4.7 J	10 U	NS	610	*
			Aluminum	NT	111 JB	50 U	200	36000	0
			Arsenic	NT	4.7 J	7 J	10	0.045	11.7
			Barium	NT	78.7	77.3	2000	2600	82.1
			Calcium	NT	92700	90800	NS	NS	115000
			Dibenzo(a,h)anthracene	NT	0.24 U	2.2 J	NS	0.0093	*
			Iron	NT	7820 J	6830	300	11000	279
			Magnesium	NT	27200	23900	NS	NS	43300
			Manganese	NT	2510	2320	50	880	1020
			Potassium	NT	2770 J	2940 J	NS	NS	2890
			Sodium	NT	33200	30700	NS	NS	45700
			Zinc	NT	4.9 J	9.2 BJ	5000	11000	60.9
			2,6-Dinitrotoluene	NT	0.069 J	0.1 U	NS	36	*
Demolition Area 2	DA2mw-104	Unconsolidated	2-Butanone	NT	0.57 J	10 U	NS	1900	*
			Aroclor 1242	NT	0.57 J	0.5 U	NS	0.034	*
			Barium	NT	14.6	14.7 J	2000	2600	82.1
			Calcium	NT	43500	45700 J	NS	NS	115000
			Magnesium	NT	12800	12800	NS	NS	43300
			Manganese	NT	0.98 J	0.93 J	50	880	1020
			Potassium	NT	646 J	644 J	NS	NS	2890
			Sodium	NT	3300	3750 J	NS	NS	45700
			Zinc	NT	5.4 J	8.5 JB	5000	11000	60.9
			2,6-Dinitrotoluene	NT	0.11 U	0.057 J	NS	36	*
			2-Butanone	NT	0.8 J	10 U	NS	1900	*
			Acetone	NT	10 JB	10 U	NS	610	*
			Arsenic	NT	5 U	8.2	10	0.045	11.7
			Barium	NT	55	58 J	2000	2600	82.1
Demolition Area 2	DA2mw-105	Unconsolidated	bis(2-Ethylhexyl) phthalate	NT	10 U	1.6 J	NS	4.8	*
			Calcium	NT	80700	84200 J	NS	NS	115000
			Iron	NT	886 J	1260	300	11000	279
			Magnesium	NT	23000	23300	NS	NS	43300
			Manganese	NT	341	252	50	880	1020
			Potassium	NT	1000 J	1190	NS	NS	2890
			Sodium	NT	7130	7670 J	NS	NS	45700
			Zinc	NT	10 U	9.5 JB	5000	11000	60.9
			2-Butanone	NT	0.71 J	10 U	NS	1900	*
			Acetone	NT	10 JB	10 JB	NS	610	*
			Barium	NT	49.6	62.5 J	2000	2600	82.1
			bis(2-Ethylhexyl) phthalate	NT	10 U	1.4 J	NS	4.8	*
			Calcium	NT	151000	156000	NS	NS	115000
			Cobalt	NT	9.6	8.5	NS	730	0
Demolition Area 2	DA2mw-106	Unconsolidated	Iron	NT	9190 J	1620	300	11000	279
			Magnesium	NT	54100	54200	NS	NS	43300
			Manganese	NT	5640	3720	50	880	1020
			Nickel	NT	4.6 J	11.2 J	NS	730	0
			Potassium	NT	1470 J	2590 J	NS	NS	2890
			Sodium	NT	23300	18500 J	NS	NS	45700
			Zinc	NT	10.6	9.6 J	5000	11000	60.9
			2,6-Dinitrotoluene	NT	0.056 J	0.1 U	NS	36	*
			2-Butanone	NT	0.7 J	10 U	NS	1900	*
			Acetone	NT	10 U	10 JB	NS	610	*
			Arsenic	NT	5 U	3.6 J	10	0.045	11.7
			Barium	NT	31.5	35 J	2000	2600	82.1
			beta-BHC	NT	0.014 J	0.03 U	NS	0.037	*
			bis(2-Ethylhexyl) phthalate	NT	2.5 J	0.89 J	NS	4.8	*
Demolition Area 2	DA2mw-108	Unconsolidated	Calcium	NT	40000	89300	NS	NS	115000
			Iron	NT	2360 J	2920	300	11000	279
			Magnesium	NT	15700	32300	NS	NS	43300
			Manganese	NT	372	295	50	880	1020
			Perchlorate	NT	NT	0.044 J	NS	3.6	*
			Potassium	NT	1980 J	2710 J	NS	NS	2890
			Sodium	NT	13600	10300 J	NS	NS	45700
			Thallium	NT	1 U	0.28 J	2	2	0
			Zinc	NT	4 J	10 U	5000	11000	60.9
			Barium	NT	22.5	20.3 J	2000	2600	82.1
			beta-BHC	NT	0.03 U	0.011 J	NS	0.037	*
			bis(2-Ethylhexyl) phthalate	NT	10 U	2.7 J	NS	4.8	*
			Calcium	NT	93400	95400	NS	NS	115000
			Iron	NT	50 U	29.3 J	300	11000	279
Demolition Area 2	DA2mw-109	Unconsolidated	Magnesium	NT	37000	36700	NS	NS	43300
			Manganese	NT	2.4 J	50.7	50	880	1020
			Perchlorate	NT	NT	0.028 J	NS	3.6	*
			Potassium	NT	778 J	978 J	NS	NS	2890
			Sodium	NT	12800 J	6410 J	NS	NS	45700
			Zinc	NT	3 J	3.3 J	5000	11000	60.9

Table 4-3. Summary of Constituents Detected - January, April and July 2008

Area	Well Number	Monitored Zone	Compound or Element Detected	Jan-08 Level (ug/L)	Apr-08 Level (ug/L)	Jul-08 Level (ug/L)	MCL (ug/L)	Region 9 PRG (ug/L)	Facility-Wide Background (ug/L)
Demolition Area 2	DA2mw-110	Unconsolidated	2-Butanone	NT	0.63 J	10 U	NS	1900	*
			Acetone	NT	10 U	10 JB	NS	610	*
			Aluminum	NT	57.7	50 U	200	36000	0
			Barium	NT	6.7 J	10.3 J	2000	2600	82.1
			beta-BHC	NT	0.03 U	0.0094 J	NS	0.037	*
			bis(2-Ethylhexyl) phthalate	NT	10 U	2.9 J	NS	4.8	*
			Calcium	NT	50900	55100	NS	NS	115000
			Iron	NT	78.3 J	50 U	300	11000	279
			Magnesium	NT	15700	17200	NS	NS	43300
			Manganese	NT	12.8	36	50	880	1020
			Potassium	NT	772 J	1030 J	NS	NS	2890
			Sodium	NT	4310	4880 J	NS	NS	45700
			Zinc	NT	10 U	3.8 J	5000	11000	60.9
			2-Butanone	NT	0.69 J	10 U	NS	1900	*
Demolition Area 2	DA2mw-111	Unconsolidated	Acetone	NT	10 U	10 JB	NS	610	*
			Barium	NT	22.9	20.6 J	2000	2600	82.1
			bis(2-Ethylhexyl) phthalate	NT	10 U	2 J	NS	4.8	*
			Calcium	NT	103000	95300	NS	NS	115000
			Magnesium	NT	40200	36200	NS	NS	43300
			Manganese	NT	238	40.9	50	880	1020
			Perchlorate	NT	NT	0.04 J	NS	3.6	*
			Potassium	NT	2940 J	3150 J	NS	NS	2890
			Sodium	NT	28300 J	24300 J	NS	NS	45700
			Zinc	NT	7.6 J	7.5 J	5000	11000	60.9
			2-Butanone	NT	0.87 J	10 U	NS	1900	*
			Acetone	NT	10 JB	10 U	NS	610	*
			Arsenic	NT	5 U	5	10	0.045	11.7
			Barium	NT	21.1	22.9 J	2000	2600	82.1
Demolition Area 2	DA2mw-112	Unconsolidated	beta-BHC	NT	0.03 U	0.016 J	NS	0.037	*
			bis(2-Ethylhexyl) phthalate	NT	10 U	0.88 J	NS	4.8	*
			Calcium	NT	78400	92700 J	NS	NS	115000
			Iron	NT	2350 J	4980	300	11000	279
			Magnesium	NT	20100	20100	NS	NS	43300
			Manganese	NT	544	724	50	880	1020
			Perchlorate	NT	NT	0.044 J	NS	3.6	*
			Potassium	NT	1730 J	1550	NS	NS	2890
			Sodium	NT	4830	4040 J	NS	NS	45700
			Zinc	NT	4.3 J	8.7 JB	5000	11000	60.9
			2,6-Dinitrotoluene	NT	0.068 J	0.1 U	NS	36	*
			2-Butanone	NT	0.87 J	10 U	NS	1900	*
			Acetone	NT	10 JB	10 U	NS	610	*
			Barium	NT	38.5	41.8 J	2000	2600	82.1
Demolition Area 2	DA2mw-113	Unconsolidated	Calcium	NT	66500	71100 J	NS	NS	115000
			Iron	NT	2730 J	3390	300	11000	279
			Magnesium	NT	16800	17100	NS	NS	43300
			Manganese	NT	507	340	50	880	1020
			Perchlorate	NT	NT	0.047 J	NS	3.6	*
			Potassium	NT	1010 J	1170	NS	NS	2890
			Sodium	NT	2950	2800 J	NS	NS	45700
			Zinc	NT	3.1 J	7.9 JB	5000	11000	60.9
			Acetone	NT	10 JB	NT	NS	610	*
			Arsenic	NT	9.9	NT	10	0.045	11.7
			Barium	NT	47.8	NT	2000	2600	82.1
			Calcium	NT	82800	NT	NS	NS	115000
			Iron	NT	1640 J	NT	300	11000	279
			Magnesium	NT	31600	NT	NS	NS	43300
Demolition Area 2	DETmw-003	Unconsolidated	Manganese	NT	281	NT	50	880	1020
			Potassium	NT	1490 J	NT	NS	NS	2890
			Sodium	NT	11400	NT	NS	NS	45700
			2,4,6-TNT	NT	0.097 J	NT	NS	2.2	*
			Acetone	NT	10 JB	NT	NS	610	*
			Antimony	NT	0.15 J	NT	6	15	0
			Barium	NT	42.4	NT	2000	2600	82.1
			Calcium	NT	106000	NT	NS	NS	115000
			HMX	NT	2.1	NT	NS	1800	*
			Magnesium	NT	22400	NT	NS	NS	43300
			Manganese	NT	1.5 J	NT	50	880	1020
			Potassium	NT	1460 J	NT	NS	NS	2890
			RDX	NT	2.9	NT	NS	0.61	*
			Sodium	NT	2900	NT	NS	NS	45700
			Zinc	NT	6.1 J	NT	5000	11000	60.9

**Table 4-3. Summary of Constituents Detected - January, April and July 2008**

Area	Well Number	Monitored Zone	Compound or Element Detected	Jan-08 Level (ug/L)	Apr-08 Level (ug/L)	Jul-08 Level (ug/L)	MCL (ug/L)	Region 9 PRG (ug/L)	Facility-Wide Background (ug/L)
Erie Burning Grounds	EBGmw-123	Unconsolidated	2-Nitrotoluene	NT	0.18 J	0.1 U	NS	61	*
			Arsenic	NT	31.6 J	38.4	10	0.045	11.7
			Barium	NT	186 J	175 J	2000	2600	82.1
			beta-BHC	NT	0.03 U	0.018 J	NS	0.037	*
			bis(2-Ethylhexyl) phthalate	NT	10 UJ	1.7 J	NS	4.8	*
			Calcium	NT	88800 J	89800	NS	NS	115000
			Iron	NT	3500	5190	300	11000	279
			Magnesium	NT	15100 J	15500	NS	NS	43300
			Manganese	NT	154 J	135	50	880	1020
			Nitrobenzene	NT	0.09 J	0.1 U	NS	3	*
			Potassium	NT	945 J	943 J	NS	NS	2890
			Sodium	NT	7700 J	7820	NS	NS	45700
			Zinc	NT	10 U	2.8 J	5000	11000	60.9
Erie Burning Grounds	EBGmw-124	Unconsolidated	Arsenic	NT	42.3 J	40.1	10	0.045	11.7
			Barium	NT	171 J	158 J	2000	2600	82.1
			bis(2-Ethylhexyl) phthalate	NT	10 U	2.6 J	NS	4.8	*
			Calcium	NT	81200 J	78100 J	NS	NS	115000
			Iron	NT	3130	3880	300	11000	279
			Magnesium	NT	17600 J	15900	NS	NS	43300
			Manganese	NT	55.6 J	66.8	50	880	1020
			Nitrobenzene	NT	0.057 J	0.1 U	NS	3	*
			Potassium	NT	1060 J	1050	NS	NS	2890
			Sodium	NT	11200 J	9960 J	NS	NS	45700
Erie Burning Grounds	EBGmw-125	Unconsolidated	Acetone	NT	10 U	10 JB	NS	610	*
			Aluminum	NT	50 U	28.6 J	200	36000	0
			Arsenic	NT	5 U	8.7 J	10	0.045	11.7
			Barium	NT	57.5 J	54.6 J	2000	2600	82.1
			bis(2-Ethylhexyl) phthalate	NT	10 UJ	1.1 J	NS	4.8	*
			Calcium	NT	44800 J	41300	NS	NS	115000
			Cyanide	NT	0.0051 J	0.01 U	NS	730	*
			Iron	NT	6330	8710	300	11000	279
			Magnesium	NT	8520 J	8480	NS	NS	43300
			Manganese	NT	438 J	460	50	880	1020
			Perchlorate	NT	NT	0.035 J	NS	3.6	*
			Potassium	NT	1060 J	1110 J	NS	NS	2890
			Sodium	NT	3170 J	3490 J	NS	NS	45700
			Zinc	NT	10 U	3.8 J	5000	11000	60.9
Erie Burning Grounds	EBGmw-126	Unconsolidated	Arsenic	NT	13.9 J	23.1	10	0.045	11.7
			Barium	NT	229 J	238 J	2000	2600	82.1
			bis(2-Ethylhexyl) phthalate	NT	2.1 J	10 U	NS	4.8	*
			Calcium	NT	90800 J	97100 J	NS	NS	115000
			Iron	NT	5230	7750	300	11000	279
			Magnesium	NT	16200 J	16900	NS	NS	43300
			Manganese	NT	202 J	208	50	880	1020
			Perchlorate	NT	NT	0.036 J	NS	3.6	*
			Potassium	NT	1270 J	1240	NS	NS	2890
			Sodium	NT	7150 J	7160 J	NS	NS	45700
			Zinc	NT	6.8 J	5.7 JB	5000	11000	60.9
Erie Burning Grounds	EBGmw-127	Unconsolidated	Aluminum	NT	114 J	131	200	36000	0
			Arsenic	NT	14 J	11.7 J	10	0.045	11.7
			Barium	NT	368 J	295 J	2000	2600	82.1
			bis(2-Ethylhexyl) phthalate	NT	10 U	1 J	NS	4.8	*
			Calcium	NT	75800 J	72600	NS	NS	115000
			Iron	NT	1620	1190	300	11000	279
			Magnesium	NT	17500 J	16400	NS	NS	43300
			Manganese	NT	31.6 J	30.7	50	880	1020
			Mercury	NT	0.2 U	0.3 J	2	11	0
			Potassium	NT	1470 J	1400 J	NS	NS	2890
			Sodium	NT	4210 J	3990 J	NS	NS	45700
			Zinc	NT	10 U	2.9 J	5000	11000	60.9
Erie Burning Grounds	EBGmw-128	Unconsolidated	Arsenic	NT	5 J	11	10	0.045	11.7
			Barium	NT	55.1 J	59.1 J	2000	2600	82.1
			bis(2-Ethylhexyl) phthalate	NT	1.3 J	1.5 J	NS	4.8	*
			Calcium	NT	46400 J	49400 J	NS	NS	115000
			Iron	NT	212	902	300	11000	279
			Magnesium	NT	8240 J	8520	NS	NS	43300
			Manganese	NT	152 J	315	50	880	1020
			Perchlorate	NT	NT	0.041 J	NS	3.6	*
			Potassium	NT	711 J	704 J	NS	NS	2890
			Sodium	NT	3780 J	3650 J	NS	NS	45700
			Zinc	NT	10 U	3 JB	5000	11000	60.9

Table 4-3. Summary of Constituents Detected - January, April and July 2008

Area	Well Number	Monitored Zone	Compound or Element Detected	Jan-08 Level (ug/L)	Apr-08 Level (ug/L)	Jul-08 Level (ug/L)	MCL (ug/L)	Region 9 PRG (ug/L)	Facility-Wide Background (ug/L)
Erie Burning Grounds	EBGmw-129	Unconsolidated	2-Nitrotoluene	NT	0.12 J	0.1 U	NS	61	*
			Barium	NT	25.3 J	26.7 J	2000	2600	82.1
			bis(2-Ethylhexyl) phthalate	NT	10 U	1.9 J	NS	4.8	*
			Calcium	NT	47400 J	45700 J	NS	NS	115000
			Iron	NT	5750	5370	300	11000	279
			Magnesium	NT	11100 J	10600	NS	NS	43300
			Manganese	NT	655 J	558	50	880	1020
			Perchlorate	NT	NT	0.038 J	NS	3.6	*
			Potassium	NT	898 J	897 J	NS	NS	2890
			Sodium	NT	2940 J	2910 J	NS	NS	45700
			Zinc	NT	6.5 J	5.9 JB	5000	11000	60.9
			2-Butanone	NT	0.59 J	10 U	NS	1900	*
Erie Burning Grounds	EBGmw-130	Unconsolidated	Arsenic	NT	4.5 J	7.1 J	10	0.045	11.7
			Barium	NT	37.6 J	56.9 J	2000	2600	82.1
			Calcium	NT	73700 J	70800	NS	NS	115000
			Cobalt	NT	2.2 J	5 U	NS	730	0
			Iron	NT	2980	3370	300	11000	279
			Magnesium	NT	16600 J	15700	NS	NS	43300
			Manganese	NT	762 J	614	50	880	1020
			Nickel	NT	10 U	3.7 J	NS	730	0
			Perchlorate	NT	NT	0.048 J	NS	3.6	*
			Potassium	NT	2730 J	2440 J	NS	NS	2890
			Sodium	NT	3840 J	4130 J	NS	NS	45700
			Zinc	NT	4.9 J	4.6 J	5000	11000	60.9
			2,6-Dinitrotoluene	NT	0.097 U	0.064 J	NS	36	*
			Acetone	NT	10 JB	10 U	NS	610	*
			Barium	NT	32.1 J	34.6 J	2000	2600	82.1
Fuze & Booster Quarry	FBQmw-166	Unconsolidated	bis(2-Ethylhexyl) phthalate	NT	10 U	6.2 J	NS	4.8	*
			Calcium	NT	95300 J	95800 J	NS	NS	115000
			Chromium	NT	5 U	2.5 J	100	NS	0
			Iron	NT	50 U	28 J	300	11000	279
			Magnesium	NT	35600 J	34100	NS	NS	43300
			Manganese	NT	21.7 J	111	50	880	1020
			Nickel	NT	10 U	3.4 J	NS	730	0
			Perchlorate	NT	NT	0.038 J	NS	3.6	*
			Potassium	NT	815 J	1040	NS	NS	2890
			Sodium	NT	14000 J	14300 J	NS	NS	45700
			Zinc	NT	10 U	14.5 J	5000	11000	60.9
			Antimony	NT	0.13 J	2 U	6	15	0
			Barium	NT	63.9 J	54.6 J	2000	2600	82.1
			bis(2-Ethylhexyl) phthalate	NT	2.5 J	1.6 J	NS	4.8	*
			Cadmium	NT	0.16 J	0.13 J	5	NS	0
Fuze & Booster Quarry	FBQmw-167	Unconsolidated	Calcium	NT	29500 J	28200 J	NS	NS	115000
			Cobalt	NT	6.8 J	6.9 J	NS	730	0
			Iron	NT	15900	15100	300	11000	279
			Magnesium	NT	13700 J	12700	NS	NS	43300
			Manganese	NT	2220 J	2070	50	880	1020
			Nickel	NT	7.6 J	9.4 J	NS	730	0
			Perchlorate	NT	NT	0.04 J	NS	3.6	*
			Potassium	NT	1650 J	1630	NS	NS	2890
			Sodium	NT	33400 J	32200	NS	NS	45700
			Zinc	NT	17.7	17.6 JB	5000	11000	60.9
			Acetone	NT	10 JB	10 JB	NS	610	*
			Antimony	NT	0.33 J	0.54 J	6	15	0
			Barium	NT	28.1 J	25.9 J	2000	2600	256
			bis(2-Ethylhexyl) phthalate	NT	10 U	4.1 J	NS	4.8	*
			Calcium	NT	40100 J	44000 J	NS	NS	53100
Fuze & Booster Quarry	FBQmw-168	Bedrock	Iron	NT	50 U	63.2	300	11000	1430
			Magnesium	NT	7510 J	7520	NS	NS	15000
			Manganese	NT	1.2 J	8 J	50	880	1340
			Perchlorate	NT	NT	0.039 J	NS	3.6	*
			Potassium	NT	745 J	877 J	NS	NS	5770
			Sodium	NT	1730 J	1770 J	NS	NS	51400
			Zinc	NT	10 U	10.7 J	5000	11000	52.3
			Aluminum	NT	36.5 J	50 U	200	36000	0
			Barium	NT	54.8 J	49.8 J	2000	2600	256
			bis(2-Ethylhexyl) phthalate	NT	2.9 J	1.4 J	NS	4.8	*
			Cadmium	NT	0.86	0.79 J	5	NS	0
			Calcium	NT	26300 J	24400 J	NS	NS	53100
			Cobalt	NT	12.1 J	12.2 J	NS	730	0
			Iron	NT	961	1300	300	11000	1430
			Magnesium	NT	18000 J	16800	NS	NS	15000
Fuze & Booster Quarry	FBQmw-169	Bedrock	Manganese	NT	7070 J	6370	50	880	1340
			Nickel	NT	13.2 J	15 J	NS	730	83.4
			Nitrocellulose	NT	0.5 UJ	0.13 J	NS	NS	*
			Perchlorate	NT	NT	0.059	NS	3.6	*
			Potassium	NT	1990 J	2010	NS	NS	5770
			Sodium	NT	31400 J	30800	NS	NS	51400
			Zinc	NT	9.3 J	11 JB	5000	11000	52.3

Table 4-3. Summary of Constituents Detected - January, April and July 2008

Area	Well Number	Monitored Zone	Compound or Element Detected	Jan-08 Level (ug/L)	Apr-08 Level (ug/L)	Jul-08 Level (ug/L)	MCL (ug/L)	Region 9 PRG (ug/L)	Facility-Wide Background (ug/L)
Fuze & Booster Quarry	FBQmw-170	Bedrock	4-Amino-2,6-Dinitrotoluene	NT	0.063 J	0.1 U	NS	NS	*
			Acetone	NT	10 JB	10 U	NS	610	*
			Aluminum	NT	28.1 J	22.3 J	200	36000	0
			Barium	NT	40.9 J	34.3 J	2000	2600	256
			bis(2-Ethylhexyl) phthalate	NT	0.97 J	2.1 J	NS	4.8	*
			Cadmium	NT	0.14 J	5 U	5	NS	0
			Calcium	NT	8200 J	8450 J	NS	NS	53100
			Magnesium	NT	2970 J	2950	NS	NS	15000
			Manganese	NT	94.2 J	68.4	50	880	1340
			Nickel	NT	4.5 J	5.5 J	NS	730	83.4
			Nitrobenzene	NT	0.054 J	0.1 U	NS	3	*
			Perchlorate	NT	NT	0.19	NS	3.6	*
			Potassium	NT	688 J	729 J	NS	NS	5770
			Sodium	NT	7960 J	8720	NS	NS	51400
Fuze & Booster Quarry	FBQmw-171	Bedrock	Zinc	NT	15.8	15.2 JB	5000	11000	52.3
			2,6-Dinitrotoluene	NT	0.052 J	0.1 U	NS	36	*
			Acetone	NT	10 JB	10 U	NS	610	*
			Barium	NT	30 J	31.6 J	2000	2600	256
			bis(2-Ethylhexyl) phthalate	NT	4.1 J	1.1 J	NS	4.8	*
			Calcium	NT	16600 J	17600 J	NS	NS	53100
			Cyanide	NT	0.01 U	0.0055 JB	NS	730	*
			Magnesium	NT	5420 J	5620	NS	NS	15000
			Manganese	NT	29.7 J	27.3	50	880	1340
			Perchlorate	NT	NT	0.078	NS	3.6	*
			Potassium	NT	822 J	890 J	NS	NS	5770
			Sodium	NT	1000 J	1530 J	NS	NS	51400
			Zinc	NT	12.5	15.7 J	5000	11000	52.3
Fuze & Booster Quarry	FBQmw-172	Bedrock	2,6-Dinitrotoluene	NT	0.063 J	0.1 U	NS	36	*
			Barium	NT	48.2 J	38.6 J	2000	2600	256
			bis(2-Ethylhexyl) phthalate	NT	10 U	2.1 J	NS	4.8	*
			Calcium	NT	90500 J	81000 J	NS	NS	53100
			Cobalt	NT	2 J	1.8 J	NS	730	0
			Cyanide	NT	0.01 U	0.005 J	NS	6.2	*
			Iron	NT	153	31.4 J	300	11000	1430
			Magnesium	NT	40800 J	35500	NS	NS	15000
			Manganese	NT	2370 J	2370	50	880	1340
			Mercury	NT	0.2 U	0.16 J	2	11	0
			Nickel	NT	10 U	3.2 J	NS	730	83.4
			Perchlorate	NT	NT	0.024 J	NS	3.6	*
			Potassium	NT	908 J	762 J	NS	NS	5770
			Sodium	NT	8030 J	6330	NS	NS	51400
			Thallium	NT	1 U	0.28 J	2	2	0
			Zinc	NT	10 U	5 JB	5000	11000	52.3
			2,4,6-TNT	NT	0.09 J	0.08 J	NS	2.2	*
			2-Amino-4,6-dinitrotoluene	NT	0.31	0.13	NS	NS	*
Fuze & Booster Quarry	FBQmw-173	Bedrock	4-Amino-2,6-Dinitrotoluene	NT	0.39	0.1 U	NS	NS	*
			Barium	NT	9.5 J	8.8 J	2000	2600	256
			bis(2-Ethylhexyl) phthalate	NT	0.94 J	3.6 J	NS	4.8	*
			Calcium	NT	8180 J	8310 J	NS	NS	53100
			Cobalt	NT	5 U	2.8 J	NS	730	0
			Iron	NT	5190	1240	300	11000	1430
			Magnesium	NT	3310 J	3210	NS	NS	15000
			Manganese	NT	1260 J	1190	50	880	1340
			Perchlorate	NT	NT	0.035 J	NS	3.6	*
			Potassium	NT	1240 J	1190	NS	NS	5770
			Sodium	NT	1300 J	1490	NS	NS	51400
			Zinc	NT	7.6 J	4.9 JB	5000	11000	52.3
			2,4,6-TNT	NT	62	12 J	NS	2.2	*
			2,4-Dinitrotoluene	NT	1 U	0.4 J	NS	73	*
			2-Amino-4,6-dinitrotoluene	NT	21	21 J	NS	NS	*
			4-Amino-2,6-Dinitrotoluene	NT	21	23 J	NS	NS	*
			Acetone	NT	10 JB	10 U	NS	610	*
			alpha-Chordane	NT	0.018 J	0.03 U	NS	0.19	*
Fuze & Booster Quarry	FBQmw-174	Bedrock	Barium	NT	13.8 J	16.5 J	2000	2600	256
			beta-BHC	NT	0.24 J	0.03 U	NS	0.037	*
			bis(2-Ethylhexyl) phthalate	NT	2 U	1.5 J	NS	4.8	*
			Calcium	NT	6340 J	8500 J	NS	NS	53100
			Iron	NT	50 U	26.6 J	300	11000	1430
			Magnesium	NT	2150 J	2630	NS	NS	15000
			Manganese	NT	13.5 J	3.9 J	50	880	1340
			Perchlorate	NT	NT	0.094	NS	3.6	*
			Potassium	NT	815 J	1020	NS	NS	5770
			Zinc	NT	13.9	17.6	5000	11000	52.3

Table 4-3. Summary of Constituents Detected - January, April and July 2008

Area	Well Number	Monitored Zone	Compound or Element Detected	Jan-08 Level (ug/L)	Apr-08 Level (ug/L)	Jul-08 Level (ug/L)	MCL (ug/L)	Region 9 PRG (ug/L)	Facility-Wide Background (ug/L)
Fuse & Booster Quarry	FBQmw-175	Bedrock	Antimony	NT	0.17 J	2 U	6	15	0
			Barium	NT	6.8 J	5.1 J	2000	2600	256
			bis(2-Ethylhexyl) phthalate	NT	10 U	1.9 J	NS	4.8	*
			Calcium	NT	8310 J	9300 J	NS	NS	53100
			Cyanide	NT	0.01 U	0.0062 JB	NS	730	*
			Magnesium	NT	4470 J	4860	NS	NS	15000
			Manganese	NT	47 J	34.1	50	880	1340
			Nickel	NT	9.6 J	17.5	NS	730	83.4
			Perchlorate	NT	NT	0.11	NS	3.6	*
			Potassium	NT	622 J	593 J	NS	NS	5770
			Sodium	NT	4410 J	2430 J	NS	NS	51400
			Thallium	NT	0.19 J	1 U	2	2	0
			Zinc	NT	10	14.4 J	5000	11000	52.3
Fuse & Booster Quarry	FBQmw-176	Unconsolidated	Acetone	NT	10 JB	10 U	NS	610	*
			Barium	NT	52.8 J	57.2 J	2000	2600	82.1
			bis(2-Ethylhexyl) phthalate	NT	10 U	2.1 J	NS	4.8	*
			Calcium	NT	8880 J	8900 J	NS	NS	115000
			Cobalt	NT	3.2 J	3.1 J	NS	730	0
			Iron	NT	8480	9250	300	11000	279
			Magnesium	NT	3240 J	3160	NS	NS	43300
			Manganese	NT	1440 J	1400	50	880	1020
			Potassium	NT	834 J	872 J	NS	NS	2890
			Sodium	NT	1920 J	2220 J	NS	NS	45700
			Zinc	NT	4.2 J	5.5 J	5000	11000	60.9
Fuse & Booster Quarry	FBQmw-177	Bedrock	Barium	NT	10.4 J	10 J	2000	2600	256
			bis(2-Ethylhexyl) phthalate	NT	10 U	2.2 J	NS	4.8	*
			Calcium	NT	41800 J	42000 J	NS	NS	53100
			Iron	NT	50 U	28.2 J	300	11000	1430
			Magnesium	NT	11700 J	11300	NS	NS	15000
			Manganese	NT	1130 J	1380	50	880	1340
			Perchlorate	NT	NT	0.027 J	NS	3.6	*
			Potassium	NT	1080 J	1330	NS	NS	5770
			Sodium	NT	2870 J	2960 J	NS	NS	51400
			Zinc	NT	10 U	7.1 J	5000	11000	52.3
Landfill North of Winklepeck	LNWmw-024	Unconsolidated	Barium	NT	38.4 J	35.1	2000	2600	82.1
			bis(2-Ethylhexyl) phthalate	NT	10 U	2.2 J	NS	4.8	*
			Calcium	NT	83000 J	84800	NS	NS	115000
			Magnesium	NT	37000 J	36800	NS	NS	43300
			Manganese	NT	3.9 J	5 J	50	880	1020
			Nitrobenzene	NT	0.066 J	0.12 J	NS	3	*
			Potassium	NT	1150 J	1050	NS	NS	2890
			Sodium	NT	9930 J	7910	NS	NS	45700
			Thallium	NT	0.2 J	1 U	2	2	0
			Zinc	NT	10 U	3.3 JB	5000	11000	60.9
Landfill North of Winklepeck	LNWmw-025	Unconsolidated	4,4'-DDT	NT	0.03 U	0.024 J	NS	0.2	*
			Aluminum	NT	50 U	742 J	200	36000	0
			Arsenic	NT	4.4 J	45	10	0.045	11.7
			Barium	NT	38.4 J	41.6	2000	2600	82.1
			bis(2-Ethylhexyl) phthalate	NT	1.8 J	2.3 J	NS	4.8	*
			Calcium	NT	37700 J	37000	NS	NS	115000
			Cyanide	NT	0.01 U	0.0099 J	NS	730	*
			Iron	NT	1460	18900	300	11000	279
			Magnesium	NT	11300 J	11000	NS	NS	43300
			Manganese	NT	942 J	812	50	880	1020
			Mercury	NT	0.2 U	0.14 JB	2	11	0
			Potassium	NT	876 J	1120	NS	NS	2890
			Sodium	NT	6630 J	6600	NS	NS	45700
			Vanadium	NT	10 U	1.5 J	NS	36	0
			Zinc	NT	2.5 J	5.4 JB	5000	11000	60.9
Landfill North of Winklepeck	LNWmw-026	Unconsolidated	4-Nitrotoluene	NT	0.5 UJ	0.27 J	NS	61	*
			Arsenic	NT	5 U	3.2 J	10	0.045	11.7
			Barium	NT	103 J	94.7	2000	2600	82.1
			bis(2-Ethylhexyl) phthalate	NT	1.3 J	3.1 J	NS	4.8	*
			Calcium	NT	40100 J	38900	NS	NS	115000
			Iron	NT	50 U	36.5 J	300	11000	279
			Magnesium	NT	9490 J	8940	NS	NS	43300
			Manganese	NT	14.1 J	61	50	880	1020
			Potassium	NT	1180 J	1140	NS	NS	2890
			Sodium	NT	10800 J	9610	NS	NS	45700
			Zinc	NT	2.4 J	9.8 JB	5000	11000	60.9



Table 4-3. Summary of Constituents Detected - January, April and July 2008

Area	Well Number	Monitored Zone	Compound or Element Detected	Jan-08 Level (ug/L)	Apr-08 Level (ug/L)	Jul-08 Level (ug/L)	MCL (ug/L)	Region 9 PRG (ug/L)	Facility-Wide Background (ug/L)
Landfill North of Winklepeck	LNMW-027	Unconsolidated	4-Nitrotoluene	NT	0.52 UJ	0.21 J	NS	61	*
			Acetone	NT	10 U	10 JB	NS	610	*
			Arsenic	NT	5 U	4.3 J	10	0.045	11.7
			Barium	NT	31.1 J	34.3 J	2000	2600	82.1
			bis(2-Ethylhexyl) phthalate	NT	10 U	2.2 J	NS	4.8	*
			Calcium	NT	57900 J	61500	NS	NS	115000
			Iron	NT	44.9 J	39.5 J	300	11000	279
			Magnesium	NT	18300 J	18700	NS	NS	43300
			Manganese	NT	230 J	261	50	880	1020
			Nitrobenzene	NT	0.1 UJ	0.067 J	NS	3	*
			Potassium	NT	1700 J	1940	NS	NS	2890
			Sodium	NT	8600 J	7450	NS	NS	45700
			Zinc	NT	10 U	4.1 JB	5000	11000	60.9
			1,3,5-Trinitrobenzene	NT	0.098 U	0.034 J	NS	1100	*
NACA Test Area	NTAmw-107	Unconsolidated	Aluminum	NT	50 U	33.6 J	200	36000	0
			Arsenic	NT	11.5 J	13.2	10	0.045	11.7
			Barium	NT	102 J	103 J	2000	2600	82.1
			bis(2-Ethylhexyl) phthalate	NT	2.6 J	2.9 J	NS	4.8	*
			Calcium	NT	62400 J	63600	NS	NS	115000
			Iron	NT	223	418	300	11000	279
			Magnesium	NT	16800 J	16700	NS	NS	43300
			Manganese	NT	198 J	253	50	880	1020
			Potassium	NT	1470 J	1050 J	NS	NS	2890
			Sodium	NT	7400 J	7270	NS	NS	45700
			Acetone	NT	10 U	10 JB	NS	610	*
			Barium	NT	67.4 J	57.3 J	2000	2600	82.1
			bis(2-Ethylhexyl) phthalate	NT	3 J	2.4 J	NS	4.8	*
			Calcium	NT	93300 J	89400	NS	NS	115000
NACA Test Area	NTAmw-108	Unconsolidated	Chromium	NT	3.6 J	5 U	100	NS	0
			Cobalt	NT	3.5 J	5 U	NS	730	0
			Copper	NT	4.6 J	5 U	1300	1500	0
			Magnesium	NT	25200 J	23600	NS	NS	43300
			Manganese	NT	3.9 J	1.8 J	50	880	1020
			Nickel	NT	3.6 J	10 U	NS	730	0
			Potassium	NT	1080 J	966 J	NS	NS	2890
			Silver	NT	4 J	5 U	NS	180	0
			Sodium	NT	10700 J	9020	NS	NS	45700
			Vanadium	NT	2.7 J	10 U	NS	36	0
			Zinc	NT	10 U	2.6 J	5000	11000	60.9
			Antimony	NT	0.14 J	2 U	6	15	0
			Barium	NT	24.9 J	25 J	2000	2600	82.1
			bis(2-Ethylhexyl) phthalate	NT	1.5 J	1.9 J	NS	4.8	*
			Calcium	NT	7890 J	7970	NS	NS	115000
NACA Test Area	NTAmw-109	Unconsolidated	Iron	NT	1330	1420	300	11000	279
			Magnesium	NT	3570 J	3590	NS	NS	43300
			Manganese	NT	46.1 J	60.6	50	880	1020
			Nickel	NT	10 U	3.4 J	NS	730	0
			Potassium	NT	970 J	1070 J	NS	NS	2890
			Sodium	NT	1050 J	1240	NS	NS	45700
			Zinc	NT	2.6 J	6.5 J	5000	11000	60.9
			Aluminum	NT	1100	50 U	200	36000	0
			Antimony	NT	0.18 J	2 U	6	15	0
			Arsenic	NT	10.8 J	13.9	10	0.045	11.7
			Barium	NT	122 J	121 J	2000	2600	82.1
			bis(2-Ethylhexyl) phthalate	NT	10 U	2.4 J	NS	4.8	*
			Calcium	NT	44700 J	53500	NS	NS	115000
			Iron	NT	1460	101	300	11000	279
NACA Test Area	NTAmw-110	Unconsolidated	Magnesium	NT	12400 J	14600	NS	NS	43300
			Manganese	NT	128 J	194	50	880	1020
			Nitrocellulose	NT	0.16 J	0.5 U	NS	NS	*
			Potassium	NT	1240 J	957 J	NS	NS	2890
			Sodium	NT	15100 J	50 U	NS	NS	45700
			Vanadium	NT	1.3 J	10 U	NS	36	0
			Zinc	NT	5.5 J	10 U	5000	11000	60.9
			Aluminum	NT	50 U	24.9 J	200	36000	0
			Barium	NT	58.1 J	57.4 J	2000	2600	82.1
			bis(2-Ethylhexyl) phthalate	NT	1.3 J	1.1 J	NS	4.8	*
			Calcium	NT	76500 J	74000	NS	NS	115000
			Iron	NT	36.8 J	81.9	300	11000	279
			Magnesium	NT	37200 J	35100	NS	NS	43300
			Manganese	NT	84.4 J	155	50	880	1020
NACA Test Area	NTAmw-111	Unconsolidated	Perchlorate	NT	NT	0.044 J	NS	3.6	*
			Potassium	NT	970 J	1050 J	NS	NS	2890
			Sodium	NT	11700 J	11400 J	NS	NS	45700
			Zinc	NT	10 U	2.9 J	5000	11000	60.9

Table 4-3. Summary of Constituents Detected - January, April and July 2008

Area	Well Number	Monitored Zone	Compound or Element Detected	Jan-08 Level (ug/L)	Apr-08 Level (ug/L)	Jul-08 Level (ug/L)	MCL (ug/L)	Region 9 PRG (ug/L)	Facility-Wide Background (ug/L)
NACA Test Area	NTAmw-112	Unconsolidated	Acetone	NT	10 JB	10 U	NS	610	*
			Aluminum	NT	117	77.4	200	36000	0
			Arsenic	NT	16.3 J	13.4 J	10	0.045	11.7
			Barium	NT	38.4 J	33.3 J	2000	2600	82.1
			bis(2-Ethylhexyl) phthalate	NT	10 U	3.1	NS	4.8	*
			Calcium	NT	131000 J	127000	NS	NS	115000
			Iron	NT	1600	1820	300	11000	279
			Magnesium	NT	40700 J	38400	NS	NS	43300
			Manganese	NT	606 J	692 J	50	880	1020
			Nitrobenzene	NT	0.077 J	0.1 U	NS	3	*
			Nitrocellulose	NT	0.5 UJ	0.17 J	NS	NS	*
			Potassium	NT	2450 J	1370 J	NS	NS	2890
			Sodium	NT	19000 J	18400 J	NS	NS	45700
			Zinc	NT	2.9 J	4.1	5000	11000	60.9
NACA Test Area	NTAmw-113	Unconsolidated	Acetone	NT	10 U	10 JB	NS	610	*
			Aluminum	NT	50 U	25 J	200	36000	0
			Arsenic	NT	17.2 J	12.5 J	10	0.045	11.7
			Barium	NT	46.1 J	38.8 J	2000	2600	82.1
			Calcium	NT	83500 J	91700	NS	NS	115000
			Iron	NT	495	915	300	11000	279
			Magnesium	NT	35400 J	33200	NS	NS	43300
			Manganese	NT	244 J	350	50	880	1020
			Potassium	NT	1640 J	1520 J	NS	NS	2890
			Selenium	NT	5 U	4.7 J	50	180	0
			Sodium	NT	14300 J	14100 J	NS	NS	45700
			2,6-Dinitrotoluene	NT	0.052 J	0.1 U	NS	36	*
			Arsenic	NT	3.9 J	7.3 J	10	0.045	11.7
			Barium	NT	79.2 J	71.4 J	2000	2600	82.1
NACA Test Area	NTAmw-114	Unconsolidated	Calcium	NT	92200 J	103000	NS	NS	115000
			Iron	NT	62.6	549	300	11000	279
			Magnesium	NT	31600 J	35500	NS	NS	43300
			Manganese	NT	519 J	587	50	880	1020
			Nitrobenzene	NT	0.097 UJ	0.056 J	NS	3	*
			Perchlorate	NT	NT	0.042 J	NS	3.6	*
			Potassium	NT	1060 J	1240 J	NS	NS	2890
			Sodium	NT	7730 J	9460 J	NS	NS	45700
			Zinc	NT	2.4 J	6.5 J	5000	11000	60.9
			2,6-Dinitrotoluene	NT	0.077 J	0.1 U	NS	36	*
			Acetone	NT	10 U	10 JB	NS	610	*
			Barium	NT	50.1 J	48.3 J	2000	2600	82.1
			bis(2-Ethylhexyl) phthalate	NT	1.1 J	1.8 J	NS	4.8	*
			Calcium	NT	66300 J	69600	NS	NS	115000
NACA Test Area	NTAmw-115	Unconsolidated	Cyanide	NT	0.0076 J	0.0065 J	NS	730	*
			Magnesium	NT	16500 J	16500	NS	NS	43300
			Manganese	NT	12.6 J	2.2 J	50	880	1020
			Nitrobenzene	NT	0.076 J	0.068 J	NS	3	*
			Potassium	NT	715 J	854 J	NS	NS	2890
			Sodium	NT	9370 J	10500	NS	NS	45700
			Barium	NT	18.1 J	19.4 J	2000	2600	82.1
			bis(2-Ethylhexyl) phthalate	NT	10 U	1.5 J	NS	4.8	*
			Calcium	NT	16600 J	17100	NS	NS	115000
			Cyanide	NT	0.01 U	0.0058 J	NS	730	*
			Magnesium	NT	2900 J	2910	NS	NS	43300
			Manganese	NT	18.4 J	18.3	50	880	1020
			Nitrobenzene	NT	0.098 UJ	0.088 J	NS	3	*
			Nitrocellulose	NT	0.5 UJ	0.13 J	NS	NS	*
NACA Test Area	NTAmw-116	Unconsolidated	Potassium	NT	769 J	925 J	NS	NS	2890
			Sodium	NT	1440 J	2140	NS	NS	45700
			Zinc	NT	10 U	2.4 J	5000	11000	60.9
			Barium	NT	83.2 J	84.3 J	2000	2600	82.1
			bis(2-Ethylhexyl) phthalate	NT	1.3 J	1.3 J	NS	4.8	*
			Calcium	NT	71800 J	74400	NS	NS	115000
			Cyanide	NT	0.0056 J	0.01 U	NS	730	*
			Iron	NT	50 U	52.3	300	11000	279
			Magnesium	NT	17800 J	18000	NS	NS	43300
			Manganese	NT	143 J	193	50	880	1020
			Potassium	NT	1180 J	951 J	NS	NS	2890
			Sodium	NT	10800 J	10400	NS	NS	45700
			Zinc	NT	10 U	2.3 J	5000	11000	60.9
			2,6-Dinitrotoluene	NT	0.058 J	0.1 U	NS	36	*
NACA Test Area	NTAmw-118	Unconsolidated	Aluminum	NT	22 J	50 U	200	36000	0
			Barium	NT	15.5 J	15.7 J	2000	2600	82.1
			bis(2-Ethylhexyl) phthalate	NT	10 U	2.7 J	NS	4.8	*
			Calcium	NT	61300 J	64000	NS	NS	115000
			Magnesium	NT	28300 J	28400	NS	NS	43300
			Manganese	NT	28.7 J	71.5	50	880	1020
			Potassium	NT	1350 J	1760 J	NS	NS	2890
			Sodium	NT	9720 J	10500	NS	NS	45700
			Zinc	NT	2.3 J	10 U	5000	11000	60.9

Table 4-3. Summary of Constituents Detected - January, April and July 2008

Area	Well Number	Monitored Zone	Compound or Element Detected	Jan-08 Level (ug/L)	Apr-08 Level (ug/L)	Jul-08 Level (ug/L)	MCL (ug/L)	Region 9 PRG (ug/L)	Facility-Wide Background (ug/L)
Ramsdell Quarry Landfill	RQLmw-007	Bedrock	1,2-Dichloroethene (total)	NT	0.67 J	NT	NS	NS	*
			1,3,5-Trinitrobenzene	NT	0.098 U	NT	NS	1100	*
			2-Butanone	NT	0.72 J	NT	NS	1900	*
			Aluminum	NT	41.2 J	NT	200	36000	0
			Antimony	NT	0.48 J	NT	6	15	0
			Arsenic	NT	11.3 J	NT	10	0.045	0
			Barium	NT	40.7 J	NT	2000	2600	82.1
			Cadmium	NT	0.52	NT	5	NS	0
			Calcium	NT	137000 J	NT	NS	NS	53100
			cis-1,2-Dichloroethene	NT	0.67 J	NT	70	61	*
			Cobalt	NT	8.9 J	NT	NS	730	0
			Iron	NT	2010 J	NT	300	11000	1430
			Magnesium	NT	44800 J	NT	NS	NS	15000
			Manganese	NT	1530 J	NT	50	880	1340
			Nickel	NT	13.4 J	NT	NS	730	83.4
			Potassium	NT	4440 J	NT	NS	NS	5770
			Sodium	NT	6430 J	NT	NS	NS	45700
			Zinc	NT	50.1	NT	5000	11000	52.3
			Arsenic	NT	15.4 J	NT	10	0.045	11.7
			Barium	NT	125 J	NT	2000	2600	256
Ramsdell Quarry Landfill	RQLmw-008	Bedrock	Calcium	NT	59800 J	NT	NS	NS	53100
			Cobalt	NT	3.2 J	NT	NS	730	0
			Iron	NT	101000 J	NT	300	11000	1430
			Magnesium	NT	47300 J	NT	NS	NS	15000
			Manganese	NT	802 J	NT	50	880	1340
			Nickel	NT	4.1 J	NT	NS	730	83.4
			Potassium	NT	4140 J	NT	NS	NS	5770
			Sodium	NT	5180 J	NT	NS	NS	51400
			Zinc	NT	10.9	NT	5000	11000	52.3
			2,6-Dinitrotoluene	NT	0.071 J	NT	NS	36	*
			2-Butanone	NT	0.97 J	NT	NS	1900	*
			Aluminum	NT	19.8 J	NT	200	36000	0
			Arsenic	NT	6.3 J	NT	10	0.045	11.7
Ramsdell Quarry Landfill	RQLmw-009	Bedrock	Barium	NT	15.4	NT	2000	2600	256
			beta-BHC	NT	0.01 J	NT	NS	0.037	*
			Calcium	NT	16900	NT	NS	NS	53100
			Iron	NT	869 J	NT	300	11000	1430
			Magnesium	NT	12900	NT	NS	NS	15000
			Manganese	NT	1030 J	NT	50	880	1340
			Potassium	NT	2750	NT	NS	NS	5770
			Sodium	NT	1410	NT	NS	NS	45700
			Zinc	NT	4 J	NT	5000	11000	60.9
			Barium	NT	27.2 J	26.1	2000	2600	256
			bis(2-Ethylhexyl) phthalate	NT	10 U	1.4 J	NS	4.8	*
			Aluminum	NT	1030	1070	200	36000	0
			Cadmium	NT	0.52	0.53	5	NS	0
Ramsdell Quarry Landfill	RQLmw-012	Bedrock	Calcium	NT	60100 J	60400	NS	NS	53100
			Cobalt	NT	6.5 J	6.9	NS	730	0
			HMX	NT	0.096 U	0.04 J	NS	1800	*
			Iron	NT	70.5 J	50	300	11000	1430
			Magnesium	NT	17700 J	16800	NS	NS	15000
			Manganese	NT	216 J	248	50	880	1340
			Nickel	NT	20.8 J	25.1	NS	730	83.4
			Nitrocellulose	NT	0.5 U	0.18 J	NS	NS	*
			Potassium	NT	4540 J	3960 J	NS	NS	5770
			RDX	NT	0.15	0.13	NS	0.61	*
			Sodium	NT	4200 J	4010	NS	NS	45700
			Thallium	NT	0.4 J	0.46 J	2	2	0
			Zinc	NT	61.3	53.1 J	5000	11000	60.9
Ramsdell Quarry Landfill	RQLmw-013	Bedrock	2-Butanone	NT	0.63 J	10 U	NS	1900	*
			Aluminum	NT	4310	4340	200	36000	0
			Barium	NT	33.9 J	30.1	2000	2600	256
			Beryllium	NT	0.6 J	0.57 J	4	NS	0
			bis(2-Ethylhexyl) phthalate	NT	10 U	3.5 J	NS	4.8	*
			Cadmium	NT	0.14 J	0.15 J	5	NS	0
			Calcium	NT	22000 J	23200	NS	NS	53100
			Cobalt	NT	37.6 J	38.2	NS	730	0
			Iron	NT	4860 J	5180	300	11000	1430
			Magnesium	NT	11000 J	10900	NS	NS	15000
			Manganese	NT	693 J	781	50	880	1340
			Nickel	NT	72 J	77.9	NS	730	83.4
			Nitrocellulose	NT	0.5 U	0.14 J	NS	NS	*
Ramsdell Quarry Landfill	RQLmw-013	Bedrock	Potassium	NT	2160 J	2120 J	NS	NS	5770
			Sodium	NT	21900 J	22700	NS	NS	51400
			Thallium	NT	0.91 J	0.93 J	2	2	0
			Vanadium	NT	10 U	0.86 J	NS	36	0
			Zinc	NT	230	235 J	5000	11000	52.3

Table 4-3. Summary of Constituents Detected - January, April and July 2008

Area	Well Number	Monitored Zone	Compound or Element Detected	Jan-08 Level (ug/L)	Apr-08 Level (ug/L)	Jul-08 Level (ug/L)	MCL (ug/L)	Region 9 PRG (ug/L)	Facility-Wide Background (ug/L)
Ramsdell Quarry Landfill	RQLmw-014	Bedrock	Barium	NT	25.5	26.3 J	2000	2600	256
			beta-BHC	NT	0.03 U	0.016 J	NS	0.037	*
			bis(2-Ethylhexyl) phthalate	NT	10 U	1.8 J	NS	4.8	*
			Calcium	NT	14300	21000 J	NS	NS	53100
			Cobalt	NT	12.4	12.5 J	NS	730	0
			Iron	NT	16900 J	11600	300	11000	1430
			Magnesium	NT	8900	10900	NS	NS	15000
			Manganese	NT	3070	3090	50	880	1340
			Nickel	NT	21.5 J	26.7 J	NS	730	83.4
			Nitrocellulose	NT	0.5 U	0.14 J	NS	NS	*
			Potassium	NT	2190	2470	NS	NS	5770
			Sodium	NT	3770	4470	NS	NS	51400
			Zinc	NT	26.1	24.4 JB	5000	11000	52.3
Ramsdell Quarry Landfill	RQLmw-015	Bedrock	2-Butanone	NT	0.59 J	10 U	NS	1900	*
			Acetone	NT	1.3 J	10 JB	NS	610	*
			Arsenic	NT	5 U	3.4 JB	10	0.045	11.7
			Barium	NT	1.5 J	1.3 J	2000	2600	256
			bis(2-Ethylhexyl) phthalate	NT	10 U	1.1 J	NS	4.8	*
			Calcium	NT	21900	22400 J	NS	NS	53100
			Cobalt	NT	2.1 J	5 U	NS	730	0
			delta-BHC	NT	0.013 J	0.03 U	NS	0.052	*
			Iron	NT	563 J	537	300	11000	1430
			Magnesium	NT	10500	10400	NS	NS	15000
			Manganese	NT	1110	420	50	880	1340
			Nickel	NT	4.9 J	3.7 J	NS	730	83.4
			Nitrocellulose	NT	0.5 U	0.14 J	NS	NS	*
			Potassium	NT	1400 J	1210	NS	NS	5770
			Sodium	NT	50 U	660 J	NS	NS	51400
			Thallium	NT	1 U	0.22 J	2	2	0
			Zinc	NT	26.9	31.9 J	5000	11000	52.3
Ramsdell Quarry Landfill	RQLmw-016	Bedrock	2-Butanone	NT	0.77 J	10 U	NS	1900	*
			Arsenic	NT	3.4 J	4.9 JB	10	0.045	11.7
			Barium	NT	12.9 J	11.4 J	2000	2600	256
			Benzoic acid	NT	10 R	6.8 J	NS	150000	*
			bis(2-Ethylhexyl) phthalate	NT	10 U	1.6 J	NS	4.8	*
			Calcium	NT	438000 J	462000 J	NS	NS	53100
			Carbon disulfide	NT	0.84 J	1 U	NS	1000	*
			Cobalt	NT	3.5 J	17.7 J	NS	730	0
			delta-BHC	NT	0.03 U	0.021 J	NS	0.052	*
			Iron	NT	16300 J	28800	300	11000	1430
			Magnesium	NT	68300 J	70000	NS	NS	15000
			Manganese	NT	7460 J	9900	50	880	1340
			Nickel	NT	15.7 J	36.9 J	NS	730	83.4
			Nitrocellulose	NT	0.5 U	0.13 J	NS	NS	*
			Potassium	NT	3590 J	3220	NS	NS	5770
			Sodium	NT	7700 J	8340	NS	NS	51400
			Thallium	NT	1 U	0.15 J	2	2	0
			Zinc	NT	3.2 J	4.7 JB	5000	11000	52.3
			2-Butanone	NT	0.75 J	10 U	NS	1900	*
			Acetone	NT	10 U	10 JB	NS	610	*
Ramsdell Quarry Landfill	RQLmw-017	Bedrock	Aluminum	NT	1160	1660 J	200	36000	0
			Barium	NT	16.4	7.6 J	2000	2600	256
			Beryllium	NT	0.9 J	0.87 J	4	NS	0
			bis(2-Ethylhexyl) phthalate	NT	10 U	3.1 J	NS	4.8	*
			Cadmium	NT	0.3 J	0.37 J	5	NS	0
			Calcium	NT	142000	98900 J	NS	NS	53100
			Cobalt	NT	52.8	36.2 J	NS	730	0
			delta-BHC	NT	0.077 J	0.03 U	NS	0.052	*
			Iron	NT	86.3 J	50 U	300	11000	1430
			Magnesium	NT	34100	25300	NS	NS	15000
			Manganese	NT	6140	4680	50	880	1340
			Nickel	NT	194	146 J	NS	730	83.4
			Nitrocellulose	NT	0.5 U	0.15 J	NS	NS	*
			Potassium	NT	3420 J	2590	NS	NS	5770
			Sodium	NT	8260	4800	NS	NS	51400
			Thallium	NT	0.26 J	1 U	2	2	0
			Zinc	NT	1290	603 J	5000	11000	52.3

**Table 4-3. Summary of Constituents Detected - January, April and July 2008**

Area	Well Number	Monitored Zone	Compound or Element Detected	Jan-08 Level (ug/L)	Apr-08 Level (ug/L)	Jul-08 Level (ug/L)	MCL (ug/L)	Region 9 PRG (ug/L)	Facility-Wide Background (ug/L)
Winklepeck Burning Ground	WBGmw-005	Unconsolidated	Aluminum	50 U	50 U	30.0 J	200	36000	0
			Arsenic	NT	9.3 J	12.8	10	0.045	11.7
			Barium	NT	68.9 J	71.4	2000	2600	82.1
			beta-BHC	NT	0.011 J	0.03 U	NS	0.037	*
			bis(2-Ethylhexyl) phthalate	NT	1.8 J	5.8 J	NS	4.8	*
			Calcium	NT	50400 J	54500	NS	NS	115000
			Cyanide	NT	0.0062 J	0.01 U	NS	730	*
			delta-BHC	NT	0.014 J	0.03 U	NS	0.052	*
			Iron	NT	9320	9430	300	11000	279
			Magnesium	NT	15900 J	16800	NS	NS	43300
			Manganese	NT	1180 J	1220	50	880	1020
			Nitrobenzene	NT	0.092 J	0.055 J	NS	3	*
			Potassium	NT	861 J	956 J	NS	NS	2890
			Sodium	NT	12800 J	12200	NS	NS	45700
Winklepeck Burning Ground	WBGmw-008	Unconsolidated	Zinc	NT	3 J	3.2 JB	5000	11000	60.9
			2-Nitrotoluene	NT	0.26 J	0.5 U	NS	61	*
			Acetone	NT	10 U	3.3 JB	NS	5500	*
			Barium	NT	27.7 J	27.6	2000	2600	82.1
			bis(2-Ethylhexyl) phthalate	NT	1.2 J	1.4 J	NS	4.8	*
			Calcium	NT	89400 J	82700	NS	NS	115000
			Iron	NT	36.4 J	50 U	300	11000	279
			Magnesium	NT	20900 J	19700	NS	NS	43300
			Manganese	NT	3.5 J	13.3	50	880	1020
			Nitrocellulose	NT	0.5 U	0.13 J	NS	NS	*
			Potassium	NT	597 J	692	NS	NS	2890
			Sodium	NT	7600 J	6900	NS	NS	45700
Winklepeck Burning Ground	WBGmw-010	Unconsolidated	2,6-Dinitrotoluene	NT	0.11 U	0.051 J	NS	36	*
			Antimony	NT	0.15 J	2 U	6	15	0
			Barium	NT	25.2 J	21.1	2000	2600	82.1
			bis(2-Ethylhexyl) phthalate	NT	10 U	1.3 J	NS	4.8	*
			Calcium	NT	94100 J	90200	NS	NS	115000
			Iron	NT	48.7 J	46.6 J	300	11000	279
			Magnesium	NT	36700 J	33000	NS	NS	43300
			Manganese	NT	167 J	124	50	880	1020
			Potassium	NT	702 J	681 J	NS	NS	2890
			Sodium	NT	20200 J	18400	NS	NS	45700
			Thallium	NT	0.17 J	1 U	2	2	0
			Zinc	NT	3.3 J	3.1 JB	5000	11000	60.9
Winklepeck Burning Ground	WBGmw-011	Unconsolidated	Aluminum	NT	338 J	50 U	200	36000	0
			Barium	NT	45.9 J	47.3	2000	2600	82.1
			bis(2-Ethylhexyl) phthalate	NT	10 U	1.0 J	NS	4.8	*
			Calcium	NT	77600 J	87300	NS	NS	115000
			Iron	NT	775	50 U	300	11000	279
			Magnesium	NT	16700 J	17800	NS	NS	43300
			Manganese	NT	38.7 J	21.2	50	880	1020
			Potassium	NT	3790 J	4330	NS	NS	2890
			Sodium	NT	4690 J	4800	NS	NS	45700
			Zinc	NT	3.4 J	3.8 JB	5000	11000	60.9
Winklepeck Burning Ground	WBGmw-012	Unconsolidated	Barium	NT	27.8 J	25.4	2000	2600	82.1
			bis(2-Ethylhexyl) phthalate	NT	10 U	1.7 J	NS	4.8	*
			Calcium	NT	64500 J	63500	NS	NS	115000
			Iron	NT	71.1	50 U	300	11000	279
			Magnesium	NT	19500 J	18200	NS	NS	43300
			Manganese	NT	0.97 J	0.49 J	50	880	1020
			Nitrocellulose	NT	0.5 U	0.14 J	NS	NS	*
			Potassium	NT	844 J	722 J	NS	NS	2890
			Sodium	NT	6430 J	3060	NS	NS	45700
			Zinc	NT	10 U	3.6 JB	5000	11000	60.9
Winklepeck Burning Ground	WBGmw-013	Unconsolidated	2,4-Dinitrotoluene	NT	0.058 J	0.061 J	NS	73	*
			2-Amino-4,6-dinitrotoluene	NT	0.91 J	0.85	NS	NS	*
			4-Amino-2,6-Dinitrotoluene	NT	0.49 J	0.50	NS	NS	*
			Barium	NT	16.9 J	14.6	2000	2600	82.1
			beta-BHC	NT	0.02 J	0.021 J	NS	0.037	*
			bis(2-Ethylhexyl) phthalate	NT	10 UJ	1.4 J	NS	4.8	*
			Calcium	NT	50400 J	37500	NS	NS	115000
			Magnesium	NT	14500 J	10200	NS	NS	43300
			Manganese	NT	0.85 J	0.48 J	50	880	1020
			Phenol	NT	1 U	1	NS	2200	*
			Potassium	NT	666 J	609 J	NS	NS	2890
			Sodium	NT	2000 J	2560	NS	NS	45700
			Toluene	NT	0.19 J	1 U	1000	720	*
			Zinc	NT	10 U	2.5 JB	5000	11000	60.9

Table 4-3. Summary of Constituents Detected - January, April and July 2008

Area	Well Number	Monitored Zone	Compound or Element Detected	Jan-08 Level (ug/L)	Apr-08 Level (ug/L)	Jul-08 Level (ug/L)	MCL (ug/L)	Region 9 PRG (ug/L)	Facility-Wide Background (ug/L)
Winklepeck Burning Ground	WBGmw-014	Unconsolidated	2-Nitrotoluene	NT	0.39 J	0.1 U	NS	61	*
			Barium	NT	15.8 J	24.5	2000	2600	82.1
			bis(2-Ethylhexyl) phthalate	NT	10 U	2 J	NS	4.8	*
			Calcium	NT	62500 J	67900	NS	NS	115000
			delta-BHC	NT	0.03 U	0.022 J	NS	0.052	*
			Iron	NT	50 U	51.6	300	11000	279
			Magnesium	NT	16000 J	16800	NS	NS	43300
			Manganese	NT	43.6 J	76.4	50	880	1020
			Nitrobenzene	NT	0.058 J	0.5 U	NS	3	*
			Potassium	NT	2540 J	1580	NS	NS	2890
			Sodium	NT	8830 J	6860	NS	NS	45700
			Zinc	NT	2.5 J	3.2 JB	5000	11000	60.9
Winklepeck Burning Ground	WBGmw-015	Unconsolidated	Barium	NT	50.4 J	55.3	2000	2600	82.1
			bis(2-Ethylhexyl) phthalate	NT	10 U	2.2 J	NS	4.8	*
			Calcium	NT	88700 J	88800	NS	NS	115000
			Iron	NT	50 U	30.4 J	300	11000	279
			Magnesium	NT	30300 J	29300	NS	NS	43300
			Manganese	NT	21 J	119	50	880	1020
			Nitrocellulose	NT	0.5 U	0.19 J	NS	NS	*
			Potassium	NT	1170 J	1190 J	NS	NS	2890
			Sodium	NT	13600 J	12500	NS	NS	45700
			Thallium	NT	0.21 J	1 U	2	2	0
			Zinc	NT	10 U	3.4 JB	5000	11000	60.9
Winklepeck Burning Ground	WBGmw-016	Unconsolidated	Barium	NT	19.8 J	22.5	2000	2600	82.1
			bis(2-Ethylhexyl) phthalate	NT	10 U	3.6 J	NS	4.8	*
			Calcium	NT	51200 J	80900	NS	NS	115000
			Magnesium	NT	8770 J	16800	NS	NS	43300
			Manganese	NT	0.54 J	1.5 J	50	880	1020
			Nitrobenzene	NT	0.089 J	0.1 U	NS	3	*
			Nitrocellulose	NT	0.5 U	0.17 J	NS	NS	*
			Potassium	NT	756 J	943 J	NS	NS	2890
			Sodium	NT	1340 J	3740	NS	NS	45700
			Vanadium	NT	10 U	0.66 J	NS	36	0
			Zinc	NT	2680 J	32.9 J	200	36000	0
Winklepeck Burning Ground	WBGmw-017	Unconsolidated	Aluminum	NT	2680 J	32.9 J	200	36000	0
			Arsenic	NT	12 J	5.1 J	10	0.045	11.7
			Barium	NT	70.2 J	55.8	2000	2600	82.1
			bis(2-Ethylhexyl) phthalate	NT	10 U	1.7 J	NS	4.8	*
			Calcium	NT	60000 J	70600	NS	NS	115000
			Chromium	NT	4.6 J	5 U	100	NS	0
			Copper	NT	4.9 J	5 U	1300	1500	0
			Iron	NT	5140	492	300	11000	279
			Magnesium	NT	16800 J	18800	NS	NS	43300
			Manganese	NT	397 J	196	50	880	1020
			Nickel	NT	3.5 J	10 U	NS	730	0
			Potassium	NT	1740 J	1010 J	NS	NS	2890
			Sodium	NT	4190 J	4850	NS	NS	45700
Suspected Mustard Agent Burial Ground	MBSmw-001	Unconsolidated	Vanadium	NT	4.6 J	10 U	NS	36	0
			Zinc	NT	16.4 J	2.5 JB	5000	11000	60.9
Suspected Mustard Agent Burial Ground	MBSmw-002	Unconsolidated	2-Nitrotoluene	NT	0.15 J	0.1 U	NS	61	*
			Arsenic	NT	5 U	3.4 J	10	0.045	11.7
			Barium	NT	113 J	98.2 J	2000	2600	82.1
			bis(2-Ethylhexyl) phthalate	NT	10 U	11	NS	4.8	*
			Calcium	NT	78100 J	75600	NS	NS	115000
			HMX	NT	0.1 UJ	0.078 J	NS	1800	*
			Iron	NT	103	153	300	11000	279
			Magnesium	NT	21800 J	21000	NS	NS	43300
			Manganese	NT	227 J	230	50	880	1020
			Nitrocellulose	NT	0.5 UJ	0.19 J	NS	NS	*
			Potassium	NT	1180 J	1140 J	NS	NS	2890
			Sodium	NT	12500 J	10400 J	NS	NS	45700
			Zinc	NT	10 U	4.2 J	5000	11000	60.9
Suspected Mustard Agent Burial Ground	MBSmw-002	Unconsolidated	Arsenic	NT	15.1 J	9.4	10	0.045	11.7
			Barium	NT	108 J	102 J	2000	2600	82.1
			beta-BHC	NT	0.03 U	0.0089 J	NS	0.037	*
			bis(2-Ethylhexyl) phthalate	NT	1.4 J	2.4 J	NS	4.8	*
			Calcium	NT	67000 J	68300	NS	NS	115000
			Chromium	NT	2.7 J	5 U	100	NS	0
			Cobalt	NT	3.1 J	5 U	NS	730	0
			Copper	NT	5.1 J	5 U	1300	1500	0
			Iron	NT	463	504	300	11000	279
			Magnesium	NT	17500 J	17500	NS	NS	43300
			Manganese	NT	213 J	223	50	880	1020
			Potassium	NT	1180 J	1020 J	NS	NS	2890
			Silver	NT	3.6 J	5 U	NS	180	0
			Sodium	NT	8300 J	7850	NS	NS	45700
			Thallium	NT	0.19 J	1 U	2	2	0
			Vanadium	NT	3.5 J	10 U	NS	36	0
			Zinc	NT	10 U	2.8 J	5000	11000	60.9

**Table 4-3. Summary of Constituents Detected - January, April and July 2008**

Area	Well Number	Monitored Zone	Compound or Element Detected	Jan-08 Level (ug/L)	Apr-08 Level (ug/L)	Jul-08 Level (ug/L)	MCL (ug/L)	Region 9 PRG (ug/L)	Facility-Wide Background (ug/L)
Suspected Mustard Agent Burial Ground	MBSmw-003	Unconsolidated	4-Nitrotoluene	NT	0.53 UJ	0.15 J	NS	61	*
			Barium	NT	18.4 J	13.6 J	2000	2600	82.1
			bis(2-Ethylhexyl) phthalate	NT	1.7 J	5.2 J	NS	4.8	*
			Calcium	NT	80500 J	75500	NS	NS	115000
			Magnesium	NT	24800 J	22900	NS	NS	43300
			Manganese	NT	0.96 J	1.6 J	50	880	1020
			Potassium	NT	1200 J	1060 J	NS	NS	2890
			Sodium	NT	4850 J	4460	NS	NS	45700
			Zinc	NT	10 U	4 J	5000	11000	60.9
Suspected Mustard Agent Burial Ground	MBSmw-004	Unconsolidated	Barium	NT	34.6 J	36.4 J	2000	2600	82.1
			bis(2-Ethylhexyl) phthalate	NT	10 U	1.1 J	NS	4.8	*
			Calcium	NT	78800 J	69300	NS	NS	115000
			Cyanide	NT	0.01 U	0.0075 J	NS	730	*
			Magnesium	NT	23600 J	20700	NS	NS	43300
			Manganese	NT	25.9 J	175	50	880	1020
			Potassium	NT	1160 J	1150 J	NS	NS	2890
			Sodium	NT	5660 J	5260 J	NS	NS	45700
			Zinc	NT	10 U	3.8 J	5000	11000	60.9
Suspected Mustard Agent Burial Ground	MBSmw-005	Unconsolidated	Arsenic	NT	8.6 J	6.2	10	0.045	11.7
			Barium	NT	79.3 J	74.9 J	2000	2600	82.1
			bis(2-Ethylhexyl) phthalate	NT	10 U	1.2 J	NS	4.8	*
			Calcium	NT	80700 J	83300	NS	NS	115000
			HMX	NT	0.087 J	0.1 U	NS	1800	*
			Iron	NT	1860	1600	300	11000	279
			Magnesium	NT	24600 J	25300	NS	NS	43300
			Manganese	NT	725 J	802	50	880	1020
			Potassium	NT	1090 J	1090 J	NS	NS	2890
			Sodium	NT	14500 J	17100	NS	NS	45700
Suspected Mustard Agent Burial Ground	MBSmw-006	Unconsolidated	Acetone	NT	10 JB	10 JB	NS	610	*
			Aluminum	NT	85	50 U	200	36000	0
			Barium	NT	86.8 J	80 J	2000	2600	82.1
			bis(2-Ethylhexyl) phthalate	NT	1.4 J	10 U	NS	4.8	*
			Calcium	NT	79600 J	79600	NS	NS	115000
			Iron	NT	111	46.3 J	300	11000	279
			Magnesium	NT	23300 J	23000	NS	NS	43300
			Manganese	NT	410 J	390	50	880	1020
			Potassium	NT	1390 J	1220 J	NS	NS	2890
			Sodium	NT	6560 J	6530 J	NS	NS	45700
			Zinc	NT	10 U	2.6 J	5000	11000	60.9

**Notes:**

NS = no standard NT = not tested

All inorganics are filtered, all organics are not filtered

\* There are no background levels for organic constituents

J = estimated result. Results have been qualified "J" For more details refer to Data Verification/Validation Reports in the FWGWMP October 2007 and January, April and July 2008 Sampling Reports

B = the analyte is found in the method blank or any of the field blanks

R = Rejected data

U = analyzed but not detected at or above the reporting limit

Bold = inorganic constituent detected above Facility-Wide background levels

Italics = inorganic constituent detected below the Facility-Wide background levels

Shaded boxes indicate any constituent, which does not have a background value, detected above the reporting limit.

1 Table 4-4 RVAAP Facility-wide Background Criteria, (SAIC, 2001b)

Media Units	Surface Soil mg/kg	Subsurface Soil mg/kg	Sediment mg/kg	Surface Water µg/L	Groundwater Bedrock Zone Filtered µg/L	Groundwater Bedrock Zone Unfiltered µg/L	Groundwater Unconsolidated Zone Filtered µg/L	Groundwater Unconsolidated Unfiltered µg/L
<b>Analyte</b>								
Cyanide	0	0	0	0	0	0	0	0
Aluminum	17700	19500	13900	3370	0	9410	0	0
Antimony	0.96	0.96	0	0	0	0	0	0
Arsenic	15.4	19.8	19.5	3.2	0	19.1	11.7	11.7
Barium	88.4	124	123	47.5	256	241	82.1	82.1
Beryllium	0.88	0.88	0.38	0	0	0	0	0
Cadmium	0	0	0	0	0	0	0	0
Calcium	15800	35500	5510	41400	53100	48200	115000	115000
Chromium	17.4	27.2	18.1	0	0	19.5	7.3	7.3
Cobalt	10.4	23.2	9.1	0	0	0	0	0
Copper	17.7	32.3	27.6	7.9	0	17	0	0
Iron	23100	35200	28200	2560	1430	21500	279	279
Lead	26.1	19.1	27.4	0	0	23	0	0
Magnesium	3030	8790	2760	10800	15000	13700	43300	43300
Manganese	1450	3030	1950	391	1340	1260	1020	1020
Mercury	0.036	0.044	0.059	0	0	0	0	0
Nickel	21.1	60.7	17.7	0	83.4	85.3	0	0
Potassium	927	3350	1950	3170	5770	6060	2890	2890
Selenium	104	105	107	0	0	0	0	0
Silver	0	0	0	0	0	0	0	0
Sodium	123	145	112	21300	51400	49700	45700	45700
Thallium	0	0.91	0.89	0	0	0	0	0
Vanadium	31.1	37.6	26.1	0	0	15.5	0	0
Zinc	61.8	93.3	532	42	52.3	193	60.9	60.9



Table 4-5 presents those compounds and elements detected in any of the October 2007, January 2008, April 2008, or July 2008 sampling events that exceeded Region 9 PRGs, primary MCLs, or secondary MCLs. Section 4.13 presents a summary discussion of the MCL and PRG exceedances.

Sections 4.2 through 4.12 present a summary of the time trend graphs for Chemicals of Potential Concern identified in groundwater samples collected under the FWGWMP over the last 11 quarters (i.e., October 2005 through July 2008). Each of Sections 4.2 through 4.12 contains several subsections presented by group of Chemicals of Potential Concern (e.g., inorganics, semi-volatile organic compounds, explosives, etc.). To facilitate the discussion of concentration changes over time concentration versus time graphs (i.e. time-trend graphs) were prepared. The following guidelines were applied to produce the graphs:

1. Only wells with three or more detections of an organic and explosive or three or more detection above background for inorganics are graphed.
2. For background wells, inorganics with background values are screened and graphed. Any background well with a detected organic compound is also graphed.
3. Values reported as “non-detect” are shown as one-half the reporting limit.
4. Per agreement with the USACE, time trend graphs were prepared only for wells having four quarters or more of data.

Table 4-6 summarizes the wells and constituents for which time-trend graphs were prepared. Time-trend graphs for the Chemicals of Potential Concern are presented in Appendix G. The graphs are organized by AOC (maps showing each of the AOC areas are presented in Appendix H). The background wells are grouped before the AOCs.

The time-trend plots include the comparative criteria of: 1) MCL, 2) PRG for tap water, and 3) background concentration (either unconsolidated or bedrock) for inorganics. It is noted that background concentrations for several inorganics are identified as “0” (i.e., not expected to be naturally present at any measurable concentration) (Table 4-4). These inorganics include aluminum, antimony, arsenic (bedrock only), beryllium, cadmium, chromium (bedrock only), cobalt, copper, lead, selenium, silver, thallium and vanadium. These criteria were calculated from data collected prior to implementation of the FWGWMP. With implementation of the FWGWMP, many of the inorganics with a “0” background criterion are found to be present at concentrations greater than the respective FWGWMP RLs. Consideration should be made for a re-evaluation of background criteria for inorganics with thought given to inclusion of the FWGWMP data.

## **4.2 Background Wells**

Aluminum, antimony, arsenic, barium, cadmium, calcium, copper, cyanide, iron, magnesium, nickel, potassium, carbon disulfide, and bis(2-ethylhexyl)-phthalate are reported to be present at concentrations exceeding their respective RL in three or more samples from background wells. No explosive, PCB Arochlor, pesticide or herbicide is

Table 4-5. Exceedences of MCLs and Region 9 PRGs

Area	Well Number	Compound or Element Detected	Oct-07 Level (ug/L)	Jan-08 Level (ug/L)	Apr-08 Level (ug/L)	Jul-08 Level (ug/L)	MCL (ug/L)	Region 9 PRG (ug/L)
Background Wells	BK Gmw-006	Iron	742 J	NT	NT	NT	300	11000
		Manganese	191 J	NT	NT	NT	50	880
	BK Gmw-010	Manganese	509	NT	NT	NT	50	880
		Arsenic	17.4	NT	NT	NT	10	0.045
	BK Gmw-013	Iron	844	NT	NT	NT	300	11000
		Manganese	417	NT	NT	NT	50	880
	BK Gmw-017	Arsenic	20.2	NT	NT	NT	10	0.045
		Iron	1780	NT	NT	NT	300	10000
	BK Gmw-019	Manganese	213	NT	NT	NT	50	880
		Manganese	189 J	NT	NT	NT	50	880
Load Line 1	BK Gmw-020	Iron	2390 J	NT	NT	NT	300	10000
		Manganese	756 J	NT	NT	NT	50	880
	LL1mw-063	Aluminum	NT	460	325	237	200	36000
		HMX	NT	8420	1.2	1.7	NS	1800
	LL1mw-064	Manganese	NT	56.4	288	251	50	880
		Arsenic	NT	NT	4.8 JB	6.3	10	0.045
	LL1mw-065	Iron	NT	NT	671	660	300	11000
		Manganese	NT	NT	125	127	50	880
	LL1mw-078	bis(2-Ethylhexyl) phthalate	NT	8.6 J	10 U	8 J	NS	4.8
		Manganese	NT	185	87.7	186	50	880
Load Line 2	LL1mw-080	Manganese	120	NT	NT	NT	50	880
		Iron	685	NT	NT	NT	300	11000
	LL1mw-083	Manganese	56.1	NT	NT	NT	50	880
		2,4,6-Trinitrotoluene	9.2 J	NT	NT	NT	NS	2
	LL2mw-059	Aluminum	989 J	NT	NT	NT	200	36000
		Manganese	765	NT	NT	NT	50	880
	LL2mw-261	Manganese	136	NT	NT	NT	50	880
		Arsenic	NT	13.4	15.2 B	15.7	10	0.045
	LL2mw-262	Iron	NT	2380	2630	2480	300	11000
		Manganese	NT	369	393	386	50	880
Load Line 3	LL2mw-263	Manganese	922	NT	NT	NT	50	880
		Arsenic	16.8	NT	NT	NT	10	0.045
	LL2mw-264	Iron	5140	NT	NT	NT	300	11000
		Manganese	1590	NT	NT	NT	50	880
	LL2mw-265	Arsenic	NT	5 U	5 U	3.7 J	10	0.045
		Iron	NT	249	219	363	300	11000
	LL2mw-266	Manganese	NT	144	191	334	50	880
		Iron	NT	222	146	2230	300	11000
	LL2mw-268	Manganese	NT	193	33	186	50	880
		Arsenic	NT	5.4 J	3.7 JB	8.2	10	0.045
Load Line 4	LL2mw-270	Iron	NT	2500	2440	2770	300	11000
		Manganese	NT	362	341	366	50	880
	LL3mw-232	bis(2-Ethylhexyl) phthalate	NT	14	10 U	2.5 J	NS	4.8
		Iron	NT	4420	6030	4780	300	11000
	LL3mw-233	Manganese	NT	1160	3600	561	50	880
		Pentachlorophenol	NT	7.3 J	4.7 J	5 U	NS	0.56
	LL3mw-234	Manganese	NT	458	366	275	50	880
		Iron	NT	4840	3350 J	6500	300	11000
	LL3mw-235	Manganese	NT	1410	904	1390	50	880
		Iron	NT	512	571 J	595 J	300	11000
Load Line 5	LL3mw-237	Manganese	NT	1480	1440	2070	50	880
		Iron	NT	172	435	44.5	50	880
	LL3mw-238	2,4,6-TNT	NT	3.4 J	0.11 U	2.8	NS	2.2
		beta-BHC	NT	0.061	0.034 J	0.03 U	NS	0.037
	LL3mw-239	Manganese	NT	1.6 J	183	66.9	50	880
		1,3-Dinitrobenzene	42 J	NT	NT	NT	NS	3.6
	LL3mw-240	2,4-Dinitrotoluene	96 J	NT	NT	NT	NS	73
		4-Nitrotoluene	37 J	NT	NT	NT	NS	3.2
	LL3mw-241	RDX	6.6 J	NT	NT	NT	NS	0.61
		2,4,6-TNT	NT	7.4	12	4.7	NS	2.2
Load Line 6	LL4mw-193	RDX	NT	0.09 U	1.6	1.6	NS	0.61
		Manganese	NT	482	452	443	50	880
	LL4mw-194	Iron	NT	183	80.5	448	300	11000
		Manganese	NT	242	189	271	50	880
	LL4mw-195	Arsenic	NT	5 U	5 U	4.2 J	10	0.045
		Iron	NT	9560	8900	9580	300	11000
	LL4mw-196	Manganese	NT	3660	3470	3450	50	880
		Iron	4330	NT	NT	NT	300	11000
	LL4mw-198	Manganese	1460	NT	NT	NT	50	880

**Table 4-5. Exceedences of MCLs and Region 9 PRGs**

Area	Well Number	Compound or Element Detected	Oct-07 Level (ug/L)	Jan-08 Level (ug/L)	Apr-08 Level (ug/L)	Jul-08 Level (ug/L)	MCL (ug/L)	Region 9 PRG (ug/L)
Load Line 4	LL4mw-199	Arsenic	10.8	NT	NT	NT	10	0.045
		Iron	4910	NT	NT	NT	300	11000
		Manganese	636	NT	NT	NT	50	880
Load Line 5	LL4mw-200	Iron	NT	NT	59.1	854 J	300	11000
	LL5mw-001	Iron	NT	NT	431 J	35.2 J	300	11000
	LL5mw-002	Manganese	NT	NT	91.3 J	122	50	880
	LL5mw-003	Iron	NT	NT	50 U	3280	300	11000
	LL5mw-004	Iron	NT	NT	50 U	1520	300	11000
	LL5mw-005	Iron	NT	NT	1940 J	50 U	300	11000
Load Line 6	LL6mw-002	Aluminum	NT	NT	50 U	515	200	36000
	LL6mw-002	Iron	NT	NT	50 U	893	300	11000
	LL6mw-003	Manganese	NT	NT	88.8	76.7	50	880
	LL6mw-004	Iron	NT	NT	NT	798	300	11000
Load Line 11	LL11mw-002	Manganese	NT	NT	NT	114	50	880
		Iron	1310 J	NT	NT	NT	300	11000
	LL11mw-007	Arsenic	23.1	NT	NT	NT	10	0.045
		Iron	1350	NT	NT	NT	300	11000
Load Line 12	LL12mw-088	Manganese	224	NT	NT	NT	50	880
		Arsenic	NT	16.8	21.9	5 U	10	0.045
		Iron	NT	2860 J	3100	2470	300	11000
	LL12mw-107	Manganese	NT	304	412	371	50	880
		Arsenic	NT	17.4	5 U	7.3 B	10	0.045
		Iron	NT	2090 J	50.8 J	1690 J	300	11000
	LL12mw-113	Manganese	NT	225	277	280	50	880
		Aluminum	NT	28500	1350	10400 J	200	36000
		Arsenic	NT	54.3	4.9 J	23.8	10	0.045
		Iron	NT	88300	3660	29100	300	11000
	LL12mw-128	Lead	NT	47	2.1 J	10.4	15	NS
		Manganese	NT	4410	1510	2450	50	880
		Arsenic	NT	40.1	52.9	51.5	10	0.045
	LL12mw-153	Manganese	NT	199	333	189	50	880
		Arsenic	NT	24.6	NT	NT	10	0.045
		Iron	4180	NT	NT	NT	300	11000
	LL12mw-154	Manganese	NT	206	NT	NT	50	880
		Aluminum	NT	4820	50 U	50 U	200	36000
		Arsenic	NT	651	8	16.3 B	10	0.045
		Iron	NT	53200 J	162 J	2580 J	300	11000
	LL12mw-182	Manganese	NT	213	70.5	95.9	50	880
		Arsenic	NT	40.5	NT	NT	10	0.045
		Iron	1100	NT	NT	NT	300	11000
	LL12mw-183	Manganese	NT	56.1	NT	NT	50	880
		Arsenic	NT	34.9	NT	NT	10	0.045
		Iron	1460	NT	NT	NT	300	11000
	LL12mw-184	Manganese	NT	74.6	NT	NT	50	880
		Arsenic	NT	13.5	16.7	11.9 B	10	0.045
		Heptachlor epoxide	NT	0.03 U	0.0082 J	0.03 U	NS	0.0074
		Iron	NT	2410 J	2680 J	3130 J	300	11000
	LL12mw-185	Manganese	NT	498	527	551	50	880
		Arsenic	NT	1780	1580	1530	50	880
		Iron	861	NT	NT	NT	300	11000
	LL12mw-187	Manganese	NT	347	NT	NT	50	880
		Arsenic	NT	2110	2030	2130	50	880
		Aluminum	NT	1770	23.8 J	72.3	200	36000
	LL12mw-188	beta-BHC	NT	0.3 U	0.3 U	0.17	NS	0.037
		Iron	NT	4120	227 J	362 J	300	11000
		Manganese	NT	485	664	646	50	880
	LL12mw-189	Arsenic	NT	5 U	3.9 J	5 U	10	0.045
		bis(2-Ethylhexyl) phthalate	NT	1.1 J	10 U	34	NS	4.8
		Manganese	NT	235	327	319	50	880
	LL12mw-242	Arsenic	NT	53.5	19	24.7	10	0.045
		Benzene	NT	0.55 J	1 U	1 U	5	0.34
		Iron	NT	65800	565 J	4390 J	300	11000
		Lead	NT	24.3	0.89 J	3 U	15	NS
	LL12mw-243	Manganese	NT	1070	67.3	99.8	50	880
		Aluminum	NT	67.8	220 B	50 U	200	36000
		Arsenic	NT	7.5	16.5	20.1	10	0.045
		Iron	NT	2460 J	2180 J	2540 J	300	11000
		Manganese	NT	1070	928	862	50	880

Table 4-5. Exceedences of MCLs and Region 9 PRGs

Area	Well Number	Compound or Element Detected	Oct-07 Level (ug/L)	Jan-08 Level (ug/L)	Apr-08 Level (ug/L)	Jul-08 Level (ug/L)	MCL (ug/L)	Region 9 PRG (ug/L)
Load Line 12	LL12mw-244	Aluminum	NT	83.5	9040	26.8 J	200	36000
		Arsenic	NT	7.5	21.4	5 U	10	0.045
		Iron	NT	332	20700 J	61.8 J	300	11000
		Manganese	NT	115	360	108	50	880
	LL12mw-245	Arsenic	NT	24.4 J	5 U	7.3 B	10	0.045
		Iron	NT	1670 J	73.5 J	426 J	300	11000
		Manganese	NT	301	56.5	186	50	880
		Arsenic	NT	32.7	29.5	41.6	10	0.045
	LL12mw-246	Iron	NT	1430	1130 J	2120	300	11000
		Manganese	NT	73.2	78.6	69.3	50	880
		Aluminum	NT	NT	240	1.4 J	200	36000
		Indeno(1,2,3-cd)pyrene	NT	NT	0.72	0.2 U	NS	0.092
Building 1200	B12mw-010	Iron	NT	NT	428 J	50 U	300	11000
		Manganese	NT	NT	62 J	31.5	50	880
		Iron	NT	NT	50 U	4570	300	11000
		Manganese	NT	NT	52	538	50	880
	B12mw-011	Iron	NT	NT	29.7 J	464	300	11000
		Manganese	NT	NT	9.5 J	262	50	880
	B12mw-012	Aluminum	NT	NT	469	50 U	200	36000
		Arsenic	NT	NT	80.6	77.3 J	10	0.045
		Iron	NT	NT	6940 J	7960	300	11000
		Manganese	NT	NT	104	104	50	880
	CBPmw-002	Arsenic	NT	NT	15.3	17.5	10	0.045
		Iron	NT	NT	426	1310	300	11000
Central Burn Pits	CBPmw-003	Manganese	NT	NT	66.7	111	50	880
		Arsenic	NT	NT	17.2	20.7 J	10	0.045
		Iron	NT	NT	929 J	1440	300	11000
		Manganese	NT	NT	49	107	50	880
	CBPmw-004	Aluminum	NT	NT	243 JB	50 U	200	36000
		Arsenic	NT	NT	42.1 J	29.8	10	0.045
		Iron	NT	NT	1150 J	1150	300	11000
		Manganese	NT	NT	51.3	54	50	880
	CBPmw-006	Arsenic	34.3	NT	4.2 J	NT	10	0.045
		Iron	27400	NT	276 J	NT	300	11000
		Manganese	466	NT	45.5 J	NT	50	880
		Arsenic	36.8	NT	NT	NT	10	0.045
	CBPmw-007	Manganese	228	NT	NT	NT	50	880
		Arsenic	NT	NT	4.2 J	5 U	10	0.045
		Iron	NT	NT	526 J	119	300	11000
		Manganese	NT	NT	78.8 J	28.8	50	880
	CBPmw-008	Manganese	NT	NT	300	282	50	880
		bis(2-Ethylhexyl) phthalate	NT	NT	10 U	16	NS	5
		Arsenic	NT	NT	7.1	9 B	10	0.045
		Iron	NT	NT	757 J	584	300	11000
Cobbs Pond	CPmw-003	Manganese	NT	NT	96.5	177	50	880
		Arsenic	NT	NT	29.3	30.3 J	10	0.045
		Iron	NT	NT	408 J	384	300	11000
		Arsenic	NT	NT	4.7 J	7 J	10	0.045
	CPmw-006	Dibenzo(a)anthracene	NT	NT	0.24 U	2.2 J	NS	0.092
		Iron	NT	NT	7820 J	6830	300	11000
		Manganese	NT	NT	2570	2320	50	880
		Aroclor 1242	NT	NT	0.57 J	0.5 U	NS	0.034
	DA2mw-104	Arsenic	NT	NT	5 U	8.2	10	0.045
		Iron	NT	NT	886 J	1260	300	11000
		Manganese	NT	NT	341	252	50	880
		Iron	NT	NT	9190 J	1620	300	11000
Demolition Area 2	DA2mw-106	Manganese	NT	NT	5640	3720	50	880
		Arsenic	6.4	NT	NT	NT	10	0.045
		Iron	1800	NT	NT	NT	300	11000
		Manganese	203	NT	NT	NT	50	880
	DA2mw-108	Arsenic	NT	NT	5 U	3.6 J	10	0.045
		Iron	NT	NT	2360 J	2920	300	11000
		Manganese	NT	NT	372	295	50	880
		Manganese	NT	NT	238	40.9	50	880
	DA2mw-112	Arsenic	NT	NT	5 U	5	10	0.045
		Iron	NT	NT	2350 J	4980	300	11000
		Manganese	NT	NT	544	724	50	880
		Iron	NT	NT	2730 J	3390	300	11000
	DETmw-003	Arsenic	12.4	NT	9.9	NT	10	0.045
		Iron	1960	NT	1640 J	NT	300	11000
		Manganese	294	NT	281	NT	50	880
		Iron	396	NT	50 U	NT	300	11000

Table 4-5. Exceedences of MCLs and Region 9 PRGs

Area	Well Number	Compound or Element Detected	Oct-07 Level (ug/L)	Jan-08 Level (ug/L)	Apr-08 Level (ug/L)	Jul-08 Level (ug/L)	MCL (ug/L)	Region 9 PRG (ug/L)
Erie Burning Grounds	EBGmw-123	Arsenic	NT	NT	31.6 J	38.4	10	0.045
		Iron	NT	NT	3500	5190	300	11000
		Manganese	NT	NT	154 J	135	50	880
	EBGmw-124	Arsenic	NT	NT	42.3 J	40.1	10	0.045
		Iron	NT	NT	3130	3880	300	11000
		Manganese	NT	NT	55.6 J	66.8	50	880
	EBGmw-125	Arsenic	NT	NT	5 U	8.7 J	10	0.045
		Iron	NT	NT	6330	8710	300	11000
		Manganese	NT	NT	438 J	460	50	880
	EBGmw-126	Arsenic	NT	NT	13.9 J	23.1	10	0.045
		Iron	NT	NT	5230	7750	300	11000
		Manganese	NT	NT	202 J	208	50	880
	EBGmw-127	Arsenic	NT	NT	14 J	11.7 J	10	0.045
		Iron	NT	NT	1620	1190	300	11000
		Manganese	NT	NT	5 J	11	10	0.045
	EBGmw-128	Arsenic	NT	NT	212	902	300	11000
		Iron	NT	NT	152 J	315	50	880
		Manganese	NT	NT	5750	5370	300	11000
	EBGmw-129	Arsenic	NT	NT	655 J	558	50	880
		bis(2-Ethylhexyl) phthalate	NT	NT	10 U	1.9 J	NS	4.8
		Manganese	NT	NT	4.5 J	7.1 J	10	0.045
	EBGmw-130	Arsenic	NT	NT	2980	3370	300	11000
		Iron	NT	NT	762 J	614	50	880
		Manganese	NT	NT	10 U	6.2 J	NS	4.8
Fuze & Booster	FBQmw-166	bis(2-Ethylhexyl) phthalate	NT	NT	10 U	6.2 J	NS	4.8
		Manganese	NT	NT	21.7 J	111	50	880
		Iron	NT	NT	15900	15100	300	11000
	FBQmw-170	Arsenic	NT	NT	94.2 J	68.4	50	880
		Iron	NT	NT	153	31.4 J	300	11000
		Manganese	NT	NT	2370 J	2370	50	880
	FBQmw-173	Arsenic	NT	NT	5190	1240	300	11000
		Manganese	NT	NT	1260 J	1190	50	880
		beta-BHC	NT	NT	0.24 J	0.03 U	NS	0.037
	FBQmw-176	Arsenic	NT	NT	8480	9250	300	11000
Landfill North	LNWmw-025	Manganese	NT	NT	1440 J	1400	50	880
		Manganese	NT	NT	1130 J	1380	50	880
		Aluminum	NT	NT	50 U	742 J	200	36000
	LNWmw-026	Arsenic	NT	NT	4.4 J	45	10	0.045
		Iron	NT	NT	1460	18900	300	11000
		Manganese	NT	NT	942 J	812	50	880
	LNWmw-027	Arsenic	NT	NT	5 U	3.2 J	10	0.045
		Arsenic	NT	NT	5 U	4.3 J	10	0.045
		Manganese	NT	NT	230 J	261	50	880
NACA Test Area	NTAmw-107	Arsenic	NT	NT	11.5 J	13.2	10	0.045
		Iron	NT	NT	223	418	300	11000
		Manganese	NT	NT	198 J	253	50	880
	NTAmw-109	Iron	NT	NT	1330	1420	300	11000
		Manganese	NT	NT	46.1 J	60.6	50	880
		Aluminum	NT	NT	1100	50 U	200	36000
	NTAmw-110	Arsenic	NT	NT	10.8 J	13.9	10	0.045
		Iron	NT	NT	1460	101	300	11000
		Manganese	NT	NT	128 J	194	50	880
	NTAmw-111	Manganese	NT	NT	84.4 J	155	50	880
		Arsenic	NT	NT	16.3 J	13.4 J	10	0.045
		Iron	NT	NT	1600	1820	300	11000
	NTAmw-112	Manganese	NT	NT	606 J	692 J	50	880
		Arsenic	NT	NT	11.2 J	12.5 J	10	0.045
		Iron	NT	NT	495	915	300	11000
	NTAmw-114	Arsenic	NT	NT	3.9 J	7.3 J	10	0.045
		Iron	NT	NT	62.6	549	300	11000
		Manganese	NT	NT	519 J	587	50	880
	NTAmw-117	Manganese	NT	NT	143 J	193	50	880

Table 4-5. Exceedences of MCLs and Region 9 PRGs

Area	Well Number	Compound or Element Detected	Oct-07 Level (ug/L)	Jan-08 Level (ug/L)	Apr-08 Level (ug/L)	Jul-08 Level (ug/L)	MCL (ug/L)	Region 9 PRG (ug/L)
Ramsdell Quarry	RQLmw-007	Arsenic	51.4	NT	11.3 J	NT	10	0.045
		Iron	20800	NT	2010 J	NT	300	11000
		Manganese	2730	NT	1530 J	NT	50	880
	RQLmw-008	Arsenic	61.2	NT	15.4 J	NT	10	0.045
		Iron	141000	NT	101000 J	NT	300	11000
		Manganese	1280	NT	802 J	NT	50	880
	RQLmw-009	Toxaphene	0.64 J	NT	2 UJ	NT	3	0.061
		Arsenic	36	NT	6.3 J	NT	10	0.045
		Iron	17500	NT	869 J	NT	300	11000
	RQLmw-012	Manganese	2400	NT	1030 J	NT	50	880
		Iron	NT	NT	70.5 J	50	300	11000
	RQLmw-013	Manganese	NT	NT	216 J	248	50	880
		Aluminum	NT	NT	4310	4340	200	36000
	RQLmw-014	Iron	NT	NT	4860 J	5180	300	11000
		Manganese	NT	NT	16900 J	11600	300	11000
	RQLmw-015	Arsenic	NT	NT	3070	3090	50	880
		Iron	NT	NT	5 U	3.4 JB	10	0.045
		Manganese	NT	NT	563 J	537	300	11000
	RQLmw-016	Arsenic	NT	NT	1170	420	50	880
		Iron	NT	NT	3.4 J	4.9 JB	10	0.045
		Manganese	NT	NT	16300 J	28800	300	11000
	RQLmw-017	Aluminum	NT	NT	7460 J	9900	50	880
		delta-BHC	NT	NT	1160	1660 J	200	36000
Winklepeck	WBGmw-005	Manganese	NT	NT	0.077 J	0.03 U	NS	0.052
		Arsenic	NT	NT	6140	4680	50	880
		Iron	NT	NT	9.3 J	12.8	10	0.045
	WBGmw-006	Manganese	NT	NT	9320	9430	300	11000
		RDX	NT	NT	1180 J	1220	50	880
		Arsenic	58	NT	NT	NT	NS	0.61
	WBGmw-007	Arsenic	4.5 J	NT	NT	NT	10	0.045
		RDX	8.5	NT	NT	NT	NS	0.61
		Aluminum	NT	NT	338 J	50 U	200	36000
	WBGmw-011	Iron	NT	NT	775	50 U	300	11000
		Manganese	NT	NT	43.6 J	76.4	50	880
		Aluminum	NT	NT	2680 J	32.9 J	200	36000
	WBGmw-017	Arsenic	NT	NT	12 J	5.1 J	10	0.045
		Iron	NT	NT	5140	492	300	11000
		Manganese	NT	NT	397 J	196	50	880
Suspected Mustard Burial Grounds	MBSmw-001	Arsenic	NT	NT	5 U	3.4 J	10	0.045
		bis(2-Ethylhexyl) phthalate	NT	NT	10 U	11	NS	4.8
		Manganese	NT	NT	227 J	230	50	880
	MBSmw-002	Arsenic	NT	NT	15.1 J	9.4	10	0.045
		Iron	NT	NT	463	504	300	11000
		Manganese	NT	NT	213 J	223	50	880
	MBSmw-005	Arsenic	NT	NT	8.6 J	6.2	10	0.045
		Iron	NT	NT	1860	1600	300	11000
		Manganese	NT	NT	725 J	802	50	880
	MBSmw-006	Manganese	NT	NT	410 J	390	50	880

## Notes:

NS = no standard NT = not tested

All inorganics are filtered, all organics are not filtered

J = estimated result. Results have been qualified "J"

**Bold** = constituent detected above MCL

**Bold** = constituent detected above Region 9 PRG

B = the analyte is found in the method blank or any of the field blanks

U = analyzed but not detected at or above the reporting limit

Table 4.6 Wells and Consituents with Time-Trend Graphs

Area	Well	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Cobalt	Copper	Iron	Magnesium	Manganese	Nickel	Potassium	Selenium	Sodium	Thallium	Zinc	Carbon Sulfide	Cyanide	Bis(2-ethylhexyl)phthalate	Di-n-octyl phthalate	1,3,5-Trinitrobenzene	2,4,6-Trinitrotoluene	HMX	1,3-Dinitrobenzene	RDX
Background Wells	BKGmw-004	X												X								X						
	BKGmw-005							X			X	X										X						
	BKGmw-006							X			X	X										X						
	BKGmw-008		X					X														X						
	BKGmw-010	X					X					X		X								X						
	BKGmw-012	X			X						X				X					X		X						
	BKGmw-013			X	X			X			X	X										X						
	BKGmw-015				X									X	X							X						
	BKGmw-016	X								X				X								X						
	BKGmw-017			X				X			X				X							X						
	BKGmw-018										X											X						
	BKGmw-019							X			X	X										X						
Load Line 1	BKGmw-020				X						X	X			X					X		X						
	BKGmw-021							X			X	X								X		X						
								X			X	X										X						
Load Line 1	LL1mw-078	X	X											X				X				X						
	LL1mw-080		X					X						X								X		X	X	X	X	X
	LL1mw-083	X				X	X		X	X				X				X				X	X	X	X	X	X	X
Load Line 2	LL2mw-059	X	X						X		X			X				X				X		X	X	X	X	X
	LL2mw-262		X					X	X			X		X								X						
	LL2mw-263		X	X					X		X		X	X								X						
Load Line 3	LL3mw-238	X												X		X						X		X	X	X		X
	LL3mw-242	X												X								X						
Load Line 4	LL4mw-198	X	X						X		X		X	X					X			X						
	LL4mw-199			X	X		X				X	X										X						
Load Line 11	LL11mw-002	X	X				X	X		X	X	X		X					X			X		X				
	LL11mw-007			X	X			X			X	X										X						
Load Line 12	LL12mw-153			X				X			X	X		X								X						
	LL12mw-182	X		X	X			X			X	X		X	X							X						
	LL12mw-183		X	X				X			X	X		X	X		X					X						
	LL12mw-186	X	X					X	X		X	X		X							X	X						
Central Burn Pits	CBPmw-006	X		X	X			X			X	X		X								X						
	CBPmw-007		X	X				X	X		X	X		X	X		X					X						
Detention Area 2	DA2mw-107			X				X			X	X										X						
	DETmw-003			X				X			X	X										X						
	DETmw-004							X			X	X										X				X		X
Ramsdell Quarry Landfill	RQLmw-007			X				X	X		X	X	X	X	X				X			X						
	RQLmw-008			X	X			X	X		X	X		X	X							X		X				
	RQLmw-009			X					X		X	X	X	X	X				X			X						
Winklepeck Burning Ground	WBGmw-006							X				X										X				X		X
	WBGmw-007							X			X	X										X						
	WBGmw-009	X	X					X			X	X										X				X		X

1 reported to be present at concentrations exceeding the respective RL in three or more  
2 samples from background wells.

#### 4 4.2.1 Inorganics

##### 6 Aluminum

8 Aluminum is present above the RL in background wells BKGmw-004 (unconsolidated  
9 well), BKGmw-010 (bedrock well), BKGmw-12 (bedrock well) and BKGmw-016  
10 (unconsolidated well). The reported concentrations in all four wells show a declining  
11 concentration trend. Reported concentrations in all four background wells are below the  
12 MCL (200 µg/L) and the PRG (36,000 µg/L), except the July 2006 sample from well  
13 BKGmw-004 that was slightly above the MCL. All reported concentrations are above  
14 the bedrock and unconsolidated background criterion of “0.”

##### 16 Antimony

18 Antimony is present above the RL in bedrock background well BKGmw-008. The  
19 reported concentrations have declined during the FWGWMP to a concentration below the  
20 PRG (15 µg/L) and the MCL (6 µg/L). The decline may be related to changes in  
21 laboratory reporting limits. All reported concentrations are above the bedrock  
22 background criterion of “0.”

##### 24 Arsenic

26 Arsenic is present above the RL in unconsolidated background wells BKGmw-013 and  
27 BKGmw-017. The reported concentrations in both wells show fluctuation over time  
28 without identifiable trend. The reported concentrations in well BKGmw-013 are  
29 fluctuating around the MCL (10 µg/L) and the unconsolidated background criterion (11.7  
30 µg/L). The reported concentrations in well BKGmw-013 are above the PRG (0.045  
31 µg/L). The reported concentrations in well BKGmw-017 are above the MCL, the PRG,  
32 and the unconsolidated background criterion.

##### 34 Barium

36 Barium is present above the RL in unconsolidated background well BKGmw-013. The  
37 reported concentrations show fluctuation over time without identifiable trend. The  
38 reported concentrations in well BKGmw-013 are fluctuating around the unconsolidated  
39 background criterion (82.1 µg/L). The reported concentrations are below the MCL  
40 (2,000 µg/L) and the PRG (2,600 µg/L).

42 Barium is present above the RL in bedrock background wells BKGmw-012, BKGmw-  
43 015 and BKGmw-020. The concentrations in all three wells show fluctuation over time  
44 without identifiable trend. The reported concentrations are fluctuating around the  
45 bedrock background criterion (256 µg/L). The reported concentrations are below the  
46 MCL and the PRG.



## **Cadmium**

Cadmium is present above the RL in bedrock background well BKGmw-010. The reported concentrations show a significant decline between July and September 2006. This may be related to changes in analytical method or reporting limit. All reported concentrations are below the PRG (18 µg/L). Through July 2006 the reported concentrations were at the MCL (5 µg/L), but starting in September 2006 the concentrations are below the MCL. All reported concentrations are above the bedrock background criterion of “0.”

## **Calcium**

Calcium is present above the RL in unconsolidated background wells BKGmw-005, BKGmw-013, BKGmw-017, BKGmw-019 and BKGmw-021. The reported concentrations in all five wells show fluctuation over time with no identifiable trends. All reported concentrations are below the unconsolidated background (115,000 µg/L) for wells BKGmw-005, BKGmw-013, BKGmw-017, and BKGmw-021. The reported concentration exceeded the unconsolidated background in well MCKmw-019 during the April 2007 sampling event. There are no MCL or PRG criteria for calcium.

Calcium is present above the RL in bedrock background wells BKGmw-006 and BKGmw-018. The reported concentrations in both wells show fluctuation over time. A declining seasonal trend is observed in well BKGmw-006. No identifiable trend is observed in well BKGmw-018. The reported concentrations are at or above the bedrock background criterion.

## **Copper**

Copper is present above the RL in unconsolidated background well BKGmw-016. The reported concentrations show little fluctuation. All reported concentrations are below the MCL (1,300 µg/L) and the PRG (15,000 µg/L). All reported concentrations are above the unconsolidated background criterion of “0.”

## **Iron**

Iron is present above the RL in unconsolidated background wells BKGmw-005, BKGmw-013, BKGmw-017, BKGmw-019, and BKGmw-021. The reported concentrations in all five wells show fluctuation over time without identifiable trend. The reported concentrations fluctuate around the MCL (300 µg/L) and the unconsolidated background criterion (279 µg/L). The reported concentrations are below the PRG (11,000 µg/L).

Iron is present above the RL in bedrock background wells BKGmw-006, BKGmw-012, BKGmw-018, and BKGmw-020. The reported concentrations in all four wells show fluctuation over time without identifiable trend. Some reported concentrations in

BKGmw-006 and BKGmw-020 are above the MCL. All concentrations in all wells are below the PRG and bedrock background criterion (1,430 µg/L).

### **Magnesium**

Magnesium is present above the RL in unconsolidated background wells BKGmw-005, BKGmw-013, BKGmw-017, BKGmw-019 and BKGmw-021. The reported concentrations in all wells, except BKGmw-021, show fluctuation over time without identifiable trend. The reported concentrations in BKGmw-021 show a declining trend. All concentrations are below the unconsolidated background criterion (43,300 µg/L), except BKGmw-017 and BKGmw-021 which are fluctuating around the unconsolidated background criterion. There is no MCL or PRG for magnesium.

Magnesium is present above the RL in bedrock background wells BKGmw-006, BKGmw-010, and BKGmw-020. The reported concentrations in all wells, except BKGmw-006, show fluctuation over time without identifiable trend. The reported concentrations in BKGmw-006 show a declining trend. All reported concentrations in all wells are above the bedrock background criterion (15,000 µg/L).

### **Nickel**

Nickel is present above the RL in unconsolidated background wells BKGmw-004 and BKGmw-016. The reported concentrations show little fluctuation over time. All reported concentrations are below the PRG (730 mg/L) and the MCL (100 mg/L) but above the unconsolidated background criterion of "0."

Nickel is present above the RL in bedrock background wells BKGmw-010 and BKGmw-015. The reported concentrations show fluctuation over time without identifiable trend. Reported concentrations are below the bedrock background criterion (83.4 µg/L), and the PRG (880 µg/L). All concentrations are below the MCL (100 µg/L).

### **Potassium**

Potassium is present above the RL in unconsolidated background well BKGmw-017. The reported concentrations show fluctuation over time without identifiable trend. Reported concentrations are fluctuating around the unconsolidated background criterion (2,890 µg/L). There is no MCL or PRG for potassium.

Potassium is present above the RL in bedrock background wells BKGmw-012, BKGmw-015 and BKGmw-020. The reported concentrations in all three wells show a declining trend. All reported concentrations are below the bedrock background criterion (5,770 µg/L), except for the October 2006 sample from well BKGmw-012.

## 4.2.2 Volatile and Semi-Volatile Organic Compounds

### Carbon Disulfide

Carbon disulfide is reported above the RL in bedrock wells BKGmw-012 and BKGmw-020. The reported concentrations in both wells show little fluctuation over time. All reported concentrations are below the PRG (1,000 µg/L). There is no MCL for carbon disulfide.

### Bis(2-ethylhexyl)phthalate

Bis(2-ethylhexyl)phthalate is reported above the RL in unconsolidated background wells BKGmw-004, BKGmw-005, BKGmw-013, BKGmw-016, BKGmw-174, BKGmw-019, and BKGmw-021. The reported concentrations show a wide range of fluctuation without identifiable trend. The reported concentrations fluctuate above and below the PRG (4.8 µg/L). There is no MCL for bis(2-ethylhexyl)phthalate.

Bis(2-ethylhexyl)phthalate is reported above the RL in bedrock background wells BKGmw-006, BKGmw-008, BKGmw-010, BKGmw-012, BKGmw-015, BKGmw-018, and BKGmw-020. The reported concentrations show a wide range of fluctuation without identifiable trend. The reported concentrations fluctuate above and below the PRG (4.8 µg/L).

## 4.3 Load Line 1

Aluminum, antimony, beryllium, cadmium, calcium, cobalt, copper, nickel, thallium, bis(2-ethylhexyl)phthalate, di-n-octyl phthalate, 1,3,5-trinitrobenzene, 2,4,6-trinitrotoluene, HMX, 1,3-dinitrobenzene, and RDX are reported to be present at concentrations exceeding the respective RL in three or more samples from Load Line 1 wells. No VOC, PCB Arochlor, pesticide or herbicide is reported to be present at concentrations exceeding the respective RL in three or more samples from Load Line 1 wells.

### 4.3.1 Inorganics

#### Aluminum

Aluminum is present above the RL in Load Line 1 bedrock wells LL1mw-078 and LL1mw-083. The reported concentrations in both wells show small fluctuation over time. There is no identifiable trend in well LL1mw-078 but an increasing trend is observed in well LL1mw-083. All reported concentrations in well LL1mw-078 are below the MCL (200 µg/L) and the PRG (36,000 µg/L). All reported concentrations in well LL1mw-083 are above the MCL but below the PRG. All reported concentrations are above the bedrock background criterion of "0."

### **Antimony**

Antimony is present above the RL in Load Line 1 bedrock wells LL1mw-078 and LL1mw-080. The reported concentrations in both wells have declined during the FWGWMP to below the PRG (15 µg/L) and the MCL (6 µg/L). The decline may be related to changes in laboratory reporting limits. All reported concentrations are above the bedrock background criterion of “0.”

### **Beryllium**

Beryllium is present above the RL in Load Line 1 bedrock well LL1mw-083. The reported concentrations have declined to below the MCL (4 µg/L). All concentrations are below the PRG (73 µg/L). All concentrations are above the bedrock background criterion of “0.”

### **Cadmium**

Cadmium is present above the RL in Load Line 1 bedrock well LL1mw-083. The reported concentrations show fluctuation over time with no identifiable trend. The reported concentrations are at or below the MCL (5 µg/L) and below PRG (18 µg/L). All concentrations are above the bedrock background criterion of “0.”

### **Calcium**

Calcium is present above the RL in Load Line 1 bedrock well LL1mw-080. The reported concentrations show fluctuation over time with no identifiable trend. Three reported concentrations are above the bedrock background criterion (53,100 µg/L) and five are at or below the bedrock background criterion. There are no MCL or PRG criteria for calcium.

### **Cobalt**

Cobalt is present above the RL in Load Line 1 bedrock wells LL1mw-078 and LL1mw-083. The reported concentrations show minimal fluctuation over time. All reported concentrations are below the PRG (730 µg/L), but above the bedrock background criterion of “0.” There is no MCL for cobalt.

### **Copper**

Copper is present above the RL in Load Line 1 bedrock well LL1mw-083. The reported concentrations show fluctuation over time without identifiable trend. All reported concentrations are below the MCL (1,300 µg/L) and the PRG (1,500 µg/L). All reported concentrations are above the bedrock background criterion of “0.”

## **Nickel**

Nickel is present above the RL in Load Line 1 bedrock wells LL1mw-078, LL1mw-080 and LL1mw-083. The reported concentrations show minimal fluctuation over time. All reported concentrations are below the MCL (100 µg/L), the PRG (730 µg/L) and bedrock background criterion (83.4 µg/L).

## **Thallium**

Thallium is present above the RL in Load Line 1 bedrock wells LL1mw-078 and LL1mw-080. The reported concentrations fluctuate over time without identifiable trend. All reported concentrations are below the MCL (2 µg/L) and the PRG (2.4 µg/L). All reported concentrations are above the bedrock background criterion of “0.”

### **4.3.2 Semi-Volatile Organic Compounds**

#### **Bis(2-ethylhexyl)phthalate**

Bis(2-ethylhexyl)phthalate is present above the RL in Load Line 1 bedrock wells LL1mw-078, LL1mw-080 and LL1mw-083. The reported concentrations fluctuate widely over time without identifiable trend. In all wells the reported concentrations are above and below the PRG (4.8 µg/L). There is no MCL for bis(2-ethylhexyl)phthalate.

#### **Di-n-octyl phthalate**

Di-n-octyl phthalate is present above the RL in Load Line 1 bedrock well LL1mw-083. The reported concentrations show small fluctuation over time without identifiable trend. All reported concentrations are below the PRG (1,500 µg/L). There is no MCL for di-n-octyl phthalate.

### **4.3.3 Explosives**

#### **1,3,5-Trinitrobenzene**

1,3,5-Trinitrobenzene is present above the RL in Load Line 1 bedrock wells LL1mw-080 and LL1mw-083. The reported concentrations in both wells show minimal fluctuation over time. All concentrations are below the PRG (1,100 µg/L). There is no MCL for 1,3,5-trinitrobenzene.

#### **2,4,6-Trinitrotoluene**

2,4,6-Trinitrotoluene is present above the RL in Load Line 1 bedrock wells LL1mw-080 and LL1mw-083. The reported concentrations in both wells show fluctuation over time without identifiable trend. All reported concentrations are at or below the PRG (2 µg/L) in well LL1mw-080. All reported concentrations are above the PRG in well LL1mw-083. There is no MCL for 2,4,6-trinitrotoluene.

## **HMX**

HMX is present above the RL in Load Line 1 bedrock wells LL1mw-080 and LL1mw-083. The reported concentrations show minimal fluctuation over time. All reported concentrations are below the PRG (1,800 µg/L). There is no MCL for HMX.

## **1,3-Dinitrobenzene**

1,3-Dinitrobenzene (m-dinitrobenzene) is above the RL in Load Line 1 bedrock well LL1mw-083. The reported concentrations show minimal fluctuation over time. All reported concentrations are below the PRG (3.6 µg/L). There is no MCL for 1,3-dinitrobenzene.

## **RDX**

RDX is present above the RL in Load Line 1 bedrock wells LL1mw-080 and LL1mw-083. The reported concentrations for well LL1mw-083 show minimal fluctuation over time. The reported concentrations for well LL1mw-080 show significant fluctuation with out identifiable trend. All concentrations for well LL1mw-083 are below the PRG (0.61 µg/L), but all concentrations for well LL1mw-080 are above the PRG. There is no MCL for RDX.

## **4.4 Load Line 2**

Aluminum, antimony, arsenic, calcium, cobalt, iron, magnesium, manganese, nickel, thallium, bis(2-ethylhexyl)phthalate, 1,3,5-trinitrobenzene, HMX, 1,3-dinitrobenzene, and RDX are reported to be present at concentrations exceeding the respective RL in three or more samples from Load Line 2 wells. No VOC, PCB Arochlor, pesticide or herbicide is reported to be present at concentrations exceeding the respective RL in three or more samples from Load Line 2 wells.

### **4.4.1 Inorganics**

#### **Aluminum**

Aluminum is present above the RL in Load Line 2 bedrock well LL2mw-059. The reported concentrations declined significantly between July 2006 and October 2006 possibly related to changes in laboratory reporting limits. All concentrations are below the PRG (36,000 µg/L) and MCL (200 µg/L). All reported concentrations are above the bedrock background criterion of "0."

#### **Antimony**

Antimony is present above the RL in Load Line 2 bedrock wells LL2-mw059, LL2mw-062, and LL2mw-063. The reported concentrations have declined during the FWGWMP

1 to a concentration below the PRG (15 µg/L) and the MCL (6 µg/L). The decline may be  
2 related to changes in laboratory reporting limits. All reported concentrations are above  
3 the bedrock background criterion of “0.”  
4

#### 5 **Arsenic**

6  
7 Arsenic is present above the RL in Load Line 2 bedrock well LL2mw-263. The reported  
8 concentrations show fluctuation over time without an identifiable trend. All reported  
9 concentrations are above the MCL (10 µg/L), the PRG (0.007 µg/L) and the bedrock  
10 background criterion of “0.”  
11

#### 12 **Calcium**

13  
14 Calcium is present above the RL in Load Line 2 bedrock well LL2mw-262. The reported  
15 concentrations show fluctuation without identifiable trend. The reported concentrations  
16 are fluctuating around the bedrock background criterion (53,100 µg/L). There are no  
17 MCL or PRG criteria for calcium.  
18

#### 19 **Cobalt**

20  
21 Cobalt is present above the RL in Load Line 2 bedrock wells LL2mw-059 and LL2mw-  
22 262, and LL2mw-263. The reported concentrations show minimal fluctuation over time.  
23 All reported concentrations are below the PRG (730 µg/L) but above the bedrock  
24 background criterion of “0.” There is no MCL for cobalt.  
25

#### 26 **Iron**

27  
28 Iron is present above the RL in Load Line 2 bedrock wells LL2mw-059 and LL2mw-263.  
29 The reported concentrations in both wells show fluctuation over time without identifiable  
30 trend. All reported concentrations in LL2mw-263 are above the MCL (300 µg/L) and  
31 bedrock background criterion (1,430 µg/L) but all reported concentrations are below the  
32 PRG (11,000 µg/L). Reported concentrations in LL2mw-059 fluctuate around the MCL  
33 and all concentrations are below the PRG and bedrock background criterion.  
34

#### 35 **Magnesium**

36  
37 Magnesium is present above the RL in Load Line 2 bedrock well LL2mw-262. The  
38 reported concentrations show fluctuation over time without identifiable trend. All  
39 reported concentrations are above the bedrock background criterion (15,000 µg/L).  
40 There are no MCL or PRG criteria for magnesium.  
41

#### 42 **Manganese**

43  
44 Manganese is present above the RL in Load Line 2 bedrock well LL2mw-263. The  
45 reported concentrations show fluctuation over time without identifiable trend. All

concentrations are above the MCL (50 µg/L) and PRG (880 µg/L). Reported concentrations fluctuate around the bedrock background criterion (1,020 µg/L).

#### **Nickel**

Nickel is present above the RL in Load Line 2 bedrock wells LL2mw-059, LL2mw-262 and LL2mw-263. The reported concentrations show minimal fluctuation over time without identifiable trend. All reported concentrations are below the MCL (100 µg/L), the PRG (730 µg/L) and bedrock background criterion (83.4 µg/L).

#### **Thallium**

Thallium is present above the RL in Load Line 2 bedrock well LL2mw-059. The reported concentrations show fluctuation over time without identifiable trend. All reported concentrations are below the MCL (2 µg/L) and the PRG (2.4 µg/L). All reported concentrations are above the bedrock background criterion of "0."

### **4.4.2 Semi-volatile Organics**

Bis(2-ethylhexyl)phthalate is the only semivolatile organic compound (SVOC) present above the RL in Load Line 2 bedrock wells LL2mw-059, LL2mw-062 and LL2mw-063. The reported concentrations fluctuate widely over time without identifiable trend. In all wells the reported concentrations are above and below the PRG (4.8 µg/L). There is no MCL for bis(2-ethylhexyl)phthalate.

### **4.4.3 Explosives**

#### **1,3,5-Trinitrobenzene**

1,3,5-Trinitrobenzene is present above the RL in Load Line 2 bedrock well LL2mw-059. The reported concentrations show fluctuation over time without identifiable trend. All concentrations are below the PRG (1,100 µg/L). There is no MCL for 1,3,5-trinitrobenzene.

#### **HMX**

HMX is present above the RL in Load Line 2 bedrock well LL2mw-059. The reported concentrations show minimal fluctuation over time. All reported concentrations are below the PRG (1,800 µg/L). There is no MCL for HMX.

#### **1,3-Dinitrobenzene**

1,3-Dinitrobenzene (m-dinitrobenzene) is present above the RL in Load Line 2 bedrock well LL2mw-059. The reported concentrations show minimal fluctuation over time. All reported concentrations are below the PRG (3.6 µg/L). There is no MCL for 1,3-dinitrobenzene.



## **RDX**

RDX is present above the RL in Load Line 2 bedrock well LL2mw-059. The reported concentrations show minimal fluctuation over time. All concentrations are below the PRG (0.61 µg/L). There is no MCL for RDX.

### **4.5 Load Line 3**

Aluminum, nickel, selenium, bis(2-ethylhexyl)phthalate, 1,3,5-trinitrobenzene, 2,4,6-trinitrotoluene, HMX, and RDX, are reported to be present at concentrations exceeding the respective RL in three or more samples from Load Line 3 wells. No VOC, PCB Arochlor, pesticide or herbicide is reported to be present at concentrations exceeding the respective RL in three or more samples from Load Line 3 wells.

#### **4.5.1 Inorganics**

##### **Aluminum**

Aluminum is present above the RL in Load Line 3 bedrock wells LL3mw-238 and LL3mw-242. The reported concentrations in both wells show fluctuation over time with a declining trend after July 2006 that is believed to be related to a laboratory change. All reported concentrations are below the MCL (200 µg/L) and the PRG (36,000 µg/L). All reported concentrations are above the bedrock background criterion of "0."

##### **Nickel**

Nickel is present above the RL in Load Line 3 bedrock wells LL3mw-238 and LL3mw-242. The reported concentrations show minimal fluctuation over time. All reported concentrations are below the MCL (100 µg/L), the PRG (730 µg/L) and bedrock background criterion (83.4 µg/L).

##### **Selenium**

Selenium is present above the RL in Load Line 3 bedrock well LL3mw-238. The reported concentrations show minimal fluctuation over time with a slight declining trend. All reported concentrations are below the MCL (50 µg/L) and the PRG (180 µg/L). All reported concentrations are above the bedrock background criterion of "0."

#### **4.5.2 Semi-Volatile Organic Compounds**

Bis(2-ethylhexyl)phthalate is the only SVOC present above the RL in Load Line 3 bedrock wells LL3mw-238 and LL3mw-242. The reported concentrations fluctuate widely over time without identifiable trend. In all wells the reported concentrations are above and below the PRG (4.8 µg/L). There is no MCL for bis(2-ethylhexyl)phthalate.

### 4.5.3 Explosives

#### 1,3,5-Trinitrobenzene

1,3,5-Trinitrobenzene is present above the RL in Load Line 3 bedrock well LL3mw-238. The reported concentrations show fluctuation over time without identifiable trend. All concentrations are below the PRG (1,100 µg/L). There is no MCL for 1,3,5-trinitrobenzene.

#### 2,4,6-Trinitrotoluene

2,4,6-Trinitrotoluene is present above the RL in Load Line 3 bedrock well LL3mw-238. The reported concentrations show fluctuation over time without identifiable trend. All reported concentrations are above the PRG (2 µg/L). There is no MCL for 2,4,6-trinitrotoluene.

#### HMX

HMX is present above the RL in Load Line 3 bedrock well LL3mw-238. The reported concentrations show fluctuation over time without identifiable trend. All reported concentrations are below the PRG (1,800 µg/L). There is no MCL for HMX.

#### RDX

RDX is present above the RL in Load Line 3 bedrock well LL3mw-238. The reported concentrations show fluctuation over time without identifiable trend. All concentrations are above the PRG (0.61 µg/L). There is no MCL for RDX.

## 4.6 Load Line 4

Aluminum, antimony, arsenic, barium, calcium, cobalt, iron, magnesium, manganese, nickel, zinc and bis(2-ethylhexyl)phthalate are reported to be present at concentrations exceeding the respective RL in three or more samples from Load Line 4 wells. No VOC, explosive, PCB Arochlor, pesticide or herbicide is reported to be present at concentrations exceeding the respective RL in three or more samples from Load Line 4 wells.

### 4.6.1 Inorganics

#### Aluminum

Aluminum is present above the RL in Load Line 4 unconsolidated well LL4mw-198. The reported concentrations show little fluctuation over time. All reported concentrations are below the MCL (200 µg/L) and the PRG (36,000 µg/L), except a high reported

1 concentration in the July 2007 sample is believed to be an outlier. All reported  
2 concentrations are above the unconsolidated background criterion of "0."

### 3 4 **Antimony**

5  
6 Antimony is present above the RL in Load Line 4 unconsolidated well LL4-mw198. The  
7 reported concentrations have declined during the FWGWMP to a concentration below the  
8 PRG (15 µg/L) and the MCL (6 µg/L). The decline may be related to changes in  
9 laboratory reporting limits. All reported concentrations are above the unconsolidated  
10 background criterion of "0."

### 11 12 **Arsenic**

13  
14 Arsenic is present above the RL in Load Line 4 unconsolidated well LL4mw-199. The  
15 reported concentrations show significant fluctuation over time without identifiable trend.  
16 Reported concentrations are above the MCL (10 µg/L) in six samples and below the  
17 MCL in three samples. All reported concentrations are above the PRG (0.007 µg/L).  
18 Five of the reported concentrations are above the unconsolidated background criterion  
19 (11.7 µg/L).

### 20 21 **Barium**

22  
23 Barium is present above the RL in Load Line 4 unconsolidated well LL4mw-199. The  
24 concentrations show small fluctuation over time without identifiable trend. The reported  
25 concentrations are fluctuating at the unconsolidated background criterion (82.1 µg/L).  
26 The reported concentrations are below the MCL (2,000 µg/L) and the PRG (2,600 µg/L).

### 27 28 **Calcium**

29  
30 Calcium is present above the RL in Load Line 4 unconsolidated well LL4mw-199. The  
31 reported concentrations show fluctuation over time with an increasing trend. Three  
32 reported concentrations are below the unconsolidated background criterion (115,000  
33 µg/L). There are no MCL or PRG criteria for calcium.

### 34 35 **Cobalt**

36  
37 Cobalt is present above the RL in Load Line 4 unconsolidated well LL4mw-198. The  
38 reported concentrations show small fluctuation over time without identifiable trend. All  
39 reported concentrations are below the PRG (730 µg/L) but above the unconsolidated  
40 background criterion of "0." There is no MCL for cobalt.

### 41 42 **Iron**

43  
44 Iron is present above the RL in Load Line 4 unconsolidated wells LL4mw-198 and  
45 LL4mw-199. The reported concentrations in both wells show large fluctuation over time  
46 with an increasing trend. Reported concentrations in both wells are above the MCL (300

1 µg/L) but below the PRG (11,000 µg/L). The reported concentrations are fluctuating at  
2 or are above the unconsolidated background criterion (279 µg/L).

### 3 4 **Magnesium**

5  
6 Magnesium is present above the RL in Load Line 4 unconsolidated well LL4mw-199.  
7 The reported concentrations show fluctuation over time without identifiable trend. All  
8 reported concentrations are below the unconsolidated background criterion (43,300  
9 µg/L). There are no MCL or PRG criteria for magnesium.

### 10 11 **Manganese**

12  
13 Manganese is present above the RL in Load Line 4 unconsolidated well LL4mw-198.  
14 The reported concentrations show fluctuation over time without trend. All reported  
15 concentrations are above the MCL (50 µg/L), the PRG (880 µg/L) and unconsolidated  
16 background criterion (1,020 µg/L).

### 17 18 **Nickel**

19  
20 Nickel is present above the RL in Load Line 4 unconsolidated well LL4mw-199. The  
21 reported concentrations show minimal fluctuation over time. All reported concentrations  
22 are below the MCL (100 µg/L), the PRG (730 µg/L) and above the unconsolidated  
23 background criterion of "0."

### 24 25 **Zinc**

26  
27 Zinc is present above the RL in Load Line 4 unconsolidated well LL4mw-198. The  
28 reported concentrations show minimal fluctuation over time without trend. All reported  
29 concentrations are below the MCL (5,000 µg/L), PRG (11,000 µg/L) and unconsolidated  
30 background criterion (60.9 µg/L).

## 31 32 **4.6.2 Semi-Volatile Organic Compounds**

33  
34 Bis(2-ethylhexyl)phthalate is the only SVOC present above the RL in Load Line 4  
35 unconsolidated wells LL4mw-198 and LL4mw-199. The reported concentrations  
36 fluctuate widely over time without identifiable trend. In both wells the reported  
37 concentrations are above and below the PRG (4.8 µg/L). There is no MCL for bis(2-  
38 ethylhexyl)phthalate.

## 39 40 41 **4.7 Load Line 11**

42  
43 Aluminum, antimony, arsenic, barium, cadmium, calcium, copper, iron, magnesium,  
44 nickel, zinc, bis(2-ethylhexyl)phthalate and 1,3,5-trinitrobenzene are reported to be  
45 present at concentrations exceeding the respective RL in three or more samples from  
46 Load Line 11 wells. No VOC, PCB Arochlor, pesticide or herbicide is reported to be

1 present at concentrations exceeding the respective RL in three or more samples from  
2 Load Line 11 wells.

#### 3 4 **4.7.1 Inorganics**

##### 5 6 **Aluminum**

7  
8 Aluminum is present above the RL in Load Line 11 unconsolidated well LL11mw-002.  
9 The reported concentrations show little fluctuation over time. All reported concentrations  
10 are below the PRG (36,000 µg/L) and seven of nine results are below the MCL (200  
11 µg/L). All reported concentrations are above the unconsolidated background criterion of  
12 “0.”

##### 13 14 **Antimony**

15  
16 Antimony is present above the RL in Load Line 11 unconsolidated well LL11-mw-002.  
17 The reported concentrations have declined during the FWGWMP to below the PRG (15  
18 µg/L) and the MCL (6 µg/L). The decline may be related to changes in laboratory  
19 reporting limits. All reported concentrations are above the unconsolidated background  
20 criterion of “0.”

##### 21 22 **Arsenic**

23  
24 Arsenic is present above the RL in Load Line 11 unconsolidated well LL11mw-007. The  
25 reported concentrations show fluctuation over time with an increasing trend. Reported  
26 concentrations are above the MCL (10 µg/L), the PRG (0.007 µg/L) and the  
27 unconsolidated background criterion (11.7 µg/L).

##### 28 29 **Barium**

30  
31 Barium is present above the RL in Load Line 11 unconsolidated well LL11mw-007. The  
32 reported concentrations show little fluctuation over time. The reported concentrations are  
33 fluctuating at the unconsolidated background criterion (82.1 µg/L). The reported  
34 concentrations are below the MCL (2,000 µg/L) and the PRG (2,600 µg/L).

##### 35 36 **Cadmium**

37  
38 Cadmium is present above the RL in Load Line 11 unconsolidated well LL11mw-002.  
39 The reported concentrations show fluctuation over time with a declining trend. The  
40 reported concentrations fluctuate around the MCL (5 µg/L) and are below PRG (18  
41 µg/L). All concentrations are above the unconsolidated background criterion of “0.”

##### 42 43 **Calcium**

44  
45 Calcium is present above the RL in Load Line 11 unconsolidated wells LL11mw-002 and  
46 LL11mw-007. The reported concentrations show seasonal fluctuation over time. All

1 reported concentrations are below the unconsolidated background criterion (115,000  
2 µg/L). There are no MCL or PRG criteria for calcium.

### 3 4 **Copper**

5  
6 Copper is present above the RL in Load Line 11 unconsolidated well LL11mw-002. The  
7 reported concentrations show minimal fluctuation over time. All reported concentrations  
8 are below the MCL (1,300 µg/L) and the PRG (1,500 µg/L). All reported concentrations  
9 are above the unconsolidated background criterion of “0.”

### 10 11 **Iron**

12  
13 Iron is present above the RL in Load Line 11 unconsolidated wells LL11mw-002 and  
14 LL11mw-007. The reported concentrations in both wells show fluctuation over time  
15 without identifiable trend. Reported concentrations in both wells are above the MCL  
16 (300 µg/L) and unconsolidated background criterion (279 µg/L). All reported  
17 concentrations are below the PRG (11,000 µg/L).

### 18 19 **Magnesium**

20  
21 Magnesium is present above the RL in Load Line 11 unconsolidated wells LL11mw-002  
22 and LL11mw-007. The reported concentrations in both wells show fluctuation over time  
23 without identifiable trend. All reported concentrations below the unconsolidated  
24 background criterion (43,300 µg/L). There are no MCL or PRG criteria for magnesium.

### 25 26 **Nickel**

27  
28 Nickel is present above the RL in Load Line 11 unconsolidated well LL11mw-002. The  
29 reported concentrations show minimal fluctuation over time. All reported concentrations  
30 are below the MCL (100 µg/L), the PRG (730 µg/L) and above the unconsolidated  
31 background criterion of “0.”

### 32 33 **Zinc**

34  
35 Zinc is present above the RL in Load Line 11 unconsolidated well LL11mw-002. The  
36 reported concentrations show fluctuation over time without identifiable trend. All  
37 reported concentrations are below the MCL (5,000 µg/L) and PRG (11,000 µg/L). The  
38 reported concentrations fluctuate above and below the unconsolidated background  
39 concentration (60.9 µg/L).

## 40 41 **4.7.2 Semi-Volatile Organic Compounds**

42  
43 Only bis(2-ethylhexyl)phthalate is present above the RL in Load Line 11 unconsolidated  
44 wells LL11mw-002 and LL11mw-007. The reported concentrations fluctuate widely  
45 over time without identifiable trend. In both wells the reported concentrations are above  
46 and below the PRG (4.8 µg/L). There is no MCL for bis(2-ethylhexyl)phthalate.

### 4.7.3 Explosives

Only 1,3,5-trinitrobenzene is present above the RL in Load Line 11 unconsolidated well LL11mw-002. The reported concentrations show minimal fluctuation. All concentrations are below the PRG (1,100 µg/L). There is no MCL for 1,3,5-trinitrobenzene.

## 4.8 Load Line 12

Aluminum, antimony, arsenic, barium, calcium, cobalt, cyanide, iron, magnesium, nickel, potassium, and bis(2-ethylhexyl)phthalate are reported to be present at concentrations exceeding the respective RL in three or more samples from Load Line 12 wells. No VOC, explosive, PCB Arochlor, pesticide or herbicide is reported to be present at concentrations exceeding the respective RL in three or more samples from Load Line 12 wells.

### 4.8.1 Inorganics

#### Aluminum

Aluminum is present above the RL in Load Line 12 wells LL12-mw-182 (unconsolidated) and LL12mw-186 (bedrock). The reported concentrations show little fluctuation over time. All reported concentrations are below the MCL (200 µg/L) and the PRG (36,000 µg/L). All reported concentrations are above the bedrock and unconsolidated background criterion of “0.”

#### Antimony

Antimony is present above the RL in Load Line 12 wells LL12-mw-182 (unconsolidated) and LL12mw-186 (bedrock). The reported concentrations have declined during the FWGWMP to below the PRG (15 µg/L) and the MCL (6 µg/L). The decline may be related to changes in laboratory reporting limits. All reported concentrations are above the bedrock and unconsolidated background criterion of “0.”

#### Arsenic

Arsenic is present above the RL in Load Line 12 unconsolidated wells LL12mw-153, LL12-mw-182 and bedrock well LL12mw-183. The reported concentrations show wide fluctuation over time without identifiable trend. Reported concentrations are above the MCL (10 µg/L), the PRG (0.007 µg/L), and the background criterion (11.7 µg/L for unconsolidated and “0” for bedrock).

## **Barium**

Barium is present above the RL in Load Line 12 unconsolidated well LL12mw-182. The reported concentrations show little fluctuation over time. The reported concentrations are fluctuating at the unconsolidated background criterion (82.1 µg/L). The reported concentrations are below the MCL (2,000 µg/L) and the PRG (2,600 µg/L).

## **Calcium**

Calcium is present above the RL in Load Line 12 unconsolidated wells LL12mw-153 and LL12-mw-182, and bedrock wells LL12mw-183 and LL12mw-186. All reported concentrations show fluctuation over time without identifiable trend. Reported concentrations in LL12mw-182 are below the unconsolidated background criterion (115,000 µg/L). The reported concentration in LL2mw-153 is above the unconsolidated background criterion. The concentrations of LL12mw-183 and LL12mw-186 are fluctuating at or are above the bedrock background criterion (53,100 µg/L). There are no MCL or PRG criteria for calcium.

## **Cobalt**

Cobalt is present above the RL in Load Line 12 bedrock well LL12mw-186. The reported concentrations show little fluctuation over time. All reported concentrations are below the PRG (730 µg/L) but above the bedrock background criterion of "0." There is no MCL for cobalt.

## **Cyanide**

Cyanide is present above the RL in Load Line 12 bedrock well LL12mw-186. The reported concentrations show little fluctuation over time. All reported concentrations are below the MCL (200 µg/L) and the PRG (730 µg/L).

## **Iron**

Iron is present above the RL in Load Line 12 unconsolidated wells LL12mw-153 and LL12-mw-182, and bedrock wells LL12mw-183 and LL12mw-186. The reported concentrations show fluctuation over time without identifiable trend. Reported concentrations are above the MCL (300 µg/L) and are fluctuating at or are above the unconsolidated background criterion (279 µg/L) and bedrock background criterion (1,430 µg/L). All reported concentrations are below the PRG (11,000 µg/L).

## **Magnesium**

Magnesium is present above the RL in Load Line 12 unconsolidated wells LL12mw-153 and LL12-mw-182, and bedrock wells LL12mw-183 and LL12mw-186. The reported concentrations in all wells show fluctuation over time without identifiable trend. All reported concentrations at or above the background criterion (43,300 µg/L) -



unconsolidated, 15,000 µg/L - bedrock). There are no MCL or PRG criteria for magnesium.

#### **Nickel**

Nickel is present above the RL in Load Line 12 unconsolidated wells LL12mw-153, LL12-mw-182, and bedrock well LL12mw-186. The reported concentrations show minimal fluctuation over time. All reported concentrations are below the MCL (100 µg/L), the PRG (730 µg/L) and above the unconsolidated and bedrock background criterion of "0."

#### **Potassium**

Potassium is present above the RL in Load Line 12 unconsolidated well LL12mw-182 and bedrock well LL12mw-183. The reported concentrations show wide fluctuation over time without identifiable trend. All reported concentrations for LL12mw-182 are above the unconsolidated background criterion (2,890 µg/L). All reported concentrations for LL12mw-183 are below the bedrock background criterion (5,770 µg/L) There is no MCL or PRG for potassium.

### **4.8.2 Semi-Volatile Organic Compounds**

Bis(2-ethylhexyl)phthalate is the only SVOC present above the RL in Load Line 12 unconsolidated wells LL12mw-153 and LL12-mw-182, and bedrock wells LL12mw-183 and LL12mw-186. The reported concentrations fluctuate widely over time without identifiable trend. In all wells the reported concentrations are above and below the PRG (4.8 µg/L). There is no MCL for bis(2-ethylhexyl)phthalate.

## **4.9 Central Burn Pits Area**

Aluminum, antimony, arsenic, barium, calcium, cobalt, iron, magnesium, nickel, potassium, sodium, and bis(2-ethylhexyl)phthalate are reported to be present at concentrations exceeding the respective RL in three or more samples from the Central Burn Pits Area. No VOC, explosive, PCB Arochlor, pesticide or herbicide is reported to be present at concentrations exceeding the respective RL in three or more samples from the Central Burn Pits Area wells.

### **4.9.1 Inorganics**

#### **Aluminum**

Aluminum is present above the RL in Central Burn Pits Area unconsolidated well CBPmw-006. The reported concentrations have fluctuated over time without identifiable trend. The reported concentrations are below the PRG (36,000 µg/L) and fluctuate

1 around the MCL (200 µg/L). All concentrations are below the unconsolidated  
2 background criterion of “0.”

### 3 4 **Antimony**

5  
6 Antimony is present above the RL in Central Burn Pits Area unconsolidated well  
7 CBPmw-007. The reported concentrations have declined during the FWGWMP to below  
8 the PRG (15 µg/L) and the MCL (6 µg/L). The decline may be related to changes in  
9 laboratory reporting limits. All reported concentrations are above the unconsolidated  
10 background criterion of “0”.

### 11 12 **Arsenic**

13  
14 Arsenic is present above the RL in Central Burn Pits Area unconsolidated wells CBPmw-  
15 006 and CBPmw-007. The reported concentrations show wide fluctuation over time with  
16 an increasing trend. Reported concentrations are above the MCL (10 µg/L), the PRG  
17 (0.007 µg/L) and the unconsolidated background criterion (11.7 µg/L).

### 18 19 **Barium**

20  
21 Barium is present above the RL in Central Burn Pits Area unconsolidated well CPBmw-  
22 6. The reported concentrations fluctuate over time without identifiable trend. The  
23 reported concentrations are below the PRG (2,600 µg/L), and the MCL (2,000 µg/L) but  
24 above the unconsolidated background criterion (82.1 µg/L).

### 25 26 **Calcium**

27  
28 Calcium is present above the RL in Central Burn Pits Area unconsolidated wells  
29 CBPmw-006 and CBPmw-007. The reported concentrations show fluctuation over time  
30 without identifiable trend. Reported concentrations in well CBPmw-007 are above the  
31 unconsolidated background criterion (115,000 µg/L) but the concentrations in CBPmw-  
32 006 are below background. There are no MCL or PRG criteria for calcium.

### 33 34 **Cobalt**

35  
36 Cobalt is present above the RL in Central Burn Pits Area unconsolidated well CBPmw-  
37 007. The reported concentrations show fluctuation over time without identifiable trend.  
38 All reported concentrations are below the PRG (730 µg/L) but above the unconsolidated  
39 background criterion of “0.” There is no MCL for cobalt.

### 40 41 **Iron**

42  
43 Iron is present above the RL in Central Burn Pits Area unconsolidated wells CBPmw-006  
44 and CBPmw-007. The reported concentrations show significant fluctuation over time  
45 without identifiable trend. Reported concentrations are above the MCL (300 µg/L) and

unconsolidated background criterion (279 µg/L). All reported concentrations are below the PRG (11,000 µg/L).

#### **Magnesium**

Magnesium is present above the RL in Central Burn Pits Area unconsolidated wells CPBmw-006 and CBPmw-007. The reported concentrations fluctuate over time without identifiable trend. The reported concentrations in well CBPmw-007 are above the unconsolidated background criterion (43,300 µg/L) but the reported concentrations in well CPBmw-006 are below the unconsolidated background criterion. There is not MCL or PRG.

#### **Nickel**

Nickel is present above the RL in Central Burn Pits Area unconsolidated wells CBPmw-006 and CBPmw-007. The reported concentrations show fluctuation over time without identifiable trend. All reported concentrations are below the MCL (100 µg/L), the PRG (730 µg/L) and above the unconsolidated background criterion of "0."

#### **Potassium**

Potassium is present above the RL in Central Burn Pits Area unconsolidated well CBPmw-007. The reported concentrations show fluctuation over time with a declining trend. All reported concentrations are above the unconsolidated background criterion (2,890 µg/L). There is no MCL or PRG for potassium.

#### **Sodium**

Sodium is present above the RL in Central Burn Pits Area unconsolidated well CBPmw-007. The reported concentrations show fluctuation over time with a declining trend. All concentrations are above the unconsolidated background criterion (45,700 µg/L). There are no MCL or PRG criteria for sodium.

### **4.9.2 Semi-Volatile Organic Compounds**

Bis(2-ethylhexyl)phthalate is the only SVOC present above the RL in Central Burn Pits Area unconsolidated well CBPmw-007. The reported concentrations fluctuate widely over time without identifiable trend. The reported concentrations are above and below the PRG (4.8 µg/L). There is no MCL for bis(2-ethylhexyl)phthalate.

### **4.10 Demolition Area #2**

Arsenic, calcium, iron, magnesium, bis(2-ethylhexyl)phthalate HMX and RDX are reported to be present at concentrations exceeding the respective RL in three or more samples from the Demolition Area #2 wells. No VOC, PCB Arochlor, pesticide or

herbicide is reported to be present at concentrations exceeding the respective RL in three or more samples from Demolition Area #2 wells.

#### **4.10.1 Inorganics**

##### **Arsenic**

Arsenic is present above the RL in Demolition Area #2 unconsolidated wells DA2mw-107 and DETmw-003. The reported concentrations show fluctuation over time without identifiable trend. Reported concentrations are generally below the MCL (10 µg/L) and the unconsolidated background criterion (11.7 µg/L). All reported concentrations are above the PRG (0.045 µg/L).

##### **Calcium**

Calcium is present above the RL in Demolition Area #2 unconsolidated wells DA2mw-107, DETmw-003 and DETmw-004. The reported concentrations show fluctuation over time without identifiable trend. Reported concentrations in well DETmw-004 are above the unconsolidated background criterion (115,000 µg/L). Reported concentrations in wells DA2mw-107 and DETmw-003 are below the background criterion. There are no MCL or PRG criteria for calcium.

##### **Iron**

Iron is present above the RL in Demolition Area #2 unconsolidated wells DA2mw-107, DETmw-003, and DETmw-004. The reported concentrations show fluctuation over time without identifiable trend. Reported concentrations are above the MCL (300 µg/L) and unconsolidated background criterion (279 µg/L). All reported concentrations are below the PRG (11,000 ug/L).

##### **Magnesium**

Magnesium is present above the RL in Demolition Area #2 unconsolidated wells DA2mw-107, DETmw-003 and DETmw-004. The reported concentrations in all wells show fluctuation over time without identifiable trend. All reported concentrations are at or below the unconsolidated background criterion (43,300 µg/L). There are no MCL or PRG criteria for magnesium.

#### **4.10.2 Semi-Volatile Organic Compounds**

Bis(2-ethylhexyl)phthalate is the only SVOC present above the RL in Demolition Area #2 unconsolidated wells DA2mw-107, DETmw-003 and DETmw-004. The reported concentrations fluctuate widely in all three wells over time without identifiable trend. In all wells the reported concentrations are above and below the PRG (4.8 µg/L). There is no MCL for bis(2-ethylhexyl)phthalate.

### 4.10.3 Explosives

#### HMX

HMX is present above the RL in Demolition Area #2 unconsolidated well DETmw-004. The reported concentrations show minimal fluctuation over time. All reported concentrations are below the PRG (1,800 µg/L). There is no MCL for HMX.

#### RDX

RDX is present above the RL in Demolition Area #2 unconsolidated well DETmw-004. The reported concentrations show fluctuation over time without identifiable trend. All concentrations are below the PRG (0.61 µg/L). There is no MCL for RDX.

## 4.11 Ramsdell Quarry Landfill

Arsenic, barium, calcium, cobalt, iron, magnesium, manganese, nickel, potassium, thallium, bis(2-ethylhexyl)phthalate, and 1,3,5-trinitrobenzene are reported to be present at concentrations exceeding the respective RL in three or more samples from Ramsdell Quarry Landfill wells. No VOC, PCB Arochlor, pesticide or herbicide is reported to be present at concentrations exceeding the respective RL in three or more samples from Ramsdell Quarry Landfill wells.

### 4.11.1 Inorganics

#### Arsenic

Arsenic is present above the RL in Ramsdell Quarry Landfill bedrock wells RQLmw-007, RQLmw-008 and RQLmw-009. The reported concentrations show fluctuation over time without identifiable trend. Reported concentrations are above the MCL (10 µg/L), the PRG (0.045 µg/L) and the bedrock background criterion of "0."

#### Barium

Barium is present above the RL in Ramsdell Quarry Landfill bedrock well RQLmw-008. The reported concentrations show seasonal fluctuation over time with a declining trend. The reported concentrations are below the MCL (2,000 µg/L), the PRG (2,600 µg/L) and the bedrock background criterion (256 µg/L).

#### Calcium

Calcium is present above the RL in Ramsdell Quarry Landfill bedrock wells RQLmw-007 and RQLmw-008. The reported concentrations show fluctuation over time without identifiable trend. All reported concentrations are above the bedrock background criterion (53,100 µg/L). There are no MCL or PRG criteria for calcium.

## **Cobalt**

Cobalt is present above the RL in Ramsdell Quarry Landfill bedrock wells RQLmw-007, RQLmw-008 and RQLmw-009. The reported concentrations show minimal fluctuation over time. All reported concentrations are below the PRG (730 µg/L) but above the bedrock background criterion of “0.” There is no MCL for cobalt.

## **Iron**

Iron is present above the RL in Ramsdell Quarry Landfill bedrock wells RQLmw-007, RQLmw-008 and RQLmw-009. The reported concentrations show fluctuation over time without identifiable trend. Reported concentrations are generally above the MCL (300 µg/L), the PRG (11,000 µg/L) and bedrock background criterion (1,430 µg/L).

## **Magnesium**

Magnesium is present above the RL in Ramsdell Quarry Landfill bedrock wells RQLmw-007, RQLmw-008 and RQLmw-009. The reported concentrations in all wells show wide fluctuation over time without identifiable trend. All reported concentrations are above the bedrock background criterion (15,000 µg/L). There are no MCL or PRG criteria for magnesium.

## **Manganese**

Manganese is present above the RL in Ramsdell Quarry Landfill bedrock wells RQLmw-007 and RQLmw-009. The reported concentrations fluctuate widely over time without identifiable trend. Reported concentrations are above the MCL (50 µg/L), the PRG (880 µg/L) and the bedrock background criterion (1,340 µg/L).

## **Nickel**

Nickel is present above the RL in Ramsdell Quarry Landfill bedrock wells RQLmw-007, RQLmw-008 and RQLmw-009. The reported concentrations show minimal fluctuation over time. All reported concentrations are below the MCL (100 µg/L), the PRG (730 µg/L) and bedrock background criterion (83.4 µg/L).

## **Potassium**

Potassium is present above the RL in Ramsdell Quarry Landfill bedrock wells RQLmw-007, RQLmw-008 and RQLmw-009. The reported concentrations show fluctuation over time with a declining trend. Reported concentrations are at or above the bedrock background criterion (5,770 µg/L). There is no MCL or PRG for potassium.

## **Thallium**

Thallium is present above the RL in Ramsdell Quarry Landfill bedrock wells RQLmw-007 and RQLmw-009. The reported concentrations fluctuate over time without identifiable trend. All reported concentrations are below the MCL (2 µg/L) and the PRG (2.4 µg/L) but above the bedrock background criterion of “0.”

### **4.11.2 Semi-Volatile Organic Compounds**

Bis(2-ethylhexyl)phthalate is the only SVOC present above the RL in Ramsdell Quarry Landfill bedrock wells RQLmw-007, RQLmw-008 and RQLmw-009. The reported concentrations fluctuate widely in all three wells over time without identifiable trend. In all wells the reported concentrations are above and below the PRG (4.8 µg/L). There is no MCL for bis(2-ethylhexyl)phthalate.

### **4.11.3 Explosives**

1,3,5-Trinitrobenzene is the only explosive present above the RL in Ramsdell Quarry Landfill bedrock well RQLmw-008. The reported concentrations show minimal fluctuation. All concentrations are below the PRG (1,100 µg/L). There is no MCL for 1,3,5-trinitrobenzene.

## **4.12 Winklepeck Burning Grounds**

Aluminum, antimony, calcium, iron, magnesium, thallium, bis(2-ethylhexyl)phthalate, HMX and RDX are reported to be present at concentrations exceeding the respective RL in three or more samples from the Winklepeck Burning Grounds wells. No VOC, PCB Arochlor, pesticide or herbicide is reported to be present at concentrations exceeding the respective RL in three or more samples from Winklepeck Burning Grounds wells.

### **4.12.1 Inorganics**

#### **Aluminum**

Aluminum is present above the RL in Winklepeck Burning Grounds unconsolidated well WBGmw-009. The reported concentrations show fluctuation over time with a declining trend. Reported concentrations are below the MCL (200 µg/L) and the PRG (36,000 µg/L). All reported concentrations are above the unconsolidated background criterion of “0.”

#### **Calcium**

Calcium is present above the RL in Winklepeck Burning Grounds unconsolidated wells WBGmw-006, WBGmw-007, and WBGmw-009. The reported concentrations show fluctuation over time without identifiable trend. All reported concentrations are below

the unconsolidated background criterion (115,000 µg/L). There are no MCL or PRG criteria for calcium.

### **Iron**

Iron is present above the RL in Winklepeck Burning Grounds unconsolidated wells WBGmw-007 and WBGmw-009. The reported concentrations show little fluctuation over time. Reported concentrations fluctuate around the MCL (300 ug/L) and the unconsolidated background criterion (279 ug/L). All reported concentrations are below the PRG (11,000 µg/L).

### **Magnesium**

Magnesium is present above the RL in Winklepeck Burning Grounds unconsolidated wells WBGmw-006, WBGmw-007, and WBGmw-009. The reported concentrations fluctuate over time without identifiable trend. All reported concentrations are below the unconsolidated background criterion (43,300 µg/L). There are no MCL or PRG criteria for magnesium.

### **Thallium**

Thallium is present above the RL in Winklepeck Burning Grounds unconsolidated well WBGmw-006. The reported concentrations fluctuate over time without identifiable trend. All reported concentrations are below the MCL (2 µg/L) and the PRG (2.4 µg/L) but above the unconsolidated background criterion of “0.”

## **4.12.2 Semi-Volatile Organic Compounds**

Bis(2-ethylhexyl)phthalate is the only SVOC present above the RL in Winklepeck Burning Grounds unconsolidated wells WBGmw-006, WBGmw-007 and WBGmw-009. The reported concentrations fluctuate widely over time without identifiable trend. In all wells the reported concentrations are above and below the PRG (4.8 µg/L). There is no MCL for bis(2-ethylhexyl)phthalate.

## **4.12.3 Explosives**

### **HMX**

HMX is present above the RL in Winklepeck Burning Grounds unconsolidated wells WBGmw-006 and WBGmw-009. The reported concentrations show minimal fluctuation over time. All reported concentrations are below the PRG (1,800 µg/L). There is no MCL for HMX.



## **RDX**

RDX is present above the RL in Winklepeck Burning Grounds unconsolidated wells WBGmw-006 and WBGmw-009. The reported concentrations show fluctuation over time without identifiable trend in WBGmw-009. A declining trend is evident over time in WBGmw-006. All concentrations are above the PRG (0.61 µg/L). There is no MCL for RDX.

### **4.13 MCL and Region 9 PRG Exceedances**

Table 4-5 (page 74) lists all wells and compounds or elements of concern reported to be present in samples collected during the FWGMP in October 2007 and January, March and July 2008 at concentrations greater than either the MCLs or the PRGs. This section summarizes those conditions and is presented by analyte group (e.g., inorganics, explosives, etc.). No VOC was reported to be present in any well at concentrations greater than its respective MCL or PRG. Perchlorate was not reported to be present above the PRG in any sample. There is no MCL for perchlorate.

#### **4.13.1 Inorganics**

Aluminum (17 wells), arsenic (67 wells), iron (95 wells), lead (2 wells) and manganese (112 wells) are the only inorganics reported to be present in samples at concentrations exceeding either MCLs or PRGs. One or more of these inorganics was present above MCLs or PRGs during at least one sample event in 130 wells. As general observations: 1) the aluminum MCL (200 µg/L) was exceeded but not the PRG (36,000 µg/L); 2) arsenic concentrations exceeded the PRG (0.045 µg/L) but not the MCL (10 µg/L); 3) iron concentrations exceeded the MCL (300 µg/L) but not the PRG (11,000 µg/L); and 4) lead concentrations exceeded the MCL (15 µg/L) and there is no PRG; and 5) manganese concentrations exceeded both the MCL (50 µg/L) and the PRG (880 µg/L).

#### **4.13.2 Semivolatile Organic Compounds**

Bis(2-ethylhexyl)phthalate (LL1mw-065, LL2mw-270, LL12mw-189, CPmw-002, CPmw-006, EBGmw-129, FBQmw-166, and MBSmw-001), pentachlorophenol (LL2mw-270), indeno(1,2,3-cd) (B12mw-010)pyrene, dibenzo(a)anthracene (CPmw-006) are the only SVOCs reported to be present in samples at concentrations exceeding their respective PRGs. There are no MCLs for any of these SVOCs.

#### **4.13.3 Pesticides and Herbicides**

beta-BHC (LL3mw-237, LL12mw-188, FBQmw-174, and RQLmw-017), heptachlor epoxide (LL12mw-184), and toxaphene (RQLmw-008) are the only pesticides and herbicides reported to be present in samples at concentrations exceeding their respective PRGs. There are no MCLs for any of these pesticides and herbicides.

1 **4.13.4 Explosives and Propellants**

2  
3 1,3-Dinitrobenzene (LL2mw-238), 2,4-dinitrobenzene (LL2mw-238), 4-nitrotoluene  
4 (LL2mw-238), 2,4,6-Trinitrobenzene (LL1mw-083), 2,4,6-TNT (LL3mw-237 and  
5 LL3mw241), HMX (LL1mw-063), and RDX (LL2mw-238, LL3mw241, WBGmw-006,  
6 and WBGmw-009) are the only explosives and propellants reported to be present in  
7 samples at concentrations exceeding the respective PRGs. There are no MCLs for these  
8 explosives and propellants.

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10 **4.13.5 PCBs**

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12 The PCB Arochlor 1242 was reported to be present in the sample from well DA2mw-104  
13 at a concentration above the PRG. There is no MCL for PCBs.

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16 **4.14 Assessment of Groundwater Remedial Action Effectiveness**

17  
18 Groundwater remedial actions have not been performed to date at RVAAP and therefore  
19 are not discussed in this report.

## SECTION 5

### FWGWMP ANNUAL RECOMMENDATIONS/REVIEW

#### 5.1 FWGWMP Annual Recommendations

It is recommended that the FWGWMP groundwater monitoring continue as scheduled until all FWGWMP wells at the facility have been sampled and analyzed a minimum of 4 quarters.

#### 5.2 Background Well Issues

Previous discussions between the Army and the Ohio EPA have dealt with concerns that the background wells may have been impacted by the facility. The specific issues related to the background wells at RVAAP include the presence of explosives and the exceedance of health/aesthetic criteria (MCLs). An additional question is related to the presence of naturally occurring elements (e.g., aluminum, copper, nickel, etc) previously establish to have a "0" background concentration in background wells. Prior to addressing the concern that background needs to be re-evaluated, it is necessary to point out that the background data are not conclusive that explosives are present. While a few explosive compounds have been reported in samples at estimated ("J") concentrations, these reports are isolated and not recurrent. Background wells can be used to address one or both of the following: 1) define regional water-quality conditions without the effects of human activities and 2) define the quality of groundwater flowing into an area of interest (e.g., AOC) from a neighboring site that may show effects of outside actions (i.e., groundwater contaminated from other sources). The Army recognizes that there are issues associated with background water-quality data and suggests that background data require re-evaluation. This re-evaluation should include the actual quality of water in the wells and the location of the wells with respect to objective. The Army considers the FWGWMP to be a fluid program allowing for re-evaluation and re-definition. The Army has initiated this re-evaluation with the presentation in October 2007 of the Draft Proposal to Update the Facility-Wide Ground Water Monitoring Program. The major premise of this document is that previous interpretations of the groundwater regime at RVAAP are not completely accurate. If the Ohio EPA agrees with this conclusion and the subsequent reinterpretation of groundwater flow systems, the locations and objectives of background wells can be re-considered. Inspection of the locations of background wells in relationship to the newly interpreted groundwater flow regime (as described in the Annual Report) suggests that only wells BKGmw-005, BKGmw-006, and BKGmw-018 may be located to establish unaffected regional water-quality conditions. All other background wells may be located hydraulically down gradient from activities and practices at RVAAP that may result in measurable affects.

Following the completion of the initial groundwater monitoring for all wells at the facility, the data will be further evaluated as it relates to background issues.

### **5.3 Reporting Limits**

Several analytical methods used to analyze a number of explosives, VOCs, metals, SVOCs, and pesticides currently do not meet the RVAAP QAPP reporting limits or Region 9 preliminary remediation goals (PRGs). Tables listing the reporting limits that currently do not meet the RVAAP QAPP PQLs and/or Region 9 PRG levels are presented in Appendix I.

## SECTION 6

### REFERENCES

Portage Environmental, 2004. *RVAAP Facility-Wide Groundwater Monitoring Program Plan.*

SAIC, 2001. *RVAAP Facility-Wide Sampling and Analysis Plan/Quality Assurance Project Plan.*

SAIC, 2001b. *Phase II Remedial Investigation report for the Winklepeck Burning Grounds at Ravenna Army Ammunition Plant, Ravenna, Ohio.*

SAIC/REIMS, 2005. *Table of Reported Construction Depths from REIMS Information.*

SpecPro, Inc., 2005a. *Facility-Wide Groundwater Monitoring Program Report on the April 2005 Sampling Event, Ravenna Training and Logistics Site / Ravenna Army Ammunition Plant, Ravenna, Ohio.*

SpecPro, Inc., 2005b. *Facility-Wide Groundwater Monitoring Program, Report on the July 2005 Sampling Event, Ravenna Training and Logistics Site/Ravenna Army Ammunition Plant, Ravenna, Ohio*

SpecPro, Inc. 2006a. *Facility-Wide Groundwater Monitoring Program, Annual Report for 2005, Ravenna Training and Logistics Site/Ravenna Army Ammunition Plant, Ravenna, Ohio*

SpecPro, Inc. 2006b. *Facility-Wide Groundwater Monitoring Program, Report on the March 2006 Sampling Event, Ravenna Army Ammunition Plant, Ravenna, Ohio*

SpecPro, Inc. 2006c. *Facility-Wide Groundwater Monitoring Program, Report on the May 2006 Sampling Event, Ravenna Army Ammunition Plant, Ravenna, Ohio*

SpecPro, Inc. 2006d. (Draft) *Facility-Wide Groundwater Monitoring Program, Annual Report for 2006, Ravenna Army Ammunition Plant, Ravenna, Ohio*

SpecPro, Inc. 2007a. *Facility-Wide Groundwater Monitoring Program, Report on the July 2006 Sampling Event, Ravenna Army Ammunition Plant, Ravenna, Ohio*

SpecPro, Inc. 2007b. *Facility-Wide Groundwater Monitoring Program, Report on the October 2006 Sampling Event, Ravenna Army Ammunition Plant, Ravenna, Ohio*

SpecPro, Inc. 2007c. *Facility- Wide Groundwater Monitoring Program, Report on the January 2006 Sampling Event, Ravenna Army Ammunition Plant, Ravenna, Ohio.*

1 Environmental Quality Management, Inc. 2007d. *Facility- Wide Groundwater*  
2 *Monitoring Program, Report on the April 2007 Sampling Event, Ravenna Army*  
3 *Ammunition Plant, Ravenna, Ohio.*

4  
5 Environmental Quality Management, Inc. 2007e. *Facility- Wide Groundwater*  
6 *Monitoring Program, Report on the July 2007 Sampling Event, Ravenna Army*  
7 *Ammunition Plant, Ravenna, Ohio.*

8  
9 Environmental Quality Management, Inc. 2007f, *Facility- Wide Groundwater Monitoring*  
10 *Program, Report on the October 2007 Sampling Event, Ravenna Army Ammunition*  
11 *Plant, Ravenna, Ohio.*

12  
13 Environmental Quality Management, Inc. 2008g, *Facility- Wide Groundwater*  
14 *Monitoring Program, Report on the January 2008 Sampling Event, Ravenna Army*  
15 *Ammunition Plant, Ravenna, Ohio.*

16  
17 Environmental Quality Management, Inc. 2008h, *Facility- Wide Groundwater*  
18 *Monitoring Program, Report on the April 2008 Sampling Event, Ravenna Army*  
19 *Ammunition Plant, Ravenna, Ohio.*

20  
21 Environmental Quality Management, Inc. 2008h, *Draft Facility- Wide Groundwater*  
22 *Monitoring Program, Report on the July 2008 Sampling Event, Ravenna Army*  
23 *Ammunition Plant, Ravenna, Ohio.*

24  
25 U.S. Army Corps of Engineers. October 2007. *Draft Proposal to Update the Facility-*  
26 *Wide Ground Water Monitoring Program.*

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**APPENDIX A**

**CORRESPONDENCE DOCUMENTING THE CHANGE IN WELLS TO BE  
SAMPLED IN 2008**



**DEPARTMENT OF THE ARMY**  
U.S. ARMY ENGINEER DISTRICT, LOUISVILLE  
CORPS OF ENGINEERS  
P.O. BOX 59  
LOUISVILLE, KENTUCKY 40201-0059

December 12, 2007

Engineering Division

Vicki Deppisch  
Ohio Environmental Protection Agency  
Northeast District Office  
2110 East Aurora Road  
Twinsburg, OH 44087

Dear Ms. Deppisch:

Re: Notification of Annual Sampling Schedule  
Facility-wide Ground water Monitoring Program  
Ravenna Army Ammunition Plant  
Portage/Trumbull Counties, Ohio

This letter is to serve as notification that the United States Army Corps of Engineers (USACE) will be changing the sampling frequency of 36 of the existing Facility-wide Ground Water Monitoring Program (FWGWMP) wells from quarterly sampling to annual sampling. As we discussed yesterday, this change is in accordance with Section 4.2, Sampling Frequency, on page 4-5 of the September 2004 Facility-wide Ground Water Monitoring Program Plan (FWGWMPP), which states that the initial monitoring frequency for the FWGWMP wells will be three consecutive quarters, and then it will revert to annual sampling, except for the OD#2 and RQL wells, which will be sampled semi-annually. Our next sampling event for the 36 current FWGWMP wells will occur in October 2008.

During the January, April, and July 2008 sampling events, USACE will sample other monitoring wells that have only been sampled during the Remedial Investigations at Load Lines 1, 2, 3, 4, and 12. These wells are identified in the last column of Table 4 in the October 22, 2007 document entitled "Draft Proposal to Update the Facility-wide Ground Water Monitoring Program", where they are numbered "1" through "36". Throughout this process, USACE will continue to comply with the sampling frequency requirements for the Ramsdell Quarry Landfill and Open Demolition Area #2 wells.

We appreciate your assistance with this matter. Copies have been provided to Eileen Mohr and Bonnie Buthker of Ohio EPA, Glen Beckham, USACE (via email) and John Miller, EQM (via email) and Mark Krivanski USAEC (via email) and Katie Elgin, OHARNG RTLS (via email). Please call Rick Hockett at 502.315.6329 if you have any questions or comments regarding this matter.

Sincerely,

Richard B. Hockett, P.G.  
Geologist, Environmental Branch  
Louisville District



**Subject:** FW: FWGWMP modifications

**From:** "Hockett, Rick B LRL" <Rick.B.Hockett@usace.army.mil>

**Date:** Tue, 8 Jan 2008 14:10:27 -0500

**To:** "John Miller" <jmiller@eqm.com>

Oops! I meant to copy you on this.

Rick

-----Original Message-----

From: Hockett, Rick B LRL

Sent: Tuesday, January 08, 2008 2:08 PM

To: 'Vicki Deppisch'

Cc: 'Eileen Mohr'; Beckham, Glen LRL; Ries, Cynthia A LRL; Chanda, Thomas M LRL; 'Patterson, Mark C Mr CIV USA OSA'; 'Krivansky, Mark E USAEC'

Subject: FWGWMP modifications

Vicki:

Just got back from lunch and listened to your voice mail message regarding the proposed changes to the FWGWMP. Sounds good! To summarize:

1. New well sampling. It's okay to proceed with rotating the new wells into the January sampling event, and not sample the "old" wells - those which have been sampled quarterly since 2005. The new wells will be all of the non-FWGWMP wells from LL-1, LL-2, LL-3, LL-4, and all but one of the non-FWGWMP wells at LL-12.

2. Annual sampling on old wells. You would prefer to not perform annual sampling on the old wells in October 2008, because that would interrupt the quarterly sampling pattern on the new wells. I agree. We will do four consecutive sampling events on the new wells; January, April, July, and October 2008.

3. Sampling order selection criteria. You requested that we provide a description of how the 196 wells were ordered for sampling (per table 4 of the Draft Proposal to Update the FWGWMP). In a nutshell, I thought it made the most sense to do the major load lines first (LL-1, LL-2, LL-3, LL-4, and LL-12), and then follow that effort with the remaining wells. In order to simplify things for the sampling team, I kept all wells at each AOC together, so that the samplers will not be visiting sites all over the facility during each event. That approach also makes the ground water elevation measurements more useable, since all wells at a given AOC that is being sampled will be measured, and we'll get a good snapshot of the ground water flow conditions at that AOC. That's really about all there was to it - there's just not a lot more to base the sampling order on.

4. Perchlorate. You are not comfortable that the perchlorate sampling performed on the October 2008 ground water samples is sufficient to end the perchlorate sampling altogether. You suggested that we discuss a strategy for additional sampling. I suggest that each time we rotate a new group of wells through the four quarters of sampling, that we sample for perchlorate during one of those events. I would prefer that it not be the first event of the four, other than that, I think we should sample at the second, third, or fourth quarterly event. Let's do each well once, and then evaluate the perchlorate data at the end of the sampling along with all of the other ground water quality data.

You didn't specifically mention it, but it's worth noting that we will continue to sample the five RCRA wells at RQL and ODA#2 on a semi-annual basis - no changes there at all.

Please let me know if any of this isn't correct.

FW: FWGWMP modifications

Thanks.

Rick

Richard B. Hockett, P.G.  
Environmental Branch  
Louisville District  
US Army Corps of Engineers

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**APPENDIX B**  
**LIST OF WELLS SAMPLED**

**FWGWMP Wells Sampled During Reporting Period**

Area	Well	October 2007	January 2008	April 2008	July 2008
Background Wells	BKGmw-004	X			
	BKGmw-005	X			
	BKGmw-006	X			
	BKGmw-008	X			
	BKGmw-012	X			
	BKGmw-013	X			
	BKGmw-015	X			
	BKGmw-016	X			
	BKGmw-017	X			
	BKGmw-018	X			
	BKGmw-019	X			
	BKGmw-020	X			
	BKGmw-021	X			
Load Line 1	LL1mw-063		X	X	X
	LL1mw-064			X	X
	LL1mw-065		X	X	X
	LL1mw-078	X			
	LL1mw-079		X	X	X
	LL1mw-080	X			
	LL1mw-083	X			
Load Line 2	LL2mw-059	X			
	LL2mw-060		X	X	X
	LL2mw-261		X	X	X
	LL2mw-262	X			
	LL2mw-263	X			
	LL2mw-264		X	X	X
	LL2mw-265		X	X	X
	LL2mw-268		X	X	X
	LL2mw-270		X	X	X
Load Line 3	LL3mw-232		X	X	X
	LL3mw-233		X	X	X
	LL3mw-234		X	X	X
	LL3mw-235		X	X	X
	LL3mw-237		X	X	X
	LL3mw-238	X			
	LL3mw-240		X	X	X
	LL3mw-241		X	X	X
	LL3mw-242	X			
Load Line 4	LL3mw-243		X	X	X
	LL4mw-193		X	X	X
	LL4mw-194		X	X	X
	LL4mw-195		X	X	X
	LL4mw-198	X			
	LL4mw-199	X			
	LL4mw-200			X	X

**FWGWMP Wells Sampled During Reporting Period**

Area	Well	October 2007	January 2008	April 2008	July 2008
Load Line 5	LL5mw-001			X	X
	LL5mw-002			X	X
	LL5mw-003			X	X
	LL5mw-004			X	X
	LL5mw-005			X	X
	LL5mw-006			X	X
Load Line 6	LL6mw-001			X	X
	LL6mw-002			X	X
	LL6mw-003			X	X
	LL6mw-004				X
Load Line 11	LL11mw-002	X			
	LL11mw-007	X			
Load Line 12	LL12mw-088		X	X	X
	LL12mw-107		X	X	X
	LL12mw-113		X	X	X
	LL12mw-128		X	X	X
	LL12mw-153	X			
	LL12mw-154		X	X	X
	LL12mw-182	X			
	LL12mw-183	X			
	LL12mw-184		X	X	X
	LL12mw-185		X	X	X
	LL12mw-186	X			
	LL12mw-187		X	X	X
	LL12mw-188		X	X	X
	LL12mw-189			X	X
	LL12mw-242		X	X	X
	LL12mw-243		X	X	X
	LL12mw-244		X	X	X
	LL12mw-245		X	X	X
	LL12mw-246		X	X	X
Building 1200	B12mw-010			X	X
	B12mw-011			X	X
	B12mw-012			X	X
C-Block Quarry	CBLmw-001			X	X
	CBLmw-002			X	X
	CBLmw-003			X	X
	CBLmw-004			X	X
Central Burn Pits	CBPmw-001			X	X
	CBPmw-002			X	X
	CBPmw-003			X	X
	CBPmw-004			X	X
	CBPmw-006	X		X	X
	CBPmw-007	X			
	CBPmw-008			X	X
Cobbs Pond	CPmw-001			X	X
	CPmw-002			X	X
	CPmw-003			X	X
	CPmw-004			X	X
	CPmw-005			X	X
	CPmw-006			X	X

## FWGWMP Wells Sampled During Reporting Period

Area	Well	October 2007	January 2008	April 2008	July 2008
Demolition Area #2	DA2mw-104			X	X
	DA2mw-105			X	X
	DA2mw-106			X	X
	DA2mw-107	X			
	DA2mw-108			X	X
	DA2mw-109			X	X
	DA2mw-110			X	X
	DA2mw-111			X	X
	DA2mw-112			X	X
	DA2mw-113			X	X
	DETmw-003	X		X	
	DETmw-004	X		X	
Erie Burning Grounds	EBGmw-123			X	X
	EBGmw-124			X	X
	EBGmw-125			X	X
	EBGmw-126			X	X
	EBGmw-127			X	X
	EBGmw-128			X	X
	EBGmw-129			X	X
	EBGmw-130			X	X
	FBQmw-166			X	X
	FBQmw-167			X	X
Fuse & Booster Quarry	FBQmw-168			X	X
	FBQmw-169			X	X
	FBQmw-170			X	X
	FBQmw-171			X	X
	FBQmw-172			X	X
	FBQmw-173			X	X
	FBQmw-174			X	X
	FBQmw-175			X	X
	FBQmw-176			X	X
	FBQmw-177			X	X
	LNWmw-024			X	X
Landfill North of Winklepeck	LNWmw-025			X	X
	LNWmw-026			X	X
	LNWmw-027			X	X
	LNWmw-028			X	X
Suspected Mustard Agent	MBSmw-001			X	X
	MBSmw-002			X	X
	MBSmw-003			X	X
	MBSmw-004			X	X
	MBSmw-005			X	X
	MBSmw-006			X	X
NACA Test Area	NTAmw-107			X	X
	NTAmw-108			X	X
	NTAmw-109			X	X
	NTAmw-110			X	X
	NTAmw-111			X	X
	NTAmw-112			X	X
	NTAmw-113			X	X
	NTAmw-114			X	X
	NTAmw-115			X	X
	NTAmw-116			X	X
	NTAmw-117			X	X
	NTAmw-118			X	X

*RVAAP Facility-Wide Groundwater Monitoring Program 2008 Annual Report*

**FWGWMP Wells Sampled During Reporting Period**

<b>Area</b>	<b>Well</b>	<b>October 2007</b>	<b>January 2008</b>	<b>April 2008</b>	<b>July 2008</b>
Ramsdell Quarry Landfill	RQLmw-007	X		X	
	RQLmw-008	X		X	
	RQLmw-009	X		X	
	RQLmw-012			X	X
	RQLmw-013			X	X
	RQLmw-014			X	X
	RQLmw-015			X	X
	RQLmw-016			X	X
	RQLmw-017			X	X
Winklepeck Burning Ground	WBGmw-005			X	X
	WBGmw-006	X			
	WBGmw-007	X			
	WBGmw-009	X			
	WBGmw-010			X	X
	WBGmw-011			X	X
	WBGmw-012			X	X
	WBGmw-013			X	X
	WBGmw-014			X	X
	WBGmw-015			X	X
	WBGmw-016			X	X
	WBGmw-017			X	X
<b>Total Number of Wells Sampled</b>		<b>40</b>	<b>36</b>	<b>136</b>	<b>132</b>

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## **APPENDIX C**

### **PERCHLORATE ADDENDUM AND OHIO EPA APPROVAL LETTER**





State of Ohio Environmental Protection Agency

Northeast District Office

2110 East Aurora Rd.  
Twinsburg, Ohio 44087

TELE: (330) 963-1200 FAX: (330) 487-0769  
www.epa.state.oh.us

Ted Strickland, Governor  
Lee Fisher, Lieutenant Governor  
Chris Korleski, Director

August 6, 2007

RE: RAVENNA ARMY AMMUNITION PLANT,  
PROTAG/TRUMBULL COUNTIES,  
PERCHLORATE ANALYSIS ADDENDUM,  
DATED AUGUST 1, 2007

Mr. Irv Venger  
Environmental Program Manager  
Ravenna Army Ammunition Plant  
8451 State Route 5  
Ravenna, OH 44266

CERTIFIED MAIL

Dear Mr. Venger:

The Ohio Environmental Protection Agency (Ohio EPA) has received and reviewed the "Perchlorate Analysis Addendum" for the Facility-Wide Groundwater Monitoring Program at the Ravenna Army Ammunition Plant, Ravenna, Ohio. This document was received at Ohio EPA, Northeast District Office (NEDO), Division of Emergency and Remedial Response (DERR) on August 2, 2007. The document was prepared for the U.S. Army Corps of Engineers (USACE) – Louisville District, by Environmental Quality Management, Inc., under contract no. W912QR-04-D-0036. The addendum states the perchlorate analysis is scheduled to begin for the October 2007 monitoring event and outlines the sampling and analysis protocol.

Ohio EPA concurs with the perchlorate addendum. Please forward a copy of the addendum to all other stakeholders, to ensure that their comments will be incorporated. If you have any questions, please call me at (330) 963-1207.

Sincerely,

Vicki Deppisch  
Project Coordinator  
Division of Emergency and Remedial Response

VD/kss

cc: Bonnie Buthker, Ohio EPA, DERR, SWDO  
Eileen Mohr, Ohio EPA, NEDO, DERR  
Katie Elgin, OHARNG RTLS  
Maj. Ed Meade, OHARNG RTLS  
Rick Hockett, USACE Louisville

John Jent, USACE Louisville  
John Miller, EQM  
Mark Krivansky, AEC  
Glen Beckham, USACE Louisville

ec: Mike Eberle, Ohio EPA, NEDO, DERR  
Todd Fisher, Ohio EPA, NEDO, DERR

**PERCHLORATE ANALYSIS ADDENDUM  
FACILITY-WIDE GROUNDWATER MONITORING PROGRAM  
RAVENNA ARMY AMMUNITION PLANT  
RAVENNA, OHIO  
AUGUST 2007**

During the October 2007 sampling event, the 36 Facility-wide Ground Water Monitoring Program (FWGWMP) wells and the five RCRA wells at ODA#2 and the Ramsdell Quarry Landfill will be sampled for perchlorate analysis. In addition, monitoring well LL-12mw-187 will be sampled for perchlorate and nitrate/nitrite during this sampling event (LL12mw-187 is not currently included in the FWGWMP).

The perchlorate sampling and analysis will be conducted in accordance with the most recent version of the DoD Perchlorate Handbook, with all appropriate QA/QC measures, including duplicates, splits, and MS/MSDs. Control limits for the LCS and MS/MSD will be 80-120%, with RPD criteria set at 15%. Groundwater samples will be collected into laboratory provided, unpreserved 125 ml polyethylene containers using the same low-flow purging technique specified in the FWGWMP utilizing dedicated tubing and submersible pumps which will be properly decontaminated between sample locations. An equipment rinsate blank will be collected daily to determine that decontamination procedures have been effective. All samples shall be filtered in the field at the time of collection using 0.2- $\mu$ m PTFE membrane filters, with a 0.8- $\mu$ m pre-filter, in order to remove potentially perchlorate-degrading microbes. Aliquots for perchlorate analysis will be collected after all other parameters have been sampled for. Adequate headspace (i.e. fill the 125 ml bottle approximately two-thirds full) will be maintained in each sample bottle in an effort to minimize the possibility of anaerobic conditions developing during sample shipment and/or storage. The analytical holding time for perchlorate is 28 days.

Samples will be transported on ice at  $4 \pm 2$  ° C via STL-North Canton laboratory courier directly to their laboratory. STL-North Canton will then ship samples priority overnight, taking steps to maintain sample temperatures at  $4 \pm 2$  ° C, to the STL-Denver laboratory for analysis by SW-846 Method 6860. STL-Denver maintains a NELAC accreditation and routinely performs work per the requirements of the DoD QSM. The laboratory reporting limits will be 0.1  $\mu$ g/L.

The reporting requirements and deliverables for the perchlorate analysis will be the same as specified in the FWGWMP. The results of the perchlorate testing will be verified by qualified EQ personnel and included in the October 2007 Quarterly Sampling Report, and in the 2008 Annual Report.

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**APPENDIX D**  
**BENZOIC ACID APPROVAL LETTER**



State of Ohio Environmental Protection Agency

Northeast District Office

2110 East Aurora Rd.  
Twinsburg, Ohio 44087

TELE: (330) 963-1200 FAX: (330) 487-0769  
www.epa.state.oh.us

Ted Strickland, Governor  
Lee Fisher, Lieutenant Governor  
Chris Korleski, Director

September 18, 2008

RE: RAVENNA ARMY AMMUNITION PLANT,  
PORTAGE/TRUMBULL COUNTIES,  
DRAFT, FWGWMP, ANALYTICAL  
EXCEPTIONS TO THE LOUISVILLE  
CHEMISTRY GUIDELINES (LCG) FOR  
WORK PERFORMED IN SUPPORT OF  
THE GROUND WATER MONITORING  
PROGRAM, DATED AUGUST 4, 2008

Mr. Mark Patterson  
Installation Manager  
Ravenna Army Ammunition Plant  
8451 State Route 5  
Ravenna, OH 44266

**CERTIFIED MAIL**

(7008 0150 0001 7111 1142)

Dear Mr. Patterson:

The Ohio Environmental Protection Agency (Ohio EPA) has received and reviewed the "Analytical Exceptions to the Louisville Chemistry Guidelines (LCG) for Work Performed in Support of the Groundwater Monitoring Program at the Ravenna Army Ammunition Plant" document. The document was received at Ohio EPA, Northeast District Office (NEDO), Division of Emergency and Remedial Response (DERR), on August 4, 2008. The document was prepared for the U.S. Army Corps of Engineers (USACE) – Louisville District, by Environmental Quality Management, Inc. (EQM). This document was reviewed by Ohio EPA personnel in NEDO's DERR.

EQM and Test America Laboratories (TA), North Canton, have requested four variances to the LCG in regards to analytical work performed in support of the Facility-Wide Ground Water Monitoring Program (FWGWMP).

The following are Ohio EPA's comments:

1. The LCG specifies method blank, initial calibration blank, and continuing calibration blank acceptance criteria to be less than one-half the Method Reporting Limit (MRL). EQM is proposing acceptance criteria be revised to less than the MRL.

Ohio EPA's comment: Please have EQM and TA identify and provide a list to Ohio EPA of the chemicals of concern that are problematic for meeting the criteria before a final decision can be made.

2. The LCG specifies that the MRL Level Verification be at least three times the Method Detection Limit (MDL). It also suggests that MRLs be established at approximately one-half the project action level, in this case, the Required Project Quantitation Limits (RPQL). EQM is proposing the laboratory set the MRL standard at the RPQL.

Ohio EPA's comment: Please have EMQ and TA identify and provide a list to Ohio EPA of the chemicals of concern that are problematic for meeting the criteria before a final decision can be made.

3. The LCG allows up to five compounds to meet criteria for the Initial Calibration (IC) and Continuing Calibration Verification (CCV) for 8260 and 8270. The Initial Calibration

MR. MARK PATTERSON, INSTALLATION MANAGER  
RAVANNA ARMY AMMUNITION PLANT  
SEPTEMBER 18, 2008  
PAGE 2

Verification (ICV) for both allow for 5% sporadic marginal failure. EQM is proposing to allow up to five compounds for both methods to meet the expanded criteria in the IC, CCV, and ICV.

Ohio EPA comment: This can be allowed without impacting the overall analysis and allow for more consistent monitoring and evaluation, but the Continuing Calibration Compounds (CCCs) and the System Performance Calibration Compounds (SPCCs) must meet the quality control criteria for 8260 and 8270. Also, any compound that is detected and quantified must meet the quality control criteria for 8260 or 8270.

4. The LCG specifies control limits for Laboratory Control Sample (LCS). The two compounds in question are benzoic acid and hexachlorocyclopentadiene. EQM is proposing to use laboratory in-house limits with the lower acceptance limit set at 10% for these two constituents.

Ohio EPA comment: Benzoic acid is a poor chromatographic compound and does have lower overall recoveries compared to the other compounds in the 8270 method. This compound is not a primary chemical of concern at the RVAAP and historically has not been detected. This compound also has a PRG of 150,000 ug/L and poses little risk. The proposal is acceptable for benzoic acid.

Please ask EQM to verify and provide documentation that hexachlorocyclopentadiene is indeed a compound of concern. A cursory review of the analytical data did not indicate that this compound was a problem.

If you have any questions, please call me at (330) 963-1207.

Sincerely,



Vicki Deppisch  
Project Coordinator  
Division of Emergency and Remedial Response

VD/kss

cc: Bonnie Buthker, Ohio EPA, DERR, SWDO  
Katie Elgin, OHARNG RTLs  
Glen Beckham, USACE Louisville  
Conni McCambridge, Ohio EPA, DERR, NEDO  
Gunars Zikmanis, Ohio EPA, DERR, NEDO

Eileen Mohr, Ohio EPA, DERR, NEDO  
Maj. Ed Meade, OHARNG RTLs  
Derek Kinder, USACE Louisville  
Mark Krivansky, AEC  
John Miller, EQM

ec: Mike Eberle, Ohio EPA, DERR, NEDO

Todd Fisher, Ohio EPA, DERR, NEDO

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**APPENDIX E**  
**WATER LEVEL MEASUREMENT FIELD SHEETS**

# COMPREHENSIVE WATER LEVEL MEASUREMENTS

RVAAP FACILITY-WIDE GROUNDWATER MONITORING PROGRAM

JULY 2008

Well Number	Location	Date	Time	Depth To Water*	Depth to Bottom	Description of bottom	Instrument/Serial Number
MBS MW-004	Suspect Mustard Area	6/30/2008	1205	16.67	26.70	Hard	05767
MBS MW-003	Suspect Mustard Area	6/30/2008	1220	18.53	30.87	Hard	05767
MBS MW-002	Suspect Mustard Area	6/30/2008	1229	18.01	30.52	Hard	05767
MBS MW-005	Suspect Mustard Area	6/30/2008	1232	17.85	30.19	Soft	05767
MBS MW-001	Suspect Mustard Area	6/30/2008	1236	17.59	31.10	Hard	05767
MBS MW-006	Suspect Mustard Area	6/30/2008	1238	17.30	28.30	Medium	05767
NTA MW-107	NACA Test Area	6/30/2008	1300	12.75	24.56	Hard	05767
NTA MW-108	NACA Test Area	6/30/2008	1305	17.79	24.69	Soft	05767
NTA MW-109	NACA Test Area	6/30/2008	1309	12.12	21.10	Hard	05767
NTA MW-110	NACA Test Area	6/30/2008	1315	14.30	29.95	Hard	05767
NTA MW-113	NACA Test Area	6/30/2008	1328	6.95	29.79	Hard	05767
NTA MW-111	NACA Test Area	6/30/2008	1338	3.89	22.28	Hard	05767
NTA MW-118	NACA Test Area	6/30/2008	1345	8.77	24.89	Hard	05767
NTA MW-117	NACA Test Area	6/30/2008	1350	13.65	27.70	Hard	05767
NTA MW-116	NACA Test Area	6/30/2008	1352	6.35	22.76	Hard	05767
NTA MW-115	NACA Test Area	6/30/2008	1356	14.05	25.43	Hard	05767
NTA MW-114	NACA Test Area	6/30/2008	1400	6.17	22.98	Hard	05767
NTA MW-112	NACA Test Area	6/30/2008	1402	8.96	26.84	Hard	05767
BKG MW-016	Background	6/30/2008	1420	6.34	21.35	Hard	05767
BKG MW-005	Background	6/30/2008	1427	12.02	21.07	Hard	05767
BKG MW-017	Background	6/30/2008	1442	18.10	36.15	Hard	05767
CBL MW-001	C-Block Quarry	6/30/2008	1455	40.65	49.95	Hard	05767
CBL MW-002	C-Block Quarry	6/30/2008	1502	35.31	47.52	Hard	05767
CBL MW-004	C-Block Quarry	6/30/2008	1510	33.59	47.22	Hard	05767

\*All measurements from top of casing

# COMPREHENSIVE WATER LEVEL MEASUREMENTS

RVAAP FACILITY-WIDE GROUNDWATER MONITORING PROGRAM

JULY 2008

Well Number	Location	Date	Time	Depth To Water*	Depth to Bottom	Description of bottom	Instrument/Serial Number
CBL MW-003	C-Block Quarry	6/30/2008	1515	33.13	44.92	Hard	05767
BKG MW-019	Background	6/30/2008	1525	19.99	35.85	Hard	05767
LL11 MW-002	Loadline 11	6/30/2008	1536	2.82	16.59	Hard	05767
LL11 MW-001	Loadline 11	6/30/2008	1550	9.74	21.65	Hard	05767
LL11 MW-003	Loadline 11	6/30/2008	1600	2.49	16.22	Hard	05767
LL11 MW-005	Loadline 11	6/30/2008	1605	7.89	16.58	Hard	05767
LL11 MW-006	Loadline 11	6/30/2008	1610	4.71	15.85	Hard	05767
LL11 MW-007	Loadline 11	6/30/2008	1618	14.30	25.46	Hard	05767
LL11 MW-009	Loadline 11	6/30/2008	1628	3.85	19.68	Hard	05767
LL11 MW-008	Loadline 11	6/30/2008	1632	3.04	15.86	Hard	05767
LL11 MW-010	Loadline 11	6/30/2008	1638	4.60	23.60	Hard	05767
LL11 MW-004	Loadline 11	6/30/2008	1645	1.55	16.33	Hard	05767
LL7 MW-001	Loadline 7	6/30/2008	1700	20.26	33.22	Hard	05767
LL7 MW-004	Loadline 7	6/30/2008	1705	14.55	32.38	Hard	05767
LL7 MW-003	Loadline 7	6/30/2008	1717	11.19	33.71	Hard	05767
LL7 MW-006	Loadline 7	6/30/2008	1720	10.92	30.49	Hard	05767
LL7 MW-005	Loadline 7	6/30/2008	1725	21.43	30.53	Hard	05767
LL7 MW-002	Loadline 7	6/30/2008	1730	15.25	27.37	Hard	05767
FBQ MW-177	Fuze and Booster Quarry	7/1/2008	825	12.75	25.04	Soft	05767
FBQ MW-170	Fuze and Booster Quarry	7/1/2008	830	18.64	32.88	Hard	05767
FBQ MW-175	Fuze and Booster Quarry	7/1/2008	834	16.88	26.00	Hard	05767
FBQ MW-174	Fuze and Booster Quarry	7/1/2008	836	16.02	23.04	Hard	05767
FBQ MW-173	Fuze and Booster Quarry	7/1/2008	845	42.25	51.89	Hard	05767
FBQ MW-172	Fuze and Booster Quarry	7/1/2008	854	25.78	34.56	Hard	05767

\*All measurements from top of casing



# COMPREHENSIVE WATER LEVEL MEASUREMENTS

RVAAP FACILITY-WIDE GROUNDWATER MONITORING PROGRAM

JULY 2008

Well Number	Location	Date	Time	Depth To Water*	Depth to Bottom	Description of bottom	Instrument/Serial Number
FBQ MW-171	Fuze and Booster Quarry	7/1/2008	900	18.12	31.60	Hard	05767
FBQ MW-168	Fuze and Booster Quarry	7/1/2008	905	12.24	21.42	Hard	05767
FBQ MW-176	Fuze and Booster Quarry	7/1/2008	910	9.10	24.23	Soft	05767
FBQ MW-169	Fuze and Booster Quarry	7/1/2008	918	6.88	18.26	Hard	05767
FBQ MW-167	Fuze and Booster Quarry	7/1/2008	921	4.89	19.16	Hard	05767
FBQ MW-166	Fuze and Booster Quarry	7/1/2008	930	5.15	19.90	Hard	05767
LL8 MW-001	Loadline 8	7/1/2008	940	11.24	27.09	Soft	05767
LL8 MW-002	Loadline 8	7/1/2008	945	18.03	32.74	Soft	05767
LL8 MW-003	Loadline 8	7/1/2008	950	11.77	23.20	Hard	05767
LL8 MW-004	Loadline 8	7/1/2008	955	10.79	22.87	Medium	05767
LL8 MW-006	Loadline 8	7/1/2008	958	19.75	27.28	Hard	05767
LL8 MW-005	Loadline 8	7/1/2008	1005	13.24	27.34	Hard	05767
LL6 MW-003	Loadline 6	7/1/2008	1015	16.14	25.91	Hard	05767
LL6 MW-005	Loadline 6	7/1/2008	1030	12.20	22.44	Hard	05767
LL6 MW-007	Loadline 6	7/1/2008	1100	6.82	19.53	Hard	05767
LL6 MW-004	Loadline 6	7/1/2008	1110	17.25	24.70	Hard	05767
LL6 MW-002	Loadline 6	7/1/2008	1115	21.19	24.65	Hard	05767
LL6 MW-006	Loadline 6	7/1/2008	1125	14.05	17.95	Hard	05767
LL6 MW-001	Loadline 6	7/1/2008	1140	13.92	17.78	Hard	05767
LL5 MW-002	Loadline 5	7/1/2008	1150	21.90	27.04	Soft	05767
LL5 MW-005	Loadline 5	7/1/2008	1155	21.70	29.89	Hard	05767
LL5 MW-006	Loadline 5	7/1/2008	1200	20.32	27.27	Hard	05767
LL5 MW-004	Loadline 5	7/1/2008	1205	18.15	25.58	Hard	05767
LL5 MW-003	Loadline 5	7/1/2008	1210	19.59	24.15	Hard	05767

\*All measurements from top of casing

# COMPREHENSIVE WATER LEVEL MEASUREMENTS

RVAAP FACILITY-WIDE GROUNDWATER MONITORING PROGRAM

JULY 2008

Well Number	Location	Date	Time	Depth To Water*	Depth to Bottom	Description of bottom	Instrument/Serial Number
LL5 MW-001	Loadline 5	7/1/2008	1215	20.19	27.22	Hard	05767
LL10 MW-004	Loadline 10	7/1/2008	1225	13.38	33.69	Hard	05767
LL10 MW-006	Loadline 10	7/1/2008	1232	12.63	26.67	Hard	05767
LL10 MW-005	Loadline 10	7/1/2008	1240	15.69	29.39	Hard	05767
LL10 MW-002	Loadline 10	7/1/2008	1245	17.69	29.95	Hard	05767
LL10 MW-001	Loadline 10	7/1/2008	1250	23.74	29.74	Hard	05767
LL10 MW-003	Loadline 10	7/1/2008	1255	21.34	28.70	Hard	05767
LL9 MW-001	Loadline 9	7/1/2008	1302	15.79	23.49	Hard	05767
LL9 MW-004	Loadline 9	7/1/2008	1310	20.45	35.83	Hard	05767
LL9 MW-006	Loadline 9	7/1/2008	1315	19.20	28.98	Hard	05767
LL9 MW-007	Loadline 9	7/1/2008	1320	9.57	18.28	Hard	05767
LL9 MW-005	Loadline 9	7/1/2008	1325	16.59	23.66	Hard	05767
LL9 MW-002	Loadline 9	7/1/2008	1330	12.60	22.90	Hard	05767
LL9 MW-003	Loadline 9	7/1/2008	1335	12.70	24.32	Hard	05767
ASY MW-001	Atlas Scrap Yard	7/1/2008	1355	11.43	23.30	Hard	05767
ASY MW-002	Atlas Scrap Yard	7/1/2008	1410	13.64	23.10	Hard	05767
ASY MW-009	Atlas Scrap Yard	7/1/2008	1415	12.29	24.69	Hard	05767
ASY MW-006	Atlas Scrap Yard	7/1/2008	1420	13.62	29.08	Hard	05767
ASY MW-010	Atlas Scrap Yard	7/1/2008	1425	12.84	31.25	Hard	05767
ASY MW-007	Atlas Scrap Yard	7/1/2008	1430	14.69	28.82	Hard	05767
ASY MW-008	Atlas Scrap Yard	7/1/2008	1435	5.56	27.69	Hard	05767
ASY MW-005	Atlas Scrap Yard	7/1/2008	1442	8.18	27.39	Hard	05767
ASY MW-004	Atlas Scrap Yard	7/1/2008	1453	9.42	29.94	Hard	05767
ASY MW-003	Atlas Scrap Yard	7/1/2008	1456	12.40	23.60	Hard	05767

\*All measurements from top of casing

# COMPREHENSIVE WATER LEVEL MEASUREMENTS

RVAAP FACILITY-WIDE GROUNDWATER MONITORING PROGRAM

JULY 2008

Well Number	Location	Date	Time	Depth To Water*	Depth to Bottom	Description of bottom	Instrument/Serial Number
BKG MW-008	Background	7/1/2008	1515	16.69	27.58	Hard	05767
BKG MW-004	Background	7/1/2008	1520	13.14	22.42	Hard	05767
BKG MW-021	Background	7/1/2008	1525	13.37	21.67	Hard	05767
BKG MW-015	Background	7/1/2008	1536	48.80	53.17	Hard	05767
BKG MW-006	Background	7/1/2008	1545	22.38	37.69	Hard	05767
BKG MW-018	Background	7/1/2008	1615	15.62	27.70	Hard	05767
DA2 MW-104	Demo Area 2	7/1/2008	1700	20.52	29.38	Hard	05767
DET DET-1	Demo Area 2	7/1/2008	1703	22.78	38.69	Hard	05767
DET DET-2	Demo Area 2	7/1/2008	1708	32.75	42.21	Hard	05767
DA2 MW-108	Demo Area 2	7/1/2008	1715	6.20	17.34	Hard	05767
DA2 MW-106	Demo Area 2	7/1/2008	1722	5.25	16.97	Hard	05767
DA2 MW-105	Demo Area 2	7/1/2008	1726	3.58	16.40	Hard	05767
DA2 MW-107	Demo Area 2	7/1/2008	1732	7.05	17.02	Hard	05767

\*All measurements from top of casing

# **COMPREHENSIVE WATER LEVEL MEASUREMENTS**

RVAAP FACILITY-WIDE GROUNDWATER MONITORING PROGRAM

JULY 2008

Well Number	Location	Date	Time	Depth To Water*	Depth to Bottom	Description of bottom	Instrument/Serial Number
EBG MW-128	Erie Burning Grounds	6/30/2008	1155	6.82	28.33	Hard	OH01266
EBG MW-127	Erie Burning Grounds	6/30/2008	1203	6.35	32.94	Hard	OH01266
EBG MW-126	Erie Burning Grounds	6/30/2008	1211	2.29	27.85	Hard	OH01266
EBG MW-129	Erie Burning Grounds	6/30/2008	1215	6.13	31.14	Hard	OH01266
EBG MW-125	Erie Burning Grounds	6/30/2008	1223	11.72	27.56	Hard	OH01266
EBG MW-123	Erie Burning Grounds	6/30/2008	1229	9.57	34.90	Medium	OH01266
EBG MW-124	Erie Burning Grounds	6/30/2008	1233	3.19	32.84	Medium	OH01266
EBG MW-130	Erie Burning Grounds	6/30/2008	1255	6.70	28.46	Hard	OH01266
RQL MW-015	Ramsdell Quarry	6/30/2008	1309	29.49	42.11	Soft	OH01266
RQL MW-016	Ramsdell Quarry	6/30/2008	1313	33.80	41.75	Hard	OH01266
RQL MW-006	Ramsdell Quarry	6/30/2008	1316	33.09	41.82	Hard	OH01266
RQL MW-012	Ramsdell Quarry	6/30/2008	1320	20.72	32.75	Hard	OH01266
RQL MW-011	Ramsdell Quarry	6/30/2008	1324	20.90	35.43	Hard	OH01266
RQL MW-014	Ramsdell Quarry	6/30/2008	1328	19.03	31.25	Soft	OH01266
RQL MW-010	Ramsdell Quarry	6/30/2008	1332	24.23	35.12	Hard	OH01266
RQL MW-013	Ramsdell Quarry	6/30/2008	1341	24.32	36.55	Hard	OH01266
RQL MW-007	Ramsdell Quarry	6/30/2008	1346	5.16	18.70	Hard	OH01266
RQL MW-008	Ramsdell Quarry	6/30/2008	1350	5.20	18.74	Hard	OH01266
RQL MW-009	Ramsdell Quarry	6/30/2008	1354	3.97	18.63	Hard	OH01266
RQL MW-017	Ramsdell Quarry	6/30/2008	1417	28.23	32.85	Hard	OH01266
LL1 MW-067	Loadline 1	6/30/2008	1425	16.95	25.69	Hard	OH01266
LL1 MW-078	Loadline 1	6/30/2008	1454	30.22	41.18	Soft	OH01266
LL1 MW-063	Loadline 1	6/30/2008	1458	23.94	30.01	Hard	OH01266
LL1 MW-083	Loadline 1	6/30/2008	1502	31.20	41.51	Hard	OH01266

\*All measurements from top of casing

# COMPREHENSIVE WATER LEVEL MEASUREMENTS

RVAAP FACILITY-WIDE GROUNDWATER MONITORING PROGRAM

JULY 2008

Well Number	Location	Date	Time	Depth To Water*	Depth to Bottom	Description of bottom	Instrument/Serial Number
LL1 MW-084	Loadline 1	6/30/2008	1506	27.76	38.97	Hard	OH01266
LL1 MW-085	Loadline 1	6/30/2008	1511	33.53	45.16	Hard	OH01266
LL1 MW-082	Loadline 1	6/30/2008	1515	27.28	41.48	Soft	OH01266
LL1 MW-081	Loadline 1	6/30/2008	1519	29.57	41.96	Hard	OH01266
LL1 MW-079	Loadline 1	6/30/2008	1524	30.26	41.82	Hard	OH01266
LL1 MW-080	Loadline 1	6/30/2008	1533	9.68	22.28	Hard	OH01266
LL1 MW-064	Loadline 1	6/30/2008	1543	2.12	21.01	Hard	OH01266
LL1 MW-065	Loadline 1	6/30/2008	1548	11.85	23.01	Hard	OH01266
LL2 MW-060	Loadline 2	6/30/2008	1556	9.77	17.22	Soft	OH01266
LL2 MW-265	Loadline 2	6/30/2008	1558	9.33	24.52	Hard	OH01266
LL2 MW-059	Loadline 2	6/30/2008	1601	12.75	21.84	Hard	OH01266
LL2 MW-269	Loadline 2	6/30/2008	1610	17.01	30.39	Hard	OH01266
LL2 MW-264	Loadline 2	6/30/2008	1615	7.02	22.47	Hard	OH01266
LL2 MW-263	Loadline 2	6/30/2008	1618	8.63	22.65	Hard	OH01266
LL2 MW-262	Loadline 2	6/30/2008	1622	8.55	22.75	Hard	OH01266
LL2 MW-266	Loadline 2	6/30/2008	1624	11.87	22.80	Medium	OH01266
LL2 MW-261	Loadline 2	6/30/2008	1630	7.09	22.55	Hard	OH01266
LL2 MW-267	Loadline 2	6/30/2008	1639	9.92	22.80	Hard	OH01266
LL2 MW-268	Loadline 2	6/30/2008	1645	15.02	30.00	Hard	OH01266
LL2 MW-270	Loadline 2	6/30/2008	1652	9.25	22.50	Hard	OH01266
B12 MW-010	Building 1200	6/30/2008	1705	17.19	22.91	Hard	OH01266
B12 MW-012	Building 1200	6/30/2008	1709	18.71	24.90	Hard	OH01266
B12 MW-011	Building 1200	6/30/2008	1712	19.32	26.82	Hard	OH01266
BKG MW-010	Background	6/30/2008	1717	16.46	22.10	Hard	OH01266

\*All measurements from top of casing

# COMPREHENSIVE WATER LEVEL MEASUREMENTS

RVAAP FACILITY-WIDE GROUNDWATER MONITORING PROGRAM

JULY 2008

Well Number	Location	Date	Time	Depth To Water*	Depth to Bottom	Description of bottom	Instrument/Serial Number
BKG MW-012	Background	6/30/2008	1725	9.41	62.06	Soft	OH01266
CP MW-006	Cobbs Pond	6/30/2008	1730	8.78	20.75	Hard	OH01266
WBG MW-009	Winklepeck Burning	7/1/2008	822	13.59	24.44	Hard	OH01266
WBG MW-013	Winklepeck Burning	7/1/2008	828	10.49	24.24	Medium	OH01266
WBG MW-012	Winklepeck Burning	7/1/2008	833	15.61	31.75	Hard	OH01266
WBG MW-011	Winklepeck Burning	7/1/2008	842	10.61	23.96	Medium	OH01266
WBG MW-005	Winklepeck Burning	7/1/2008	851	5.83	21.24	Hard	OH01266
WBG MW-010	Winklepeck Burning	7/1/2008	856	8.06	23.48	Soft	OH01266
LNW MW-025	Landfill North Winklepeck	7/1/2008	913	4.96	20.42	Hard	OH01266
LNW MW-027	Landfill North Winklepeck	7/1/2008	918	6.72	26.98	Medium	OH01266
LNW MW-026	Landfill North Winklepeck	7/1/2008	923	5.63	26.11	Hard	OH01266
LNW MW-024	Landfill North Winklepeck	7/1/2008	929	12.10	22.44	Hard	OH01266
WBG MW-006	Winklepeck Burning	7/1/2008	943	7.99	20.27	Hard	OH01266
WBG MW-016	Winklepeck Burning	7/1/2008	948	17.12	25.32	Soft	OH01266
WBG MW-007	Winklepeck Burning	7/1/2008	953	17.37	26.50	Hard	OH01266
WBG MW-014	Winklepeck Burning	7/1/2008	956	16.33	25.10	Soft	OH01266
WBG MW-008	Winklepeck Burning	7/1/2008	1000	14.99	20.96	Hard	OH01266
WBG MW-015	Winklepeck Burning	7/1/2008	1006	12.56	23.63	Hard	OH01266
WBG MW-017	Winklepeck Burning	7/1/2008	1025	9.13	23.78	Medium	OH01266
BKG MW-020	Background	7/1/2008	1036	9.41	33.31	Hard	OH01266
BKG MW-013	Background	7/1/2008	1040	12.27	28.08	Hard	OH01266
CP MW-002	Cobbs Pond	7/1/2008	1054	0.99	15.08	Hard	OH01266
CP MW-003	Cobbs Pond	7/1/2008	1109	2.12	17.83	Hard	OH01266
CP MW-001	Cobbs Pond	7/1/2008	1115	4.50	14.81	Hard	OH01266

\*All measurements from top of casing

# COMPREHENSIVE WATER LEVEL MEASUREMENTS

RVAAP FACILITY-WIDE GROUNDWATER MONITORING PROGRAM

JULY 2008

Well Number	Location	Date	Time	Depth To Water*	Depth to Bottom	Description of bottom	Instrument/Serial Number
CP MW-004	Cobbs Pond	7/1/2008	1129	11.89	22.66	Hard	OH01266
CP MW-005	Cobbs Pond	7/1/2008	1134	11.01	43.30	Hard	OH01266
CBP MW-005	Central Burn Pits	7/1/2008	1153	11.98	27.52	Medium	OH01266
CBP MW-007	Central Burn Pits	7/1/2008	1200	15.32	31.88	Medium	OH01266
CBP MW-004	Central Burn Pits	7/1/2008	1203	10.64	29.76	Medium	OH01266
CBP MW-003	Central Burn Pits	7/1/2008	1208	11.71	30.31	Hard	OH01266
CBP MW-002	Central Burn Pits	7/1/2008	1213	7.86	32.14	Medium	OH01266
CBP MW-001	Central Burn Pits	7/1/2008	1217	12.67	32.81	Soft	OH01266
CBP MW-008	Central Burn Pits	7/1/2008	1232	15.61	28.03	Hard	OH01266
CBP MW-006	Central Burn Pits	7/1/2008	1240	7.70	25.38	Soft	OH01266
LL3 MW-241	Loadline 3	7/1/2008	1256	12.12	25.66	Hard	OH01266
LL3 MW-233	Loadline 3	7/1/2008	1259	26.28	32.86	Hard	OH01266
LL3 MW-232	Loadline 3	7/1/2008	1303	19.61	39.91	Hard	OH01266
LL3 MW-234	Loadline 3	7/1/2008	1307	10.77	22.74	Hard	OH01266
LL3 MW-238	Loadline 3	7/1/2008	1310	15.90	23.44	Hard	OH01266
LL3 MW-239	Loadline 3	7/1/2008	1312	25.26	37.20	Soft	OH01266
LL3 MW-240	Loadline 3	7/1/2008	1315	28.80	36.74	Medium	OH01266
LL3 MW-237	Loadline 3	7/1/2008	1320	15.98	25.62	Hard	OH01266
LL3 MW-236	Loadline 3	7/1/2008	1325	16.40	26.68	Hard	OH01266
LL3 MW-235	Loadline 3	7/1/2008	1330	18.30	23.05	Medium	OH01266
LL3 MW-243	Loadline 3	7/1/2008	1337	15.63	26.41	Hard	OH01266
LL3 MW-242	Loadline 3	7/1/2008	1340	16.16	22.61	Hard	OH01266
LL12 MW-182	Loadline 12	7/1/2008	1347	9.61	38.06	Hard	OH01266
LL12 MW-088	Loadline 12	7/1/2008	1352	6.23	27.32	Hard	OH01266

\*All measurements from top of casing

# COMPREHENSIVE WATER LEVEL MEASUREMENTS

RVAAP FACILITY-WIDE GROUNDWATER MONITORING PROGRAM

JULY 2008

Well Number	Location	Date	Time	Depth To Water*	Depth to Bottom	Description of bottom	Instrument/Serial Number
LL12 MW-107	Loadline 12	7/1/2008	1356	8.83	33.77	Hard	OH01266
LL12 MW-128	Loadline 12	7/1/2008	1400	9.38	34.23	Hard	OH01266
LL12 MW-243	Loadline 12	7/1/2008	1403	8.42	25.47	Soft	OH01266
LL12 MW-154	Loadline 12	7/1/2008	1408	8.29	28.72	Hard	OH01266
LL12 MW-153	Loadline 12	7/1/2008	1411	5.87	24.87	Hard	OH01266
LL12 MW-113	Loadline 12	7/1/2008	1415	6.28	18.96	Soft	OH01266
LL12 MW-188	Loadline 12	7/1/2008	1422	5.63	22.26	Soft	OH01266
LL12 MW-187	Loadline 12	7/1/2008	1428	9.06	29.68	Hard	OH01266
LL12 MW-245	Loadline 12	7/1/2008	1441	7.16	30.19	Hard	OH01266
LL12 MW-185	Loadline 12	7/1/2008	1449	6.93	23.02	Hard	OH01266
LL12 MW-244	Loadline 12	7/1/2008	1453	9.70	30.97	Soft	OH01266
LL12 MW-242	Loadline 12	7/1/2008	1458	8.75	29.14	Soft	OH01266
LL12 MW-246	Loadline 12	7/1/2008	1510	15.85	35.07	Hard	OH01266
LL12 MW-184	Loadline 12	7/1/2008	1517	11.97	31.13	Hard	OH01266
LL12 MW-183	Loadline 12	7/1/2008	1524	11.73	36.41	Hard	OH01266
LL12 MW-186	Loadline 12	7/1/2008	1531	5.57	21.11	Hard	OH01266
LL12 MW-189	Loadline 12	7/1/2008	1536	5.08	19.85	Hard	OH01266
LL4 MW-197	Loadline 4	7/1/2008	1545	14.06	23.70	Hard	OH01266
LL4 MW-196	Loadline 4	7/1/2008	1549	12.85	21.89	Hard	OH01266
LL4 MW-195	Loadline 4	7/1/2008	1552	10.82	22.98	Hard	OH01266
LL4 MW-194	Loadline 4	7/1/2008	1555	8.78	23.91	Medium	OH01266
LL4 MW-199	Loadline 4	7/1/2008	1600	7.02	23.31	Medium	OH01266
LL4 MW-193	Loadline 4	7/1/2008	1604	7.32	24.40	Hard	OH01266
LL4 MW-198	Loadline 4	7/1/2008	1642	8.37	20.90	Medium	OH01266

\*All measurements from top of casing



# COMPREHENSIVE WATER LEVEL MEASUREMENTS

RVAAP FACILITY-WIDE GROUNDWATER MONITORING PROGRAM

JULY 2008

Well Number		Location	Date	Time	Depth To Water*	Depth to Bottom	Description of bottom	Instrument/Serial Number
LL4	MW-200	Loadline 4	7/1/2008	1646	17.47	25.32	Hard	OH01266
DA2	MW-110	Demo Area 2	7/1/2008	1659	8.93	22.47	Hard	OH01266
DA2	MW-109	Demo Area 2	7/1/2008	1703	13.77	24.42	Medium	OH01266
DA2	MW-111	Demo Area 2	7/1/2008	1709	4.26	14.90	Hard	OH01266
DA2	MW-113	Demo Area 2	7/1/2008	1718	8.38	16.41	Hard	OH01266
DA2	MW-112	Demo Area 2	7/1/2008	1722	7.82	17.17	Hard	OH01266
DET	DET-3	Demo Area 2	7/1/2008	1726	9.72	11.09	Hard	OH01266
DET	DET-4	Demo Area 2	7/1/2008	1730	10.93	13.89	Hard	OH01266

\*All measurements from top of casing

1  
2  
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**APPENDIX F**  
**WELL INSPECTION SHEETS**

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MMW -004 Location/Functional Area: BKG

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: \_\_\_\_\_

Reported Construction Depth: 22 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Needs painting

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: Red Marking, stencil on well

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

no cover on lock

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked at the top of well casing?

Measured depth of the well from measurement point: 22.42

Thickness of sediment accumulation (reported depth-present measurement): -.42

Are there any obstructions in the well?

Description of well bottom conditions (soft, hard, etc.): \_\_\_\_\_

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Inspection Date: 7-1-08

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-005 Location/Functional Area: BKG

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screwed/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: \_\_\_\_\_

Reported Construction Depth: 21 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

*Square cutter casing  
Hinges rusting  
need at paint*

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: Medallion, stencil on well

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked at the top of well casing?

Measured depth of the well from measurement point: 21.07

Thickness of sediment accumulation (reported depth-present measurement): -0.07

Are there any obstructions in the well?

Description of well bottom conditions (soft hard, etc.):

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Inspection Date: 6-30-08

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: mw-006 Location/Functional Area: BKG  
 Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC  
 Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft  
 Flush-mount/Above-ground Completion: \_\_\_\_\_  
 Reported Construction Depth: 37.6 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3  
 Are the posts positioned to prevent collision damage to the well? \_\_\_\_\_  
 Are any of the posts damaged or degraded? \_\_\_\_\_  
 Is a concrete pad installed? \_\_\_\_\_  
 Is the pad cracked or deteriorated? Frost Heaving? okay now \_\_\_\_\_  
 Is steel protective casing installed? \_\_\_\_\_  
 Does the protective casing have a weep hole? \_\_\_\_\_  
 Does vegetation around the well need clearing? \_\_\_\_\_

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

*Square outer casing  
Needs painting  
Pad needs to be  
repaired with caulking  
pad still secure*

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box? \_\_\_\_\_  
 Does the well have a flush-mount box? \_\_\_\_\_  
 Is the traffic cover cracked or broken? \_\_\_\_\_  
 Is the concrete apron cracked or deteriorated? Frost Heaving? \_\_\_\_\_

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Identification:**

Is the well labeled with the correct number? ☒ ☐ ☐  
 Describe labeling: Medallion in cement, stenciled on well

**Security:**

Does the well have a cap or lid? \_\_\_\_\_  
 Does the well have a weatherproof lock? \_\_\_\_\_  
 Does the lock secure well? \_\_\_\_\_  
 Does the inner casing have a water-tight cap? \_\_\_\_\_

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?) \_\_\_\_\_  
 Is the well casing loose, (at the surface?) \_\_\_\_\_  
 Is a measurement point marked at the top of well casing? ☒ ☐ ☐  
 Measured depth of the well from measurement point: 37.69  
 Thickness of sediment accumulation (reported depth-present measurement): -0.09  
 Are there an obstructions in the well? ☐ ☒ ☐  
 Description of well bottom conditions (soft/hard, etc.): hard

Inspection Date: 7-1-07 Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MLG-008 Location/Functional Area: BKG

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type:    Monitor Interval Length: 10 ft

Flush-mount Above-ground Completion:   

Reported Construction Depth: 27.5 ft ☐ BGS or ☒ BTOC (chosed one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

*Square outg casing,  
very rusty,  
needs painting*

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: Marking in concrete, stencion well

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked a the top of well casing?

Measured depth of the well from measurement point: 27.58

Thickness of sediment accumulation (reported depth-present measurement): -0.08

Are there an obstructions in the well?

Description of well bottom conditions (soft, hard, etc.):   

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Inspection Date: 7-1-08

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-010 Location/Functional Area: B1KG

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 21.0 ft ☐ BGS or ☐ BTOC (chosed one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>rusting</u>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

**Identification:**

Is the well labeled with the correct number?

Describe labeling: Paint and Tag

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked at the top of well casing?

Measured depth of the well from measurement point: 22.10

Thickness of sediment accumulation (reported depth-present measurement): -0.50

Are there any obstructions in the well?

Description of well bottom conditions (soft hard etc.): Hard

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Inspection Date: 6/30/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-012 Location/Functional Area: BKG

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 210 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 62.3 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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rusting hinges

Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Scheduled for this week

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint and Tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked a the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 62.06

Thickness of sediment accumulation (reported depth-present measurement): .24

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Soft

Inspection Date: 6/30/2008

Inspected by: MB



**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-013 Location/Functional Area: BKG

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 28 ft ☐ BGS or ☒ BTOC (chosed one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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rusting

Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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unseen

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint and Tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked a the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 28.08

Thickness of sediment accumulation (reported depth-present measurement): -0.08

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 7/1/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: mw-015 Location/Functional Area: BKG

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 20 ft

Flush-mount/Above-ground Completion: \_\_\_\_\_

Reported Construction Depth: 52.9 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

*Square outer casing  
Needs painting  
rusted inside of outer casing.*

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: medallion in cement, stored on well

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked at the top of well casing?

Measured depth of the well from measurement point: 53.17

Thickness of sediment accumulation (reported depth-present measurement): -0.27

Are there any obstructions in the well?

Description of well bottom conditions (soft, hard, etc.): hard

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Inspection Date: 2-1-08 Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MLW-016 Location/Functional Area: BK G  
 Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC  
 Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10.1 ft  
 Flush-mount/Above-ground Completion: \_\_\_\_\_  
 Reported Construction Depth: 21.1 ft ☐ BGS or ☒ BTOC (chosed one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

*Square nutty casing  
Needs paint  
Rings missing  
Concrete under pad is broken*

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: Stencil on post. Medallion in concrete

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked at the top of well casing?

Measured depth of the well from measurement point: 21.35

Thickness of sediment accumulation (reported depth-present measurement): -0.25

Are there an obstructions in the well?

Description of well bottom conditions (soft, hard, etc.): \_\_\_\_\_

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Inspection Date: 6-30-08

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MMW-017 Location/Functional Area: BKG

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10.1 ft

Flush-mount/Above-ground Completion: 3

Reported Construction Depth: 36.10 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

*Seal casing  
Needs paint*

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: medallion in concrete, stencil on well

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked at the top of well casing?

Measured depth of the well from measurement point: 36.15

Thickness of sediment accumulation (reported depth-present measurement): -0.05

Are there any obstructions in the well?

Description of well bottom conditions (soft, hard, etc.): hard

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Inspection Date: 6-30-02

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: mw-018 Location/Functional Area: BKG

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: \_\_\_\_\_

Reported Construction Depth: 27.2 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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*Square outer casing  
needs painting  
Rusted inside  
outer casing*

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Metallion in cement, stenciled on well

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked at the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 27.70

Thickness of sediment accumulation (reported depth-present measurement): -0.50

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): (hard)

Inspection Date: 7-1-07

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-019 Location/Functional Area: BKG

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: \_\_\_\_\_

Reported Construction Depth: 35.7 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

*outer casing  
needs paint  
square casing*

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: Stencil on well

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked at the top of well casing?

Measured depth of the well from measurement point: 35.85

Thickness of sediment accumulation (reported depth-present measurement): -0.15

Are there any obstructions in the well?

Description of well bottom conditions (soft, hard, etc.): 6

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Inspection Date: 6-30-08 Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-020 Location/Functional Area: BK6  
 Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC  
 Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft  
 Flush-mount/Above-ground Completion: Above Ground  
 Reported Construction Depth: 33.20 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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rusted

Are any of the posts damaged or degraded?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Need paint

Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint and Tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked at the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 33.31

Thickness of sediment accumulation (reported depth-present measurement): -0.11

Are there any obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 7/1/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MMN-021 Location/Functional Area: BKG  
 Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC  
 Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10.1 ft  
 Flush-mount/Above-ground Completion: \_\_\_\_\_  
 Reported Construction Depth: 20.6 ft ☐ BGS or ☒ BTOC (chosed one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

*Needs painting  
well cap does not  
does not need  
replacing  
interior rusted  
square outer casing*

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: medallion in cement, stencil on well

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked at the top of well casing?

Measured depth of the well from measurement point: 21.67

Thickness of sediment accumulation (reported depth-present measurement): -1.07

Are there an obstructions in the well?

Description of well bottom conditions (soft, hard, etc.): hard

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Inspection Date: 7-1-08 Inspected by: John Miller



**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW 063 Location/Functional Area: LC1

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 30.0 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3 4 (NO)

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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peeling paint

Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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hard to find

Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint and Tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked a the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 30.01

Thickness of sediment accumulation (reported depth-present measurement): -0.01

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 6/30/2008

Inspected by: MS

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-064 Location/Functional Area: LL-1

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 21.1 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

peeling paint

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: Paint

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked at the top of well casing?

Measured depth of the well from measurement point: 21.01

Thickness of sediment accumulation (reported depth-present measurement): 0.09

Are there any obstructions in the well?

Description of well bottom conditions (soft, hard, etc.): Hard

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Inspection Date: 6/30/2004

Inspected by: MY

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-065 Location/Functional Area: LL-1

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 23.4 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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peeling paint

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint and Tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is a measurement point marked at the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 23.01

Thickness of sediment accumulation (reported depth-present measurement): +0.39

Are there any obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 6/30/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-067 Location/Functional Area: LLI

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: \_\_\_\_\_ ft

Flush-mount/Above-ground Completion: \_\_\_\_\_

Reported Construction Depth: 25.6 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: Paint + Tag

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked a the top of well casing?

Measured depth of the well from measurement point: 25.69

Thickness of sediment accumulation (reported depth-present measurement):

Are there an obstructions in the well?

Description of well bottom conditions (soft, hard, etc.): 25.69 HARD ~ 0.09

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Inspection Date: 6/30/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-078 Location/Functional Area: LL 1  
 Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC  
 Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 9.5 ft  
 Flush-mount/Above-ground Completion: Above Ground  
 Reported Construction Depth: 41.1 ft ☐ BGS or ☒ BTOC (chosed one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint and Tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked at the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 41.18

Thickness of sediment accumulation (reported depth-present measurement): -0.08

Are there any obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Soft

Inspection Date: 6/30/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-079 Location/Functional Area: LL1  
 Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC  
 Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 914 ft  
 Flush-mount/Above-ground Completion: Above Ground  
 Reported Construction Depth: 42.0 ft ☐ BGS or ☐ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint and Tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked a the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 41.82

Thickness of sediment accumulation (reported depth-present measurement): + .18

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 6/30/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-080 Location/Functional Area: LL-1  
 Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC  
 Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 9.5 ft  
 Flush-mount/Above-ground Completion: Above Ground  
 Reported Construction Depth: 22 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint and Tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked at the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 22.28

Thickness of sediment accumulation (reported depth-present measurement): 0.28

Are there any obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 6/30/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-081 Location/Functional Area: LL1

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 9.5 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 41.9 ft ☐ BGS or ☐ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

X		
	X	
X		
	X	
X		
X		
	X	

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?


**Identification:**

Is the well labeled with the correct number?

Describe labeling: Paint and Tag

X		
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

X		
X		
X		
X		

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked at the top of well casing?

Measured depth of the well from measurement point: 41.96

Thickness of sediment accumulation (reported depth-present measurement): -0.06

Are there any obstructions in the well?

Description of well bottom conditions (soft, hard, etc.): Hard

	X	
	X	
X		
	X	

Inspection Date: 6/30/2008

Inspected by: MB



**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-082 Location/Functional Area: LL 1

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 9.5 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 41.8 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked at the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 41.48

Thickness of sediment accumulation (reported depth-present measurement): + 0.32

Are there any obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Soft

Inspection Date: 6/30/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-083 Location/Functional Area: LL 1

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 95 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 41.7 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4 3 (MB)

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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hard to see

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint and Tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked at the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 41.51

Thickness of sediment accumulation (reported depth-present measurement): + 0.19

Are there any obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 6/30/2006

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-084 Location/Functional Area: LLI

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 9.6 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 39.3 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint and Tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked at the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 38.97

Thickness of sediment accumulation (reported depth-present measurement): 40.33

Are there any obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 6/30/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: NW-085 Location/Functional Area: LL1

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 9.4 ft

Flush-mount/Above-ground Completion: \_\_\_\_\_

Reported Construction Depth: 44.7 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: Paint + Tag

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked at the top of well casing?

Measured depth of the well from measurement point: 45.16

Thickness of sediment accumulation (reported depth-present measurement): -0.46

Are there any obstructions in the well?

Description of well bottom conditions (soft, hard, etc.): hard

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Inspection Date: 6-30-08

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-DS9 Location/Functional Area: LL-2  
 Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC  
 Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 9.8 ft  
 Flush-mount/Above-ground Completion: Above Ground  
 Reported Construction Depth: 21.8 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked at the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 21.84

Thickness of sediment accumulation (reported depth-present measurement): -0.04

Are there any obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 6/30/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-060 Location/Functional Area: LL-2

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 9.8 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 20.9 ft ☐ BGS or ☒ BTOC (chosed one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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peeling paint

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Describe labeling: Paint

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is a measurement point marked at the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 17.22

Thickness of sediment accumulation (reported depth-present measurement): 3.68

Are there any obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Soft

Inspection Date: 6/30/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-261 Location/Functional Area: LL-2

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 21.9 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

X		
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Are any of the posts damaged or degraded?

	X	
--	---	--

Is a concrete pad installed?

X		
---	--	--

Is the pad cracked or deteriorated? Frost Heaving?

	X	
--	---	--

Is steel protective casing installed?

X		
---	--	--

Does the protective casing have a weep hole?

X		
---	--	--

Does vegetation around the well need clearing?

	X	
--	---	--

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

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Does the well have a flush-mount box?

--	--	--

Is the traffic cover cracked or broken?

--	--	--

Is the concrete apron cracked or deteriorated? Frost Heaving?

--	--	--

**Identification:**

Is the well labeled with the correct number?

X		
---	--	--

Describe labeling: Paint and Tag

**Security:**

Does the well have a cap or lid?

X		
---	--	--

Does the well have a weatherproof lock?

X		
---	--	--

Does the lock secure well?

X		
---	--	--

Does the inner casing have a water-tight cap?

X		
---	--	--

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

	X	
--	---	--

Is the well casing loose, (at the surface?)

	X	
--	---	--

Is a measurement point marked a the top of well casing?

X		
---	--	--

Measured depth of the well from measurement point: 22.55

Thickness of sediment accumulation (reported depth-present measurement): -0.65

Are there an obstructions in the well?

	X	
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Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 6/30/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-262 Location/Functional Area: LL-2

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 22.3 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint and Tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked at the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 22.75

Thickness of sediment accumulation (reported depth-present measurement): -0.45

Are there any obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 6/30/2008

Inspected by: MB



**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-263 Location/Functional Area: LL-2

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 23 ft ☐ BGS or ☒ BTOC (chosed one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

X		
	X	
X		
	X	
X		
X		
	X	

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?


**Identification:**

Is the well labeled with the correct number?

Describe labeling: Paint and Tag

X		
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

X		
X		
X		
X		

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked at the top of well casing?

Measured depth of the well from measurement point: 22.65

Thickness of sediment accumulation (reported depth-present measurement): +0.35

Are there any obstructions in the well?

Description of well bottom conditions (soft, hard, etc.): Hard

	X	
	X	
X		
	X	

Inspection Date: 6/30/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-264 Location/Functional Area: LL-2

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 21.7 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

☒ ☐ ☐

Are any of the posts damaged or degraded?

☐ ☒ ☐

Is a concrete pad installed?

☒ ☐ ☐

Is the pad cracked or deteriorated? Frost Heaving?

☐ ☒ ☐

Is steel protective casing installed?

☒ ☐ ☐

Does the protective casing have a weep hole?

☒ ☐ ☐

Does vegetation around the well need clearing?

☐ ☒ ☐

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

☐ ☐ ☒

Does the well have a flush-mount box?

☐ ☐ ☒

Is the traffic cover cracked or broken?

☐ ☐ ☒

Is the concrete apron cracked or deteriorated? Frost Heaving?

☐ ☐ ☒

**Identification:**

Is the well labeled with the correct number?

☒ ☐ ☐

Describe labeling: Paint and Tag

**Security:**

Does the well have a cap or lid?

☒ ☐ ☐

Does the well have a weatherproof lock?

☒ ☐ ☐

Does the lock secure well?

☒ ☐ ☐

Does the inner casing have a water-tight cap?

☒ ☐ ☐

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

☐ ☒ ☐

Is the well casing loose, (at the surface?)

☐ ☒ ☐

Is a measurement point marked a the top of well casing?

☒ ☐ ☐

Measured depth of the well from measurement point: 22.47

Thickness of sediment accumulation (reported depth-present measurement): -0.77

Are there an obstructions in the well?

☐ ☒ ☐

Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 6/30/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-265 Location/Functional Area: LL-2  
 Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC  
 Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 2 ft  
 Flush-mount/Above-ground Completion: Above Ground  
 Reported Construction Depth: 23.8 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

hard to see

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Describe labeling: Paint and Tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked at the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 9.33 24.52

Thickness of sediment accumulation (reported depth-present measurement): -0.72

Are there any obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 6/30/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-266 Location/Functional Area: LL-2

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 22.2 ft ☐ BGS or ☒ BTOC (chosed one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Describe labeling: Paint and Tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is a measurement point marked at the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 22.80

Thickness of sediment accumulation (reported depth-present measurement): -0.60

Are there any obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Medium

Inspection Date: 6/30/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-267 Location/Functional Area: LL-2

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 22 ft ☐ BGS or ☐ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint and Tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is a measurement point marked a the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 22.80

Thickness of sediment accumulation (reported depth-present measurement): -0.80

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 6/30/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-268 Location/Functional Area: LL-2

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 29.3 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint and Tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked a the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 30.00

Thickness of sediment accumulation (reported depth-present measurement): - 0.70

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 6/30/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-269 Location/Functional Area: LL-2  
 Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC  
 Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft  
 Flush-mount/Above-ground Completion: Above Ground  
 Reported Construction Depth: 29.40 ft ☐ BGS or ☐ BTOC (chosed one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: Paint and Tag

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked at the top of well casing?

Measured depth of the well from measurement point: 30.39

Thickness of sediment accumulation (reported depth-present measurement): -0.99

Are there any obstructions in the well?

Description of well bottom conditions (soft, hard, etc.): Hard

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Inspection Date: 6/30/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-270 Location/Functional Area: LL-2

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 20.3 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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(M) rusty hard to see bottom

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint and Tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked at the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 22.50

Thickness of sediment accumulation (reported depth-present measurement): -2.20

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 6/30/2008

Inspected by: MB



**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: NW-232 Location/Functional Area: LL-3

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 38.8 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint and Tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked a the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 39.91

Thickness of sediment accumulation (reported depth-present measurement): -1.11

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 7/1/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-233 Location/Functional Area: LL-3

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 32.2 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked a the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 32.86

Thickness of sediment accumulation (reported depth-present measurement): -0.66

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 7/1/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-234 Location/Functional Area: LL-3

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 22.10 ft ☐ BGS or ☐ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint and Tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked at the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 22.74

Thickness of sediment accumulation (reported depth-present measurement): -0.64

Are there any obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 7/1/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-235 Location/Functional Area: LL-3

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 22.2 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint and Tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked a the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 23.05

Thickness of sediment accumulation (reported depth-present measurement): -0.85

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 7/1/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-236 Location/Functional Area: LL-3

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 26.2 ft ☐ BGS or ☒ BTOC (chosed one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint and Tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked a the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 26.68

Thickness of sediment accumulation (reported depth-present measurement): -0.48

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 7/1/2008

Inspected by: MD

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-237 Location/Functional Area: LL-3  
 Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC  
 Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft  
 Flush-mount/Above-ground Completion: Above Ground  
 Reported Construction Depth: 24.9 ft ☐ BGS or ☐ BTOC (chosed one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint and Tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked at the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 25.62

Thickness of sediment accumulation (reported depth-present measurement): -0.72

Are there any obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 7/1/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-238 Location/Functional Area: LL-3

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 22.9 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint and Tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked at the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 23.44

Thickness of sediment accumulation (reported depth-present measurement): -0.54

Are there any obstructions in the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 7/1/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-239 Location/Functional Area: LL-3

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 36.8 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked a the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 37.20

Thickness of sediment accumulation (reported depth-present measurement): -0.40

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Soft

Inspection Date: 7/1/2008

Inspected by: MB



**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-240 Location/Functional Area: LC3

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 36.50 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint and Tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked at the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 36.74

Thickness of sediment accumulation (reported depth-present measurement): -0.24

Are there any obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Medium

Inspection Date: 7/1/2008

Inspected by: MRB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-241 Location/Functional Area: LL-3

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 25.1 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint and Tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked a the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 25.66

Thickness of sediment accumulation (reported depth-present measurement): -0.56

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 7/1/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-242 Location/Functional Area: LL-3

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 21.90 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well? ☒ ☐ ☐ \_\_\_\_\_

Are any of the posts damaged or degraded? ☐ ☒ ☐ \_\_\_\_\_

Is a concrete pad installed? ☒ ☐ ☐ \_\_\_\_\_

Is the pad cracked or deteriorated? Frost Heaving? ☐ ☒ ☐ \_\_\_\_\_

Is steel protective casing installed? ☒ ☐ ☐ \_\_\_\_\_

Does the protective casing have a weep hole? ☒ ☐ ☐ \_\_\_\_\_

Does vegetation around the well need clearing? ☐ ☒ ☐ \_\_\_\_\_

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box? ☐ ☐ ☒ \_\_\_\_\_

Does the well have a flush-mount box? ☐ ☐ ☒ \_\_\_\_\_

Is the traffic cover cracked or broken? ☐ ☐ ☒ \_\_\_\_\_

Is the concrete apron cracked or deteriorated? Frost Heaving? ☐ ☐ ☒ \_\_\_\_\_

**Identification:**

Is the well labeled with the correct number? ☒ ☐ ☐ \_\_\_\_\_

Describe labeling: Paint and Tag

**Security:**

Does the well have a cap or lid? ☒ ☐ ☐ \_\_\_\_\_

Does the well have a weatherproof lock? ☒ ☐ ☐ \_\_\_\_\_

Does the lock secure well? ☒ ☐ ☐ \_\_\_\_\_

Does the inner casing have a water-tight cap? ☒ ☐ ☐ \_\_\_\_\_

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?) ☐ ☒ ☐ \_\_\_\_\_

Is the well casing loose, (at the surface?) ☐ ☒ ☐ \_\_\_\_\_

Is a measurement point marked a the top of well casing? ☒ ☐ ☐ \_\_\_\_\_

Measured depth of the well from measurement point: 22.61

Thickness of sediment accumulation (reported depth-present measurement): -0.71

Are there an obstructions in the well? ☐ ☒ ☐ \_\_\_\_\_

Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 7/1/2008 Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-243 Location/Functional Area: LL-3

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 25.8 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint and Tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked at the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 26.41

Thickness of sediment accumulation (reported depth-present measurement): -0.61

Are there any obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Medium

Inspection Date: 7/1/2008

Inspected by: NB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-193 Location/Functional Area: LL-4

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 23.5 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint and tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked a the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 24.40

Thickness of sediment accumulation (reported depth-present measurement): -0.90

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 7/1/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-194 Location/Functional Area: LL-4

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 23.4 ft ☐ BGS or ☒ BTOC (chosed one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint and tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked a the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 23.91

Thickness of sediment accumulation (reported depth-present measurement): -0.51

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Medium

Inspection Date: 7/1/2009

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-195 Location/Functional Area: LL-4

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 22.3 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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one rusted

Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint + Tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked a the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 22.98

Thickness of sediment accumulation (reported depth-present measurement): = 0.68

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 7/1/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-196 Location/Functional Area: LL-4

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 21.4 ft ☐ BGS or ☐ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:** YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: <u>4</u>				
Are the posts positioned to prevent collision damage to the well?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are any of the posts damaged or degraded?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>Two bent, rusted</u>
Is a concrete pad installed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the pad cracked or deteriorated? Frost Heaving?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is steel protective casing installed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does the protective casing have a weep hole?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does vegetation around the well need clearing?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does the well have a flush-mount box?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the traffic cover cracked or broken?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the concrete apron cracked or deteriorated? Frost Heaving?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

**Identification:**

Is the well labeled with the correct number?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Describe labeling: <u>Paint and tag</u>				

**Security:**

Does the well have a cap or lid?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does the well have a weatherproof lock?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does the lock secure well?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does the inner casing have a water-tight cap?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is the well casing loose, (at the surface?)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is a measurement point marked a the top of well casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Measured depth of the well from measurement point: <u>21.89</u>				
Thickness of sediment accumulation (reported depth-present measurement): <u>-0.49</u>				
Are there an obstructions in the well?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Description of well bottom conditions (soft, hard, etc.): <u>Hard</u>				

Inspection Date: 7/1/2008 Inspected by: MB



**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-197 Location/Functional Area: LL-4

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 22.7 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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One pole bent

Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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not seen

Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked a the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 23.70

Thickness of sediment accumulation (reported depth-present measurement): -1.00

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 7/1/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-198 Location/Functional Area: LL-4

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 22.3 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked a the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 20.90

Thickness of sediment accumulation (reported depth-present measurement): 1.40

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Medium to Soft

Inspection Date: 7/1/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-199 Location/Functional Area: LL-4

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 22.6 ft ☐ BGS or ☒ BTOC (chosed one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint and tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked at the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 23.31

Thickness of sediment accumulation (reported depth-present measurement): -0.71

Are there any obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Medium

Inspection Date: 7/1/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-200 Location/Functional Area: LL-4

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 25.0 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint and tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is a measurement point marked at the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 25.32

Thickness of sediment accumulation (reported depth-present measurement): -0.32

Are there any obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 7/1/2007

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: mw001 Location/Functional Area: LL5

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: \_\_\_\_\_

Reported Construction Depth: 26.9 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

X		
X		
X		
	X	
X		
X		
	X	

*Needs painting*

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

		X
		X
		X
		X

**Identification:**

Is the well labeled with the correct number?

Describe labeling: medallion on cover, stencil on well

X		
---	--	--

**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

X		
X		
X		
X		

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked at the top of well casing?

Measured depth of the well from measurement point: 27.22

Thickness of sediment accumulation (reported depth-present measurement): -0.32

Are there any obstructions in the well?

Description of well bottom conditions (soft, hard, etc.): (C)

	X	
	X	
X		
	X	

Inspection Date: 2-1-08

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-002 Location/Functional Area: LL5

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: \_\_\_\_\_

Reported Construction Depth: 27.9 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

*Needs paint*

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: medal on cover, stencil on well

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked at the top of well casing?

Measured depth of the well from measurement point: 27.64

Thickness of sediment accumulation (reported depth-present measurement): +0.24

Are there an obstructions in the well?

Description of well bottom conditions (soft hard, etc.): \_\_\_\_\_

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Inspection Date: 2-1-08

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MMW-003 Location/Functional Area: LL5  
 Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC  
 Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft  
 Flush-mount/Above-ground Completion: \_\_\_\_\_  
 Reported Construction Depth: 24.0 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3  
 Are the posts positioned to prevent collision damage to the well? 

X		
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 Are any of the posts damaged or degraded? 

X		
---	--	--

needs painting  
 Is a concrete pad installed? 

X		
---	--	--

  
 Is the pad cracked or deteriorated? Frost Heaving? 

	X	
--	---	--

  
 Is steel protective casing installed? 

X		
---	--	--

  
 Does the protective casing have a weep hole? 

X		
---	--	--

  
 Does vegetation around the well need clearing? 

	X	
--	---	--

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box? 

		X
--	--	---

  
 Does the well have a flush-mount box? 

		X
--	--	---

  
 Is the traffic cover cracked or broken? 

		X
--	--	---

  
 Is the concrete apron cracked or deteriorated? Frost Heaving? 

		X
--	--	---

**Identification:**

Is the well labeled with the correct number? 

X		
---	--	--

  
 Describe labeling: medallion on cover, stencil on well

**Security:**

Does the well have a cap or lid? 

X		
---	--	--

no lock cover  
 Does the well have a weatherproof lock? 

X		
---	--	--

  
 Does the lock secure well? 

X		
---	--	--

  
 Does the inner casing have a water-tight cap? 

X		
---	--	--

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?) 

	X	
--	---	--

  
 Is the well casing loose, (at the surface?) 

	X	
--	---	--

  
 Is a measurement point marked at the top of well casing? 

X		
---	--	--

  
 Measured depth of the well from measurement point: 24.15  
 Thickness of sediment accumulation (reported depth-present measurement): -0.15  
 Are there an obstructions in the well? 

	X	
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 Description of well bottom conditions (soft, hard, etc.): ○

Inspection Date: 2-1-08 Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-004 Location/Functional Area: L25

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: \_\_\_\_\_

Reported Construction Depth: 24.9 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

need's paint

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: medallion on cover, stencil on well

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked a the top of well casing?

Measured depth of the well from measurement point: 25.58

Thickness of sediment accumulation (reported depth-present measurement): -0.68

Are there an obstructions in the well?

Description of well bottom conditions (soft, hard, etc.): hard

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Inspection Date: 7-1-08

Inspected by: John Miller



**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: mw-005 Location/Functional Area: LL5  
 Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC  
 Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft  
 Flush-mount/Above-ground Completion: \_\_\_\_\_  
 Reported Construction Depth: 29.9 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

*Neal's print*

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: no marking, stencil on well

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked at the top of well casing?

Measured depth of the well from measurement point: 29.89

Thickness of sediment accumulation (reported depth-present measurement): ±0.01

Are there any obstructions in the well?

Description of well bottom conditions (soft, hard, etc.): hard

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Inspection Date: 7-1-08

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: muu-006 Location/Functional Area: LL5  
 Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC  
 Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft  
 Flush-mount/Above-ground Completion: \_\_\_\_\_  
 Reported Construction Depth: 26.9 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
-------------------------------------	-------------------------------------	-------------------------------------

Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Marking and stencil on well

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Need's lock cover

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is a measurement point marked a the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 27.27

Thickness of sediment accumulation (reported depth-present measurement): -0.37

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): ⊙

Inspection Date: 7-1-02

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MM-001 Location/Functional Area: LL6

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: \_\_\_\_\_

Reported Construction Depth: 17 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is steel protective casing installed?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

Does the protective casing have a weep hole?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a flush-mount box?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Describe labeling: no medallion, stencil on well

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is a measurement point marked a the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 17.78

Thickness of sediment accumulation (reported depth-present measurement): -0.78

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): hard

Inspection Date: 2-10-78

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: WV-002 Location/Functional Area: 226

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: \_\_\_\_\_

Reported Construction Depth: 22.5 ft ☐ BGS or ☒ BTOC (chosed one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

*Needs painting*

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: No medallion, stencil on well

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked at the top of well casing?

Measured depth of the well from measurement point: 24.65

Thickness of sediment accumulation (reported depth-present measurement): -2.15

Are there an obstructions in the well?

Description of well bottom conditions (soft, hard, etc.): \_\_\_\_\_

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Inspection Date: 7-1-08

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-003 Location/Functional Area: LL 6

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: \_\_\_\_\_

Reported Construction Depth: 25.9 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

*Needs paint  
Lock is missing  
a lock cover*

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: No medallion, stencil on well

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked at the top of well casing?

Measured depth of the well from measurement point: ~~16.4~~ 25.91

Thickness of sediment accumulation (reported depth-present measurement): ~~0.0~~ -0.01

Are there any obstructions in the well?

Description of well bottom conditions (soft, hard etc.): \_\_\_\_\_

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Inspection Date: 7-1-08

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-004 Location/Functional Area: 26

Casing Type: ☐ Steel ☐ Stainless Steel ☐ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: \_\_\_\_\_

Reported Construction Depth: 25.1 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

☒ ☐ ☐

Are any of the posts damaged or degraded?

☒ ☐ ☐

Is a concrete pad installed?

☒ ☐ ☐

Is the pad cracked or deteriorated? Frost Heaving?

☐ ☒ ☐

Is steel protective casing installed?

☒ ☐ ☐

Does the protective casing have a weep hole?

☐ ☒ ☐

Does vegetation around the well need clearing?

☐ ☒ ☐

~~Block cover~~  
~~is missing~~  
Need's painting

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

☐ ☐ ☒

Does the well have a flush-mount box?

☐ ☐ ☒

Is the traffic cover cracked or broken?

☐ ☐ ☒

Is the concrete apron cracked or deteriorated? Frost Heaving?

☐ ☐ ☒

**Identification:**

Is the well labeled with the correct number?

☒ ☐ ☐

Describe labeling: No medication, stencil on well

**Security:**

Does the well have a cap or lid?

☒ ☐ ☐

Does the well have a weatherproof lock?

☒ ☐ ☐

Does the lock secure well?

☒ ☐ ☐

Does the inner casing have a water-tight cap?

☒ ☐ ☐

lock cover  
is missing

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

☐ ☒ ☐

Is the well casing loose, (at the surface?)

☐ ☒ ☐

Is a measurement point marked a the top of well casing?

☒ ☐ ☐

Measured depth of the well from measurement point: 24.70

Thickness of sediment accumulation (reported depth-present measurement): +0.40

Are there an obstructions in the well?

☐ ☒ ☐

Description of well bottom conditions (soft, hard, etc.): \_\_\_\_\_

Inspection Date: 7-1-08

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MMU-005 Location/Functional Area: 216  
 Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC  
 Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft  
 Flush-mount/Above-ground Completion: \_\_\_\_\_  
 Reported Construction Depth: 22.5 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

*Need's paint*

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: No medallion, stencil on well

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked a the top of well casing?

Measured depth of the well from measurement point: 22.44

Thickness of sediment accumulation (reported depth-present measurement): +0.06

Are there an obstructions in the well?

Description of well bottom conditions (soft hard, etc.): \_\_\_\_\_

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Inspection Date: 7-1-08

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MMW-006 Location/Functional Area: LL6

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: \_\_\_\_\_

Reported Construction Depth: 17.0 ft ☐ BGS or ☒ BTOC (chosed one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

*Replaced gasket,  
needs painting*

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: Stencil on well, no medallion

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*Needs new  
lock*

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked at the top of well casing?

Measured depth of the well from measurement point: 17.95

Thickness of sediment accumulation (reported depth-present measurement): -0.95

Are there any obstructions in the well?

Description of well bottom conditions (soft, hard, etc.): \_\_\_\_\_

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Inspection Date: 7-1-08

Inspected by: John Miller



**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-007 Location/Functional Area: LL6

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: \_\_\_\_\_

Reported Construction Depth: 19.5 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

*Needs paint  
Replaced gasket,  
needs new  
lock*

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: No medication; stencil on well

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*needs new lock*

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked at the top of well casing?

Measured depth of the well from measurement point: 19.53

Thickness of sediment accumulation (reported depth-present measurement): -0.03

Are there an obstructions in the well?

Description of well bottom conditions (soft, hard, etc.): (hard)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Inspection Date: 7-1-88

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: NW-001 Location/Functional Area: LL7

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: \_\_\_\_\_

Reported Construction Depth: 32.2 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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*posts need painting*

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: medallion + stencil

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked a the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 33.22

Thickness of sediment accumulation (reported depth-present measurement): -1.02

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): \_\_\_\_\_

Inspection Date: 6-30-08

Inspected by: John Muller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-008 Location/Functional Area: L27

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: \_\_\_\_\_

Reported Construction Depth: 27.8 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

*Need's paint*

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: Marking on cap, stencil on well

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked at the top of well casing?

Measured depth of the well from measurement point: 27.37

Thickness of sediment accumulation (reported depth-present measurement): +0.43

Are there an obstructions in the well?

Description of well bottom conditions (soft, hard, etc.): (hard)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Inspection Date: 6-30-08

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: mw-003 Location/Functional Area: 447  
 Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC  
 Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft  
 Flush-mount/Above-ground Completion: \_\_\_\_\_  
 Reported Construction Depth: 33.6 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Need's paint

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: Medallion on cap, stencil on well

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked a the top of well casing?

Measured depth of the well from measurement point: 33.71

Thickness of sediment accumulation (reported depth-present measurement): -0.11

Are there an obstructions in the well?

Description of well bottom conditions (soft, hard, etc.): hard

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Inspection Date: 6-30-08 Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-004 Location/Functional Area: 47

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount Above-ground Completions: \_\_\_\_\_

Reported Construction Depth: 32.5 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: Medallion on cap, stencil on well

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked a the top of well casing?

Measured depth of the well from measurement point: 32.38

Thickness of sediment accumulation (reported depth-present measurement): 10.12

Are there an obstructions in the well?

Description of well bottom conditions (soft, hard etc.): \_\_\_\_\_

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Inspection Date: 6-30-08

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: NW-005 Location/Functional Area: LL7  
 Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC  
~~Screened~~ Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft  
 Flush-mount/Above-ground Completion: \_\_\_\_\_  
 Reported Construction Depth: 30.16 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Needs paint

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: Medallion on cap, stencil on post.

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked at the top of well casing?

Measured depth of the well from measurement point: 30.53

Thickness of sediment accumulation (reported depth-present measurement): +0.07

Are there an obstructions in the well?

Description of well bottom conditions (soft, hard, etc.):

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Inspection Date: 6-30-07

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-006 Location/Functional Area: LL7

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: \_\_\_\_\_

Reported Construction Depth: 30.4 ft ☐ BGS or ☒ BTOC (chosed one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

*needs print*

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: Medallion on cap, stencil on well

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked at the top of well casing?

Measured depth of the well from measurement point: 30.49

Thickness of sediment accumulation (reported depth-present measurement): -0.09

Are there any obstructions in the well?

Description of well bottom conditions (soft, hard, etc.): \_\_\_\_\_

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Inspection Date: 6-30-08 Inspected by: John M. Ibr

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: mu-001 Location/Functional Area: LL8

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: \_\_\_\_\_

Reported Construction Depth: 26.8 ft ☐ BGS or ☐ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: \_\_\_\_\_

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

needs paint

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: medallion on cap, stencil on well

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked at the top of well casing?

Measured depth of the well from measurement point: 27.69

Thickness of sediment accumulation (reported depth-present measurement): -0.89

Are there any obstructions in the well?

Description of well bottom conditions (soft, hard, etc.): \_\_\_\_\_

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Inspection Date: 7-1-02

Inspected by: John M. Her



**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: 002 Location/Functional Area: LL8

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: \_\_\_\_\_

Reported Construction Depth: 32.8 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

red's paint

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: Medallion on cap, stencil on well

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked at the top of well casing?

Measured depth of the well from measurement point: 32.74

Thickness of sediment accumulation (reported depth-present measurement): +0.06

Are there an obstructions in the well?

Description of well bottom conditions (soft, hard, etc.): \_\_\_\_\_

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Inspection Date: 7-1-08

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: WM-003 Location/Functional Area: LL8  
 Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC  
 Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft  
 Flush-mount/Above-ground Completion: \_\_\_\_\_  
 Reported Construction Depth: 23.3 ft ☐ BGS or ☒ BTOC (chosed one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

*Need's paint,  
outer casing  
dental*

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: Medallion on cap, stencil on well

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked a the top of well casing?

Measured depth of the well from measurement point: 23.2

Thickness of sediment accumulation (reported depth-present measurement): +0.10

Are there an obstructions in the well?

Description of well bottom conditions (soft, hard, etc.): \_\_\_\_\_

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Inspection Date: 7-1-08

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: mw-004 Location/Functional Area: LL8

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: \_\_\_\_\_

Reported Construction Depth: 23 ft ☐ BGS or ☒ BTOC (chosed one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

needs paint

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: Medallion on cap, stencil on well

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked at the top of well casing?

Measured depth of the well from measurement point: 22.87

Thickness of sediment accumulation (reported depth-present measurement): +0.13

Are there any obstructions in the well?

Description of well bottom conditions (soft, hard, etc.): medium

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Inspection Date: 7-1-08

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: 11W 009 Location/Functional Area: LL 8

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

~~Screened~~/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: \_\_\_\_\_

Reported Construction Depth: 27.2 ft ☐ BGS or ☐ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

X		
X		
X		
X		
X		
	X	

*Need's to be  
resealed  
between casing  
and pad. one  
of the posts is  
loose, need's paint*

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?


**Identification:**

Is the well labeled with the correct number?

Describe labeling: Medal/lon on cap. stencil on well

X		
---	--	--

**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

X		
X		
X		
X		

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked a the top of well casing?

Measured depth of the well from measurement point: 27.39

Thickness of sediment accumulation (reported depth-present measurement): -0.14

Are there an obstructions in the well?

Description of well bottom conditions (soft, hard, etc.): (C)

	X	
	X	
X		

Inspection Date: 7-1-08

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: mw-006 Location/Functional Area: LL 8  
 Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC  
~~Screened~~/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft  
 Flush-mount/Above-ground Completion: \_\_\_\_\_  
 Reported Construction Depth: 26.8 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Is the pad cracked or deteriorated? Frost Heaving?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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*Need's paint*

*Pad cracked through, needs replacement*

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Describe labeling: medallion on cap, stencil on well

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is a measurement point marked a the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 27.28

Thickness of sediment accumulation (reported depth-present measurement): -0.48

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): 6

Inspection Date: 7-1-08

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-001 Location/Functional Area: 229

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: \_\_\_\_\_

Reported Construction Depth: 23.3 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

*Need's painting*

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: No metal on, stencil on well

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked a the top of well casing?

Measured depth of the well from measurement point: 23.49

Thickness of sediment accumulation (reported depth-present measurement): -0.19

Are there an obstructions in the well?

Description of well bottom conditions (soft, hard, etc.): ⊙

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Inspection Date: 7-1-08

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: mw-002 Location/Functional Area: LL9

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: \_\_\_\_\_

Reported Construction Depth: 22.4 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

*Needs painting*

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: No identification

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked at the top of well casing?

Measured depth of the well from measurement point: 22.9

Thickness of sediment accumulation (reported depth-present measurement): -0.50

Are there any obstructions in the well?

Description of well bottom conditions (soft, hard, etc.): 5

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Inspection Date: 7-1-08

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: mw-003 Location/Functional Area: LL9  
 Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC  
 Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft  
 Flush-mount/Above-ground Completion: \_\_\_\_\_  
 Reported Construction Depth: 23.8 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

*Loose posts, have  
out of the ground.  
Need's paint*

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: No identification, stored on well

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked at the top of well casing?

Measured depth of the well from measurement point: 24.32

Thickness of sediment accumulation (reported depth-present measurement): -0.52

Are there any obstructions in the well?

Description of well bottom conditions (soft, hard etc.): \_\_\_\_\_

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Inspection Date: 7-1-08

Inspected by: John Miller



**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MMW 004 Location/Functional Area: LL9

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: \_\_\_\_\_

Reported Construction Depth: 34.9 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

*Need's painting*

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: no medallion, stencil on well

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked a the top of well casing?

Measured depth of the well from measurement point:

Thickness of sediment accumulation (reported depth-present measurement):

Are there an obstructions in the well?

Description of well bottom conditions (soft, hard, etc.):

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

35.83

-0.93

Inspection Date: 7-1-08

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: mw-005 Location/Functional Area: 2L9

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

~~Screened~~/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/~~Above-ground~~ Completion: ☒

Reported Construction Depth: 23.3 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

*Need's paint  
3 posts are  
loose concrete  
deteriorating*

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: No medallion, stencil

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked a the top of well casing?

Measured depth of the well from measurement point: 23.66

Thickness of sediment accumulation (reported depth-present measurement): -0.36

Are there an obstructions in the well?

Description of well bottom conditions (soft, hard, etc.): hard

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Inspection Date: 7-1-08

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MMW-006 Location/Functional Area: LL9  
 Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC  
 Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft  
 Flush-mount/Above-ground Completion:                       
 Reported Construction Depth: 28.9 ft ☐ BGS or ☐ BTOC (chosed one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

needs painting

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: no medallion, stencil on well

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked at the top of well casing?

Measured depth of the well from measurement point: 28.98

Thickness of sediment accumulation (reported depth-present measurement): -0.08

Are there an obstructions in the well?

Description of well bottom conditions (soft, hard, etc.):                     

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Inspection Date: 7-1-08 Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MU-007 Location/Functional Area: LL9

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: \_\_\_\_\_

Reported Construction Depth: 18.5 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: NO medallion, stencil on well

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

no lock

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked at the top of well casing?

Measured depth of the well from measurement point: 18.28

Thickness of sediment accumulation (reported depth-present measurement): +0.23

Are there any obstructions in the well?

Description of well bottom conditions (soft, hard, etc.): (S)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Inspection Date: 7-1-08

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-001 Location/Functional Area: LL10

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: \_\_\_\_\_

Reported Construction Depth: 29.8 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

*Needs painting*

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: markings on cover, stencil on well

**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked at the top of well casing?

Measured depth of the well from measurement point: 29.74

Thickness of sediment accumulation (reported depth-present measurement): +0.04

Are there any obstructions in the well?

Description of well bottom conditions (soft, hard etc.):

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Inspection Date: 2-1-98 Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-002 Location/Functional Area: LL10  
 Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC  
 Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft  
 Flush-mount/Above-ground Completion: \_\_\_\_\_  
 Reported Construction Depth: 29.7 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

needs painting

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: Medallion on cover, stencil on well

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked at the top of well casing?

Measured depth of the well from measurement point: 29.95

Thickness of sediment accumulation (reported depth-present measurement): -0.25

Are there any obstructions in the well?

Description of well bottom conditions (soft, hard, etc.): (C)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Inspection Date: 2-1-08

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: 1MN 003 Location/Functional Area: LL1D

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screwed/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: \_\_\_\_\_

Reported Construction Depth: \_\_\_\_\_ ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

*Needs painting*

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: Medallion on cover, stencil on well

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked at the top of well casing?

Measured depth of the well from measurement point: 28.70

Thickness of sediment accumulation (reported depth-present measurement): +0.20

Are there any obstructions in the well?

Description of well bottom conditions (soft, hard, etc.): \_\_\_\_\_

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Inspection Date: 7-1-08

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: mw-004 Location/Functional Area: LL10

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: \_\_\_\_\_

Reported Construction Depth: 33.8 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

*Pad is cracked - needs caulking*  
*not stable*  
*needs painting*

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: medallion and cover, stencil on well

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked at the top of well casing?

Measured depth of the well from measurement point: 33.69

Thickness of sediment accumulation (reported depth-present measurement): +0.11

Are there any obstructions in the well?

Description of well bottom conditions (soft/hard, etc.): (hard)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Inspection Date: 7-1-08

Inspected by: John Miller



**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW 005 Location/Functional Area: 2210  
 Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC  
 Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft  
 Flush-mount/Above-ground Completion: \_\_\_\_\_  
 Reported Construction Depth: 29.3 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

needs painting

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: medallion on cover, stencil on well

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked at the top of well casing?

Measured depth of the well from measurement point: 29.39

Thickness of sediment accumulation (reported depth-present measurement): -0.09

Are there any obstructions in the well?

Description of well bottom conditions (soft, hard, etc.): ⊙

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Inspection Date: 2-1-08

Inspected by: Bob Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: mw 006 Location/Functional Area: 240  
 Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC  
 Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft  
 Flush-mount/Above-ground Completion: \_\_\_\_\_  
 Reported Construction Depth: 26.1 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

*needs painting*

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling:

*medallion on cover, stencil on well*

**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked a the top of well casing?

Measured depth of the well from measurement point: 26.67

Thickness of sediment accumulation (reported depth-present measurement): -0.57

Are there an obstructions in the well?

Description of well bottom conditions (soft, hard, etc.): (C)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Inspection Date: 2-1-07

Inspected by: John

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: ~~1234~~ MW 001 Location/Functional Area: LL11

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: \_\_\_\_\_

Reported Construction Depth: 24.1 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: no medallion, stencil on well

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked a the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 21.65

Thickness of sediment accumulation (reported depth-present measurement): + 2.45

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 6-30-08

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: 11-11 <sup>my-002</sup> Location/Functional Area: 2211

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: \_\_\_\_\_

Reported Construction Depth: 16.0 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:** YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>Needs paint</u>
Are any of the posts damaged or degraded?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is a concrete pad installed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the pad cracked or deteriorated? Frost Heaving?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is steel protective casing installed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Does the protective casing have a weep hole?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Does vegetation around the well need clearing?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Does the well have a flush-mount box?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Is the traffic cover cracked or broken?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Is the concrete apron cracked or deteriorated? Frost Heaving?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

**Identification:**

Is the well labeled with the correct number? ☒ ☐ ☐ \_\_\_\_\_

Describe labeling: Stencil on well

**Security:**

Does the well have a cap or lid?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Does the well have a weatherproof lock?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Does the lock secure well?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Does the inner casing have a water-tight cap?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Is the well casing loose, (at the surface?)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Is a measurement point marked a the top of well casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Measured depth of the well from measurement point:	<u>16.59</u>			_____
Thickness of sediment accumulation (reported depth-present measurement):	<u>-0.59</u>			_____
Are there an obstructions in the well?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Description of well bottom conditions (soft, hard, etc.):	<u>(hard)</u>			

Inspection Date: 630-08 Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-003 Location/Functional Area: L211  
 Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC  
 Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft  
 Flush-mount/Above-ground Completion: Flush mount  
 Reported Construction Depth: 15.9 ft ☐ BGS or ☐ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: Stencil on post

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked a the top of well casing?

Measured depth of the well from measurement point: 16.22

Thickness of sediment accumulation (reported depth-present measurement): -0.32

Are there an obstructions in the well?

Description of well bottom conditions (soft, hard, etc.): (soft)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Inspection Date: 6-30-08

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: 14W-004 Location/Functional Area: 4411  
 Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC  
 Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft  
 Flush-mount/Above-ground Completion: \_\_\_\_\_  
 Reported Construction Depth: 16.2 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4  
 Are the posts positioned to prevent collision damage to the well? ☒ ☐ ☐ needs new well  
 Are any of the posts damaged or degraded? ☒ ☒ ☐ Cap  
 Is a concrete pad installed? ☒ ☐ ☐  
 Is the pad cracked or deteriorated? Frost Heaving? ☐ ☒ ☐ need pliers  
 Is steel protective casing installed? ☐ ☐ ☒ needs paint  
 Does the protective casing have a weep hole? ☐ ☐ ☒  
 Does vegetation around the well need clearing? ☐ ☐ ☒

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box? ☒ ☐ ☐  
 Does the well have a flush-mount box? ☒ ☐ ☐  
 Is the traffic cover cracked or broken? ☐ ☒ ☐  
 Is the concrete apron cracked or deteriorated? Frost Heaving? ☐ ☒ ☐

**Identification:**

Is the well labeled with the correct number? ☒ ☐ ☐  
 Describe labeling: \_\_\_\_\_

**Security:**

Does the well have a cap or lid? ☒ ☐ ☐  
 Does the well have a weatherproof lock? ☒ ☒ ☐  
 Does the lock secure well? ☐ ☐ ☒  
 Does the inner casing have a water-tight cap? ☐ ☒ ☐

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?) ☐ ☒ ☐  
 Is the well casing loose, (at the surface?) ☐ ☒ ☐  
 Is a measurement point marked a the top of well casing? ☒ ☐ ☐  
 Measured depth of the well from measurement point: 16.33  
 Thickness of sediment accumulation (reported depth-present measurement): - 0.13  
 Are there an obstructions in the well? ☐ ☒ ☐  
 Description of well bottom conditions (soft, hard etc.): (hard)

Inspection Date: 6-30-08 Inspected by: Bm Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MMW-005 Location/Functional Area: LL11

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: \_\_\_\_\_ ft

Flush-mount/Above-ground Completion: \_\_\_\_\_

Reported Construction Depth: 16.0 ft ☐ BGS or ☒ BTOC (chosed one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Does the protective casing have a weep hole?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Need's paint

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a flush-mount box?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: \_\_\_\_\_

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked at the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 16.58

Thickness of sediment accumulation (reported depth-present measurement): -0.58

Are there any obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): hard

Inspection Date: 6-30-08

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-006 Location/Functional Area: 2L11

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: \_\_\_\_\_

Reported Construction Depth: 15.5 ft ☐ BGS or ☒ BTOC (chosed one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

*Real's new lock  
and well cap*

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: no marking, stencil on well

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked at the top of well casing?

Measured depth of the well from measurement point: 15.85

Thickness of sediment accumulation (reported depth-present measurement): -0.35

Are there any obstructions in the well?

Description of well bottom conditions (soft, hard, etc.): hard

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Inspection Date: 6-30-08

Inspected by: John Miller



**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: WW-007 Location/Functional Area: LL113

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: \_\_\_\_\_

Reported Construction Depth: 25.2 ft ☐ BGS or ☐ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Stenciled on well

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked at the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 25.46

Thickness of sediment accumulation (reported depth-present measurement): 0.24

Are there any obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): \_\_\_\_\_

Inspection Date: 6-30-08

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: mw-008 Location/Functional Area: LL11

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: \_\_\_\_\_

Reported Construction Depth: 15.4 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: Stencil on well, no medication

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked at the top of well casing?

Measured depth of the well from measurement point: 15.86

Thickness of sediment accumulation (reported depth-present measurement): -0.46

Are there an obstructions in the well?

Description of well bottom conditions (soft, hard, etc.): \_\_\_\_\_

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Inspection Date: 6-30-07

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-009 Location/Functional Area: LL11

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: \_\_\_\_\_

Reported Construction Depth: 19.27 ft ☐ BGS or ☒ BTOC (chosed one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Stencil & medallion

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Does the lock secure well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is a measurement point marked at the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 19.68

Thickness of sediment accumulation (reported depth-present measurement): -0.41

Are there any obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): \_\_\_\_\_

Inspection Date: 10-30-08

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: WW-010 Location/Functional Area: LL11

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: \_\_\_\_\_

Reported Construction Depth: 23.4 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Scheduled

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: \_\_\_\_\_

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked at the top of well casing?

Measured depth of the well from measurement point: 23.60

Thickness of sediment accumulation (reported depth-present measurement): -0.20

Are there an obstructions in the well?

Description of well bottom conditions (soft, hard, etc.): \_\_\_\_\_

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Inspection Date: 6-30-8

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-088 Location/Functional Area: LL-12

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 27.1 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint and Tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked a the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 27.32

Thickness of sediment accumulation (reported depth-present measurement): -0.22

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 7/1/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-107 Location/Functional Area: LL-12

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 33.1 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint and Tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked a the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 33.77

Thickness of sediment accumulation (reported depth-present measurement): -0.67

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 7/1/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-113 Location/Functional Area: LL-12

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 25.0 ft ☐ BGS or ☐ BTOC (chosed one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint and Tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked a the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 18.96

Thickness of sediment accumulation (reported depth-present measurement): +6.04

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Soft

Inspection Date: 7/1/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-128 Location/Functional Area: LL-12

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 33.3 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint and Tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked at the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 34.23

Thickness of sediment accumulation (reported depth-present measurement): -0.97

Are there any obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 7/1/2008

Inspected by: MB



**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-153 Location/Functional Area: LL-12

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 25 ft ☐ BGS or ☒ BTOC (chase one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint and Tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked at the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 24.87

Thickness of sediment accumulation (reported depth-present measurement): -0.13

Are there any obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 7/1/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-154 Location/Functional Area: LL-12

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 28.7 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint and Tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked a the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 28.72

Thickness of sediment accumulation (reported depth-present measurement): -0.02

Are there an obstructions in the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 7/1/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-182 Location/Functional Area: LL-12

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 37.7 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Rust at top

Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint and Tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked a the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 38.06

Thickness of sediment accumulation (reported depth-present measurement): -0.36

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): flord

Inspection Date: 7/1/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-183 Location/Functional Area: LL-12

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 36.0 ft ☐ BGS or ☐ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is a measurement point marked a the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 36.41

Thickness of sediment accumulation (reported depth-present measurement): -0.41

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 7/1/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-184 Location/Functional Area: LL-12

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 31.2 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Reeds

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint and Tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked a the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 31.13

Thickness of sediment accumulation (reported depth-present measurement): +0.07

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): hard

Inspection Date: 7/1/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-185 Location/Functional Area: LL-12

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 23.2 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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scheduled

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint and Tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked a the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 23.02

Thickness of sediment accumulation (reported depth-present measurement): +0.18

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 7/1/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-186 Location/Functional Area: LL-12  
 Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC  
 Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft  
 Flush-mount/Above-ground Completion: Above Ground  
 Reported Construction Depth: 21.0 ft ☐ BGS or ☒ BTOC (chosed one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

☒
☐
☐

Are any of the posts damaged or degraded?

☐
☒
☐

Is a concrete pad installed?

☒
☐
☐

Is the pad cracked or deteriorated? Frost Heaving?

☐
☒
☐

Is steel protective casing installed?

☒
☐
☐

Does the protective casing have a weep hole?

☒
☐
☐

Does vegetation around the well need clearing?

☒
☒
☐

MD scheduled

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

☐
☐
☐

Does the well have a flush-mount box?

☐
☐
☐

Is the traffic cover cracked or broken?

☐
☐
☐

Is the concrete apron cracked or deteriorated? Frost Heaving?

☐
☐
☐

**Identification:**

Is the well labeled with the correct number?

☒
☐
☐

Describe labeling: Paint and Tag

**Security:**

Does the well have a cap or lid?

☒
☐
☐

Does the well have a weatherproof lock?

☒
☐
☐

Does the lock secure well?

☒
☐
☐

Does the inner casing have a water-tight cap?

☒
☐
☐

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

☐
☒
☐

Is the well casing loose, (at the surface?)

☐
☒
☐

Is a measurement point marked at the top of well casing?

☒
☐
☐

Measured depth of the well from measurement point: 21.11

Thickness of sediment accumulation (reported depth-present measurement): -0.11

Are there any obstructions in the well?

☐
☒
☐

Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 7/1/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-187 Location/Functional Area: LL-12

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 29.4 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: \_\_\_\_\_

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is a measurement point marked a the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 29.68

Thickness of sediment accumulation (reported depth-present measurement): -0.28

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 7/1/2008

Inspected by: MB



**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-188 Location/Functional Area: LL-12

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 22.2 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint and Tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked at the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 22.26

Thickness of sediment accumulation (reported depth-present measurement): -0.06

Are there any obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Soft

Inspection Date: 7/1/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-189 Location/Functional Area: LL-12

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 19.6 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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scheduled

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint and Tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked a the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 19.85

Thickness of sediment accumulation (reported depth-present measurement): -0.25

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 7/1/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-242 Location/Functional Area: LL-12

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 28.3 ft ☐ BGS or ☐ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Scheduled

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked a the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 29.14

Thickness of sediment accumulation (reported depth-present measurement): -0.84

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Soft

Inspection Date: 7/1/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-243 Location/Functional Area: LL-12

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: \_\_\_\_\_

Reported Construction Depth: 25.7 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

X		
X		
X		
	X	
X		
X		
	X	

Need paint, rusting

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?


**Identification:**

Is the well labeled with the correct number?

Describe labeling: Paint and Tag

X		
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

X		
X		
X		
X		

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked a the top of well casing?

Measured depth of the well from measurement point: 25.47

Thickness of sediment accumulation (reported depth-present measurement): + 0.23

Are there an obstructions in the well?

Description of well bottom conditions (soft hard, etc.): \_\_\_\_\_

	X	
	X	
X		
	X	

Inspection Date: 7/1/08

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-244 Location/Functional Area: LL-12

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 32.1 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Rusted

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint and Tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked at the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 30.97

Thickness of sediment accumulation (reported depth-present measurement): +1.13

Are there any obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Soft

Inspection Date: 7/1/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-245 Location/Functional Area: LL-12

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 30.5 ft ☐ BGS or ☒ BTOC (chosed one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Heavy Rust

Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Scheduled

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint and Tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked a the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 30.19

Thickness of sediment accumulation (reported depth-present measurement): +0.31

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 7/1/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-246 Location/Functional Area: LL-12

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 34.3 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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*Heavy Rust/peeling*

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint and Tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked at the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 35.07

Thickness of sediment accumulation (reported depth-present measurement): - 0.77

Are there any obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): \_\_\_\_\_

Inspection Date: 7/1/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-001 Location/Functional Area: ASY

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: \_\_\_\_\_

Reported Construction Depth: 23.7 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

*Need's painting*

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: Medallion on cover, stencil on well

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked a the top of well casing?

Measured depth of the well from measurement point: 23.30

Thickness of sediment accumulation (reported depth-present measurement): +0.40

Are there an obstructions in the well?

Description of well bottom conditions (soft, hard, etc.): \_\_\_\_\_

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Inspection Date: 7-1-08

Inspected by: John Miller



**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-002 Location/Functional Area: ASY

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 9.5 ft

Flush-mount/Above-ground Completion: \_\_\_\_\_

Reported Construction Depth: 22.7 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

needs painting

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: marking on cover, stencil on well

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked at the top of well casing?

Measured depth of the well from measurement point: 23.10

Thickness of sediment accumulation (reported depth-present measurement): -0.40

Are there any obstructions in the well?

Description of well bottom conditions (soft, hard, etc.): (C)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Inspection Date: 7-1-06

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-003 Location/Functional Area: ASY

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion:                     

Reported Construction Depth: 23.5 ft ☐ BGS or ☐ BTOC (chosed one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

*Needs painting*

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: Medallion on cover, stencil on well

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked at the top of well casing?

Measured depth of the well from measurement point: 23.60

Thickness of sediment accumulation (reported depth-present measurement): -0.10

Are there any obstructions in the well?

Description of well bottom conditions (soft, hard etc.): \_\_\_\_\_

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Inspection Date: 7-1-08

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MMW-004 Location/Functional Area: ASY

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: \_\_\_\_\_

Reported Construction Depth: 29.6 ft ☐ BGS or ☐ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Needs painting

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: Medallion on cover, stone in well

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked at the top of well casing?

Measured depth of the well from measurement point: 29.94

Thickness of sediment accumulation (reported depth-present measurement): -0.34

Are there any obstructions in the well?

Description of well bottom conditions (soft, hard, etc.): ⊙

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Inspection Date: 2-1-08

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW 005 Location/Functional Area: ASP  
 Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC  
 Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft  
 Flush-mount/Above-ground Completion: \_\_\_\_\_  
 Reported Construction Depth: 26.2 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

*Needs painting*

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: Model on cover, stencil on well

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked at the top of well casing?

Measured depth of the well from measurement point: 27.39

Thickness of sediment accumulation (reported depth-present measurement): -1.19

Are there any obstructions in the well?

Description of well bottom conditions (soft, hard, etc.): (hard)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Inspection Date: 7-1-08

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: mw-006 Location/Functional Area: ASY  
 Casing-Type: ☐ Steel ☐ Stainless Steel ☒ PVC  
 Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft  
 Flush-mount/Above-ground Completion: \_\_\_\_\_  
 Reported Construction Depth: 28.8 ft ☐ BGS or ☒ BTOC (chosed one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Needs painting

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: Medallion on cover, stencil

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked at the top of well casing?

Measured depth of the well from measurement point: 29.08

Thickness of sediment accumulation (reported depth-present measurement): -0.28

Are there any obstructions in the well?

Description of well bottom conditions (soft, hard, etc.):

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Inspection Date: 7-1-88

Inspected by: John M. Her

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-007 Location/Functional Area: ASY

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: \_\_\_\_\_

Reported Construction Depth: 28.8 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: medallion on cover, stencil on well

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked at the top of well casing?

Measured depth of the well from measurement point: 28.82

Thickness of sediment accumulation (reported depth-present measurement): <0.02

Are there any obstructions in the well?

Description of well bottom conditions (soft, hard, etc.): \_\_\_\_\_

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Inspection Date: 7-1-08

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: mw-008 Location/Functional Area: ASP

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: \_\_\_\_\_

Reported Construction Depth: 27.7 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

needs painting

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: metallic on cover, stencil on well

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked at the top of well casing?

Measured depth of the well from measurement point: 27.69

Thickness of sediment accumulation (reported depth-present measurement): +0.01

Are there any obstructions in the well?

Description of well bottom conditions (soft, hard, etc.): (hard)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Inspection Date: 7-1-08

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-008 Location/Functional Area: ASY

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: \_\_\_\_\_

Reported Construction Depth: 24.3 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

☒ ☐ ☐

Are any of the posts damaged or degraded?

☒ ☐ ☐

Is a concrete pad installed?

☒ ☐ ☐

Is the pad cracked or deteriorated? Frost Heaving?

☐ ☒ ☐

Is steel protective casing installed?

☒ ☐ ☐

Does the protective casing have a weep hole?

☒ ☐ ☐

Does vegetation around the well need clearing?

☐ ☒ ☐

*Needs painting*

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

☐ ☐ ☒

Does the well have a flush-mount box?

☐ ☐ ☒

Is the traffic cover cracked or broken?

☐ ☐ ☒

Is the concrete apron cracked or deteriorated? Frost Heaving?

☐ ☐ ☒

**Identification:**

Is the well labeled with the correct number?

☒ ☐ ☐

Describe labeling: Medallion on cover, needs painting stencil on well

**Security:**

Does the well have a cap or lid?

☒ ☐ ☐

Does the well have a weatherproof lock?

☒ ☐ ☐

Does the lock secure well?

☒ ☐ ☐

Does the inner casing have a water-tight cap?

☒ ☐ ☐

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

☐ ☒ ☐

Is the well casing loose, (at the surface?)

☐ ☒ ☐

Is a measurement point marked at the top of well casing?

☒ ☐ ☐

Measured depth of the well from measurement point: 24.69

Thickness of sediment accumulation (reported depth-present measurement): -0.39

Are there an obstructions in the well?

☐ ☒ ☐

Description of well bottom conditions (soft, hard etc.): 6

Inspection Date: 7-1-08

Inspected by: John Miller



**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: mm 010 Location/Functional Area: ASF  
 Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC  
 Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft  
 Flush-mount/Above-ground Completion: \_\_\_\_\_  
 Reported Construction Depth: 29.8 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Needs painting

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: Medallion on cover, stencil on well

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked at the top of well casing?

Measured depth of the well from measurement point: 31.25

Thickness of sediment accumulation (reported depth-present measurement): -1.45

Are there any obstructions in the well?

Description of well bottom conditions (soft, hard, etc.): hard

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Inspection Date: 7-1-88

Inspected by: John M. Ilev

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-010 Location/Functional Area: B12

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 23.2 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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scheduled

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint and Tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked a the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 22.91

Thickness of sediment accumulation (reported depth-present measurement): +0.27

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 6/30/2006

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-011 Location/Functional Area: B12

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 26.9 ft ☐ BGS or ☐ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint and Tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is a measurement point marked a the top of well casing? MB

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 16.88 26.82

Thickness of sediment accumulation (reported depth-present measurement): +0.088

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 6/30/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-012 Location/Functional Area: Biz

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 24.9 ft ☐ BGS or ☒ BTOC (chosed one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Describe labeling: Paint and Tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is a measurement point marked a the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 24.90

Thickness of sediment accumulation (reported depth-present measurement): 0

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 6/30/2004

Inspected by: MD

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MMW- 001 Location/Functional Area: CBL

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion

Reported Construction Depth: 51.6 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

X		
X		
X		
	X	
X		
X		
	X	

*Rusty  
needs paint*

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

		X
		X
		X
		X

**Identification:**

Is the well labeled with the correct number?

Describe labeling: Medallion on cap, stencil on well

X		
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

X		
X		
X		
X		

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked at the top of well casing?

Measured depth of the well from measurement point: 49.95

Thickness of sediment accumulation (reported depth-present measurement): +1.65

Are there any obstructions in the well?

Description of well bottom conditions (soft, hard, etc.): (C)

	X	
	X	
X		
	X	

Inspection Date: 6-30-07

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-002 Location/Functional Area: CBL  
 Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC  
 Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft  
 Flush-mount/Above-ground Completion: \_\_\_\_\_  
 Reported Construction Depth: 47.2 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

*Busty  
Needs part*

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: Medallion on cap, stencil on well

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked at the top of well casing?

Measured depth of the well from measurement point: 47.52

Thickness of sediment accumulation (reported depth-present measurement): -0.32

Are there any obstructions in the well?

Description of well bottom conditions (soft, hard etc.): \_\_\_\_\_

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Inspection Date: 6-30-08

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-003 Location/Functional Area: CBL

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: \_\_\_\_\_

Reported Construction Depth: 45.8 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

X		
X		
X		
	X	
X		
X		
	X	

*Neel's print*

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

		X
		X
		X
		X

**Identification:**

Is the well labeled with the correct number?

Describe labeling: Model on cap, stencil on well

X		
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

X		
X		
X		
X		

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked at the top of well casing?

Measured depth of the well from measurement point: 44.92

Thickness of sediment accumulation (reported depth-present measurement): +0.88

Are there any obstructions in the well?

Description of well bottom conditions (soft, hard, etc.): (H)

	X	
	X	
X		

Inspection Date: 6-30-08

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: mw-004 Location/Functional Area: CBL  
 Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC  
 Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft  
 Flush-mount/Above-ground Completion: \_\_\_\_\_  
 Reported Construction Depth: 46.8 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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*rust  
needs paint*

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Medallion on cap, stencil on well

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is a measurement point marked at the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 47.22

Thickness of sediment accumulation (reported depth-present measurement): -0.42

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): hard

Inspection Date: 6-30-68

Inspected by: John Miller



**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-001 Location/Functional Area: CBP

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 34.9 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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behind construction  
scheduled

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Describe labeling: Paint

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is a measurement point marked a the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 32.81

Thickness of sediment accumulation (reported depth-present measurement): +2.09

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Soft

Inspection Date: 7/1/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-002 Location/Functional Area: CBP

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 32.2 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Scheduled

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Describe labeling: Paint

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is a measurement point marked a the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 32.14

Thickness of sediment accumulation (reported depth-present measurement): +0.06

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Medium

Inspection Date: 7/1/2008

Inspected by: MD

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-003 Location/Functional Area: CBP

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 27.1 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked a the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 30.31

Thickness of sediment accumulation (reported depth-present measurement): -3.2 feet

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 7/1/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-004 Location/Functional Area: CBP

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above-Ground

Reported Construction Depth: 29.5 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Scheduled

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked a the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 29.76

Thickness of sediment accumulation (reported depth-present measurement): -0.24

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard Medium (MB)

Inspection Date: 7/1/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-005 Location/Functional Area: CBP

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 27.3 ft ☐ BGS or ☒ BTOC (chosed one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Scheduled

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked a the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 27.52

Thickness of sediment accumulation (reported depth-present measurement): -0.22

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Medium

Inspection Date: 7/1/2006

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-007 Location/Functional Area: CBP

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above-Ground

Reported Construction Depth: 25.1 ft ☐ BGS or ☒ BTOC (chosed one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Scheduled

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked a the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 31.88

Thickness of sediment accumulation (reported depth-present measurement): - 6.78

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Medium

Inspection Date: 7/1/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-008 Location/Functional Area: CBP  
 Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC  
 Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft  
 Flush-mount/Above-ground Completion: Above Ground  
 Reported Construction Depth: 32.4 ft ☐ BGS or ☒ BTOC (chosed one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3  
 Are the posts positioned to prevent collision damage to the well? ☒ ☐ ☐  
 Are any of the posts damaged or degraded? ☐ ☒ ☐  
 Is a concrete pad installed? ☒ ☐ ☐  
 Is the pad cracked or deteriorated? Frost Heaving? ☐ ☒ ☐  
 Is steel protective casing installed? ☒ ☐ ☐  
 Does the protective casing have a weep hole? ☒ ☐ ☐  
 Does vegetation around the well need clearing? ☒ ☐ ☐ Scheduled

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box? ☐ ☐ ☒  
 Does the well have a flush-mount box? ☐ ☐ ☒  
 Is the traffic cover cracked or broken? ☐ ☐ ☒  
 Is the concrete apron cracked or deteriorated? Frost Heaving? ☐ ☐ ☒

**Identification:**

Is the well labeled with the correct number? ☒ ☐ ☐  
 Describe labeling: Paint

**Security:**

Does the well have a cap or lid? ☒ ☐ ☐  
 Does the well have a weatherproof lock? ☒ ☐ ☐  
 Does the lock secure well? ☒ ☐ ☐  
 Does the inner casing have a water-tight cap? ☒ ☐ ☐

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?) ☐ ☒ ☐  
 Is the well casing loose, (at the surface?) ☐ ☒ ☐  
 Is a measurement point marked a the top of well casing? ☒ ☒ ☐ Faint (B)  
 Measured depth of the well from measurement point: 29.03  
 Thickness of sediment accumulation (reported depth-present measurement): + 4.37  
 Are there an obstructions in the well? ☐ ☒ ☐  
 Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 7/1/2003 Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-006 Location/Functional Area: CBP

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 27.6 ft ☐ BGS or ☒ BTOC (chosed one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Scheduled

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked a the top of well casing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 25.38

Thickness of sediment accumulation (reported depth-present measurement): +2.22

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Soft

Inspection Date: 7/1/2008

Inspected by: MB



**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-001 Location/Functional Area: CP

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Flush-Mount

Reported Construction Depth: 15.3 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Does the protective casing have a weep hole?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Scheduled

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a flush-mount box?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked a the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 14.81

Thickness of sediment accumulation (reported depth-present measurement): +0.49

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 7/1/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-002 Location/Functional Area: CP

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground Flush-Mount MB

Reported Construction Depth: 15.1 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Does the protective casing have a weep hole?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Scheduled

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a flush-mount box?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	-------------------------------------	--------------------------

Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
-------------------------------------	--------------------------	-------------------------------------

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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MB

MB

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked at the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 15.08

Thickness of sediment accumulation (reported depth-present measurement): +0.02

Are there any obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard

Casing filled with water + gasket replaced

Inspection Date: 7/1/2004

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-003 Location/Functional Area: CP

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Flush-Mount

Reported Construction Depth: 17.6 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is steel protective casing installed?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Does the protective casing have a weep hole?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Scheduled 7/2/08

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a flush-mount box?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Print

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Does the lock secure well?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is a measurement point marked a the top of well casing?

<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 17.83

Thickness of sediment accumulation (reported depth-present measurement): -0.23

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard

Casing filled with water + add gasket

Inspection Date: 7/1/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-004 Location/Functional Area: CP

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 22.2 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is a measurement point marked a the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 22.66

Thickness of sediment accumulation (reported depth-present measurement): -0.46

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 7/1/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-005 Location/Functional Area: CP

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above-Ground

Reported Construction Depth: 42.4 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Scheduled 7/2/08

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked a the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 43.30

Thickness of sediment accumulation (reported depth-present measurement): -0.90

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 7/1/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-006 Location/Functional Area: CP

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 20.2 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked at the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 20.75

Thickness of sediment accumulation (reported depth-present measurement): - 0.55

Are there any obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 6/30/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-1B Location/Functional Area: DET Demo Area 2

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 5 ft

Flush-mount/Above-ground Completion: \_\_\_\_\_

Reported Construction Depth: 40.5 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Is the pad cracked or deteriorated? Frost Heaving?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the protective casing have a weep hole?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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*Needs painting  
Pad wobbles alot,  
needs to be  
stabilized*

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

**Labeling:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: no metalium, stencil on well

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is a measurement point marked at the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 38.69

Thickness of sediment accumulation (reported depth-present measurement): + 1.81

Are there any obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): (hard)

Inspection Date: 7-1-08

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: mw2 Location/Functional Area: DET DemoArea 2

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 5 ft

Flush-mount/Above-ground Completion: \_\_\_\_\_

Reported Construction Depth: 40.0 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

*Square outer casing  
needs painting  
mild rust on  
interior of casing*

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: no medallion, stencil on well

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked at the top of well casing?

Measured depth of the well from measurement point: 42.21

Thickness of sediment accumulation (reported depth-present measurement): -2.21

Are there an obstructions in the well?

Description of well bottom conditions (soft, hard, etc.): 6

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

*needs new well  
cap*

Inspection Date: 2-1-08

Inspected by: John Miller



**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: DET-3 Location/Functional Area: DAZ

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 5 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 13.0 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

☒
☐
☐

Are any of the posts damaged or degraded?

☐
☒
☐

Is a concrete pad installed?

☒
☐
☐

Is the pad cracked or deteriorated? Frost Heaving?

☐
☒
☐

Is steel protective casing installed?

☒
☐
☐

Does the protective casing have a weep hole?

☒
☐
☐

Does vegetation around the well need clearing?

☒
☐
☐

scheduled weedwork

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

☐
☐
☐

Does the well have a flush-mount box?

☐
☐
☐

Is the traffic cover cracked or broken?

☐
☐
☐

Is the concrete apron cracked or deteriorated? Frost Heaving?

☐
☐
☐

**Identification:**

Is the well labeled with the correct number?

☒
☐
☐

Describe labeling: Paint

**Security:**

Does the well have a cap or lid?

☒
☐
☐

Does the well have a weatherproof lock?

☒
☐
☐

Does the lock secure well?

☒
☐
☐

Does the inner casing have a water-tight cap?

☒
☐
☐

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

☐
☒
☐

Is the well casing loose, (at the surface?)

☐
☒
☐

Is a measurement point marked a the top of well casing?

☒
☐
☐

Measured depth of the well from measurement point: 16.09

Thickness of sediment accumulation (reported depth-present measurement): -3.09

Are there an obstructions in the well?

☐
☒
☐

Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 7/1/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: DET-4 Location/Functional Area: DAZ

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 5 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 12.0 ft ☐ BGS or ☒ BTOC (chosed one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Scheduled weeding

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked at the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 13.89

Thickness of sediment accumulation (reported depth-present measurement): - 1.89

Are there any obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 7/1/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-104 Location/Functional Area: DA2

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: \_\_\_\_\_

Reported Construction Depth: 29.6 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

need paintal

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: medallion in cement, set in or well

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked at the top of well casing?

Measured depth of the well from measurement point: 29.38

Thickness of sediment accumulation (reported depth-present measurement): 10.02

Are there an obstructions in the well?

Description of well bottom conditions (soft, hard, etc.): hard

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Inspection Date: 7-1-08

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: mw-105 Location/Functional Area: DAZ

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 5 ft

Flush-mount/Above-ground Completion: \_\_\_\_\_

Reported Construction Depth: 16.2 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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*needs painting*

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Describe labeling: Medallion in pad stencil on well

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is a measurement point marked at the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 16.40

Thickness of sediment accumulation (reported depth-present measurement): - 0.20

Are there any obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): \_\_\_\_\_

Inspection Date: 7-1-08

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MMU-106 Location/Functional Area: DA2

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 7 ft

Flush-mount/Above-ground Completion: \_\_\_\_\_

Reported Construction Depth: 18.1 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

☒ ☐ ☐

Are any of the posts damaged or degraded?

☐ ☒ ☐

Is a concrete pad installed?

☒ ☐ ☐

Is the pad cracked or deteriorated? Frost Heaving?

☐ ☒ ☐

Is steel protective casing installed?

☒ ☐ ☐

Does the protective casing have a weep hole?

☒ ☐ ☐

Does vegetation around the well need clearing?

☐ ☒ ☐

*no change in elevation*

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

☐ ☐ ☒

Does the well have a flush-mount box?

☐ ☐ ☒

Is the traffic cover cracked or broken?

☐ ☐ ☒

Is the concrete apron cracked or deteriorated? Frost Heaving?

☐ ☐ ☒

**Identification:**

Is the well labeled with the correct number?

☒ ☐ ☐

Describe labeling: medallion in pad, stencil on well

**Security:**

Does the well have a cap or lid?

☒ ☐ ☐

Does the well have a weatherproof lock?

☒ ☐ ☐

Does the lock secure well?

☒ ☐ ☐

Does the inner casing have a water-tight cap?

☒ ☐ ☐

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

☐ ☒ ☐

Is the well casing loose, (at the surface?)

☐ ☒ ☐

Is a measurement point marked a the top of well casing?

☒ ☐ ☐

Measured depth of the well from measurement point: 16.97

Thickness of sediment accumulation (reported depth-present measurement): + 1.13

Are there an obstructions in the well?

☐ ☒ ☐

Description of well bottom conditions (soft, hard, etc.): (hard)

Inspection Date: 7-1-08

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: mw 107 Location/Functional Area: DA2

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 5 ft

Flush-mount/Above-ground Completion: \_\_\_\_\_

Reported Construction Depth: 16.5 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

*neal's painting*

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: medallion in pad, stencil on well

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*no lock cover*

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked a the top of well casing?

Measured depth of the well from measurement point: 17.02

Thickness of sediment accumulation (reported depth-present measurement): -0.52

Are there an obstructions in the well?

Description of well bottom conditions (soft, hard, etc.): ○

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Inspection Date: 7-1-08

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-108 Location/Functional Area: DAZ  
 Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC  
 Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 5 ft  
 Flush-mount/Above-ground Completion: \_\_\_\_\_  
 Reported Construction Depth: 16.9 ft ☐ BGS or ☐ BTOC (chosed one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Medallion on pad, stencil on well

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked at the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 17.34

Thickness of sediment accumulation (reported depth-present measurement): -0.44

Are there any obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): hard

Inspection Date: 5-1-08

Inspected by: John Miplev

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-109 Location/Functional Area: DAZ

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 24.1 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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scheduled weedwhack

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint and tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked at the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 24.42

Thickness of sediment accumulation (reported depth-present measurement): - 0.32

Are there any obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard Medium @

Inspection Date: 7/1/2008

Inspected by: MB



**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-110 Location/Functional Area: DAZ

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 24.10 <sup>ft</sup> ☐ BGS or ☒ BTOC (chosed one only)  
21.9

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint and tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked at the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 22.47

Thickness of sediment accumulation (reported depth-present measurement): -0.57

Are there any obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): \_\_\_\_\_

Inspection Date: 7/1/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-111 Location/Functional Area: DAZ  
 Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC  
 Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 5 ft  
 Flush-mount/Above-ground Completion: Above Ground  
 Reported Construction Depth: 14.8 ft ☐ BGS or ☒ BTOC (chosed one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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scheduled weed whack

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint and tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked at the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 14.90

Thickness of sediment accumulation (reported depth-present measurement): -0.10

Are there any obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 7/1/2006

Inspected by: MRB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-112 Location/Functional Area: DAZ

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 5 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 16.6 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

X		
	X	
X		
	X	
X		
X		
X		

Scheduled weedwack

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?


**Identification:**

Is the well labeled with the correct number?

Describe labeling: Paint and tag

X		
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

X		
X		
X		
X		

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked at the top of well casing?

Measured depth of the well from measurement point: 17.17

Thickness of sediment accumulation (reported depth-present measurement): -0.57

Are there an obstructions in the well?

Description of well bottom conditions (soft, hard, etc.): Hard

	X	
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Inspection Date: 7/1/2004

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-113 Location/Functional Area: DAZ

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 5 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 16.1 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Scheduled weedwhack

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint and tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked a the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 16.41

Thickness of sediment accumulation (reported depth-present measurement): -0.31

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 7/1/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-123 Location/Functional Area: EBG  
 Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC  
 Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft  
 Flush-mount/Above-ground Completion: Above Ground  
 Reported Construction Depth: 33.7 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint and Tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked a the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 34.90

Thickness of sediment accumulation (reported depth-present measurement): -1.20

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Medium

Inspection Date: 6/30/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-124 Location/Functional Area: EBG

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 32.9 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint and Tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked at the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 32.84

Thickness of sediment accumulation (reported depth-present measurement): +0.06

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard Medium (MB)

Inspection Date: 6/30/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-125 Location/Functional Area: EBG

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 26.8 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint and Tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked a the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 27.56

Thickness of sediment accumulation (reported depth-present measurement): -0.76

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 6/30/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-126 Location/Functional Area: EBG

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 27.9 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Under Water

Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint and Tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked at the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 27.85

Thickness of sediment accumulation (reported depth-present measurement):

MB  
N/A +0.05

Are there any obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 6/30/2008

Inspected by: MB



**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-127 Location/Functional Area: EBG

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 32.40 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: Paint and Tag

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked at the top of well casing?

Measured depth of the well from measurement point: 32.94

Thickness of sediment accumulation (reported depth-present measurement): -0.54

Are there any obstructions in the well?

Description of well bottom conditions (soft, hard, etc.): Hard

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Inspection Date: 6/30/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-128 Location/Functional Area: EBC  
 Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC  
 Screened/Open-Hole Well Type: Open MB Monitor Interval Length: 10 ft  
 Flush-mount/Above-ground Completion: Above Ground  
 Reported Construction Depth: 28 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

X		
	X	
X		
	X	
X		
X		
	X	

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?


**Identification:**

Is the well labeled with the correct number?

Describe labeling: Paint + Tag

X		
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

X		
X		
X		
X		

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked at the top of well casing?

Measured depth of the well from measurement point: 28.33

Thickness of sediment accumulation (reported depth-present measurement): -0.33

Are there any obstructions in the well?

Description of well bottom conditions (soft, hard, etc.): Hard

	X	
	X	
X		
	X	

Inspection Date: 6/30/2004

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-129 Location/Functional Area: EBG

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: \_\_\_\_\_

Reported Construction Depth: 28.4 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint and Tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked a the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 31.14

Thickness of sediment accumulation (reported depth-present measurement): -2.74

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 6/30/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-130 Location/Functional Area: EDG  
 Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC  
 Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft  
 Flush-mount/Above-ground Completion: Above Ground  
 Reported Construction Depth: 28.3 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint and Tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked at the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 28.46

Thickness of sediment accumulation (reported depth-present measurement): -0.14

Are there any obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 6/30/2009

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: mw-166 Location/Functional Area: FBQ

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: \_\_\_\_\_

Reported Construction Depth: 19.5 ft ☐ BGS or ☐ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Medallion in concrete, stencil on well

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked a the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 19.90

Thickness of sediment accumulation (reported depth-present measurement): -0.40

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard etc.): \_\_\_\_\_

Inspection Date: 2-1-08

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: 111-167 Location/Functional Area: FBQ  
 Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC  
 Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft  
 Flush-mount/Above-ground Completion: \_\_\_\_\_  
 Reported Construction Depth: 18.9 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Medallion in concrete, stencil on well

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked at the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 19.16

Thickness of sediment accumulation (reported depth-present measurement): -0.26

Are there any obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): \_\_\_\_\_

Inspection Date: 2-1-08

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: mw-168 Location/Functional Area: FBQ  
 Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC  
 Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft  
 Flush-mount/Above-ground Completion: \_\_\_\_\_  
 Reported Construction Depth: 21.6 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: medallion in concrete, stencil on well

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked at the top of well casing?

Measured depth of the well from measurement point: 21.42

Thickness of sediment accumulation (reported depth-present measurement): +0.18

Are there an obstructions in the well?

Description of well bottom conditions (soft hard, etc.): \_\_\_\_\_

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Inspection Date: 7-1-08

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: mw-169 Location/Functional Area: FBQ

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: \_\_\_\_\_

Reported Construction Depth: 18.2 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

non seen

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: medallion in concrete, flag on well

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked a the top of well casing?

Measured depth of the well from measurement point: 18.26

Thickness of sediment accumulation (reported depth-present measurement): -0.04

Are there an obstructions in the well?

Description of well bottom conditions (soft, hard, etc.): \_\_\_\_\_

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Inspection Date: 7-1-08

Inspected by: John Miller



**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-170 Location/Functional Area: FBQ  
 Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC  
 Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft  
 Flush-mount/Above-ground Completion: \_\_\_\_\_  
 Reported Construction Depth: 32.6 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: medallion in concrete, stencil on well

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked at the top of well casing?

Measured depth of the well from measurement point: 32.88

Thickness of sediment accumulation (reported depth-present measurement): -0.28

Are there any obstructions in the well?

Description of well bottom conditions (soft, hard, etc.): hard

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Inspection Date: 7-1-08

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: WW-171 Location/Functional Area: FBQ  
 Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC  
 Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft  
 Flush-mount/Above-ground Completion: \_\_\_\_\_  
 Reported Construction Depth: 31.1 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

unseen

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: medallion in concrete, stencil on well

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked at the top of well casing?

Measured depth of the well from measurement point: 31.60

Thickness of sediment accumulation (reported depth-present measurement): -0.50

Are there any obstructions in the well?

Description of well bottom conditions (soft, hard, etc.): hard

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Inspection Date: 7-1-08

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: nmr 172 Location/Functional Area: FBQ

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: \_\_\_\_\_

Reported Construction Depth: 34.4 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

non seen

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: medallion in concrete, stencil on well

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked at the top of well casing?

Measured depth of the well from measurement point: 34.56

Thickness of sediment accumulation (reported depth-present measurement): -0.14

Are there an obstructions in the well?

Description of well bottom conditions (soft, hard, etc.): \_\_\_\_\_

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Inspection Date: 7-1-88

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: WW-173 Location/Functional Area: \_\_\_\_\_  
 Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC  
 Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 20 ft  
 Flush-mount/Above-ground Completion: \_\_\_\_\_  
 Reported Construction Depth: 53 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

nonseen

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: medallion in concrete, stencil on well

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked at the top of well casing? 42.9m

Measured depth of the well from measurement point: 124.035 51.89

Thickness of sediment accumulation (reported depth-present measurement): + 1.11

Are there an obstructions in the well?

Description of well bottom conditions (soft, hard, etc.):

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Inspection Date: 7-1-08

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: mw 174 Location/Functional Area: FBQ  
 Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC  
 Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft  
 Flush-mount/Above-ground Completion: \_\_\_\_\_  
 Reported Construction Depth: 26.2 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4  
 Are the posts positioned to prevent collision damage to the well? ☒ ☐ ☐ \_\_\_\_\_  
 Are any of the posts damaged or degraded? ☐ ☒ ☐ \_\_\_\_\_  
 Is a concrete pad installed? ☒ ☐ ☐ \_\_\_\_\_  
 Is the pad cracked or deteriorated? Frost Heaving? ☐ ☒ ☐ \_\_\_\_\_  
 Is steel protective casing installed? ☒ ☐ ☐ \_\_\_\_\_  
 Does the protective casing have a weep hole? ☒ ☐ ☐ \_\_\_\_\_  
 Does vegetation around the well need clearing? ☐ ☒ ☐ \_\_\_\_\_

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box? ☐ ☐ ☒ \_\_\_\_\_  
 Does the well have a flush-mount box? ☐ ☐ ☒ \_\_\_\_\_  
 Is the traffic cover cracked or broken? ☐ ☐ ☒ \_\_\_\_\_  
 Is the concrete apron cracked or deteriorated? Frost Heaving? ☐ ☐ ☒ \_\_\_\_\_

**Identification:**

Is the well labeled with the correct number? ☒ ☐ ☐ \_\_\_\_\_  
 Describe labeling: medallion in concrete, stencil on well

**Security:**

Does the well have a cap or lid? ☒ ☐ ☐ \_\_\_\_\_  
 Does the well have a weatherproof lock? ☒ ☐ ☐ \_\_\_\_\_  
 Does the lock secure well? ☒ ☐ ☐ \_\_\_\_\_  
 Does the inner casing have a water-tight cap? ☒ ☐ ☐ \_\_\_\_\_

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?) ☐ ☒ ☐ \_\_\_\_\_  
 Is the well casing loose, (at the surface?) ☐ ☒ ☐ \_\_\_\_\_  
 Is a measurement point marked at the top of well casing? ☒ ☐ ☐ \_\_\_\_\_  
 Measured depth of the well from measurement point: 23.04  
 Thickness of sediment accumulation (reported depth-present measurement): +3.16  
 Are there an obstructions in the well? ☐ ☒ ☐ \_\_\_\_\_  
 Description of well bottom conditions (soft, hard, etc.): hard

Inspection Date: 7-1-68 Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: mv-175 Location/Functional Area: FBQ  
 Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC  
 Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft  
 Flush-mount/Above-ground Completion: \_\_\_\_\_  
 Reported Construction Depth: 25.6 ft ☐ BGS or ☒ BTOC (chosed one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: medallion in concrete, stencil on well

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked at the top of well casing?

Measured depth of the well from measurement point: 26.00

Thickness of sediment accumulation (reported depth-present measurement): -0.40

Are there any obstructions in the well?

Description of well bottom conditions (soft, hard, etc.): hard

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Inspection Date: 7-1-08

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MMU-176 Location/Functional Area: FBQ  
 Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC  
 Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft  
 Flush-mount/Above-ground Completion: \_\_\_\_\_  
 Reported Construction Depth: 233 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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*Concrete around one post is broken  
non seen*

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: metallic

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked at the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 24.25

Thickness of sediment accumulation (reported depth-present measurement): -0.93

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): \_\_\_\_\_

Inspection Date: 7-1-88 Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: mw-177 Location/Functional Area: F13Q

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: \_\_\_\_\_

Reported Construction Depth: 24.8 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Medallion in concrete, stencil on well

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked at the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 25.04

Thickness of sediment accumulation (reported depth-present measurement): -0.24

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): \_\_\_\_\_

Inspection Date: 7-1-08

Inspected by: John Miller



**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-024 Location/Functional Area: LNW  
 Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC  
 Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft  
 Flush-mount/Above-ground Completion: Above Ground  
 Reported Construction Depth: 22.7 ft ☐ BGS or ☒ BTOC (chosed one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Need paint, rusted

Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Scheduled

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint and Tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked a the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 22.44

Thickness of sediment accumulation (reported depth-present measurement): +0.26

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 7/1/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-025 Location/Functional Area: LNW  
 Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC  
 Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft  
 Flush-mount/Above-ground Completion: Above Ground  
 Reported Construction Depth: 19.9 ft ☐ BGS or ☒ BTOC (chosed one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Need paint

Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Scheduled

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint and Tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked at the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 20.42

Thickness of sediment accumulation (reported depth-present measurement): -0.52

Are there any obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 7/1/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-026 Location/Functional Area: LNW  
 Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC  
 Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft  
 Flush-mount/Above-ground Completion: Above Ground  
 Reported Construction Depth: 25.8 ft ☐ BGS or ☒ BTOC (chosed one only)

**INSPECTION ITEMS**

**Well-Head Completion:** YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Need paint - rusted

Scheduled

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint and Tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked a the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 26.11

Thickness of sediment accumulation (reported depth-present measurement): -0.31

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 7/1/2006

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-027 Location/Functional Area: LNW

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 26.7 ft ☐ BGS or ☒ BTOC (chosed one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

☒ ☐ ☐

Are any of the posts damaged or degraded?

☒ ☒ ☐

Need paint - Rusted

Is a concrete pad installed?

☒ ☐ ☐

Is the pad cracked or deteriorated? Frost Heaving?

☐ ☒ ☐

Is steel protective casing installed?

☒ ☐ ☐

Does the protective casing have a weep hole?

☒ ☐ ☐

Does vegetation around the well need clearing?

☒ ☐ ☐

scheduled

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

☐ ☐ ☒

Does the well have a flush-mount box?

☐ ☐ ☐

Is the traffic cover cracked or broken?

☐ ☐ ☐

Is the concrete apron cracked or deteriorated? Frost Heaving?

☐ ☐ ☐

**Identification:**

Is the well labeled with the correct number?

☒ ☐ ☐

Describe labeling: Paint and Tag

**Security:**

Does the well have a cap or lid?

☒ ☐ ☐

Does the well have a weatherproof lock?

☒ ☐ ☐

Does the lock secure well?

☒ ☐ ☐

Does the inner casing have a water-tight cap?

☒ ☐ ☐

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

☐ ☒ ☐

Is the well casing loose, (at the surface?)

☐ ☒ ☐

Is a measurement point marked a the top of well casing?

☒ ☐ ☐

Measured depth of the well from measurement point: 26.98

Thickness of sediment accumulation (reported depth-present measurement): -0.28

Are there an obstructions in the well?

☐ ☒ ☐

Description of well bottom conditions (soft, hard, etc.): Medium

Inspection Date: 7/1/2006

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: mw-107 Location/Functional Area: AVACN  
 Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC  
 Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft  
 Flush-mount/Above-ground Completion: 10al  
 Reported Construction Depth: 24.6 ft ☐ BGS or ☒ BTOC (chosed one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Rust on posts

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Stencil on well

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked a the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 24.56

Thickness of sediment accumulation (reported depth-present measurement): +0.04

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Soft

Inspection Date: 6-30-08 Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-108 Location/Functional Area: NACA

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: \_\_\_\_\_

Reported Construction Depth: 24.4 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

☒ ☐ ☐

Are any of the posts damaged or degraded?

☒ ☐ ☐

Rust on posts

Is a concrete pad installed?

☒ ☐ ☐

Is the pad cracked or deteriorated? Frost Heaving?

☐ ☒ ☐

Is steel protective casing installed?

☒ ☐ ☐

Does the protective casing have a weep hole?

☒ ☐ ☐

Does vegetation around the well need clearing?

☐ ☒ ☐

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

☐ ☐ ☒

Does the well have a flush-mount box?

☐ ☐ ☒

Is the traffic cover cracked or broken?

☐ ☐ ☒

Is the concrete apron cracked or deteriorated? Frost Heaving?

☐ ☐ ☒

**Identification:**

Is the well labeled with the correct number?

☒ ☐ ☐

Describe labeling: stencil on well

**Security:**

Does the well have a cap or lid?

☒ ☐ ☐

Does the well have a weatherproof lock?

☒ ☐ ☐

Does the lock secure well?

☒ ☐ ☐

Does the inner casing have a water-tight cap?

☒ ☐ ☐

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

☐ ☒ ☐

Is the well casing loose, (at the surface?)

☐ ☒ ☐

Is a measurement point marked a the top of well casing?

☒ ☐ ☐

Measured depth of the well from measurement point: 24.69

Thickness of sediment accumulation (reported depth-present measurement): - 0.29

Are there an obstructions in the well?

☐ ☒ ☐

Description of well bottom conditions (soft hard, etc.): \_\_\_\_\_

Inspection Date: 6-30-08

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-109 Location/Functional Area: NACA  
 Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC  
 Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft  
 Flush-mount/Above-ground Completion: \_\_\_\_\_  
 Reported Construction Depth: 209 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Rust on posts

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: Stencil on well

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked at the top of well casing?

Measured depth of the well from measurement point: 21.10

Thickness of sediment accumulation (reported depth-present measurement): -0.20

Are there any obstructions in the well?

Description of well bottom conditions (soft, hard, etc.): hard

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Inspection Date: 6-30-08

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-110 Location/Functional Area: NACA

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount Above-ground Completion: \_\_\_\_\_

Reported Construction Depth: 29.6 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

☒ ☐ ☐

Are any of the posts damaged or degraded?

☒ ☐ ☐

Is a concrete pad installed?

☒ ☐ ☐

Is the pad cracked or deteriorated? Frost Heaving?

☐ ☒ ☐

Is steel protective casing installed?

☒ ☐ ☐

Does the protective casing have a weep hole?

☒ ☐ ☐

Does vegetation around the well need clearing?

☐ ☒ ☐

Rust on posts

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

☐ ☐ ☒

Does the well have a flush-mount box?

☐ ☐ ☒

Is the traffic cover cracked or broken?

☐ ☐ ☒

Is the concrete apron cracked or deteriorated? Frost Heaving?

☐ ☐ ☒

**Identification:**

Is the well labeled with the correct number?

☒ ☐ ☐

Describe labeling: Medallion, Stencil on well

**Security:**

Does the well have a cap or lid?

☒ ☐ ☐

Does the well have a weatherproof lock?

☒ ☐ ☐

Does the lock secure well?

☒ ☐ ☐

Does the inner casing have a water-tight cap?

☒ ☐ ☐

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

☐ ☒ ☐

Is the well casing loose, (at the surface?)

☐ ☒ ☐

Is a measurement point marked a the top of well casing?

☒ ☐ ☐

Measured depth of the well from measurement point: 29.95

Thickness of sediment accumulation (reported depth-present measurement): -0.35

Are there an obstructions in the well?

☐ ☒ ☐

Description of well bottom conditions (soft, hard, etc.): \_\_\_\_\_

Inspection Date: 6-30-07

Inspected by: John Miller



**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-111 Location/Functional Area: NACA

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: \_\_\_\_\_

Reported Construction Depth: 22.4 ft ☐ BGS or ☐ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Rust on posts

scheduled

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: Medallion, stencil on well

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked at the top of well casing?

Measured depth of the well from measurement point: 22.28

Thickness of sediment accumulation (reported depth-present measurement): +0.12

Are there any obstructions in the well?

Description of well bottom conditions (soft, hard, etc.): \_\_\_\_\_

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Inspection Date: 6-30-07

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-112 Location/Functional Area: NACA  
 Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC  
 Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft  
 Flush-mount/Above-ground Completion: \_\_\_\_\_  
 Reported Construction Depth: 26.9 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Rust

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: Medallion on cap, stencil on well

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked at the top of well casing?

Measured depth of the well from measurement point: 26.84

Thickness of sediment accumulation (reported depth-present measurement): +0.06

Are there any obstructions in the well?

Description of well bottom conditions (soft, hard, etc.): \_\_\_\_\_

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Inspection Date: 6-30-08

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-113 Location/Functional Area: \_\_\_\_\_  
 Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC  
 Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft  
 Flush-mount/Above-ground Completion: \_\_\_\_\_  
 Reported Construction Depth: 30.6 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Rust on posts

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Medallion, stencil on well

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked a the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 29.79

Thickness of sediment accumulation (reported depth-present measurement): +0.81

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft hard, etc.): \_\_\_\_\_

Inspection Date: 6-30-8

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-114 Location/Functional Area: WACA  
 Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC  
 Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft  
 Flush-mount/Above-ground Completion: \_\_\_\_\_  
 Reported Construction Depth: 22.6 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Best

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: medallion on cap, stencil on posts

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked at the top of well casing?

Measured depth of the well from measurement point: 22.98

Thickness of sediment accumulation (reported depth-present measurement): -0.38

Are there any obstructions in the well?

Description of well bottom conditions (soft, hard, etc.):

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Inspection Date: 6-30-8

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: mw-115 Location/Functional Area: NACA  
 Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC  
 Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft  
 Flush-mount/Above-ground Completion: \_\_\_\_\_  
 Reported Construction Depth: 25.2 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3  
 Are the posts positioned to prevent collision damage to the well? ☒ ☐ ☐  
 Are any of the posts damaged or degraded? ☒ ☐ ☐ Rust on posts  
 Is a concrete pad installed? ☒ ☐ ☐  
 Is the pad cracked or deteriorated? Frost Heaving? ☐ ☒ ☐  
 Is steel protective casing installed? ☒ ☐ ☐  
 Does the protective casing have a weep hole? ☒ ☐ ☐  
 Does vegetation around the well need clearing? ☐ ☒ ☐

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box? ☐ ☐ ☒  
 Does the well have a flush-mount box? ☐ ☐ ☒  
 Is the traffic cover cracked or broken? ☐ ☐ ☒  
 Is the concrete apron cracked or deteriorated? Frost Heaving? ☐ ☐ ☒

**Identification:**

Is the well labeled with the correct number? ☒ ☐ ☐  
 Describe labeling: Medallion in cap, stencil on well

**Security:**

Does the well have a cap or lid? ☒ ☐ ☐  
 Does the well have a weatherproof lock? ☒ ☐ ☐  
 Does the lock secure well? ☒ ☐ ☐  
 Does the inner casing have a water-tight cap? ☒ ☐ ☐

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?) ☐ ☒ ☐  
 Is the well casing loose, (at the surface?) ☐ ☒ ☐  
 Is a measurement point marked at the top of well casing? ☒ ☐ ☐  
 Measured depth of the well from measurement point: 25.43  
 Thickness of sediment accumulation (reported depth-present measurement): -0.23  
 Are there any obstructions in the well? ☐ ☒ ☐  
 Description of well bottom conditions (soft, hard etc.): (hard)

Inspection Date: 6-30-08 Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: mil-116 Location/Functional Area: MACA  
 Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC  
 Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: \_\_\_\_\_ ft  
 Flush-mount/Above-ground Completion: \_\_\_\_\_  
 Reported Construction Depth: 22.6 ft ☐ BGS or ☐ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3  
 Are the posts positioned to prevent collision damage to the well? 

X		
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 Are any of the posts damaged or degraded? 

X		
---	--	--

Rust on posts  
 Is a concrete pad installed? 

X		
---	--	--

  
 Is the pad cracked or deteriorated? Frost Heaving? 

	X	
--	---	--

  
 Is steel protective casing installed? 

X		
---	--	--

  
 Does the protective casing have a weep hole? 

X		
---	--	--

  
 Does vegetation around the well need clearing? 

	X	
--	---	--

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box? 

		X
--	--	---

  
 Does the well have a flush-mount box? 

		X
--	--	---

  
 Is the traffic cover cracked or broken? 

		X
--	--	---

  
 Is the concrete apron cracked or deteriorated? Frost Heaving? 

		X
--	--	---

**Identification:**

Is the well labeled with the correct number? 

X		
---	--	--

  
 Describe labeling: medallion, stencil on well

**Security:**

Does the well have a cap or lid? 

X		
---	--	--

  
 Does the well have a weatherproof lock? 

X		
---	--	--

  
 Does the lock secure well? 

X		
---	--	--

  
 Does the inner casing have a water-tight cap? 

X		
---	--	--

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?) 

	X	
--	---	--

  
 Is the well casing loose, (at the surface?) 

	X	
--	---	--

  
 Is a measurement point marked a the top of well casing? 

X		
---	--	--

  
 Measured depth of the well from measurement point: 22.76  
 Thickness of sediment accumulation (reported depth-present measurement): -0.10  
 Are there an obstructions in the well? 

	X	
--	---	--

  
 Description of well bottom conditions (soft, hard, etc.): \_\_\_\_\_

Inspection Date: 6-30-08 Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-117 Location/Functional Area: NACA

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: \_\_\_\_\_

Reported Construction Depth: 27.4 ft ☐ BGS or ☒ BTOC (chosed one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Rust on posts

Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Medallion on cap, Stamp on well

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked at the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 27.70

Thickness of sediment accumulation (reported depth-present measurement): -0.30

Are there any obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): 6

Inspection Date: 6-30-08

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: mw-118 Location/Functional Area: NACA  
 Casing Type: ☐ Steel ☐ Stainless Steel ☐ PVC  
 Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft  
 Flush-mount/Above-ground Completion: \_\_\_\_\_  
 Reported Construction Depth: 24.6 ft ☐ BGS or ☒ BTOC (chosed one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3  
 Are the posts positioned to prevent collision damage to the well?  
 Are any of the posts damaged or degraded?  
 Is a concrete pad installed?  
 Is the pad cracked or deteriorated? Frost Heaving?  
 Is steel protective casing installed?  
 Does the protective casing have a weep hole?  
 Does vegetation around the well need clearing?

X		
X	X	
X		
	X	
X		
X		
	X	

Rust on posts

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?  
 Does the well have a flush-mount box?  
 Is the traffic cover cracked or broken?  
 Is the concrete apron cracked or deteriorated? Frost Heaving?

		X
		X
		X
		X

**Identification:**

Is the well labeled with the correct number?  
 Describe labeling: metallic on cap. & cement on wall

X		
---	--	--

**Security:**

Does the well have a cap or lid?  
 Does the well have a weatherproof lock?  
 Does the lock secure well?  
 Does the inner casing have a water-tight cap?

X		
X		
X		
X		

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)  
 Is the well casing loose, (at the surface?)  
 Is a measurement point marked at the top of well casing?  
 Measured depth of the well from measurement point: 24.89

	X	
	X	
	X	

Thickness of sediment accumulation (reported depth-present measurement): -0.29

Are there any obstructions in the well?

	X	
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Description of well bottom conditions (soft, hard, etc.): \_\_\_\_\_

Inspection Date: 6-30-08

Inspected by: John Miller



**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-001 Location/Functional Area: MBS

Casing Type: ☒ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: \_\_\_\_\_

Reported Construction Depth: 31.5 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Is the pad cracked or deteriorated? Frost Heaving?

<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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under water

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Stencil on well

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is a measurement point marked a the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 31.10

Thickness of sediment accumulation (reported depth-present measurement): +4.0

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): (S)

Inspection Date: 6-30-08 Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-002 Location/Functional Area: MBS

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: \_\_\_\_\_

Reported Construction Depth: 30.7 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

X		
	X	
X		
	X	
X		
X		
	X	

*water surrounding pad*

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

		X
		X
		X
		X

**Identification:**

Is the well labeled with the correct number?

Describe labeling: ~~Copper tag on well~~ Stencil on well

X		
---	--	--

**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

X		
X		
X		
X		

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked at the top of well casing?

Measured depth of the well from measurement point: 30.52

Thickness of sediment accumulation (reported depth-present measurement): +0.18

Are there any obstructions in the well?

Description of well bottom conditions (soft, hard, etc.): Hard

	X	
	X	
X		
	X	

Inspection Date: 6-30-08

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-003 Location/Functional Area: NBS

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: \_\_\_\_\_

Reported Construction Depth: 30.5 ft ☐ BGS or ☒ BTOC (chosed one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

X		
	X	
X		
	X	
X		
X		
	X	

*water around well*

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

		X
		X
		X
		X

**Identification:**

Is the well labeled with the correct number?

Describe labeling: \_\_\_\_\_

X		
---	--	--

**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

X		
X		
X		
X		

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked at the top of well casing?

Measured depth of the well from measurement point: 18.30.87

Thickness of sediment accumulation (reported depth-present measurement): -0.37

Are there an obstructions in the well?

Description of well bottom conditions (soft, hard, etc.): \_\_\_\_\_

	X	
	X	
X		
	X	

Inspection Date: 6/30/2008

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MB-004 Location/Functional Area: MB5  
 Casing Type: ☒ Steel ☐ Stainless Steel ☒ PVC  
 Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft  
 Flush-mount/Above-ground Completion: \_\_\_\_\_  
 Reported Construction Depth: 27.0 ft ☐ BGS or ☐ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4  
 Are the posts positioned to prevent collision damage to the well?  
 Are any of the posts damaged or degraded?  
 Is a concrete pad installed?  
 Is the pad cracked or deteriorated? Frost Heaving?  
 Is steel protective casing installed?  
 Does the protective casing have a weep hole?  
 Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

*some erosion under pad*

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?  
 Does the well have a flush-mount box?  
 Is the traffic cover cracked or broken?  
 Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?  
 Describe labeling: \_\_\_\_\_

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?  
 Does the well have a weatherproof lock?  
 Does the lock secure well?  
 Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)  
 Is the well casing loose, (at the surface?)  
 Is a measurement point marked at the top of well casing?  
 Measured depth of the well from measurement point: 26.70  
 Thickness of sediment accumulation (reported depth-present measurement): +0.30  
 Are there an obstructions in the well?  
 Description of well bottom conditions (soft, hard, etc.): \_\_\_\_\_

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Inspection Date: 6-30-08

Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-005 Location/Functional Area: MBS

Casing Type: ☐ Steel ☐ Stainless Steel ☐ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: \_\_\_\_\_

Reported Construction Depth: 30.2 ft ☐ BGS or ☒ BTOC (chosed one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Stenciled on well

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked at the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 30.19

Thickness of sediment accumulation (reported depth-present measurement): +0.01

Are there any obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): \_\_\_\_\_

Inspection Date: \_\_\_\_\_

Inspected by: \_\_\_\_\_

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: mw-006 Location/Functional Area: NBS

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion

Reported Construction Depth: 28.2 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

X		
X	X	
X		
	X	
X		
X		
	X	

needs painted

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

		X
		X
		X
		X

**Identification:**

Is the well labeled with the correct number?

Describe labeling: stenciled

X		
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

X		
X		
X		
X		

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked a the top of well casing?

Measured depth of the well from measurement point: 28.30

Thickness of sediment accumulation (reported depth-present measurement): - 0.10

Are there an obstructions in the well?

Description of well bottom conditions (soft, hard, etc.): medium

	X	
	X	
X		

	X	
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Inspection Date: 6-30-08 Inspected by: John Miller

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-DD6 Location/Functional Area: RQL  
 Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC  
 Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 20 ft  
 Flush-mount/Above-ground Completion: Above Ground  
 Reported Construction Depth: 41.4 ft ☐ BGS or ☒ BTOC (chosed one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

peeling paint

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: Paint

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked a the top of well casing?

Measured depth of the well from measurement point: 41.82

Thickness of sediment accumulation (reported depth-present measurement): -0.42

Are there an obstructions in the well?

Description of well bottom conditions (soft, hard, etc.): Hard

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Inspection Date: 6/30/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-007 Location/Functional Area: RQL

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 18.2 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 0

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<u>MB</u>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: \_\_\_\_\_

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked a the top of well casing?

Measured depth of the well from measurement point: 18.70

Thickness of sediment accumulation (reported depth-present measurement): -0.50

Are there an obstructions in the well?

Description of well bottom conditions (soft, hard, etc.): Hard

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Inspection Date: 6/30/2008

Inspected by: MB



**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-008 Location/Functional Area: RQL  
 Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC  
 Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft  
 Flush-mount/Above-ground Completion: Above Ground  
 Reported Construction Depth: 18.5 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 0

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: Paint and Tag

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked at the top of well casing?

Measured depth of the well from measurement point: 18.74

Thickness of sediment accumulation (reported depth-present measurement): -0.24

Are there any obstructions in the well?

Description of well bottom conditions (soft, hard, etc.): Hard

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Inspection Date: 6/30/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-009 Location/Functional Area: RQL

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 18.4 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 0

Are the posts positioned to prevent collision damage to the well?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint and Tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is a measurement point marked at the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 18.63

Thickness of sediment accumulation (reported depth-present measurement): -0.23

Are there any obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 6/30/2009

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-010 Location/Functional Area: RQL

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 20 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 35.1 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 2

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the protective casing have a weep hole?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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peeling paint

none seen

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint and Tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is a measurement point marked a the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 35.12

Thickness of sediment accumulation (reported depth-present measurement): -0.02

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 6/30/2009

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-D11 Location/Functional Area: RQL

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 20 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 34.6 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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peeling paint

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint + Tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked a the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 35.43

Thickness of sediment accumulation (reported depth-present measurement): -0.83

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 6/30/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-012 Location/Functional Area: RQL

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 32.5 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

☒ ☐ ☐

Are any of the posts damaged or degraded?

☐ ☒ ☐

peeling paint

Is a concrete pad installed?

☒ ☐ ☐

Is the pad cracked or deteriorated? Frost Heaving?

☐ ☒ ☐

Is steel protective casing installed?

☒ ☐ ☐

Does the protective casing have a weep hole?

☒ ☐ ☐

Does vegetation around the well need clearing?

☐ ☒ ☐

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

☐ ☐ ☒

Does the well have a flush-mount box?

☐ ☐ ☒

Is the traffic cover cracked or broken?

☐ ☐ ☒

Is the concrete apron cracked or deteriorated? Frost Heaving?

☐ ☐ ☒

**Identification:**

Is the well labeled with the correct number?

☒ ☐ ☐

Describe labeling: Paint and Tag

**Security:**

Does the well have a cap or lid?

☒ ☐ ☐

Does the well have a weatherproof lock?

☒ ☐ ☐

Does the lock secure well?

☒ ☐ ☐

Does the inner casing have a water-tight cap?

☒ ☐ ☐

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

☐ ☒ ☐

Is the well casing loose, (at the surface?)

☐ ☒ ☐

Is a measurement point marked a the top of well casing?

☒ ☐ ☐

Measured depth of the well from measurement point: 32.75

Thickness of sediment accumulation (reported depth-present measurement): -0.25

Are there an obstructions in the well?

☐ ☒ ☐

Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 6/30/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-013 Location/Functional Area: RAL

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 36.56 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

peeling paint

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Identification:**

Is the well labeled with the correct number?

Describe labeling: Paint + Tag

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked at the top of well casing?

Measured depth of the well from measurement point: 36.55

Thickness of sediment accumulation (reported depth-present measurement): +0.05

Are there any obstructions in the well?

Description of well bottom conditions (soft, hard, etc.): Hard

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Inspection Date: 6/30/2008

Inspected by: MS

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-014 Location/Functional Area: RQL

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 31.6 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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peeling paint

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint + Tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked at the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 31.25

Thickness of sediment accumulation (reported depth-present measurement): +0.35

Are there any obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Soft

Inspection Date: 6/30/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-015 Location/Functional Area: RAL

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 41.6 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

Are any of the posts damaged or degraded?

Is a concrete pad installed?

Is the pad cracked or deteriorated? Frost Heaving?

Is steel protective casing installed?

Does the protective casing have a weep hole?

Does vegetation around the well need clearing?

X		
	X	
X		
	X	
X		
X		
	X	

peeling paint, rusty

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

Does the well have a flush-mount box?

Is the traffic cover cracked or broken?

Is the concrete apron cracked or deteriorated? Frost Heaving?


**Identification:**

Is the well labeled with the correct number?

Describe labeling: Paint and Tag

X		
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**Security:**

Does the well have a cap or lid?

Does the well have a weatherproof lock?

Does the lock secure well?

Does the inner casing have a water-tight cap?

X		
X		
X		
X		

**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

Is the well casing loose, (at the surface?)

Is a measurement point marked at the top of well casing?

Measured depth of the well from measurement point: 42.11

Thickness of sediment accumulation (reported depth-present measurement): -0.51

Are there any obstructions in the well?

Description of well bottom conditions (soft, hard, etc.): Soft

	X	
	X	
X		
	X	

Inspection Date: 6/30/2008

Inspected by: MB



**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-016 Location/Functional Area: RQL  
 Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC  
 Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft  
 Flush-mount/Above-ground Completion: Above Ground  
 Reported Construction Depth: 41.6 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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rust, peeling paint

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint and Tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked at the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 41.75

Thickness of sediment accumulation (reported depth-present measurement): -0.15

Are there any obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 6/30/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-017 Location/Functional Area: R&L  
 Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC  
 Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft  
 Flush-mount/Above-ground Completion: Above Ground  
 Reported Construction Depth: 32.5 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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rusty peeling paint

Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint and Tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked at the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 32.85

Thickness of sediment accumulation (reported depth-present measurement): -0.35

Are there any obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 6/30/2006

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-005 Location/Functional Area: WBG

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 21.1 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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hard to see

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint and Tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked a the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 21.24

Thickness of sediment accumulation (reported depth-present measurement): -0.13

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 7/1/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-006 Location/Functional Area: WBG

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 20.4 ft ☐ BGS or ☒ BTOC (chosed one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint and tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked at the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 20.27

Thickness of sediment accumulation (reported depth-present measurement): +0.13

Are there any obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 7/1/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-007 Location/Functional Area: WBG

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 26.3 ft ☐ BGS or ☐ BTOC (choose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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no concrete in tops

Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Inside Posts

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked at the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 26.50

Thickness of sediment accumulation (reported depth-present measurement): -0.20

Are there any obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 7/1/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-008 Location/Functional Area: WBG

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 21.0 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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no concrete in tops

Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Inside Posts

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint and Tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked a the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 20.96

Thickness of sediment accumulation (reported depth-present measurement): +0.04

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 7/1/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-009 Location/Functional Area: WBG

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 24 ft ☐ BGS or ☒ BTOC (chosed one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked a the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 24.44

Thickness of sediment accumulation (reported depth-present measurement): -0.44

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 7/1/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-010 Location/Functional Area: WBG

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 23.6 ft ☐ BGS or ☒ BTOC (chosed one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint and Tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked a the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 23.48

Thickness of sediment accumulation (reported depth-present measurement): +0.12

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Soft

Inspection Date: 7/1/2008

Inspected by: MB



**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-011 Location/Functional Area: WBG

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 24.0 ft ☐ BGS or ☒ BTOC (chosed one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 3

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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MB Thorns

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked at the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 23.96

Thickness of sediment accumulation (reported depth-present measurement): +0.04

Are there any obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Medium

Inspection Date: 7/1/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MU-012 Location/Functional Area: WBG

Casing Type: ☐ Steel ☐ Stainless Steel ☐ PVC

Screened Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 32.0 ft ☐ BGS or ☒ BTOC (chosed one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Need paint

Are any of the posts damaged or degraded?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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One post bent

Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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hard to see

Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint and Tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked a the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 31.75

Thickness of sediment accumulation (reported depth-present measurement): +0.25

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 7/1/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-013 Location/Functional Area: WBG

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 239 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint and Tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked at the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 24.24

Thickness of sediment accumulation (reported depth-present measurement): -0.34

Are there any obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Medium

Inspection Date: 7/1/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-014 Location/Functional Area: WBG

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 25 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Inside Posts

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked a the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 25.10

Thickness of sediment accumulation (reported depth-present measurement): -0.10

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Soft

Inspection Date: 7/1/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-015 Location/Functional Area: WBG

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 23.8 ft ☐ BGS or ☐ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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hard to see

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked a the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 23.63

Thickness of sediment accumulation (reported depth-present measurement): +0.17

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Hard

Inspection Date: 7/1/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-016 Location/Functional Area: WBG

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 25.4 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Need paint

Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint and Tag

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked a the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 25.32

Thickness of sediment accumulation (reported depth-present measurement): +0.08

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Soft

Inspection Date: 7/1/2008

Inspected by: MB

**Ravenna Army Ammunition Plant  
WELL INSPECTION CHECKLIST**

**WELL INFORMATION:**

Well Number: MW-017 Location/Functional Area: WBG

Casing Type: ☐ Steel ☐ Stainless Steel ☒ PVC

Screened/Open-Hole Well Type: \_\_\_\_\_ Monitor Interval Length: 10 ft

Flush-mount/Above-ground Completion: Above Ground

Reported Construction Depth: 23.9 ft ☐ BGS or ☒ BTOC (chose one only)

**INSPECTION ITEMS**

**Well-Head Completion:**

YES NO N/A COMMENTS

**Above-ground completion:**

Number of Guard posts at well: 4

Are the posts positioned to prevent collision damage to the well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Are any of the posts damaged or degraded?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Need paint

Is a concrete pad installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the pad cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is steel protective casing installed?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the protective casing have a weep hole?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does vegetation around the well need clearing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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hard to find

**Flush-mount completion:**

Is the traffic cover securely bolted to the flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a flush-mount box?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the traffic cover cracked or broken?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Is the concrete apron cracked or deteriorated? Frost Heaving?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Identification:**

Is the well labeled with the correct number?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Describe labeling: Paint

**Security:**

Does the well have a cap or lid?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the well have a weatherproof lock?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the lock secure well?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Does the inner casing have a water-tight cap?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Down-hole Condition:**

Is the well casing bent, corroded, or broken (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is the well casing loose, (at the surface?)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Is a measurement point marked a the top of well casing?

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Measured depth of the well from measurement point: 23.78

Thickness of sediment accumulation (reported depth-present measurement): +0.12

Are there an obstructions in the well?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Description of well bottom conditions (soft, hard, etc.): Medium

Inspection Date: 7/1/2008

Inspected by: MB

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**APPENDIX G**  
**TIME-TREND GRAPHS**

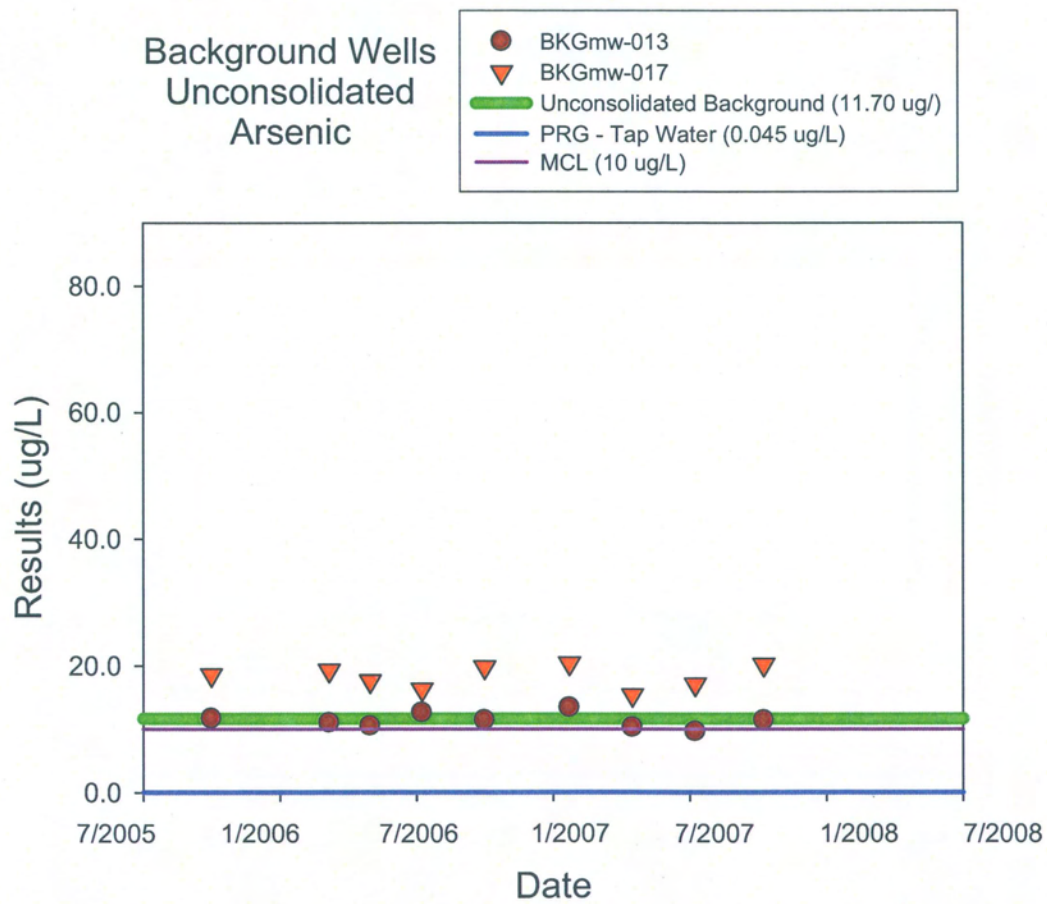
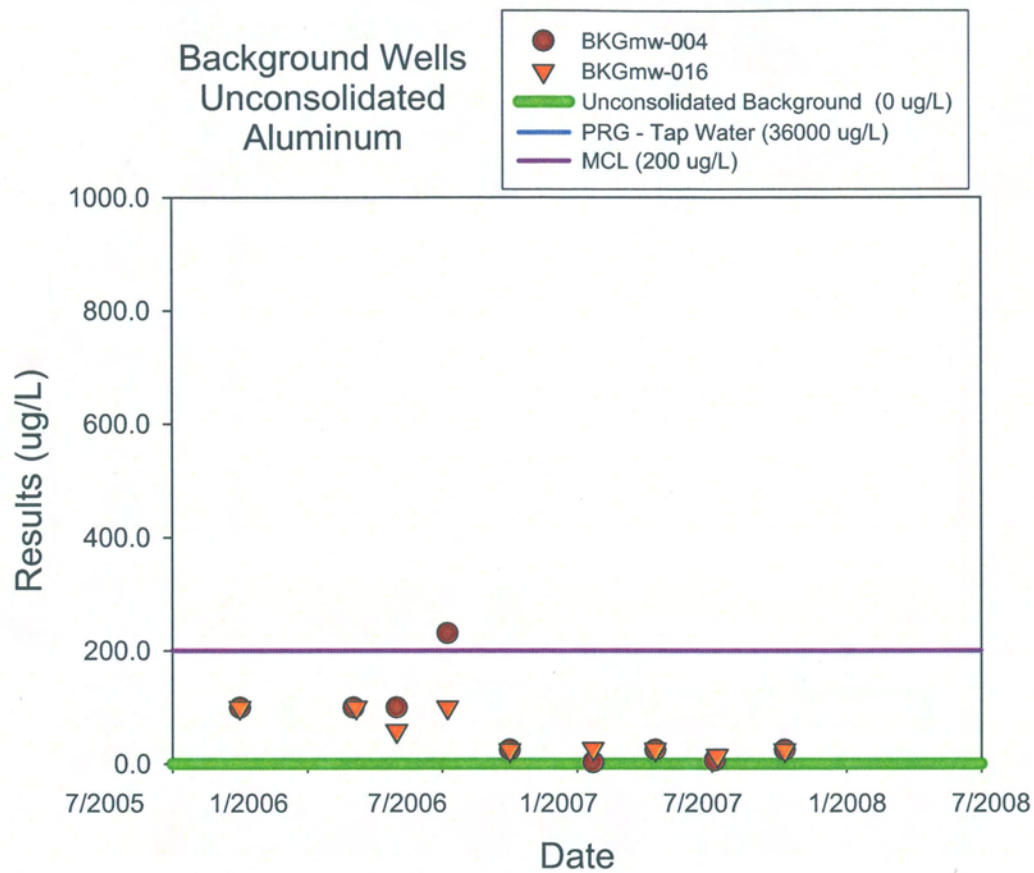


# **Contaminant Trends in Groundwater**

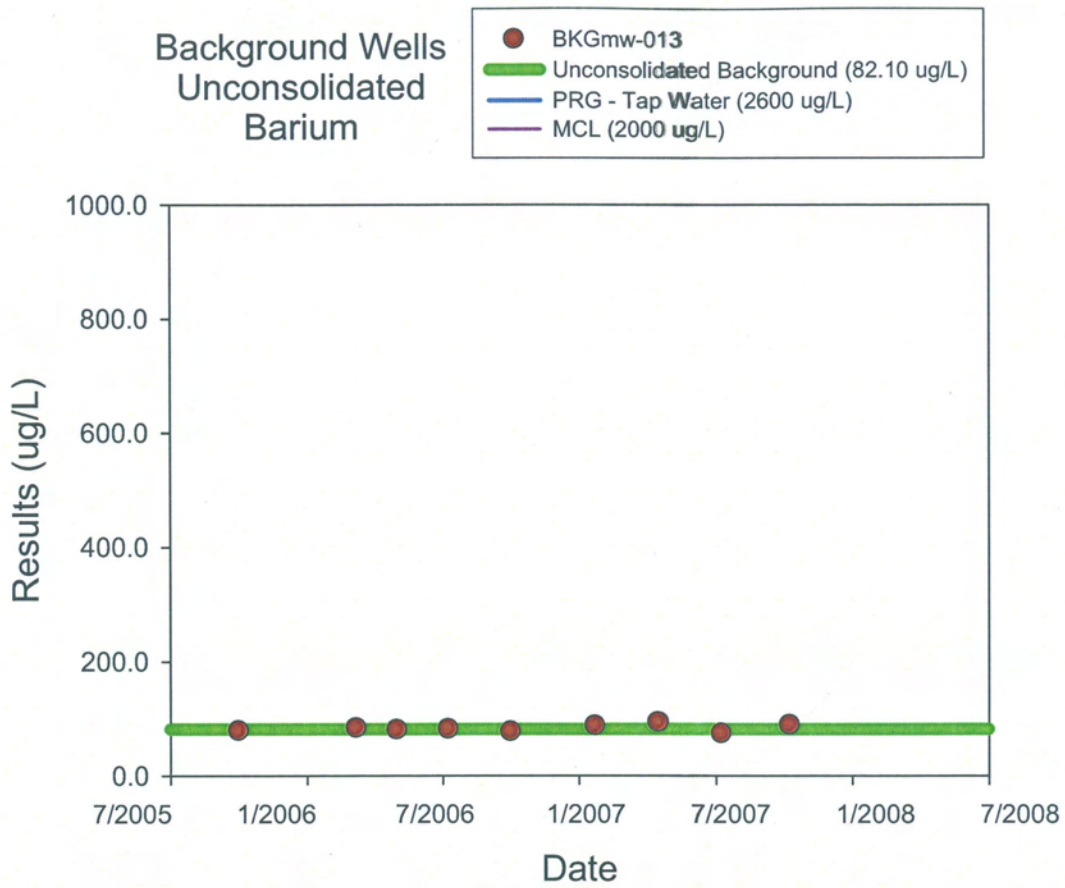
## ***Approach***

Time series graphs were generated to display the sampling results. The first sampling event included in the dataset is October 2005 and the last event is July 2008. The following guidelines were applied to produce the graphs:

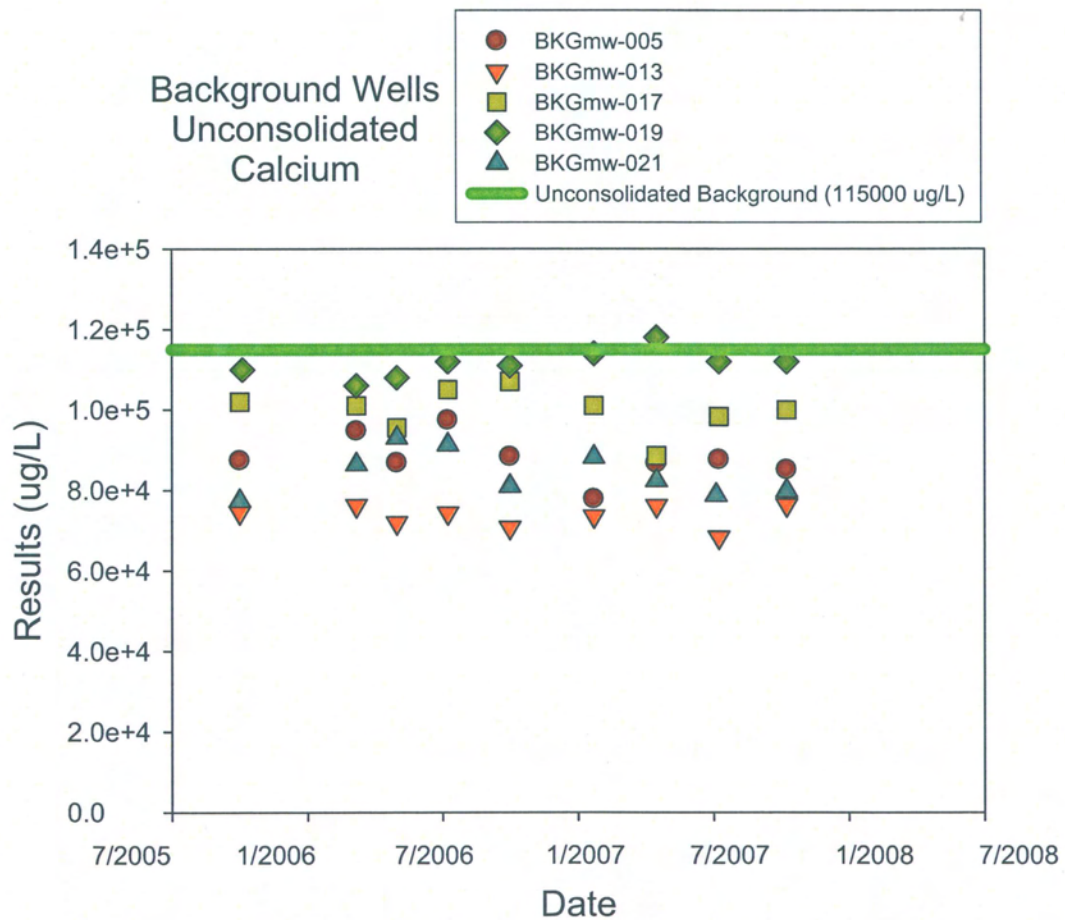
1. Only well locations with three or more detections (above background for inorganics) are graphed.
2. For background wells, inorganics with background values are screened and graphed. Any background well with a detected organic compound is also graphed.
3. Values reported as "non-detect" are shown as one-half the reporting limit.
4. The graphs are organized as follows:
  - a. By Site (alphabetically ordered beginning with Background Wells)
    1. Inorganic Compounds
    2. Organic Compounds

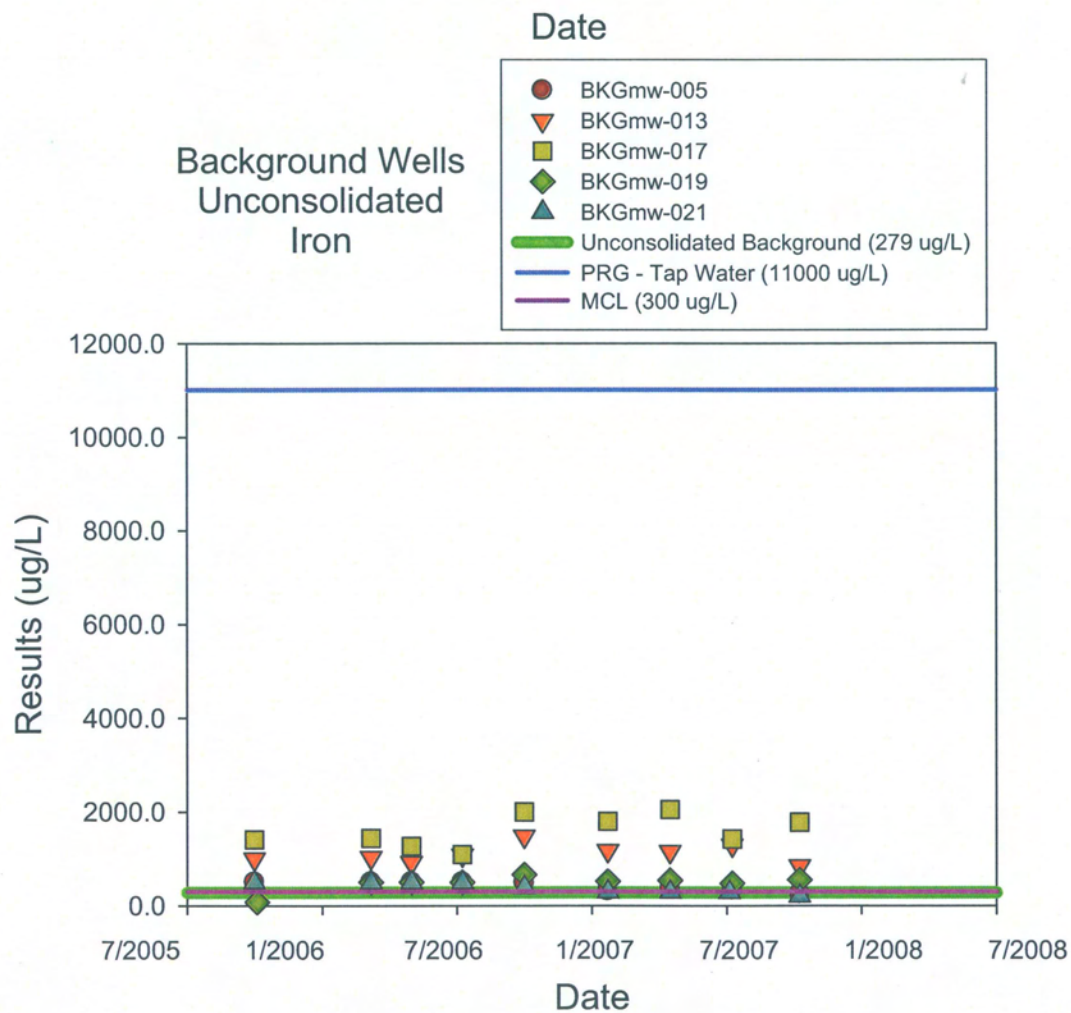
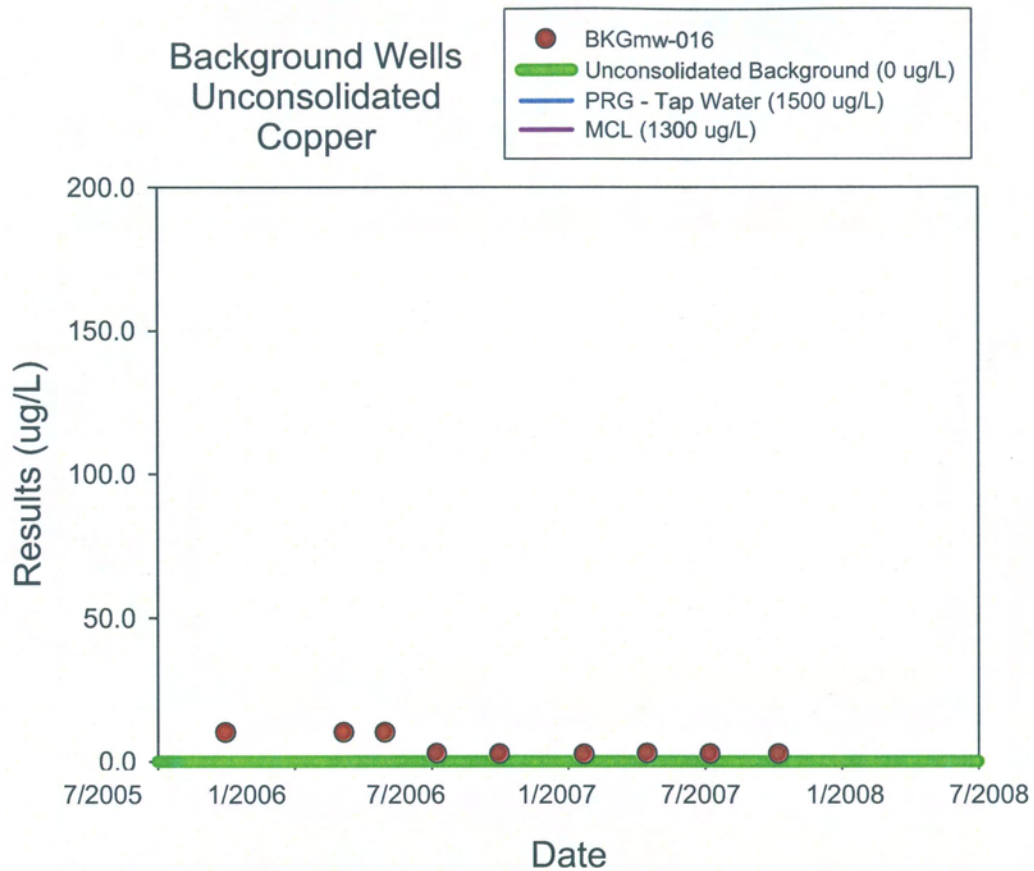


# Background Wells Unconsolidated Barium

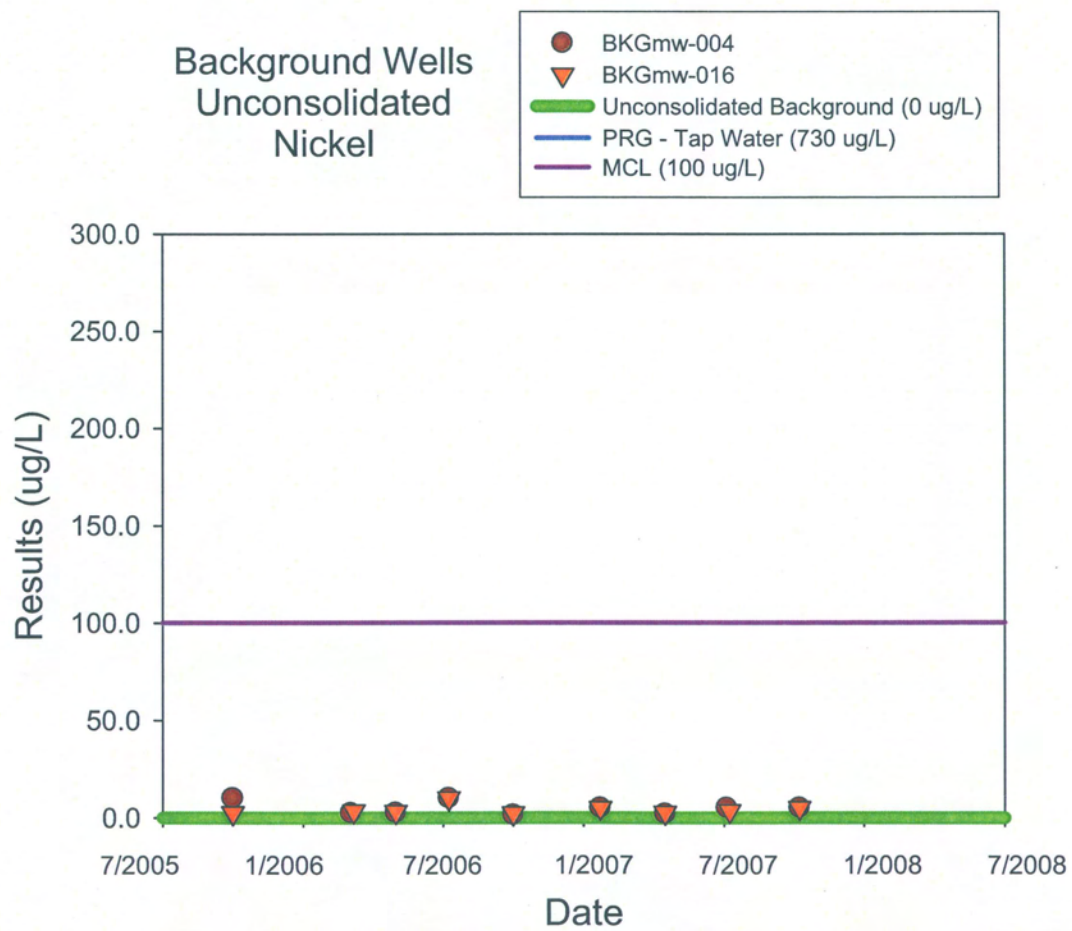
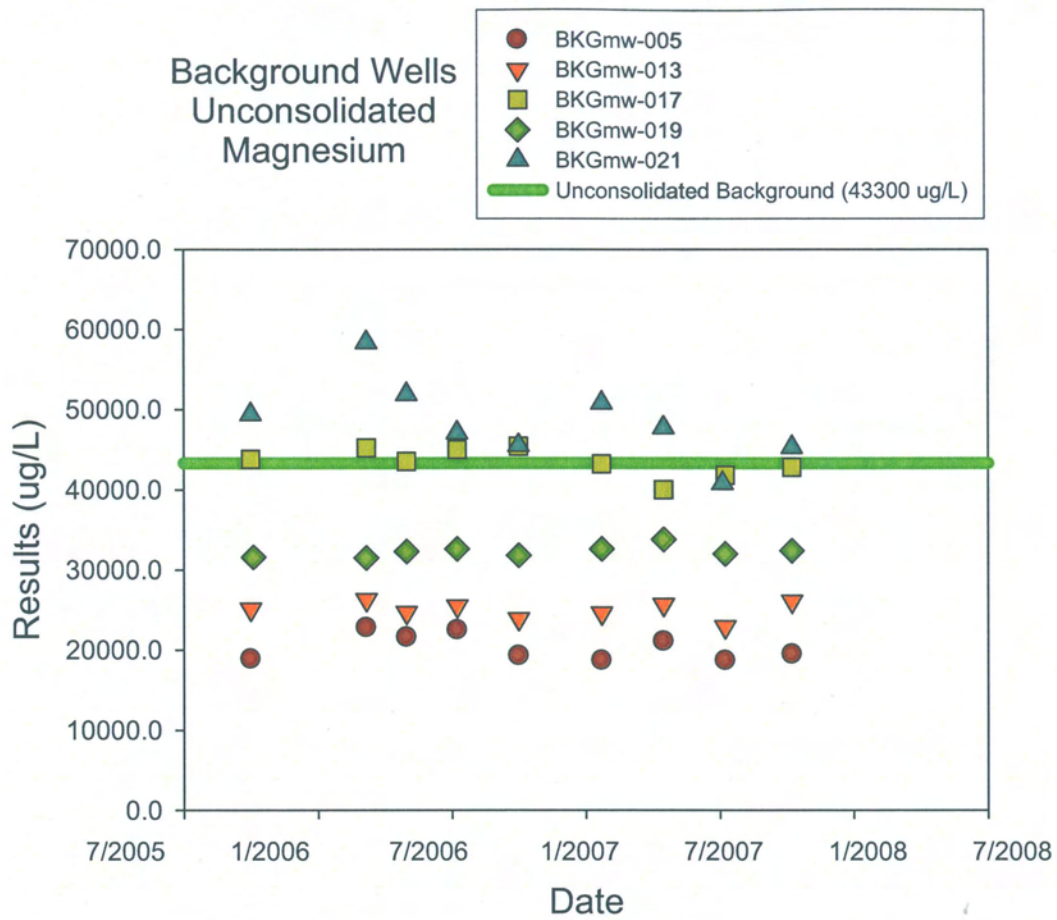


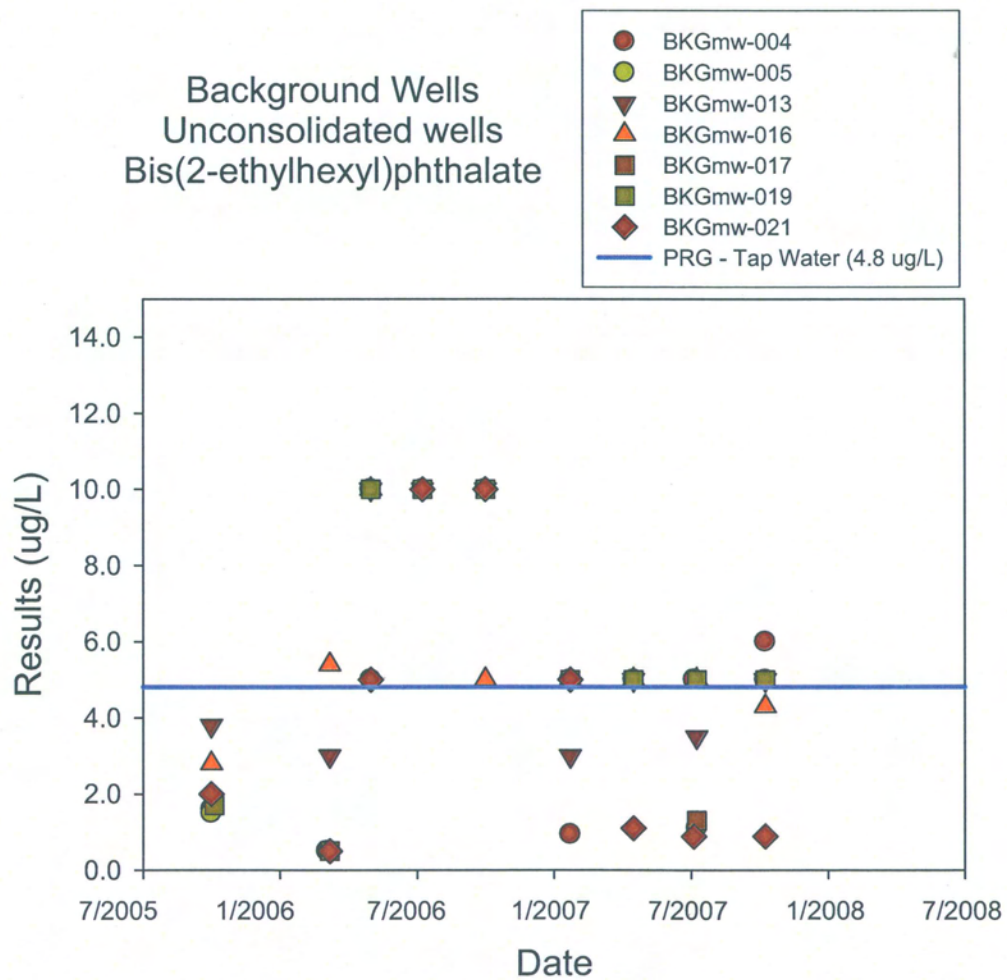
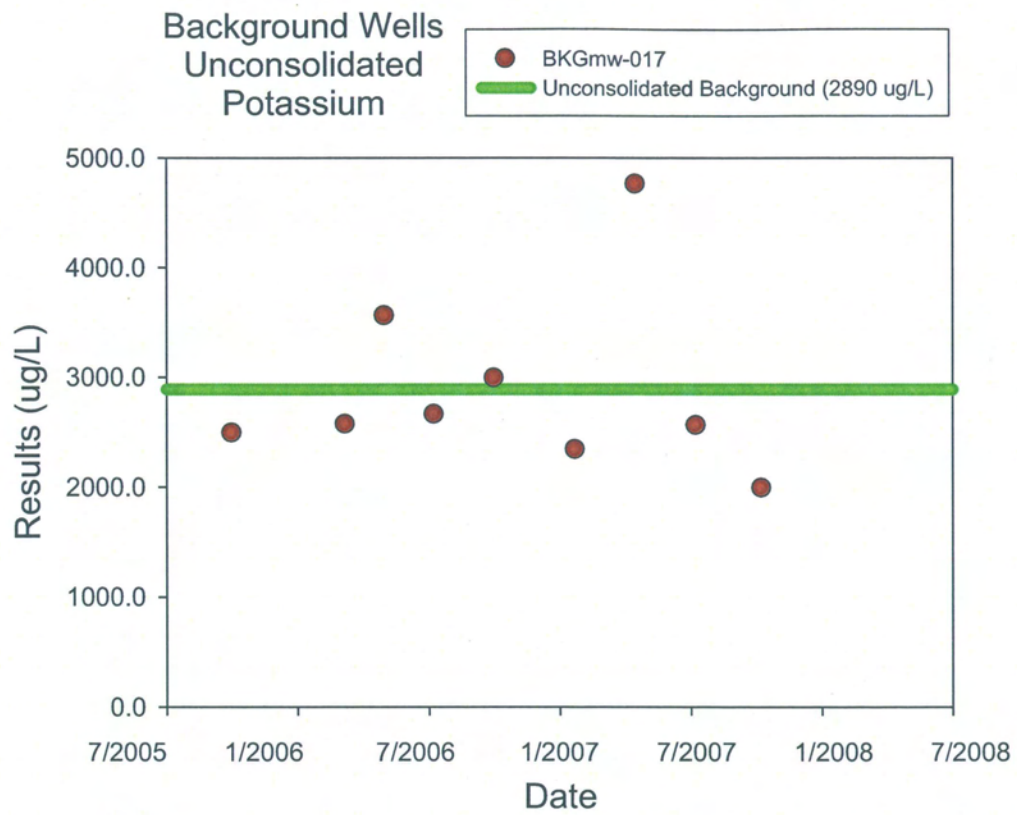
# Background Wells Unconsolidated Calcium

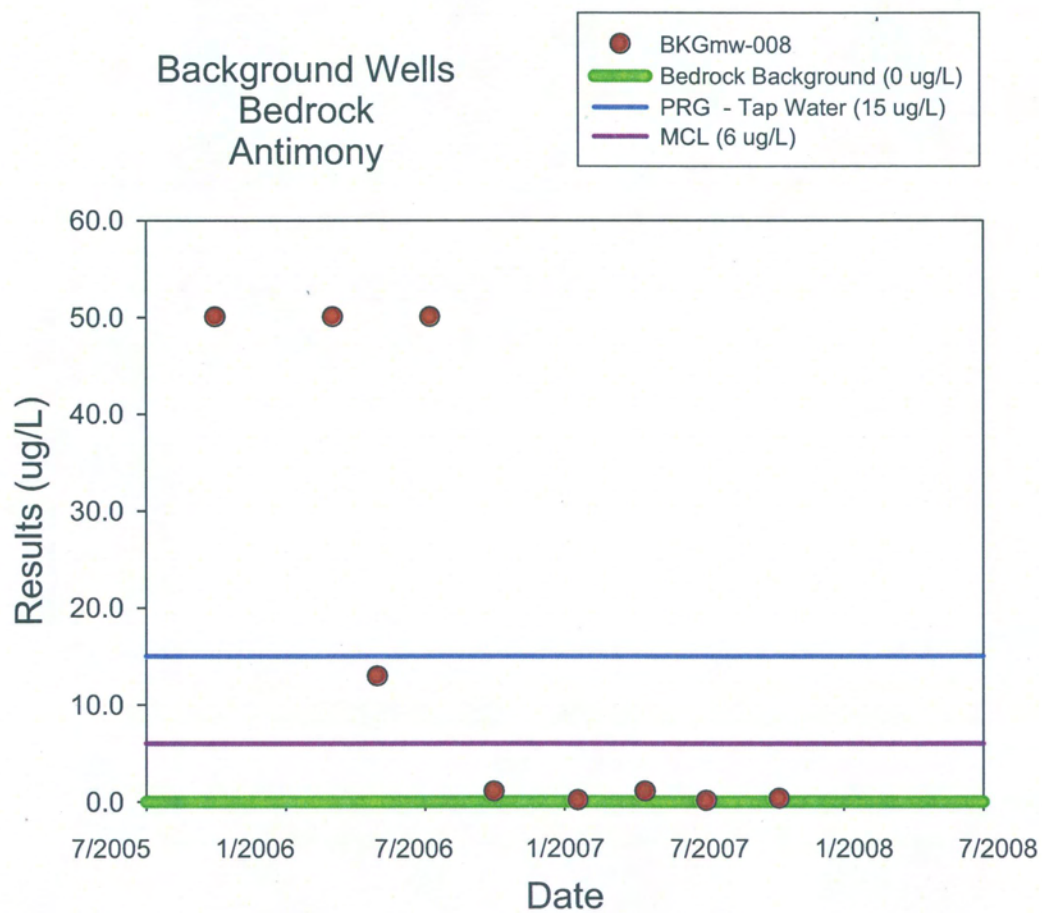
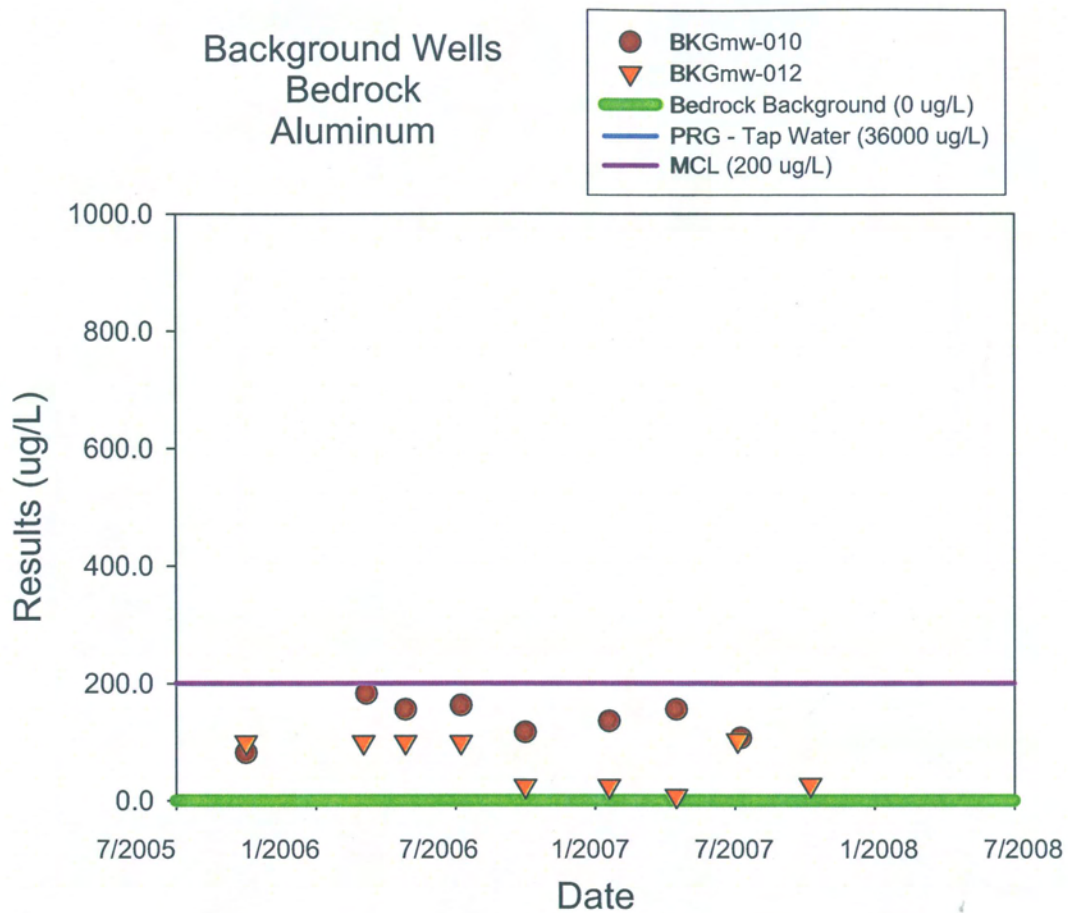




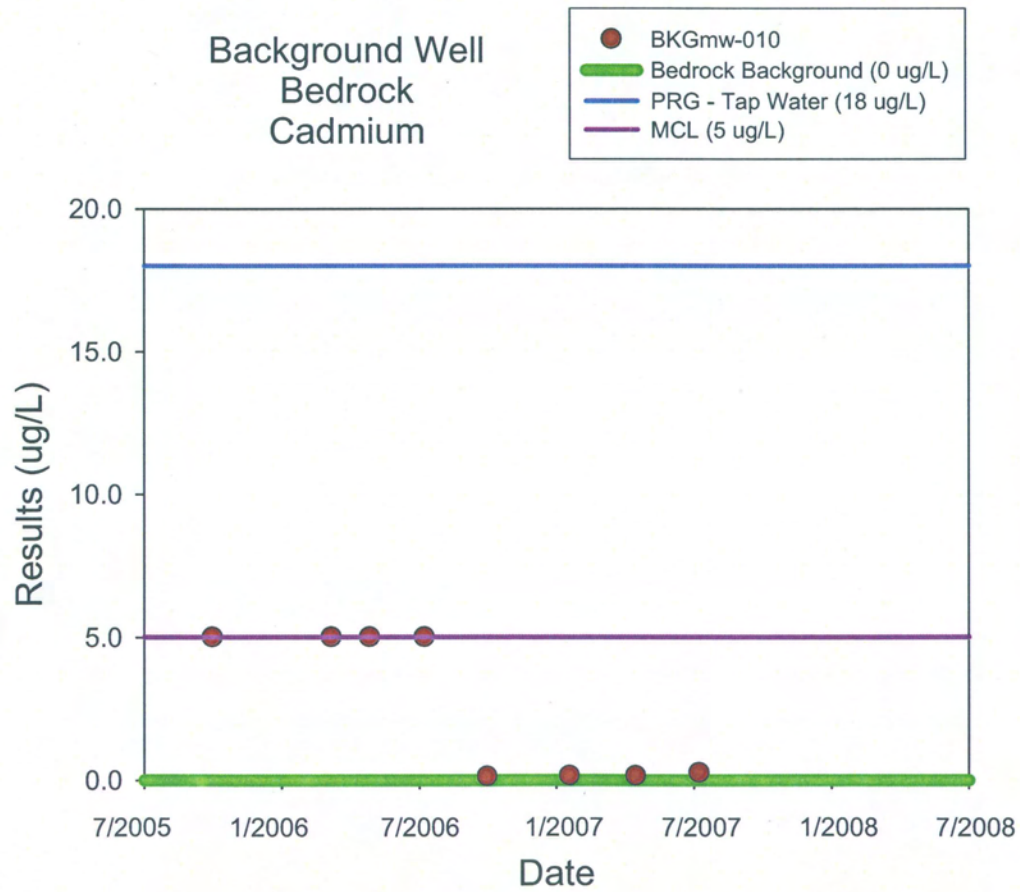
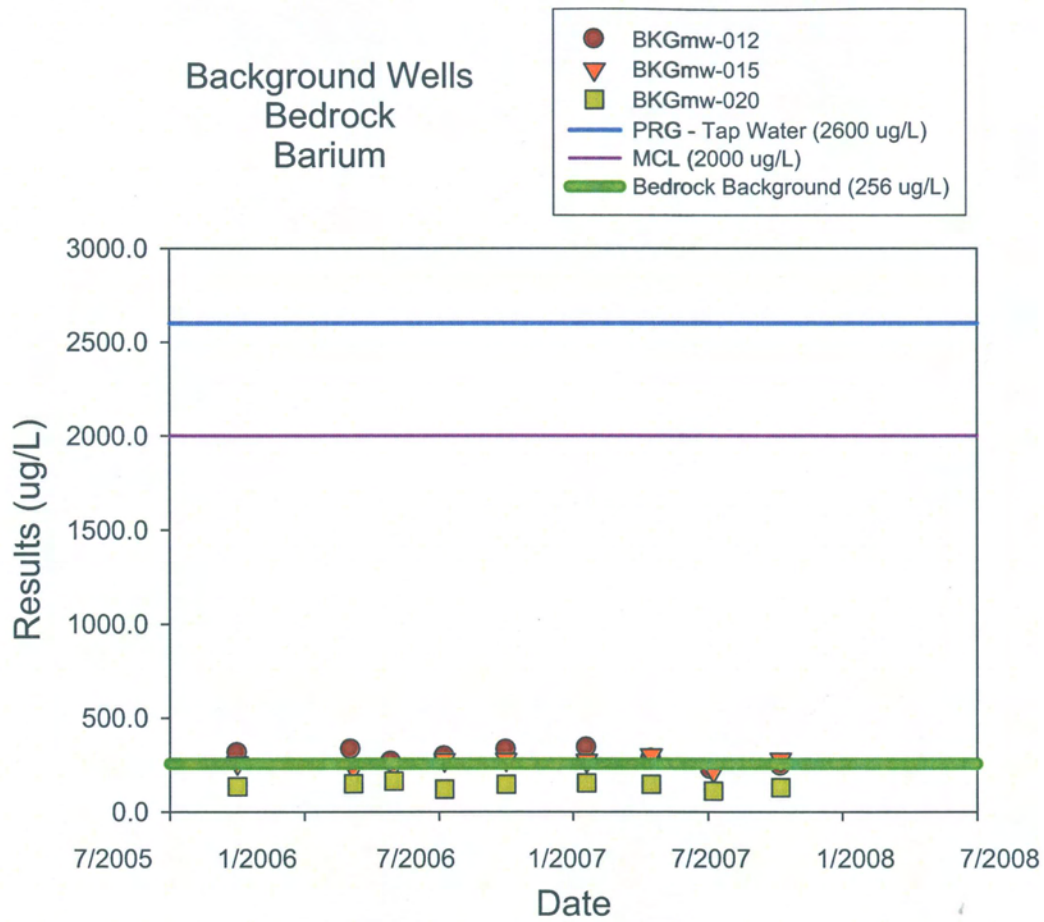




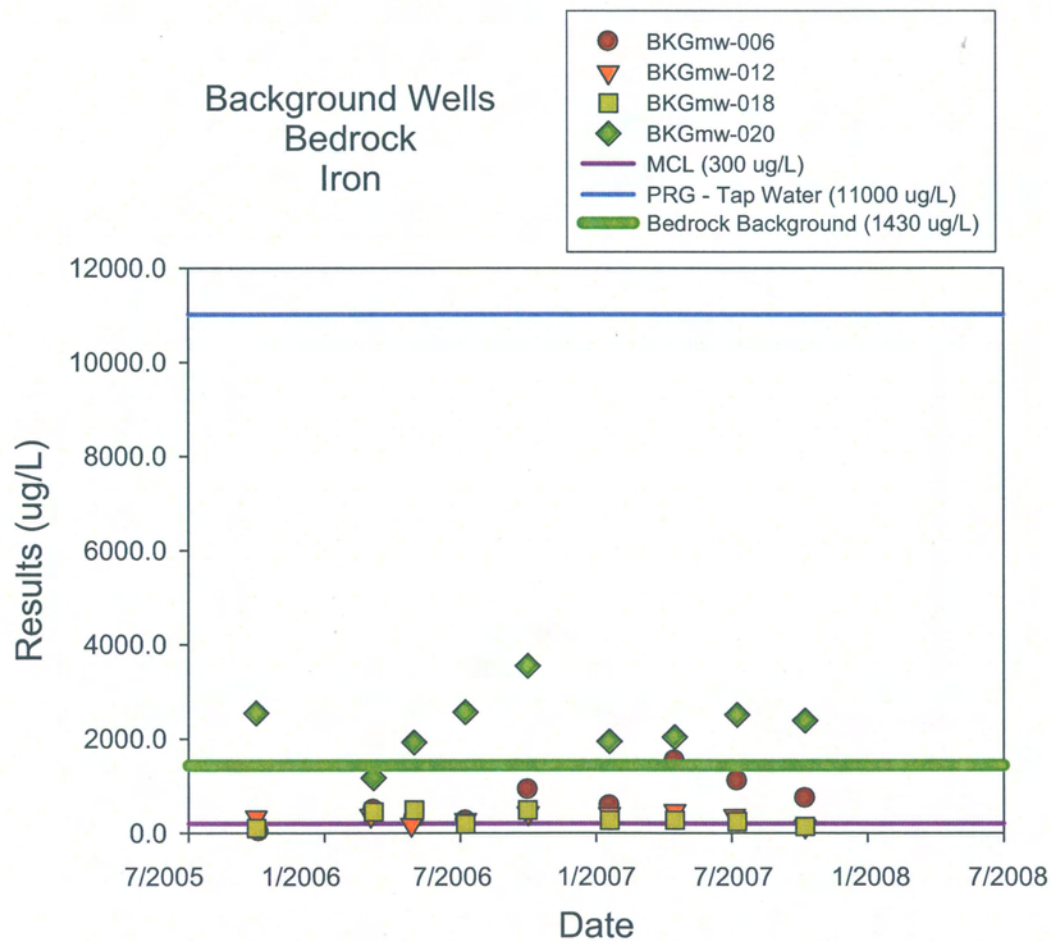
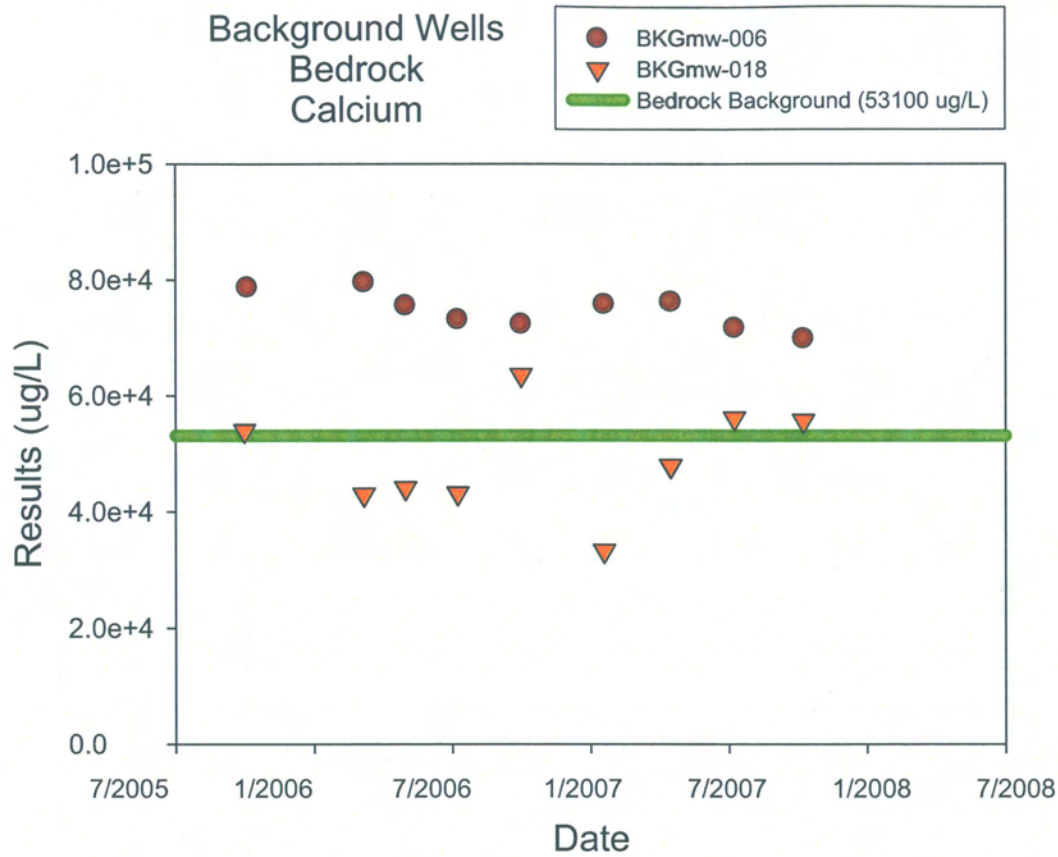


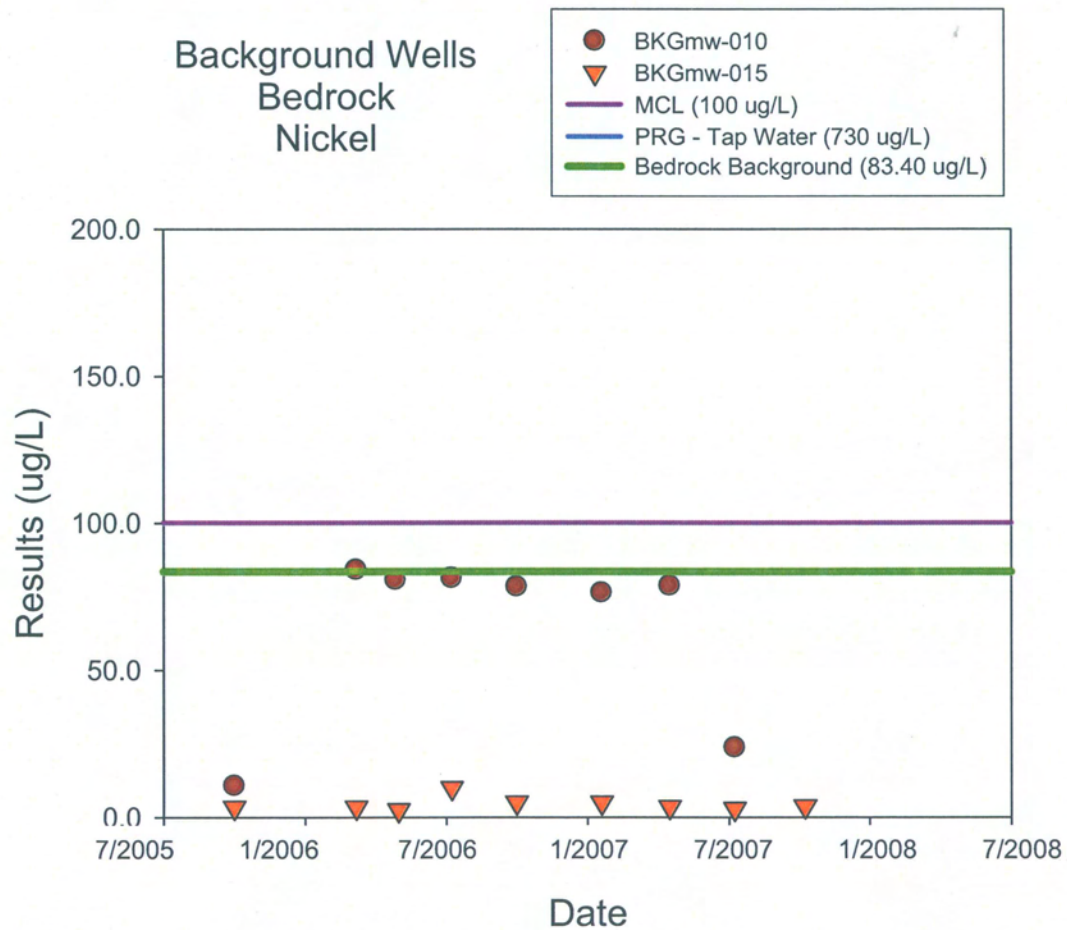
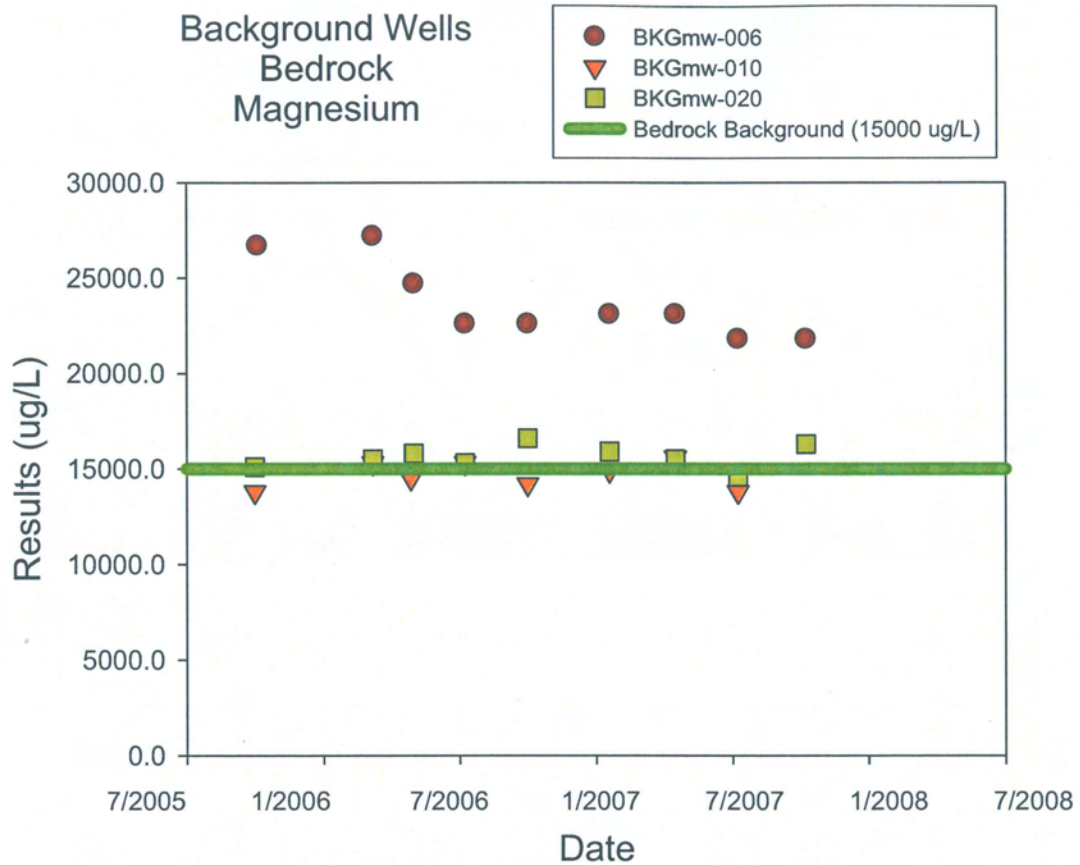


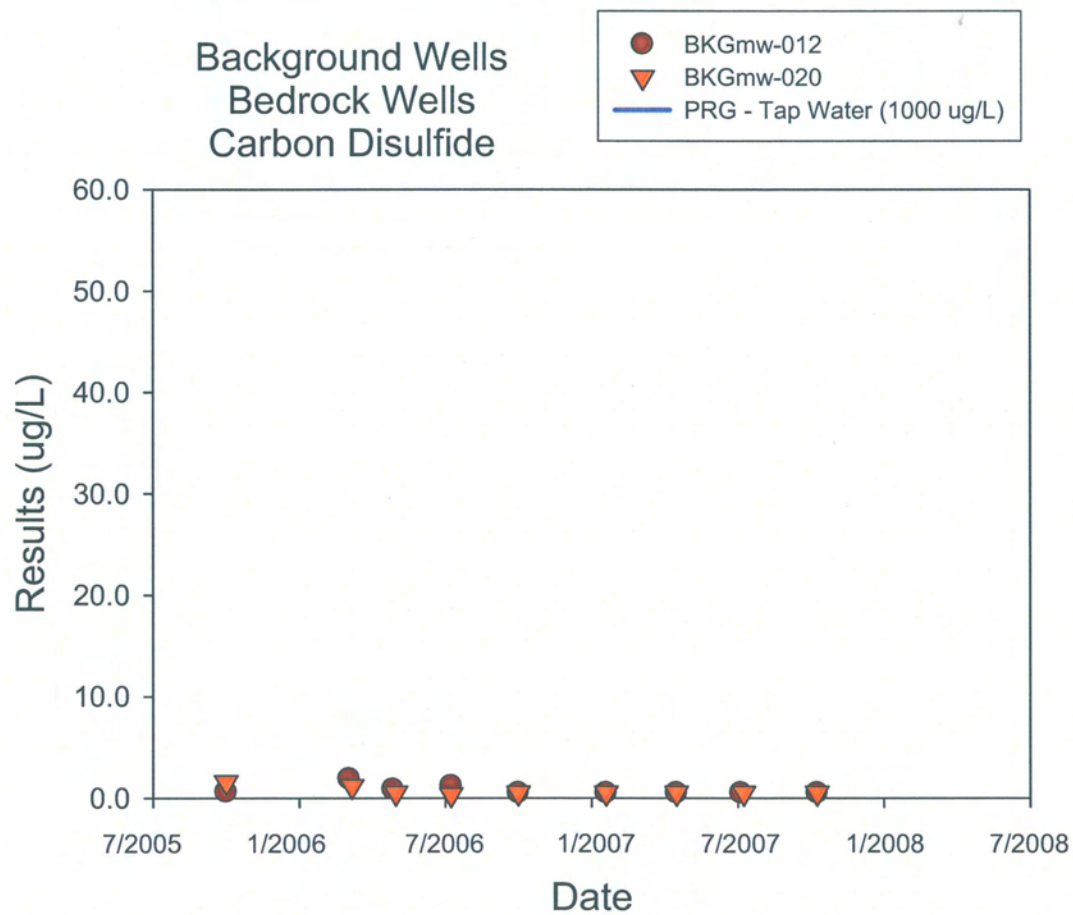
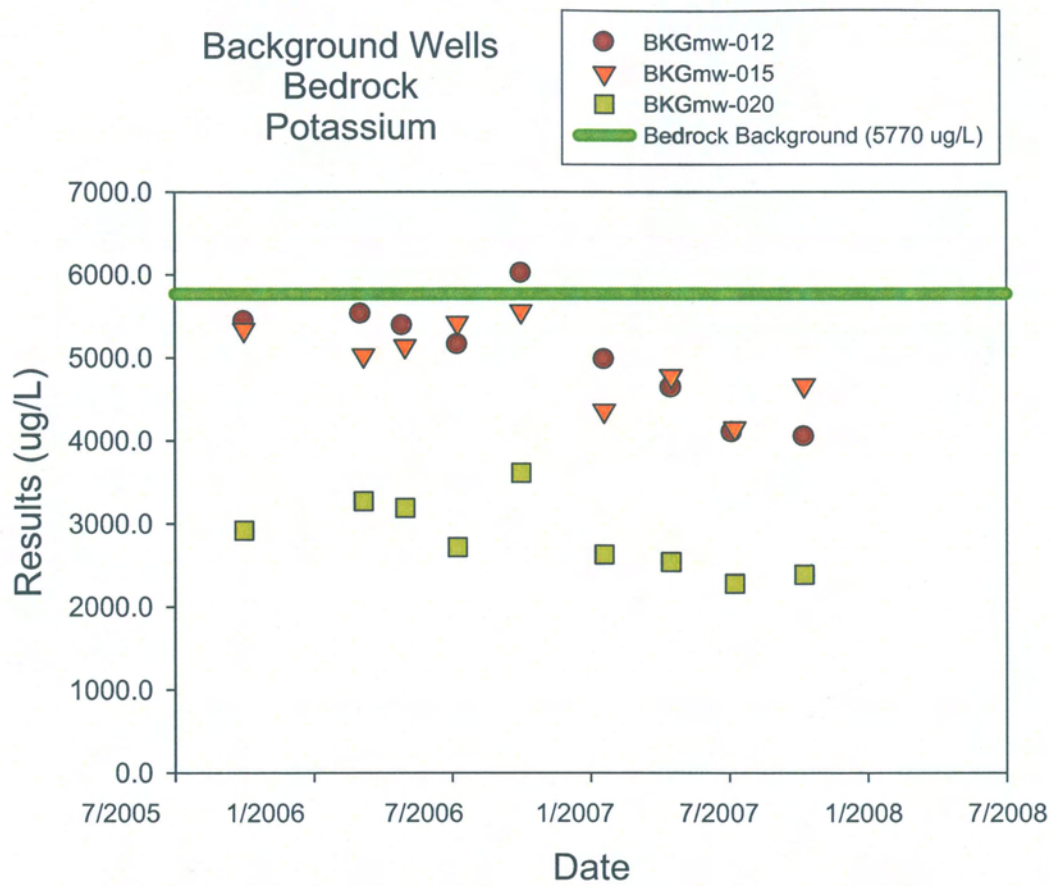




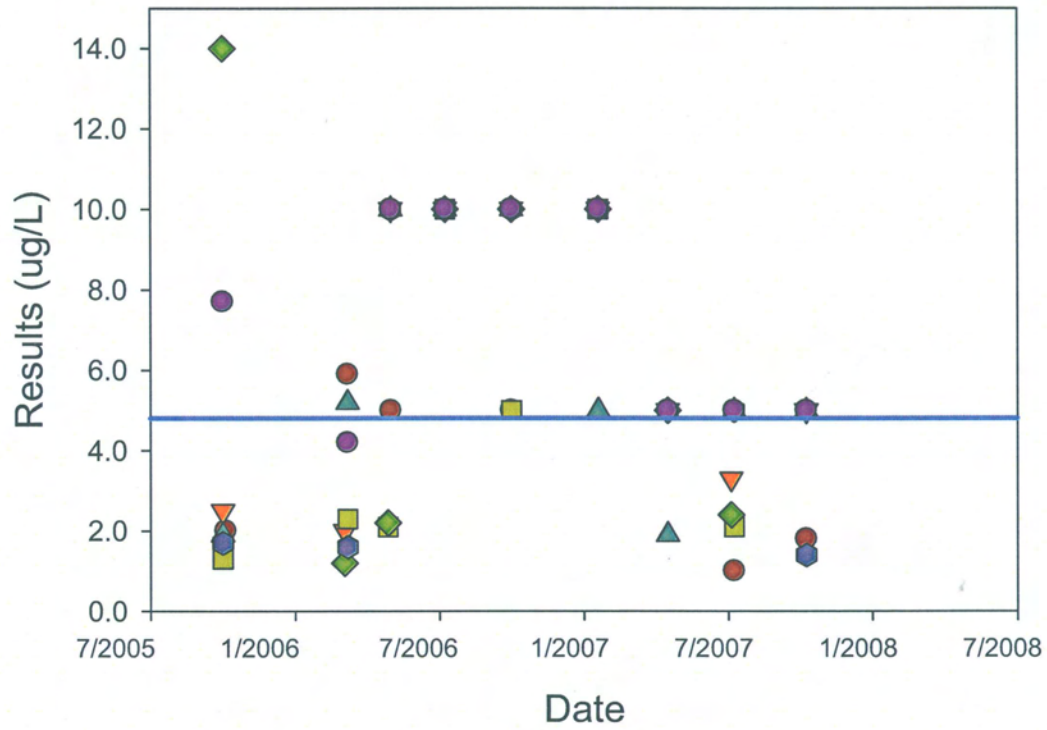
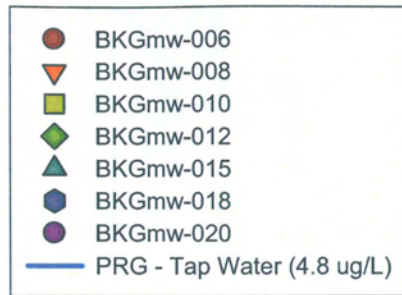




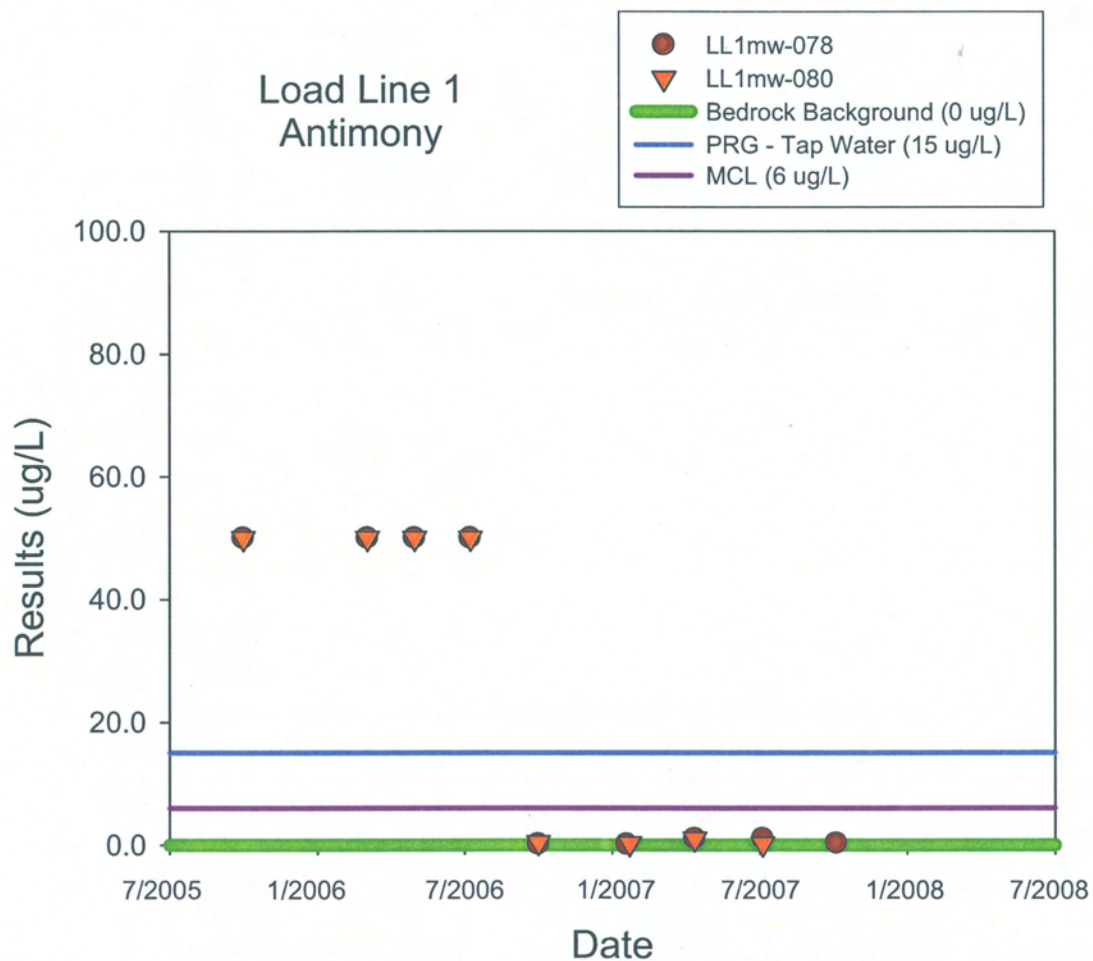
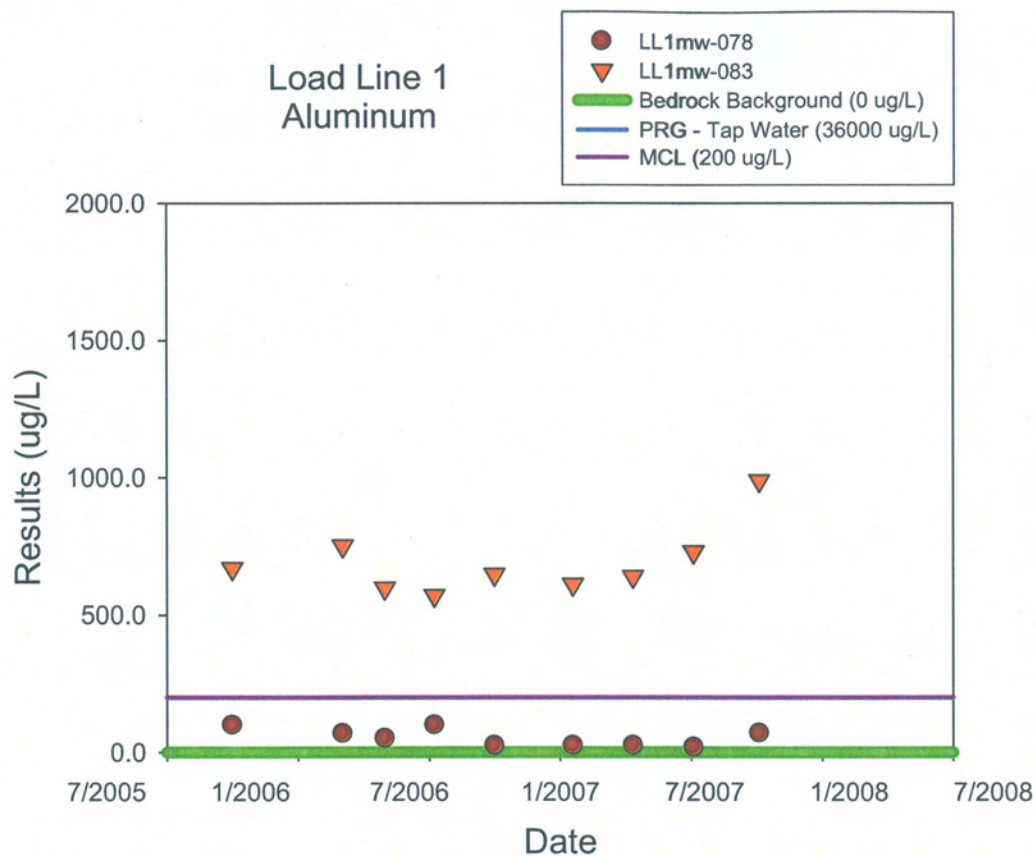


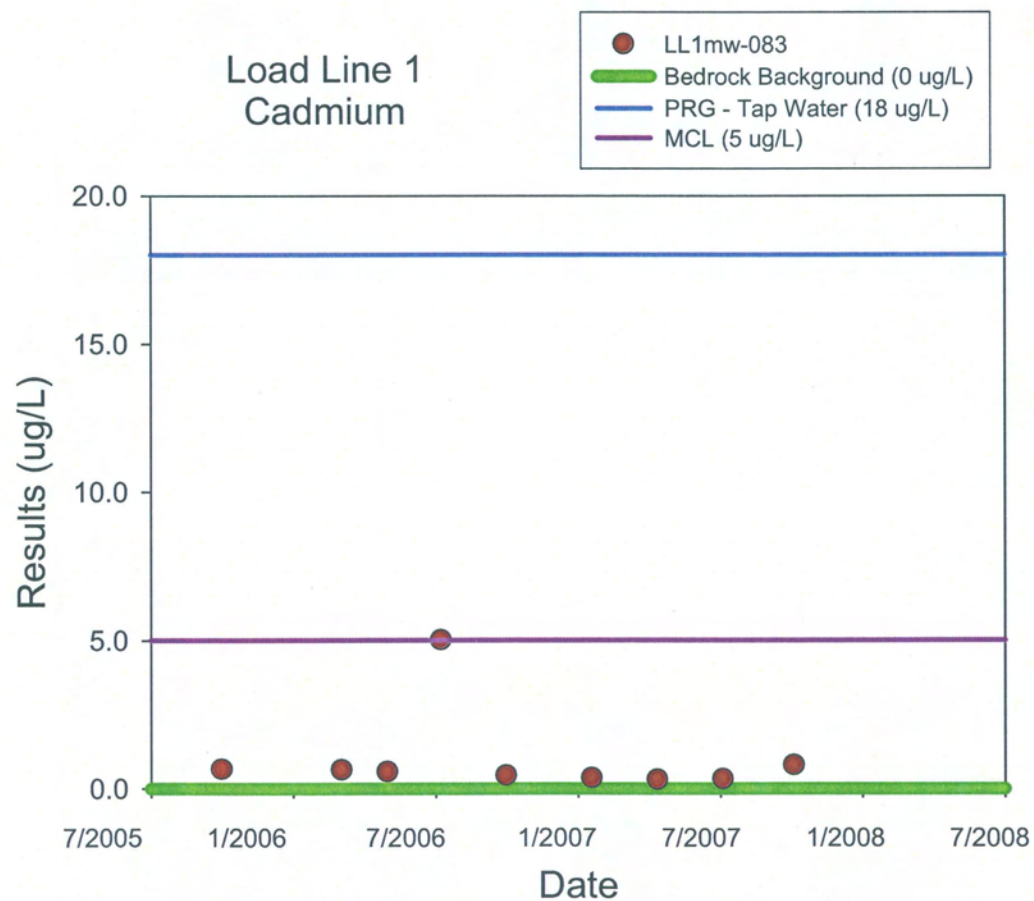
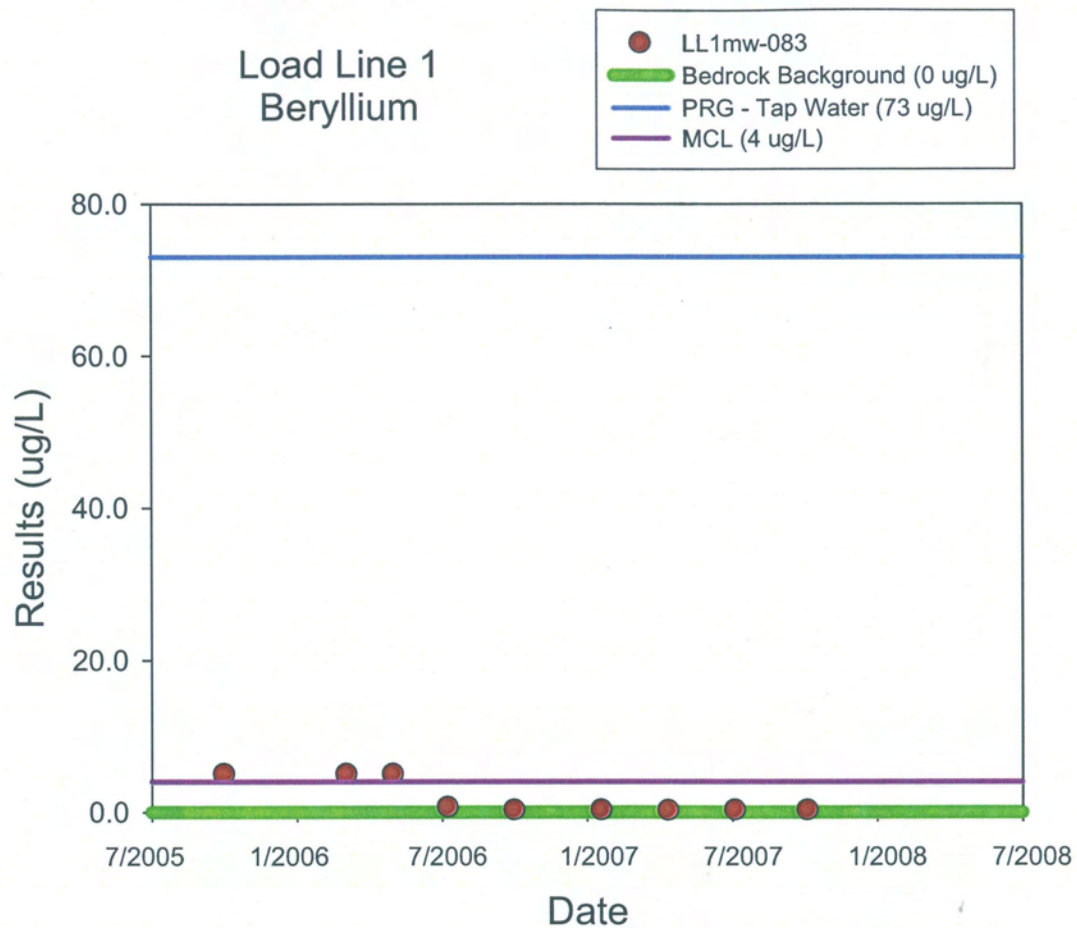


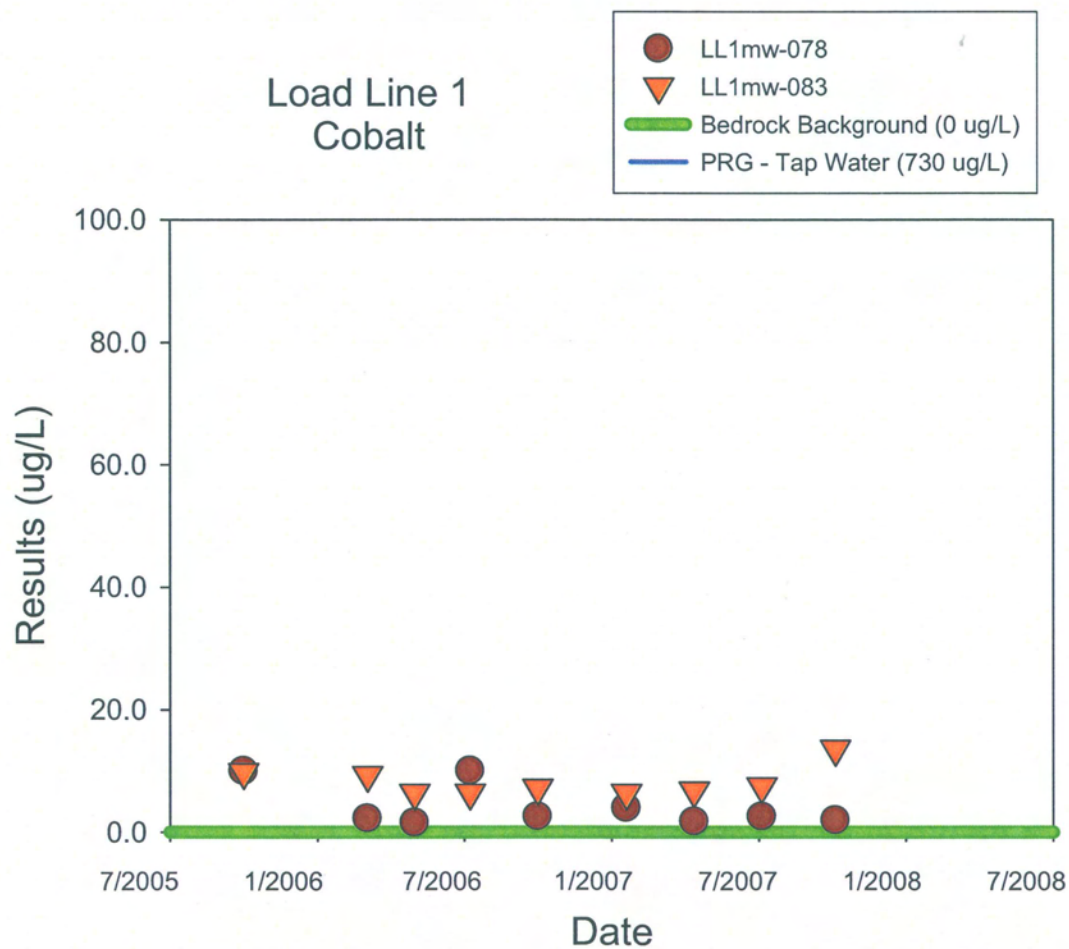
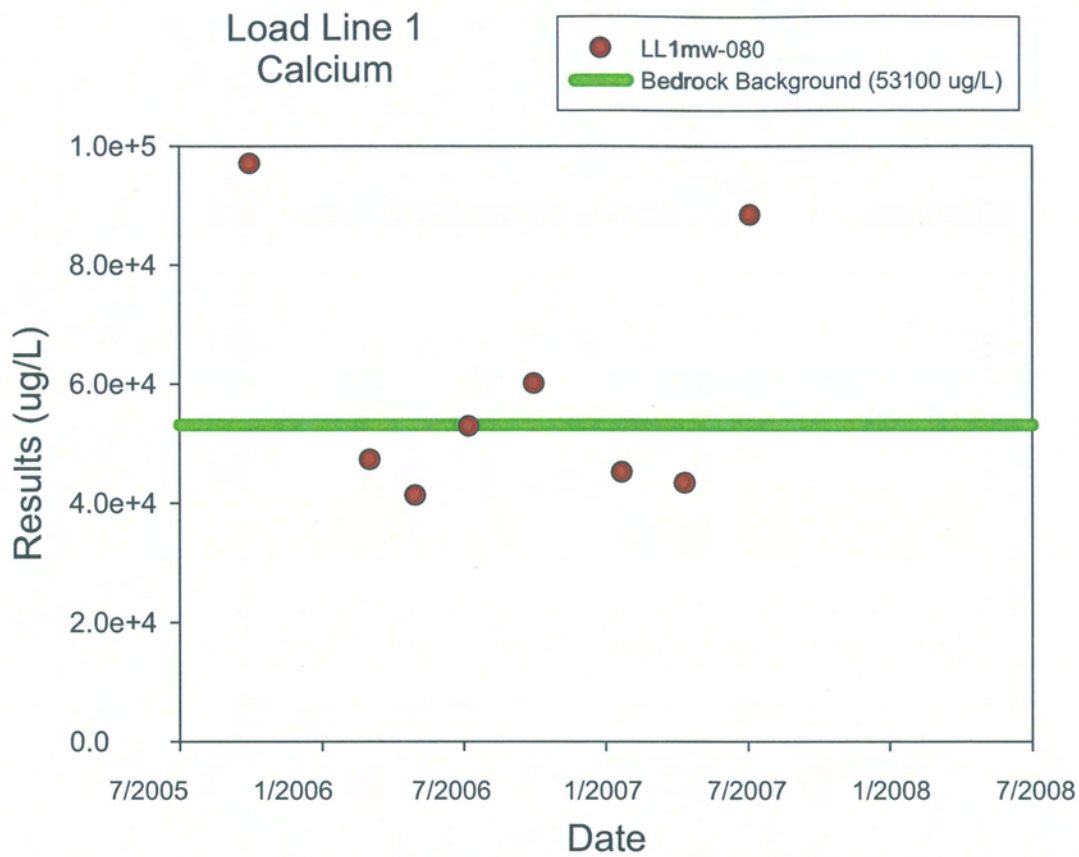
Background Wells  
Bedrock wells  
Bis(2-ethylhexyl)phthalate

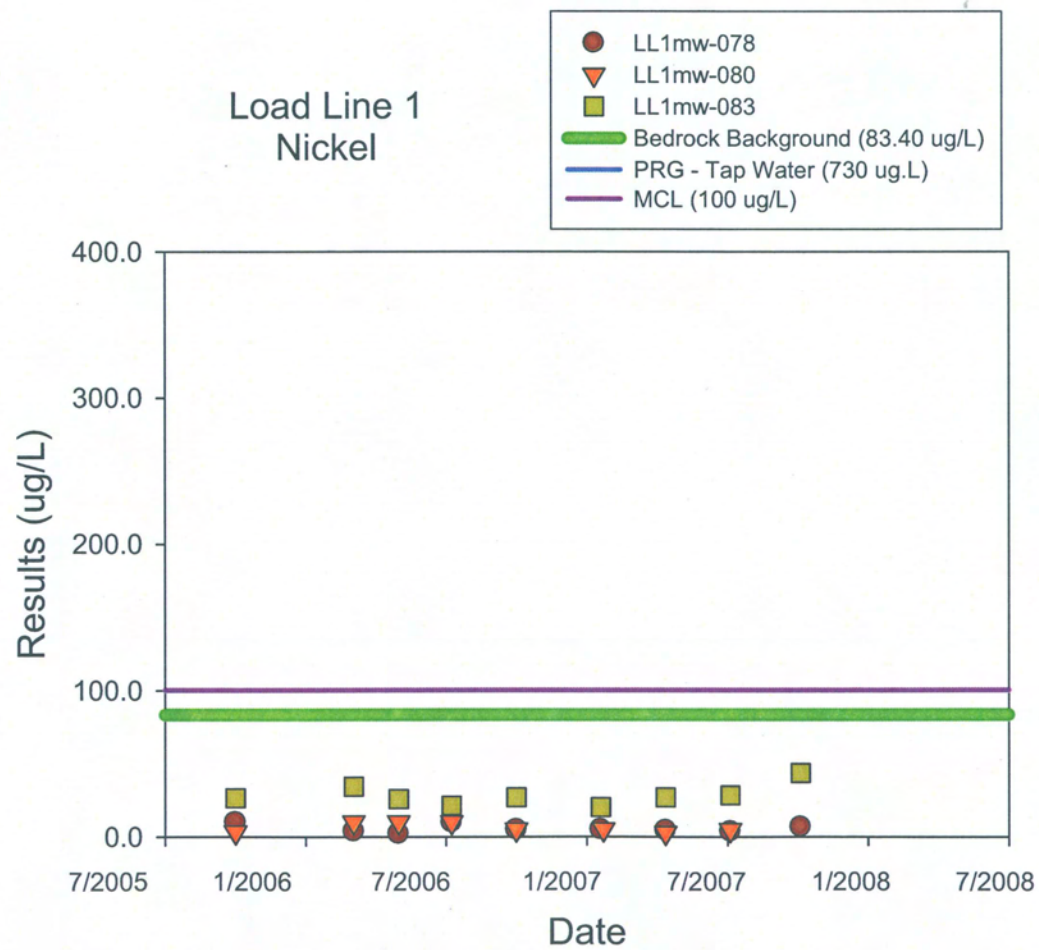
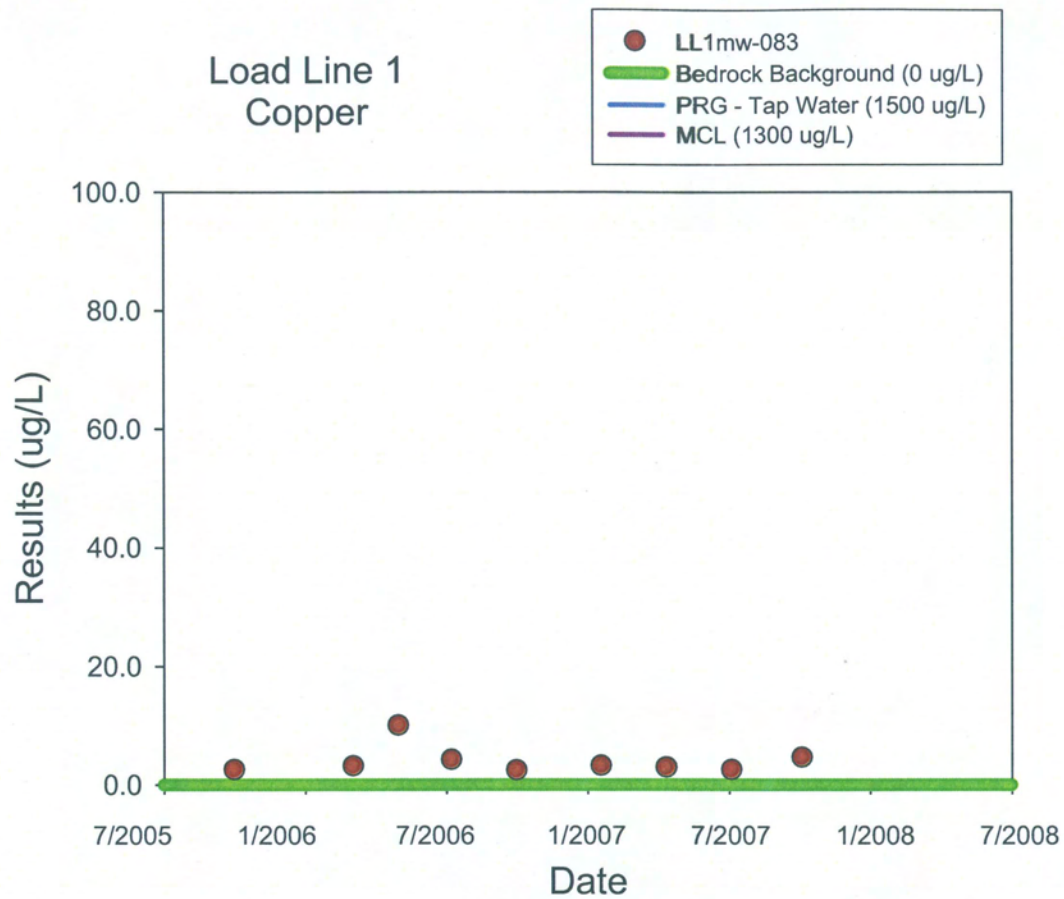




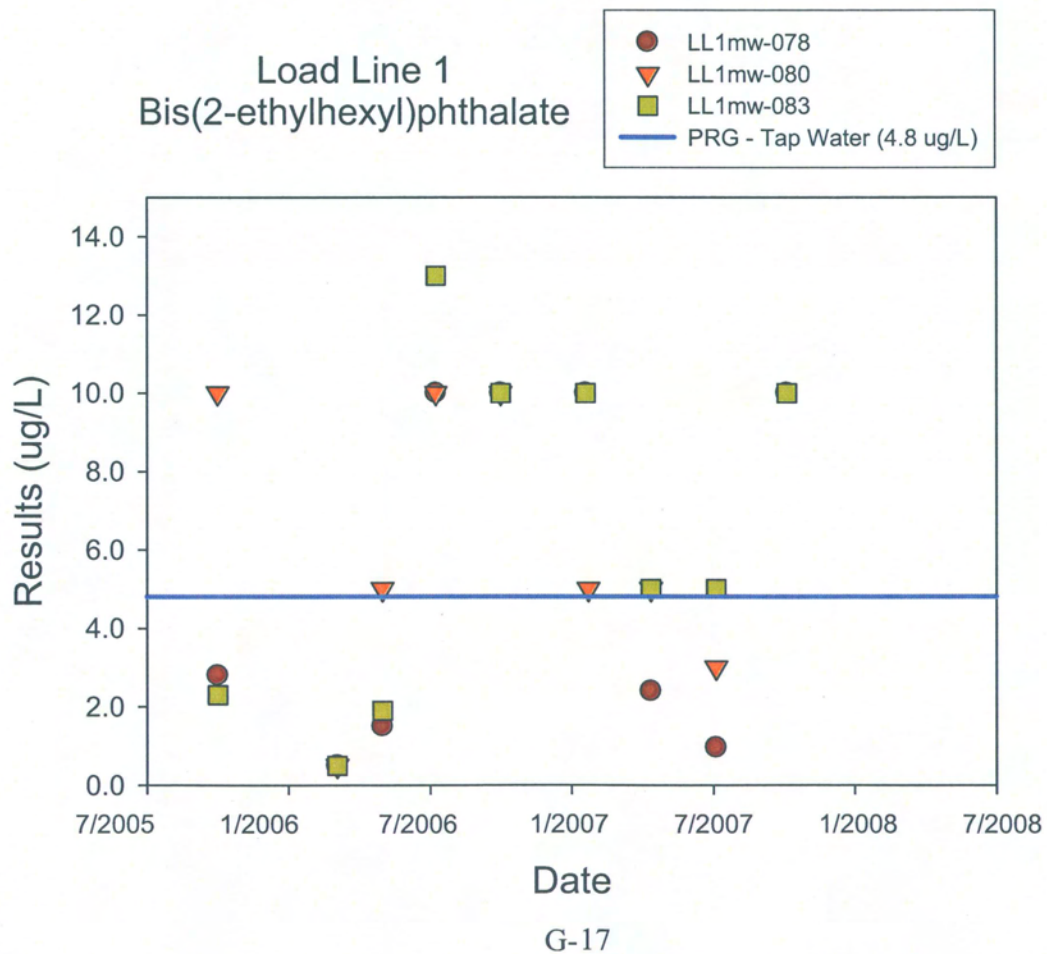
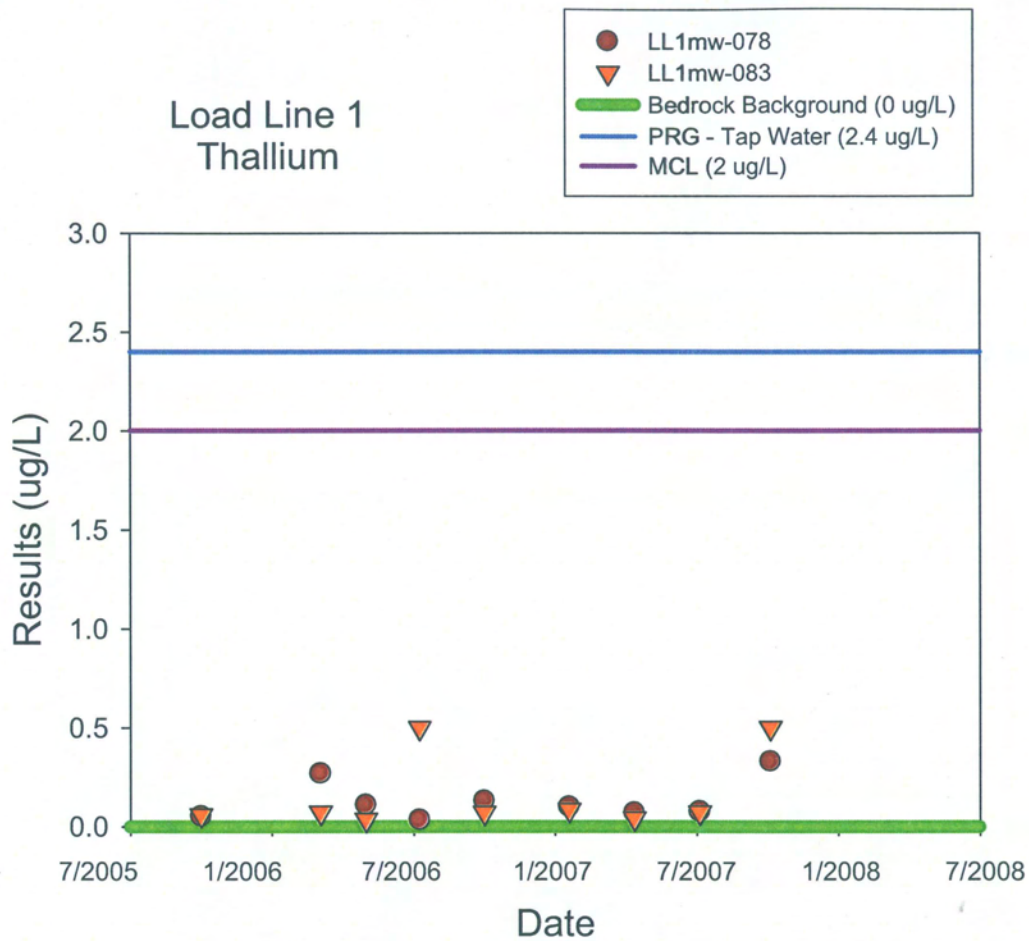


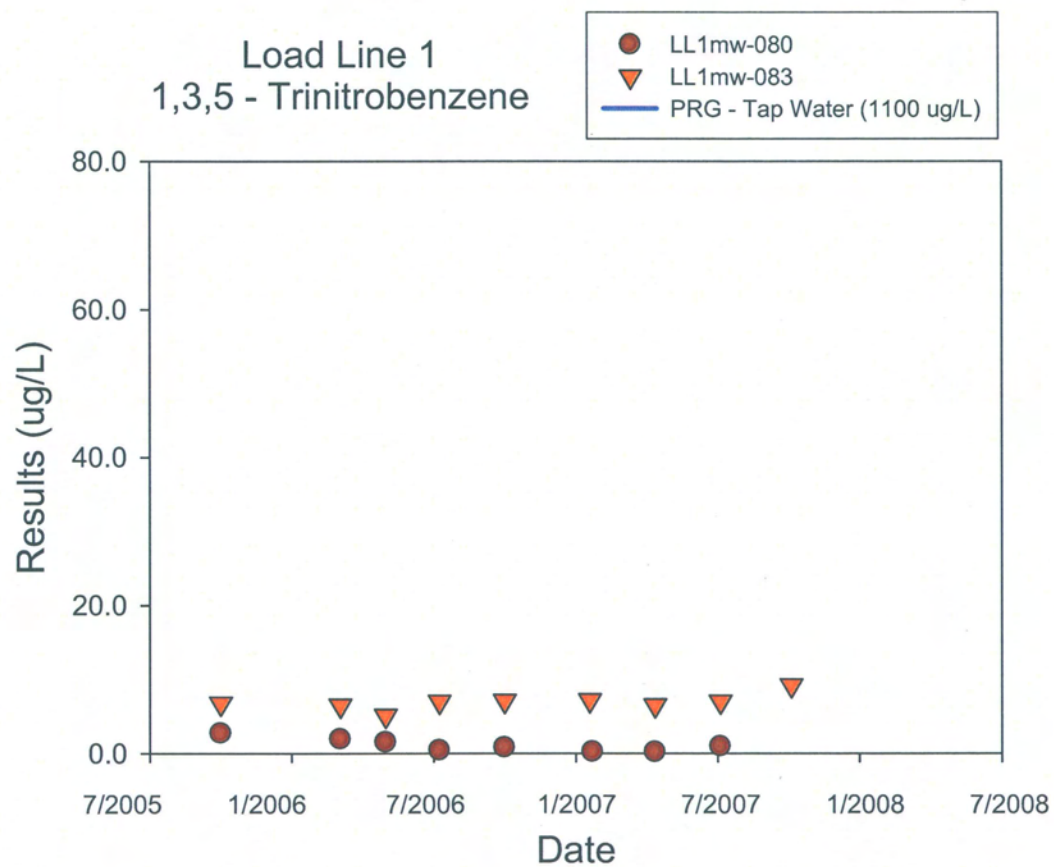
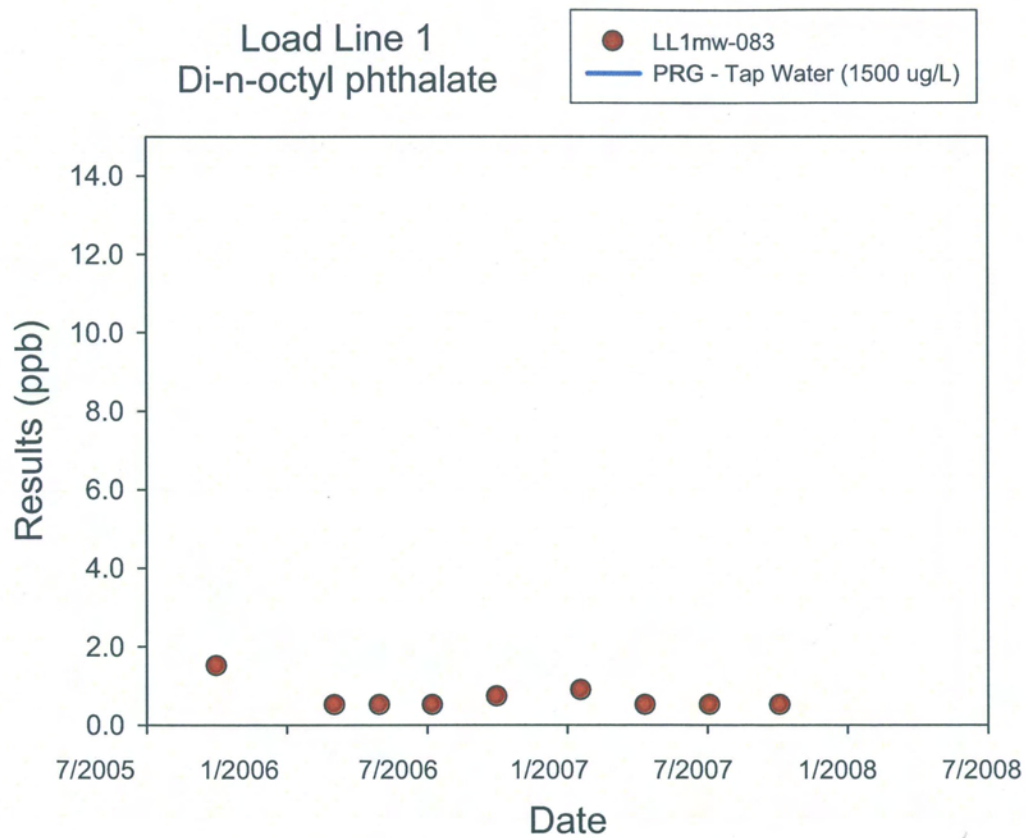


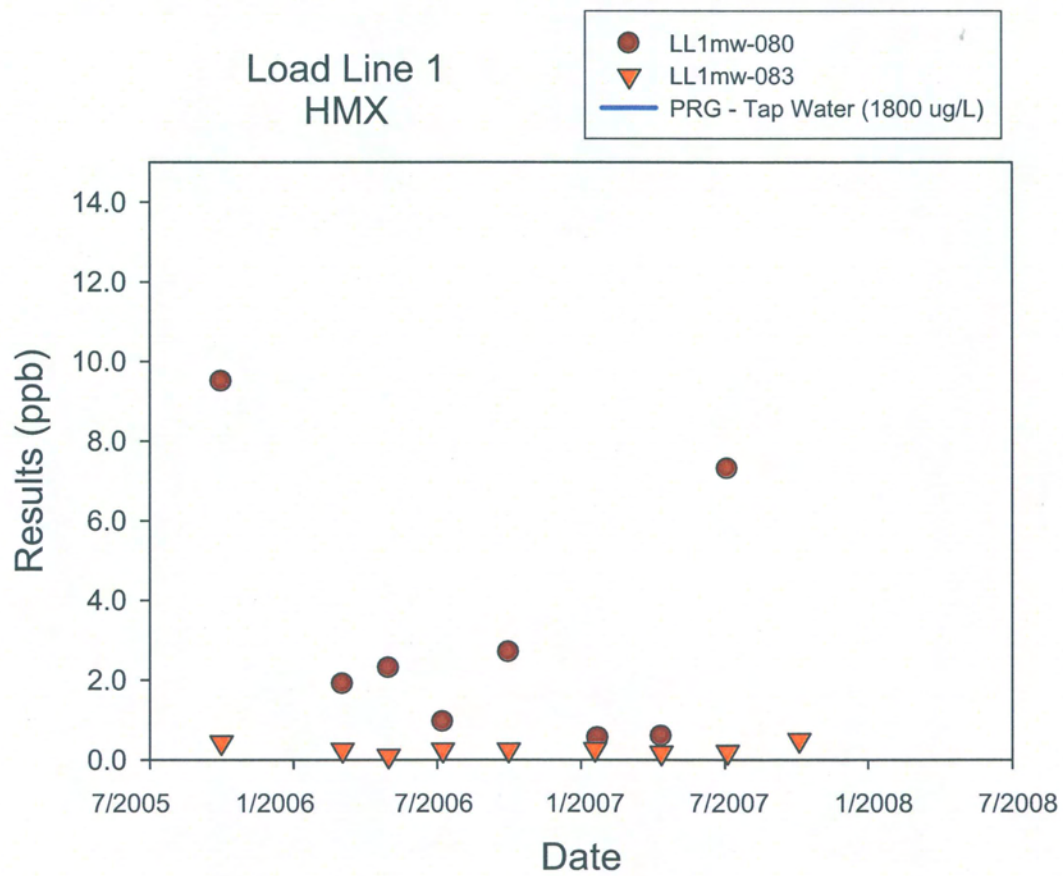
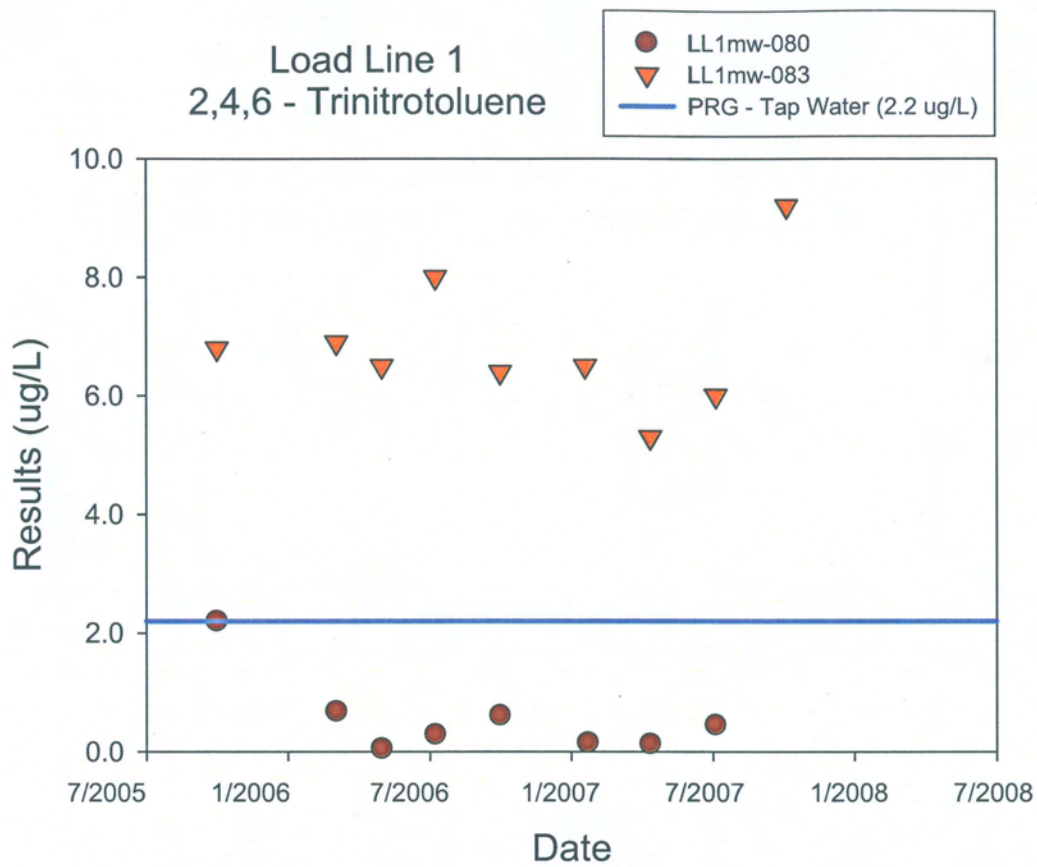


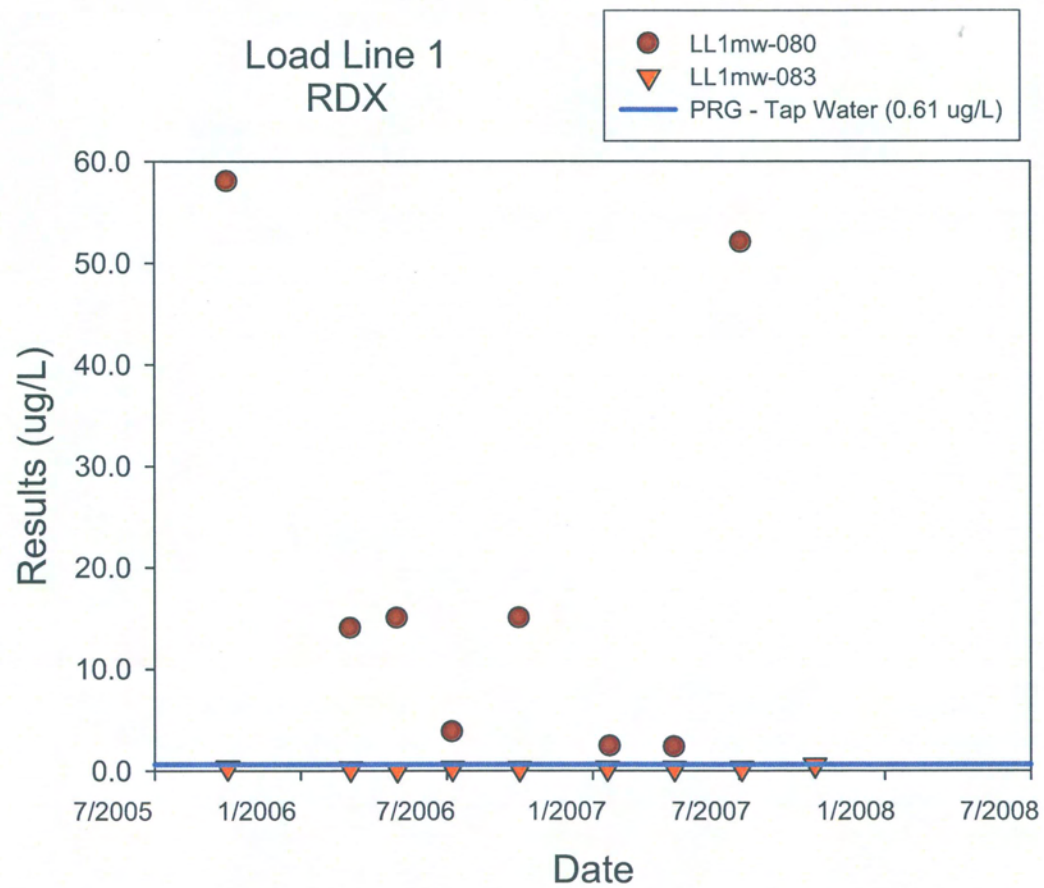
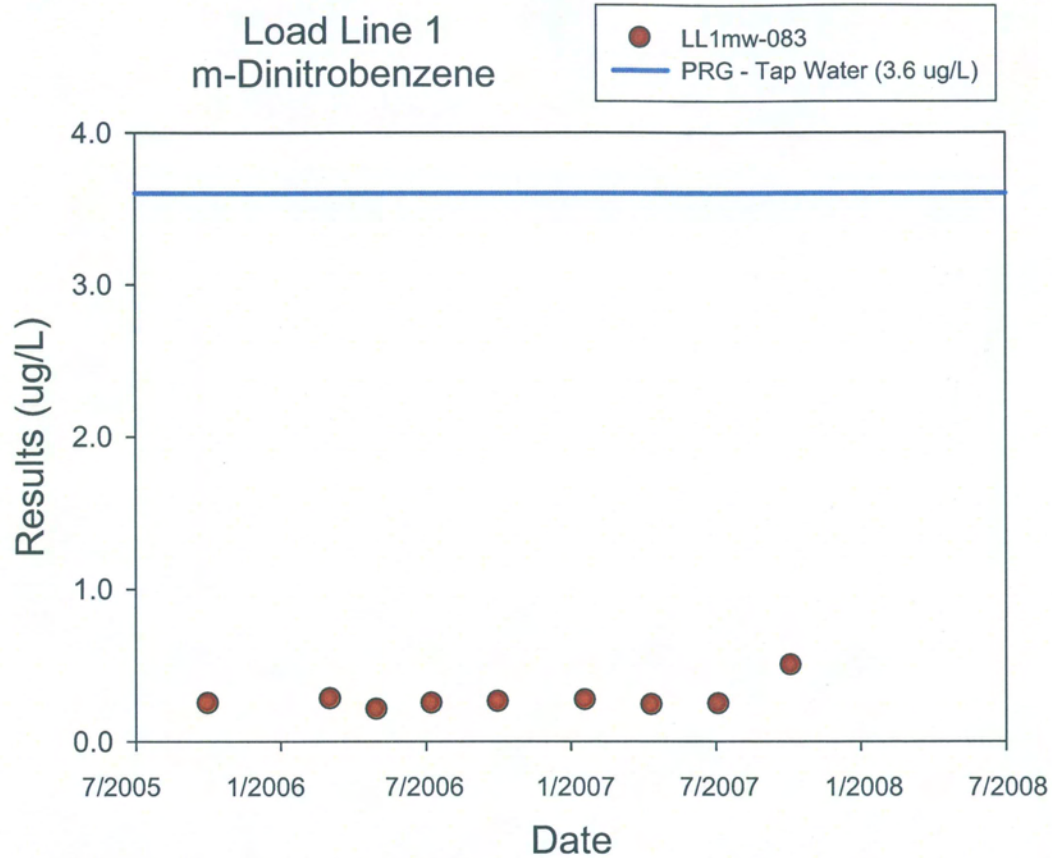




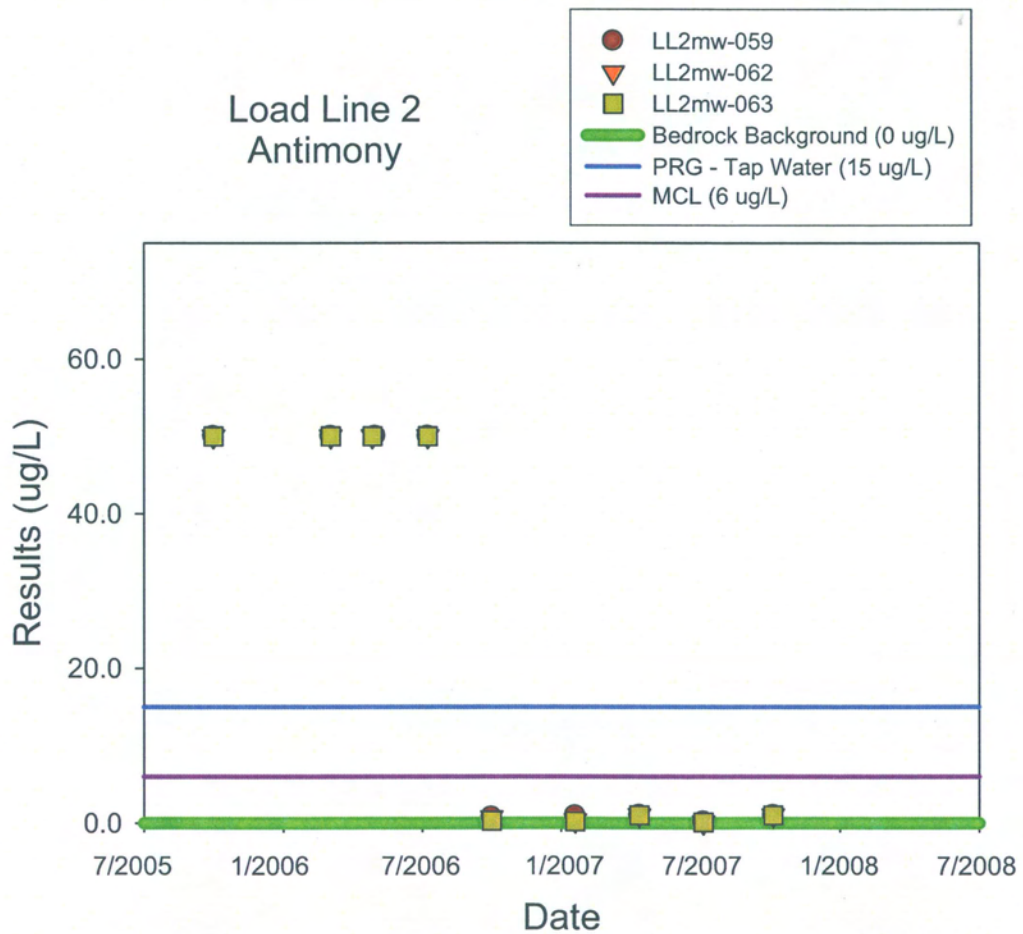
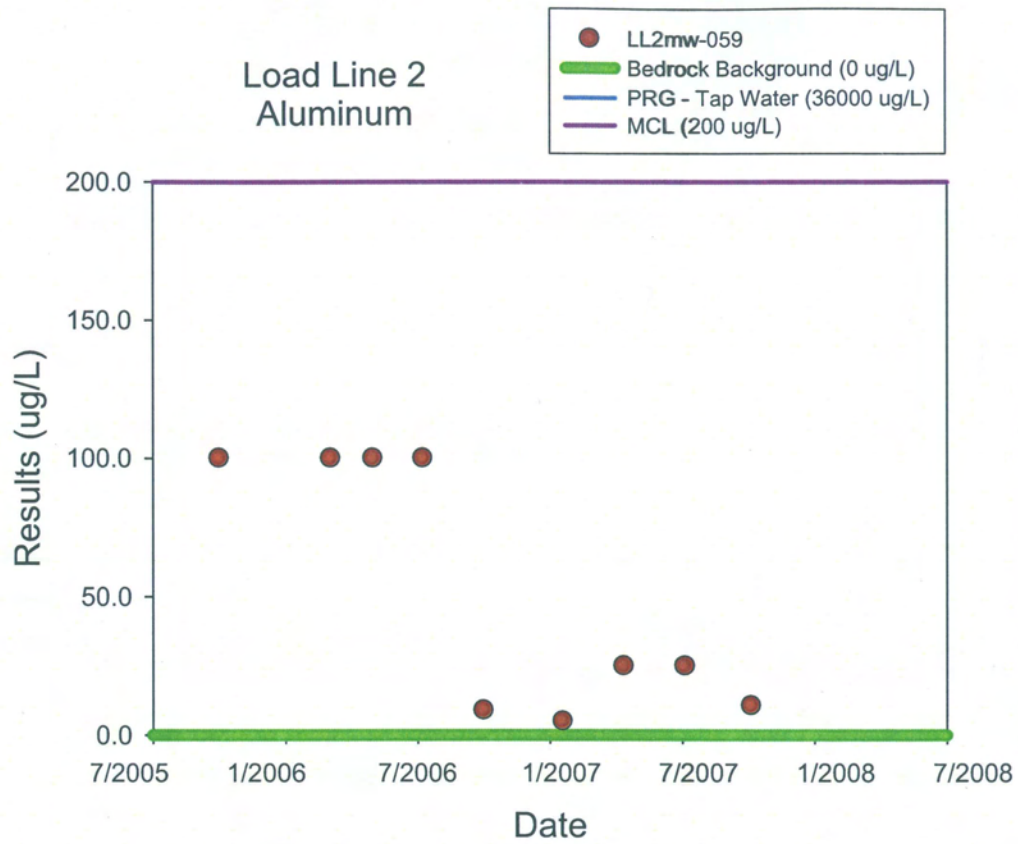


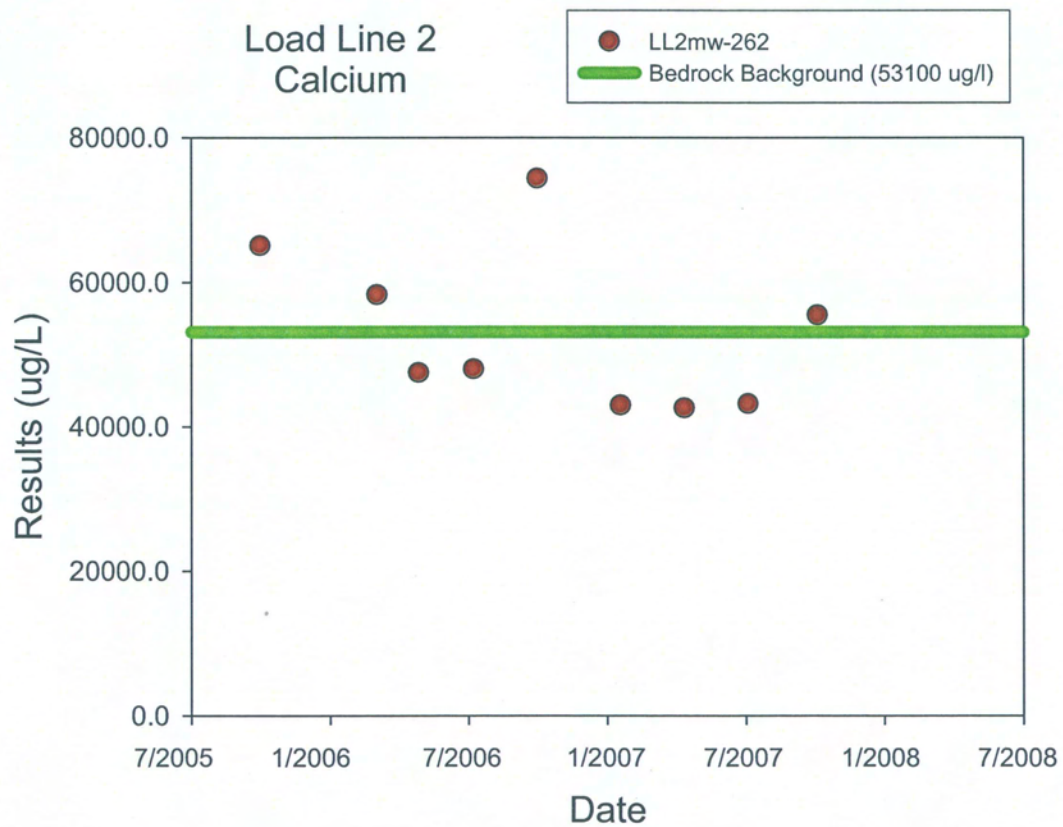
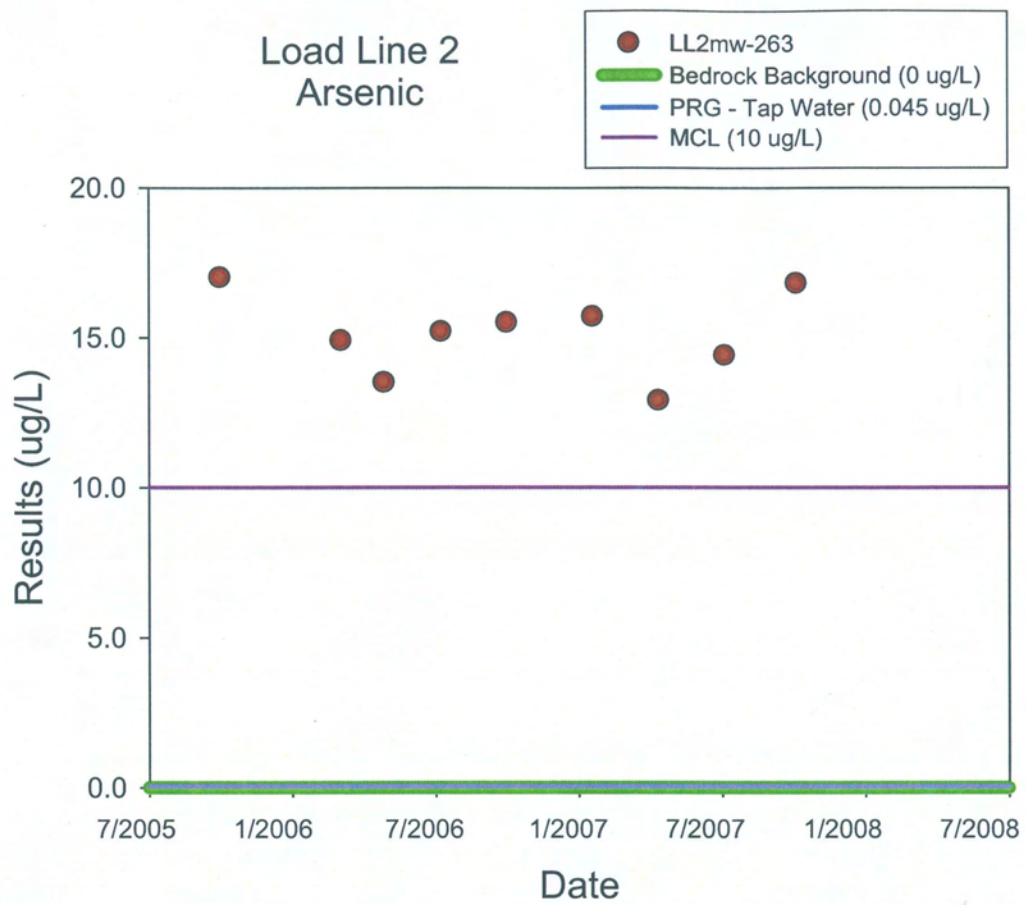


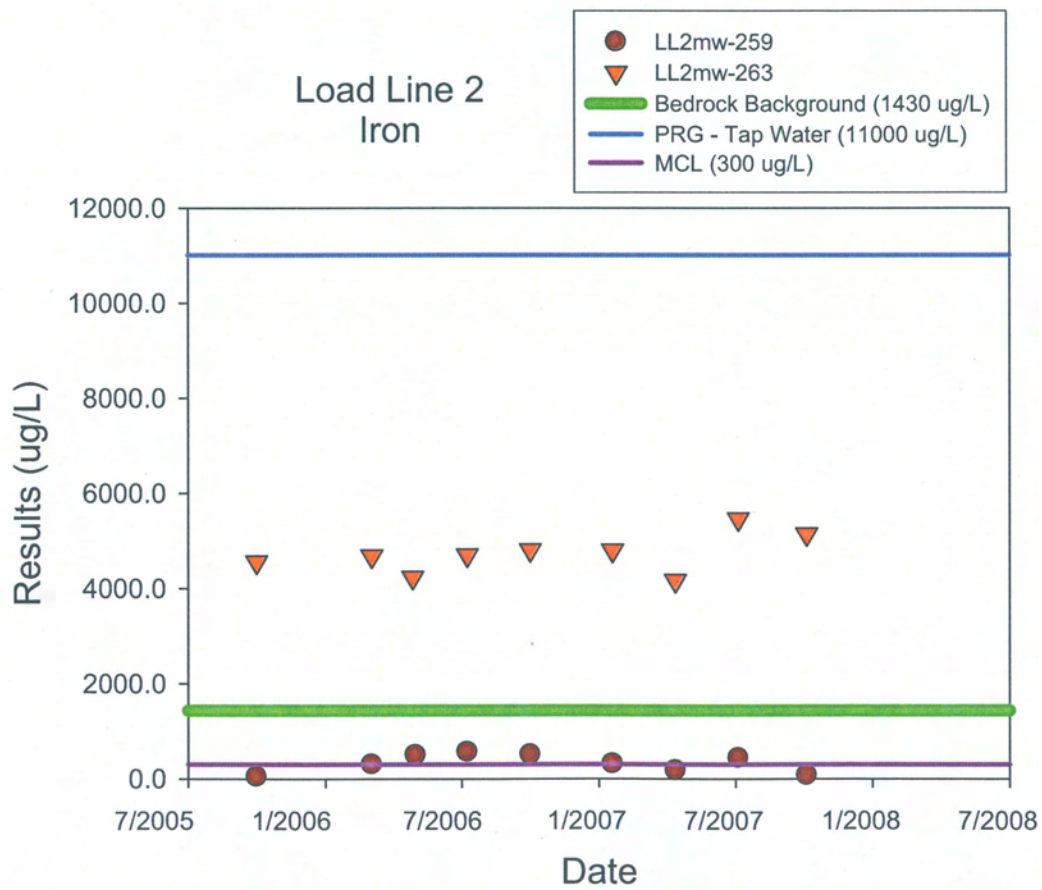
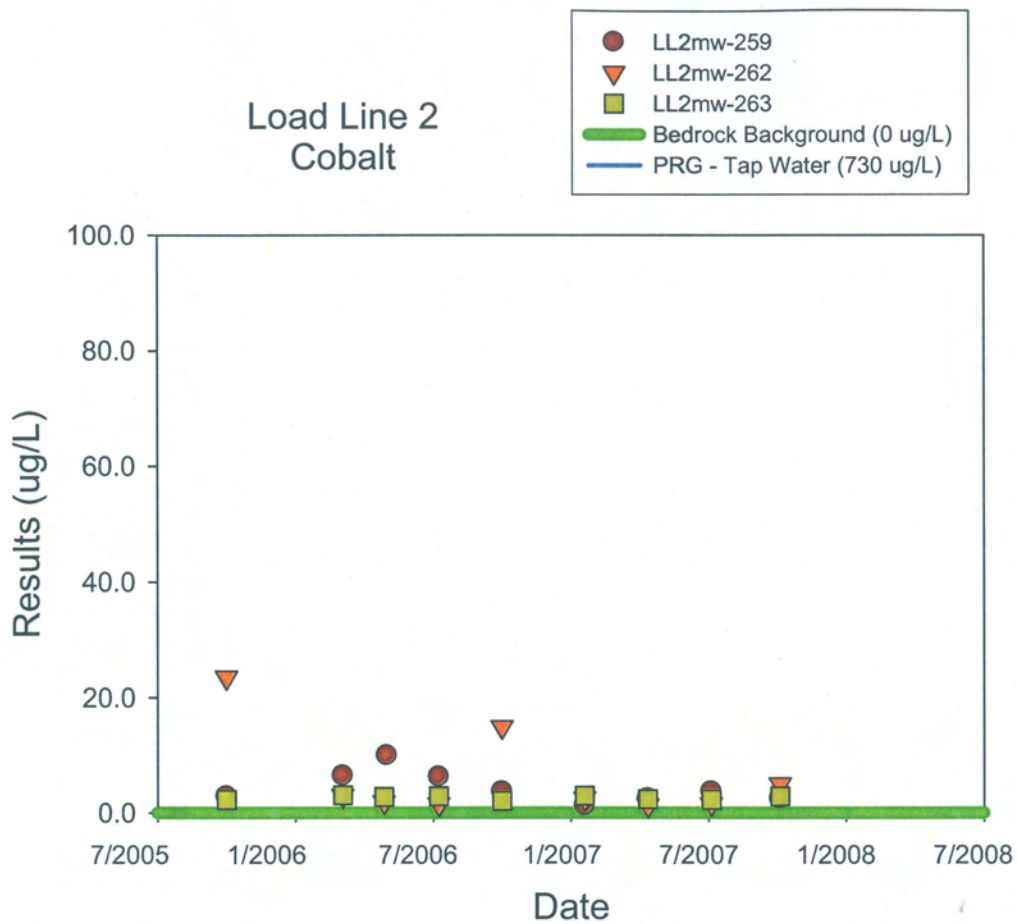




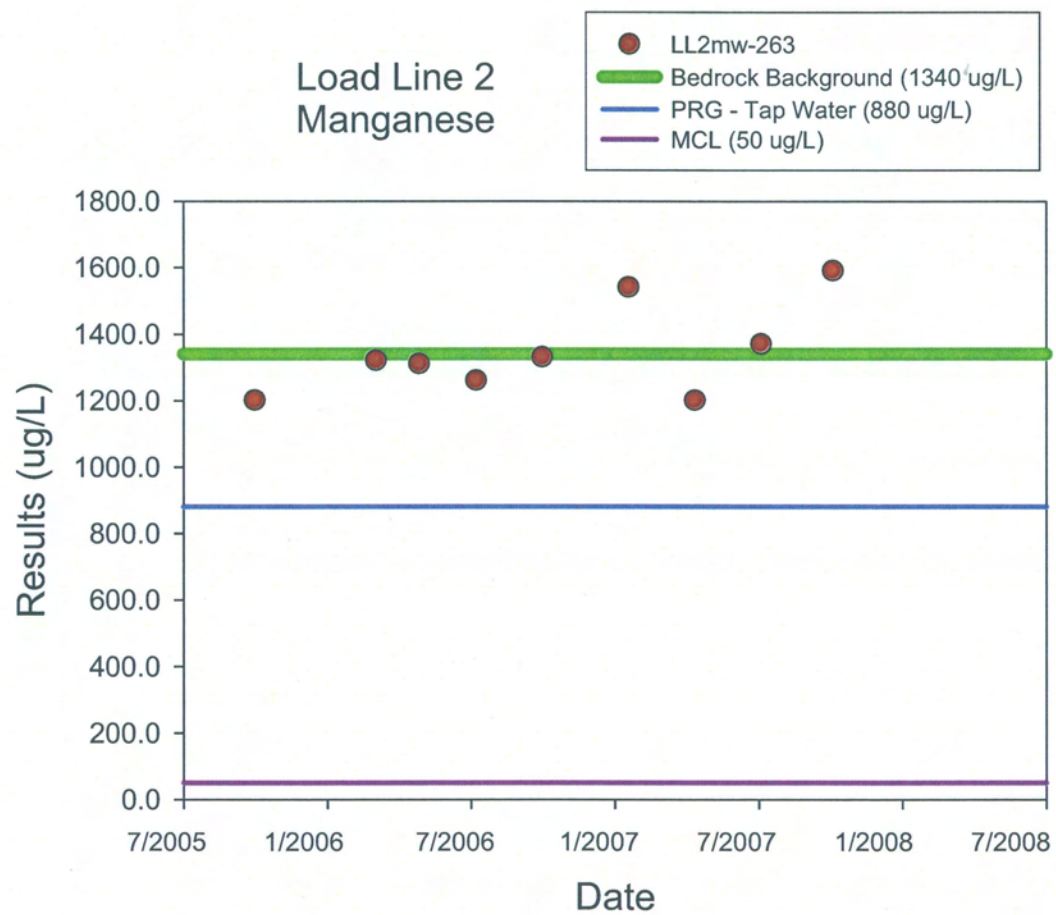
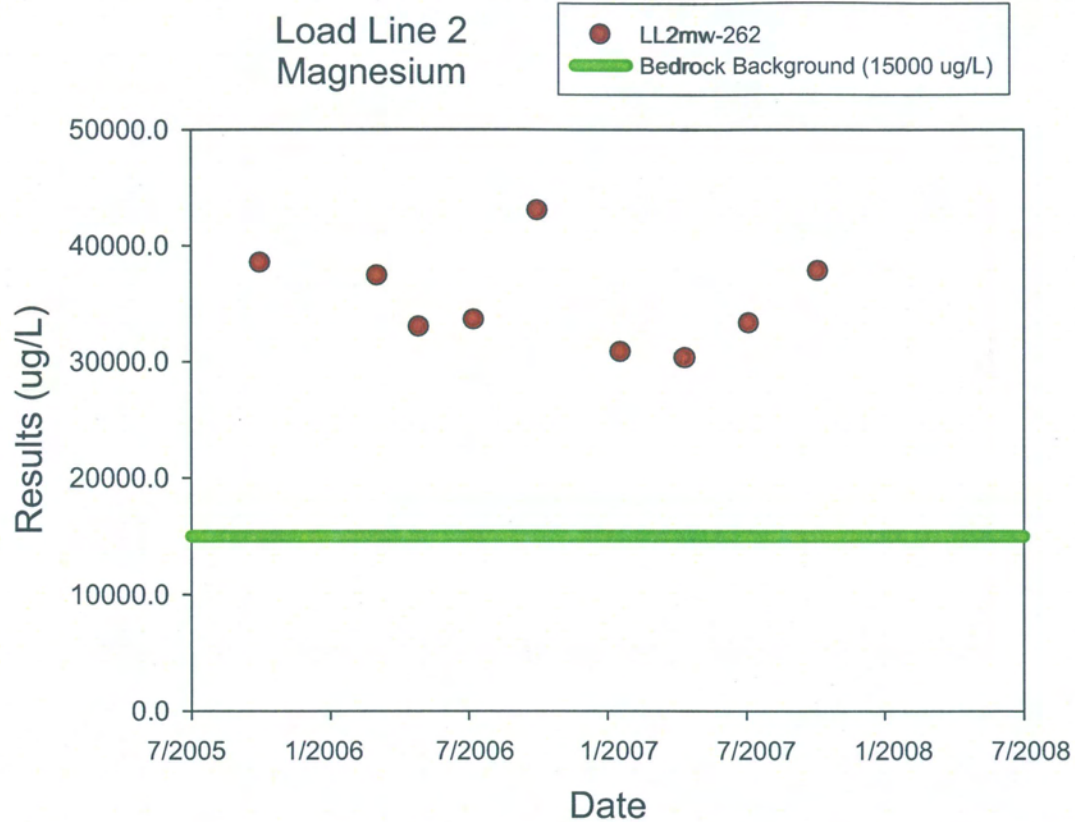




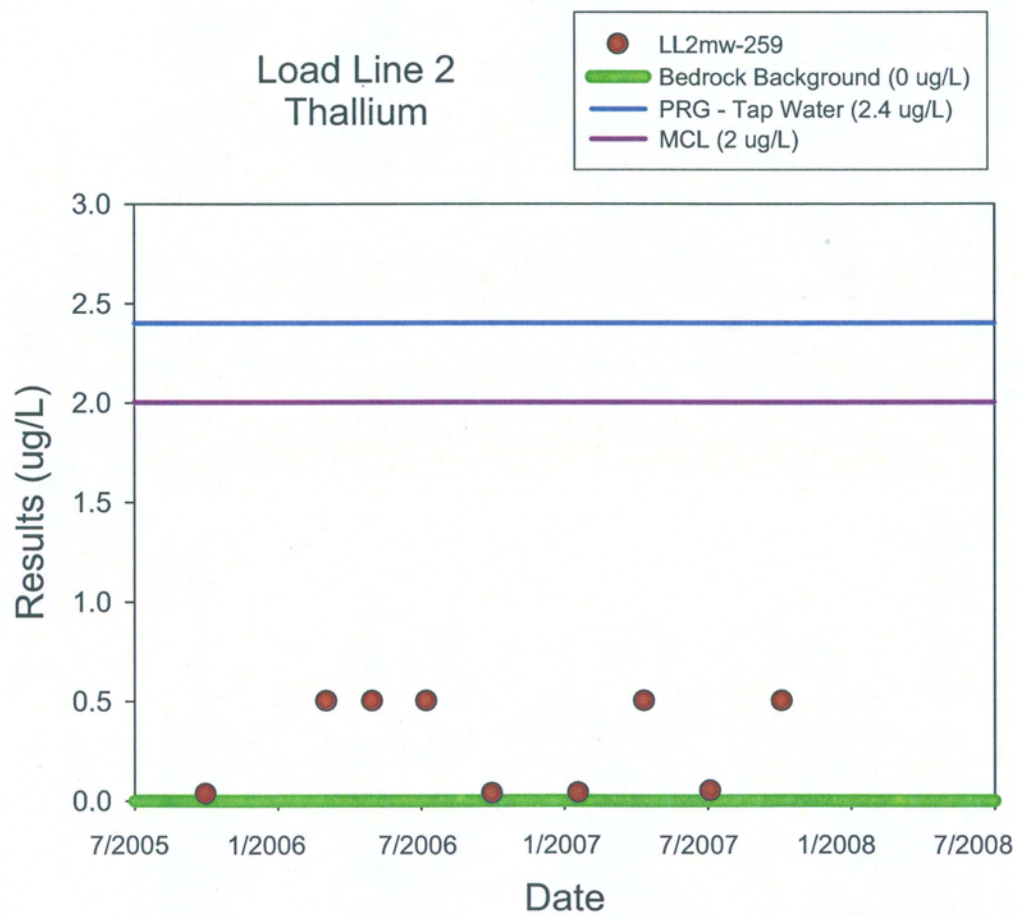
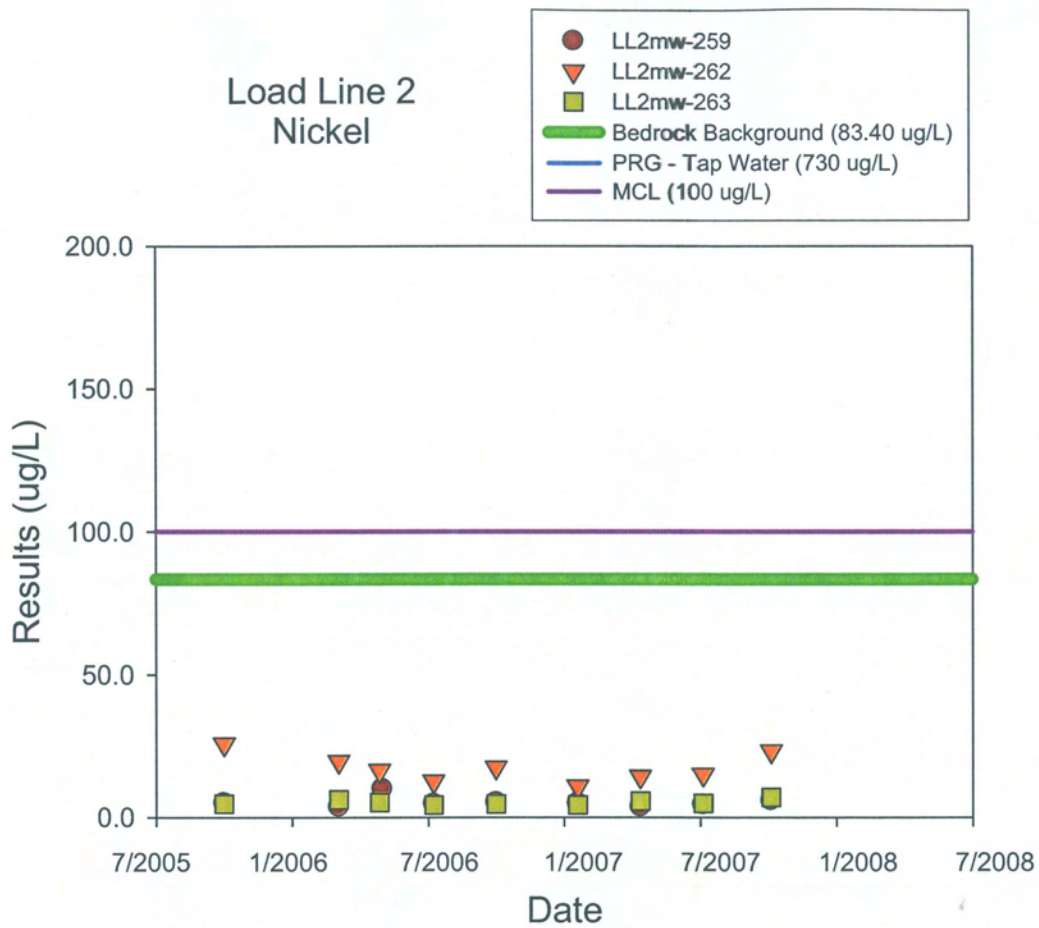


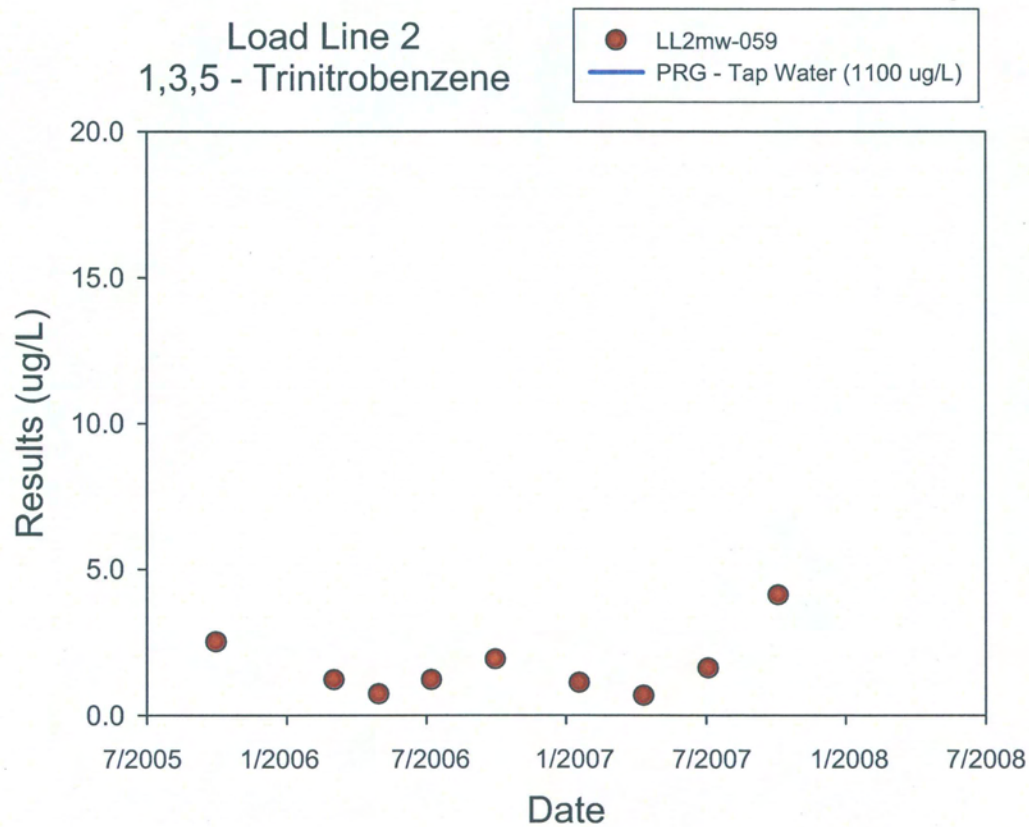
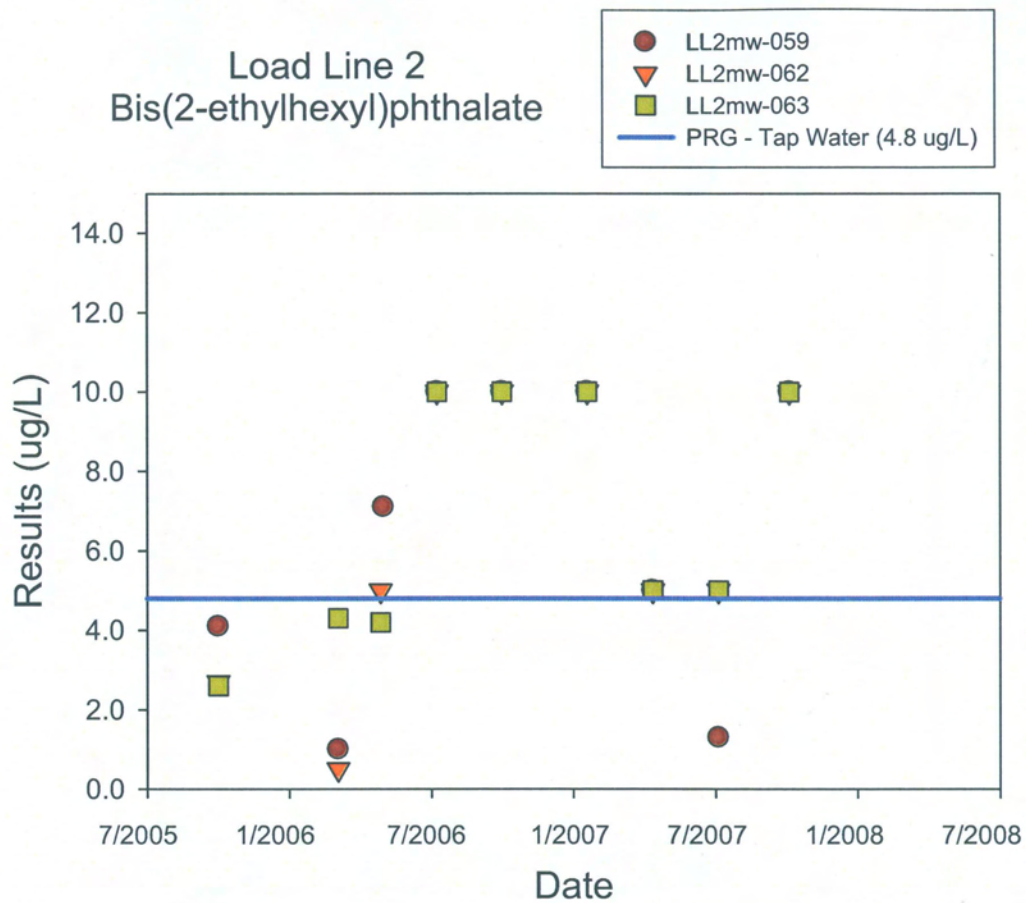


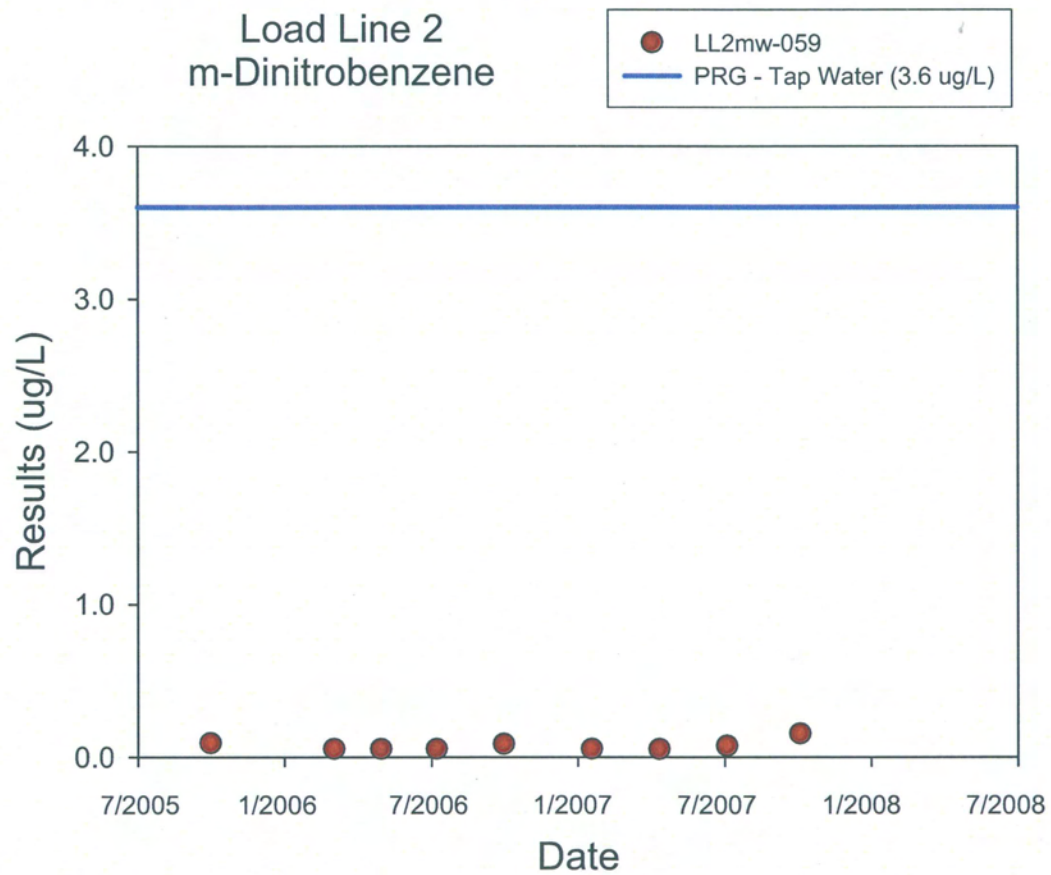
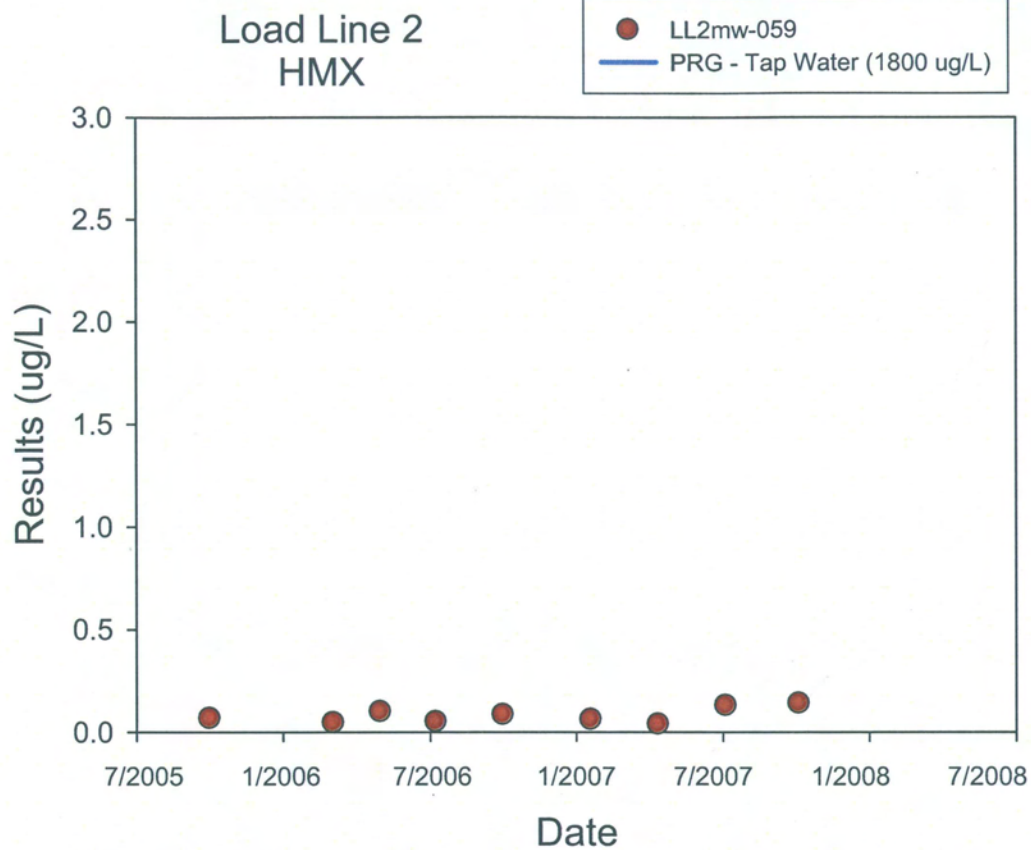




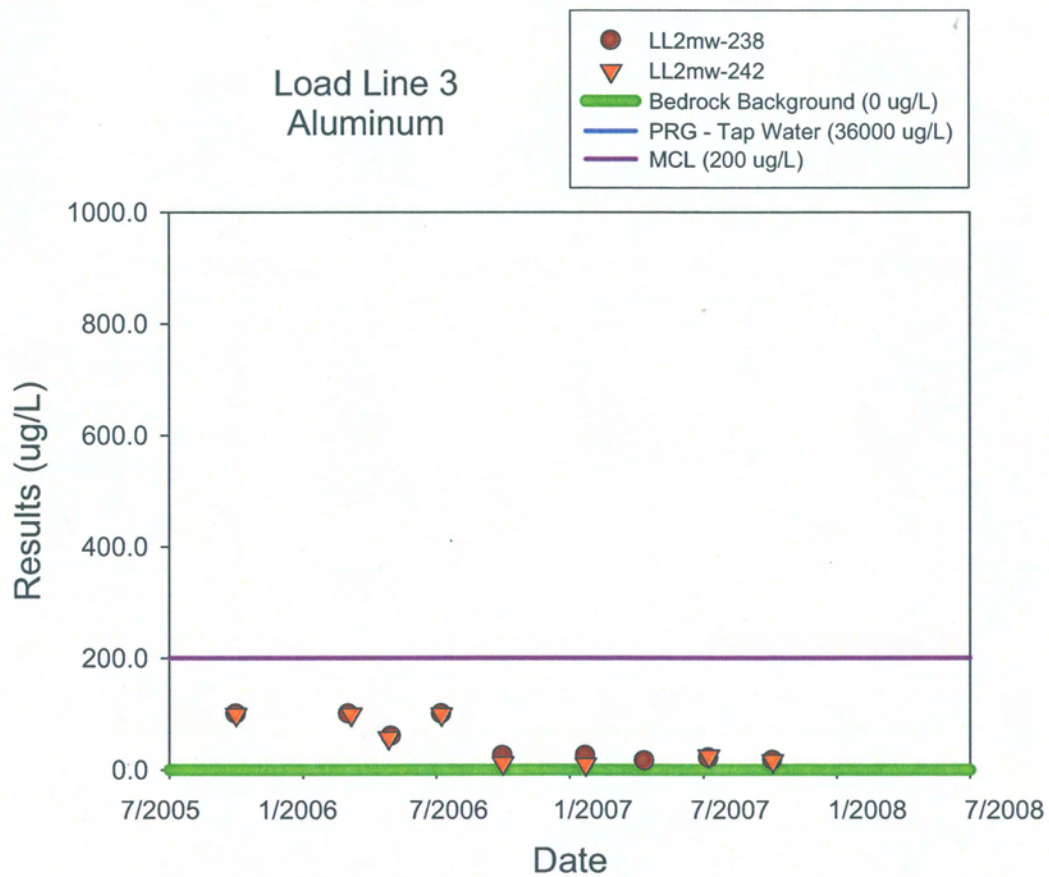
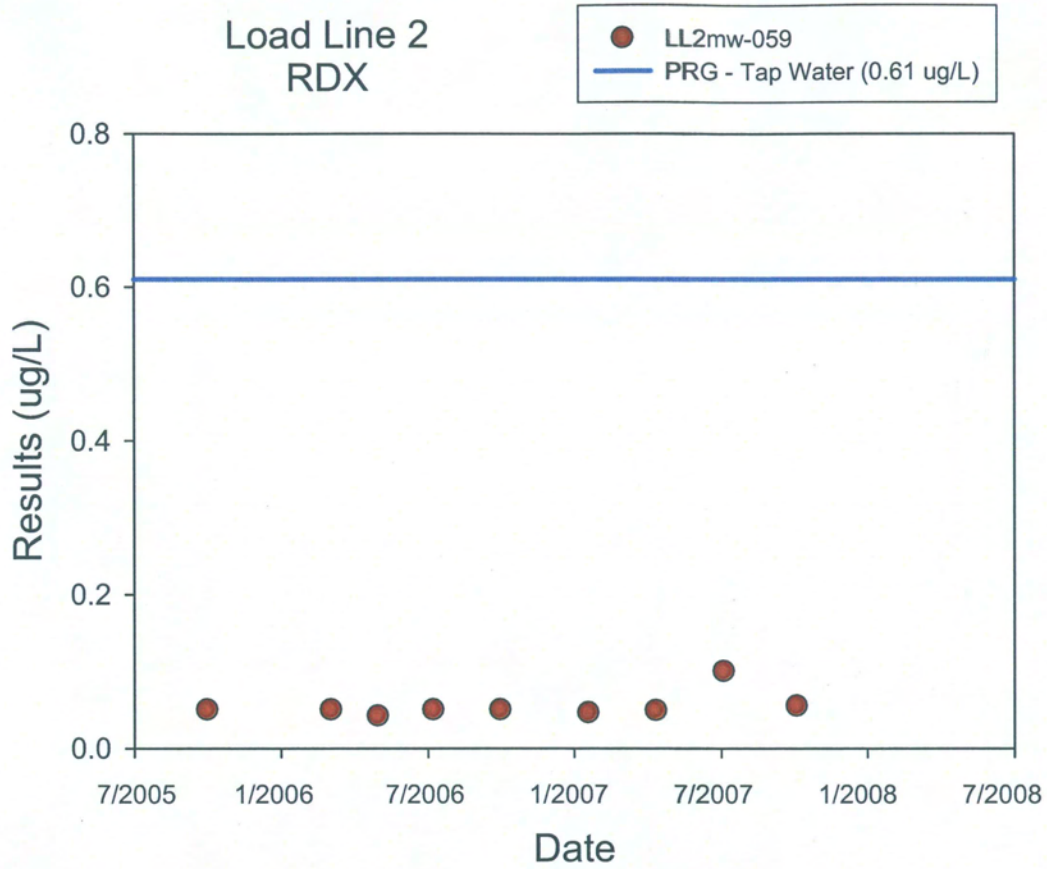


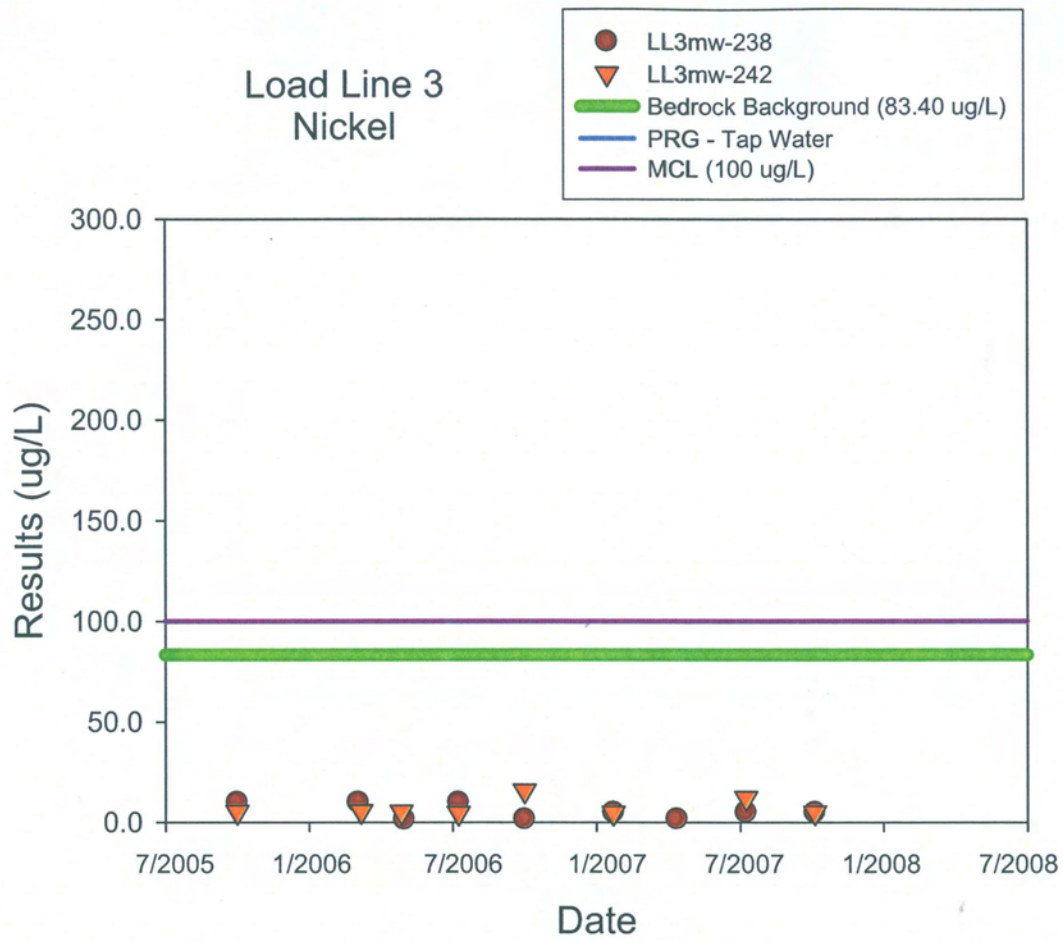


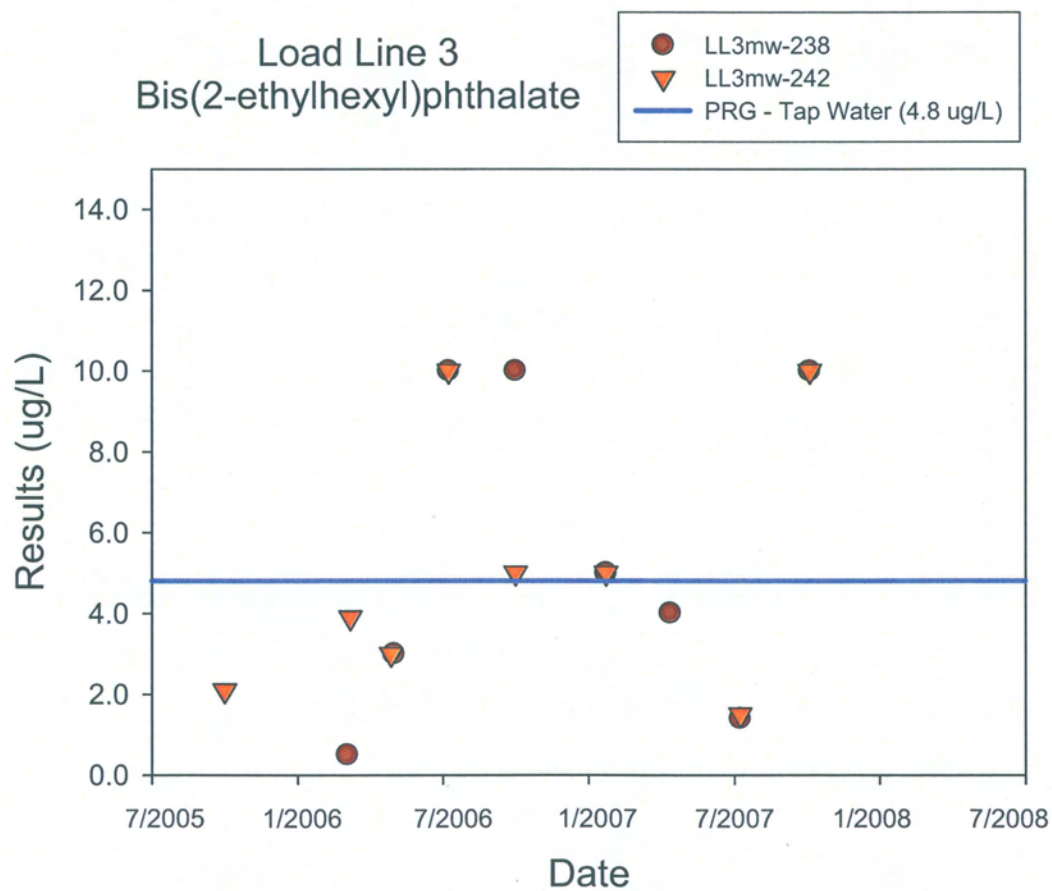
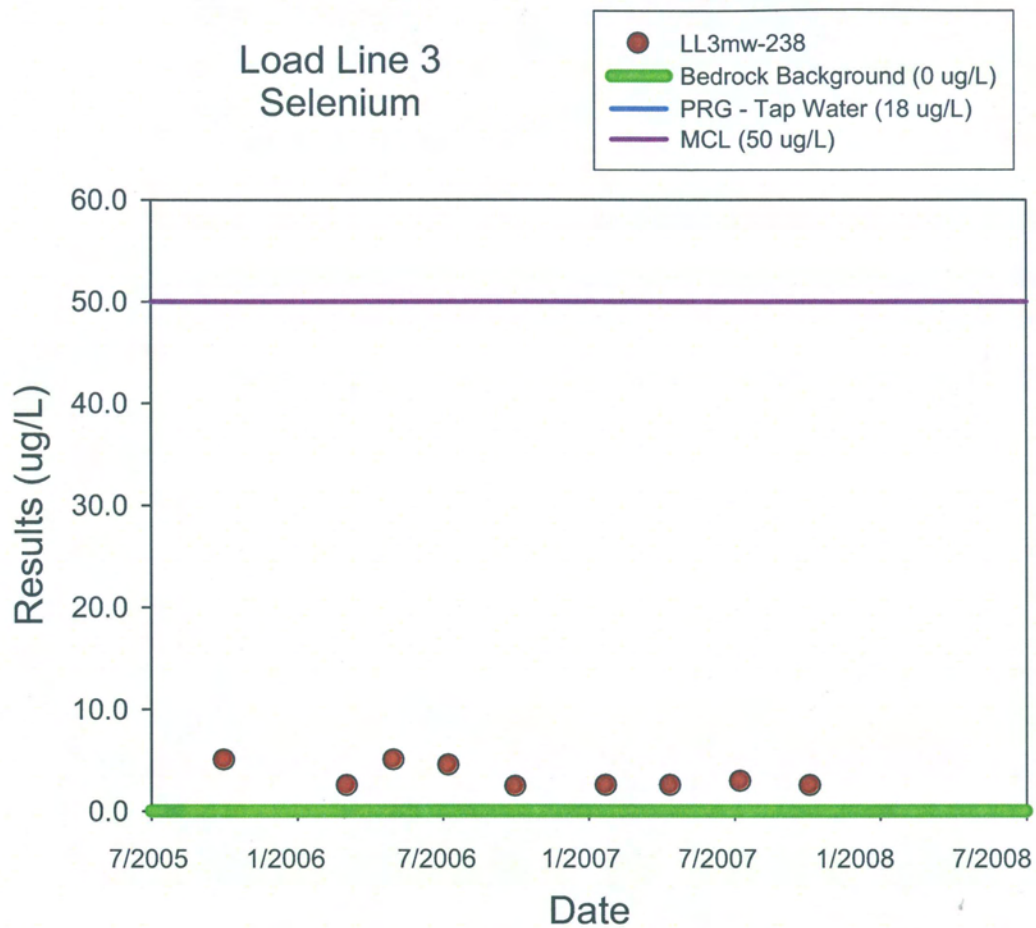


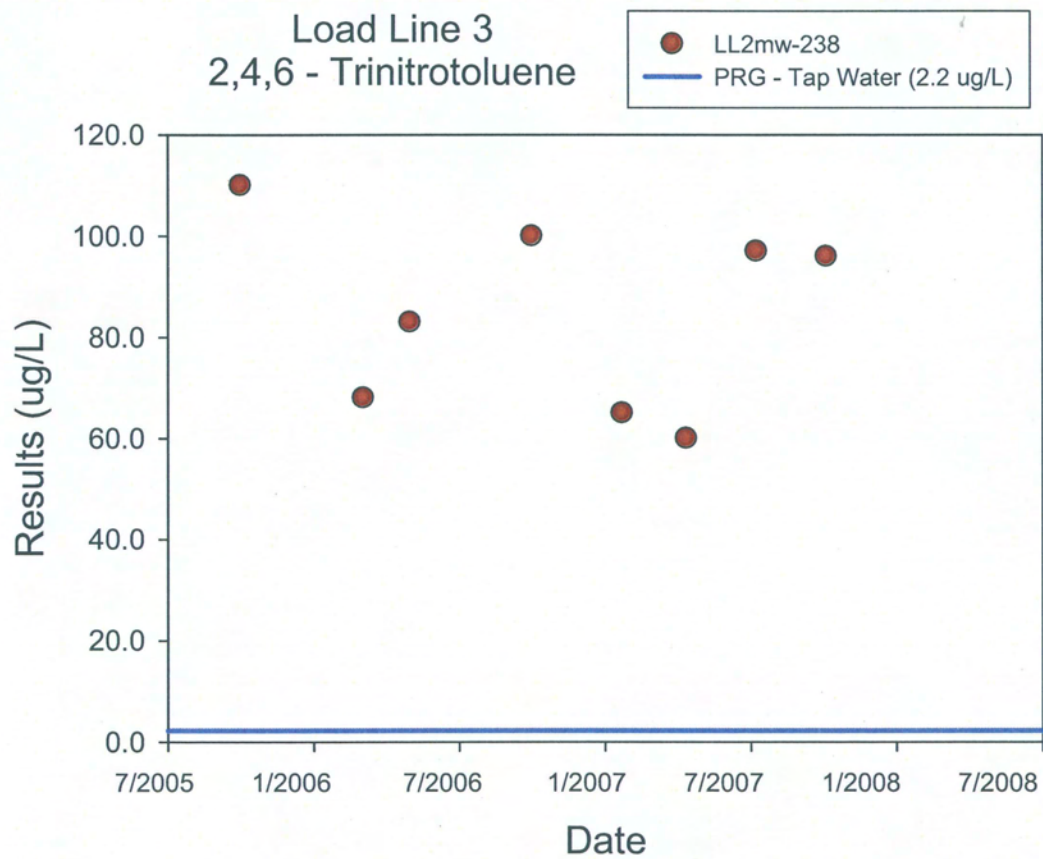
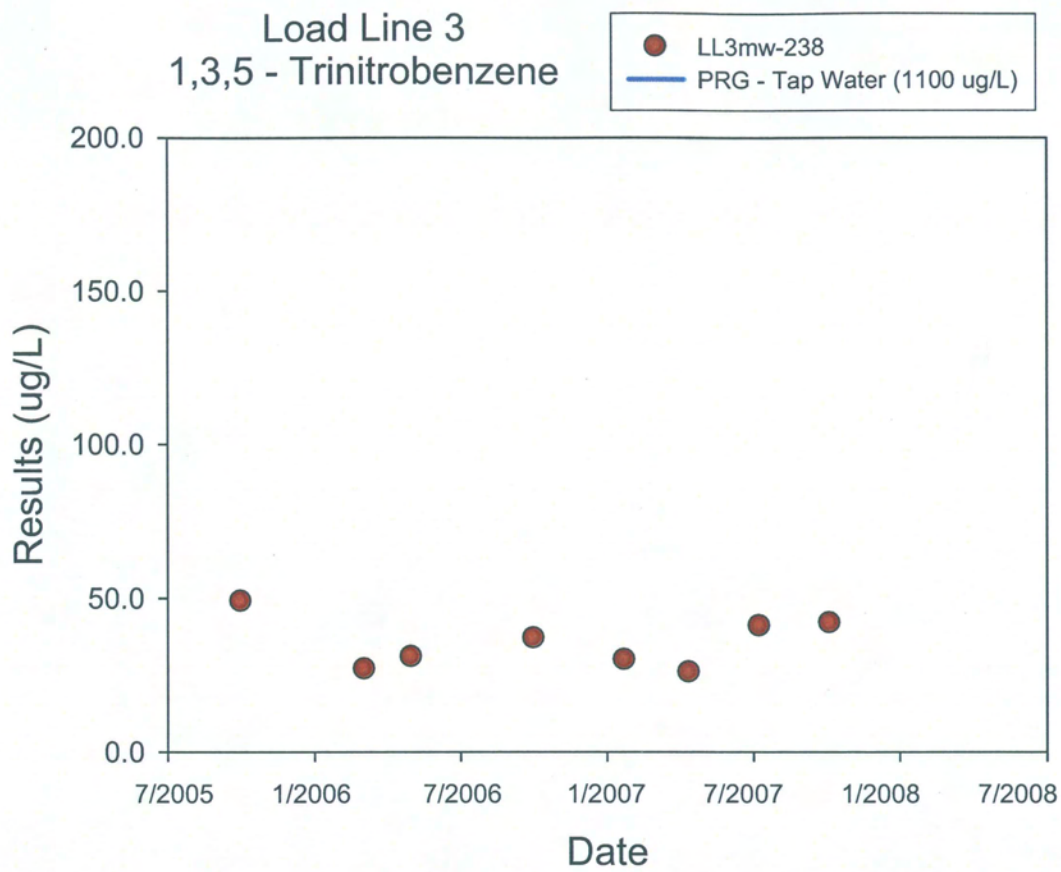




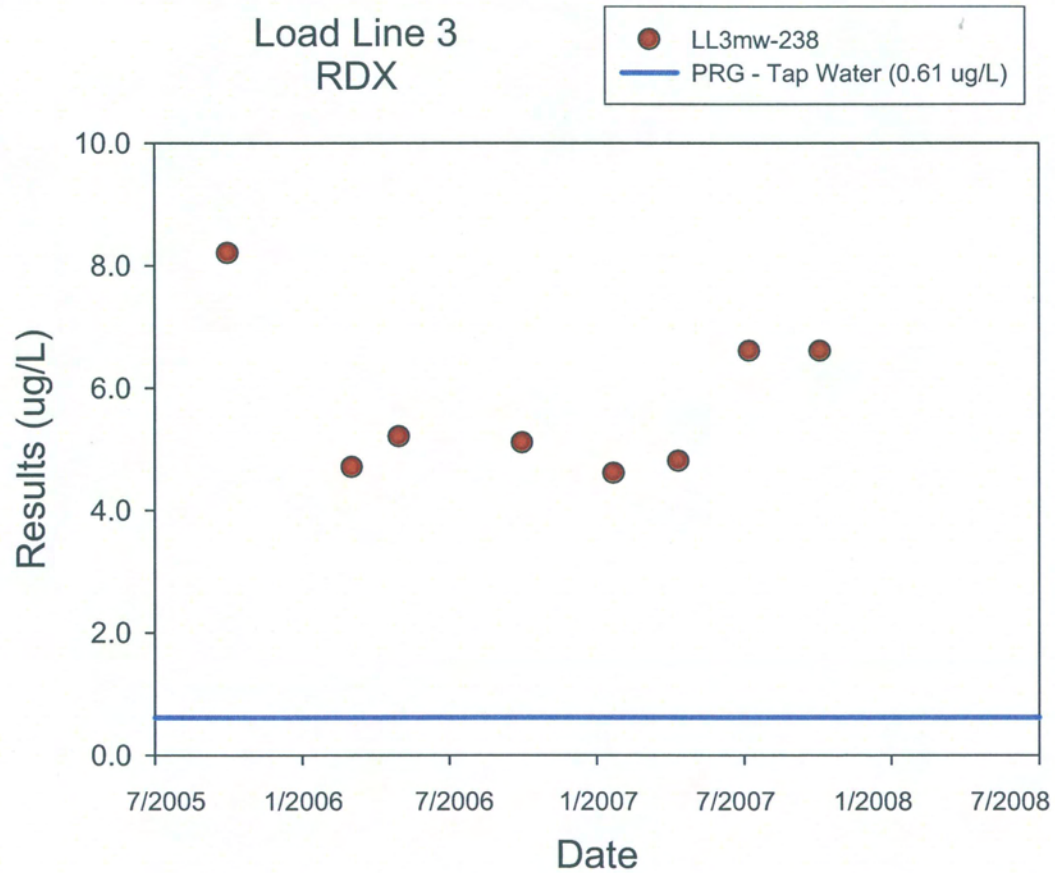
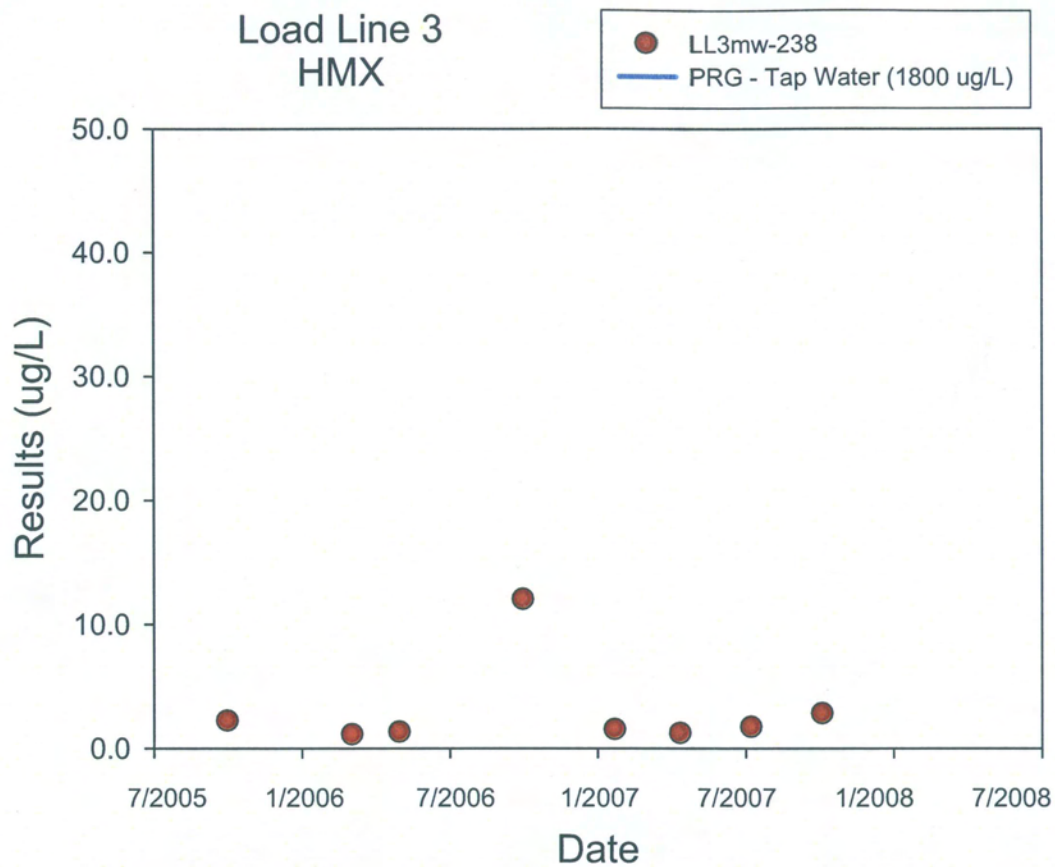




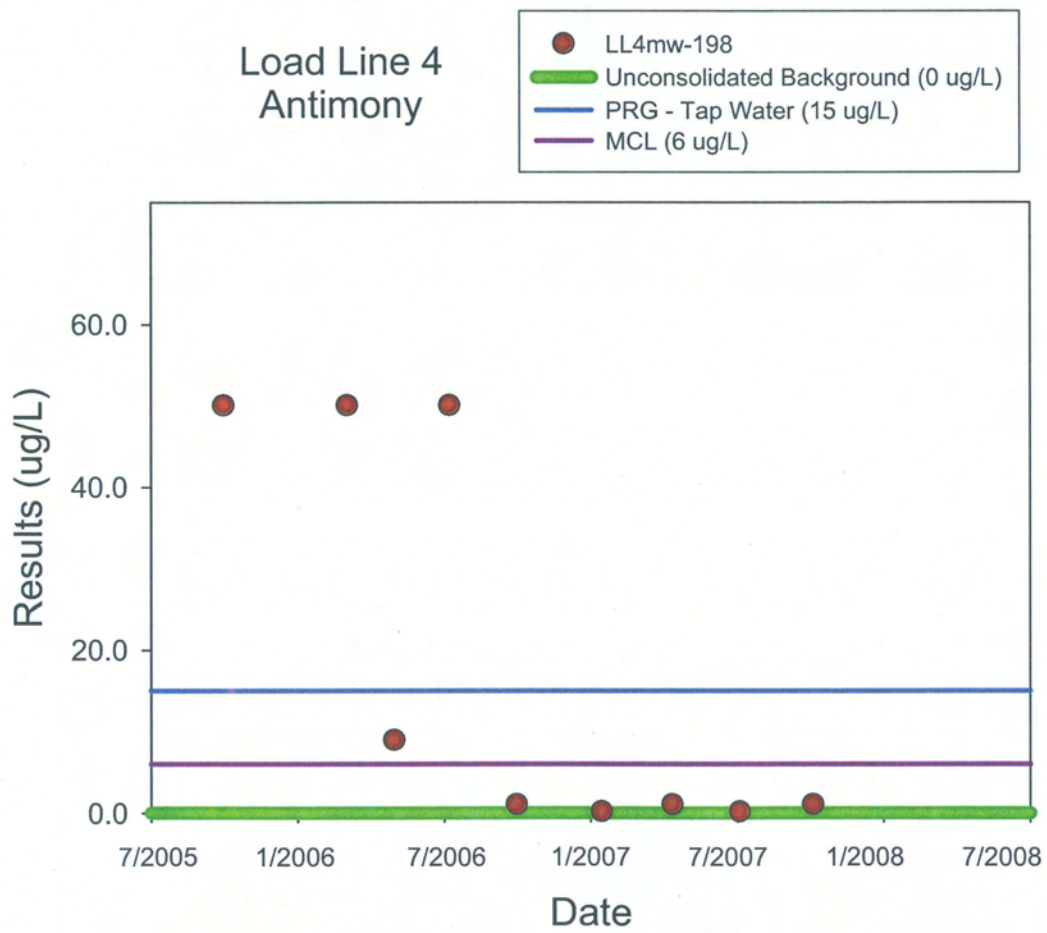
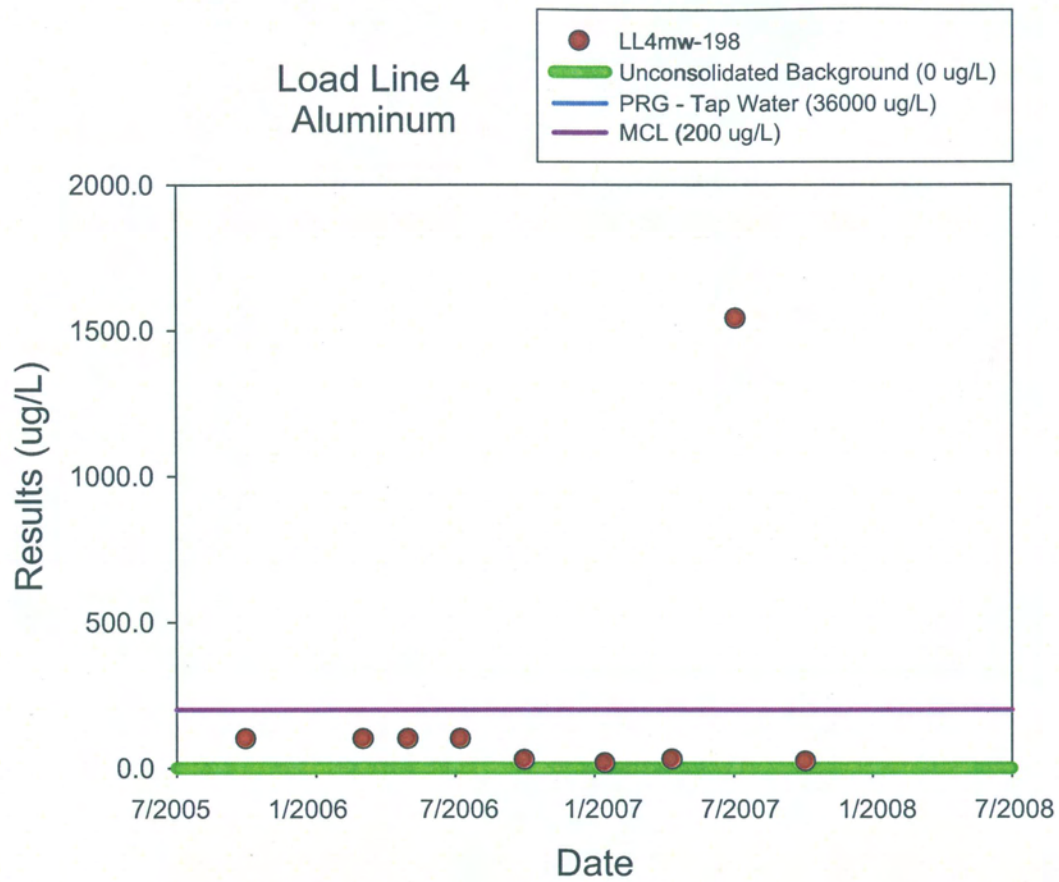


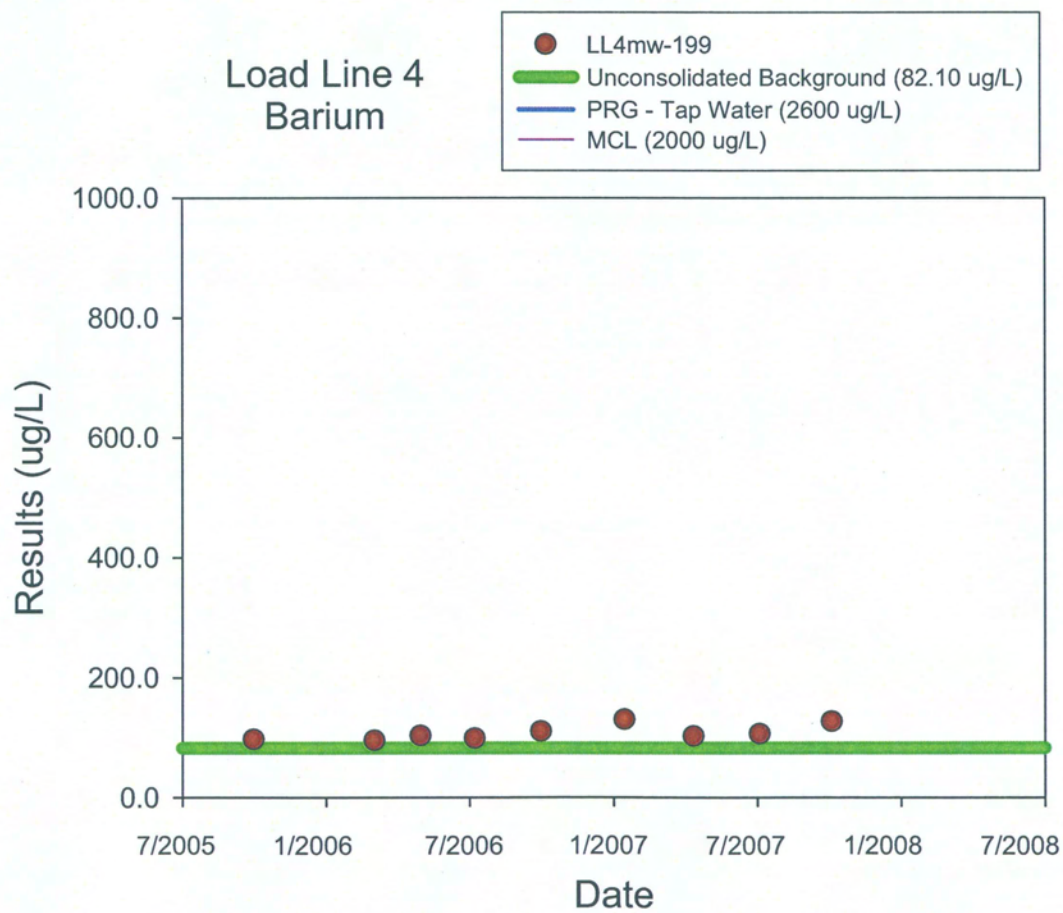
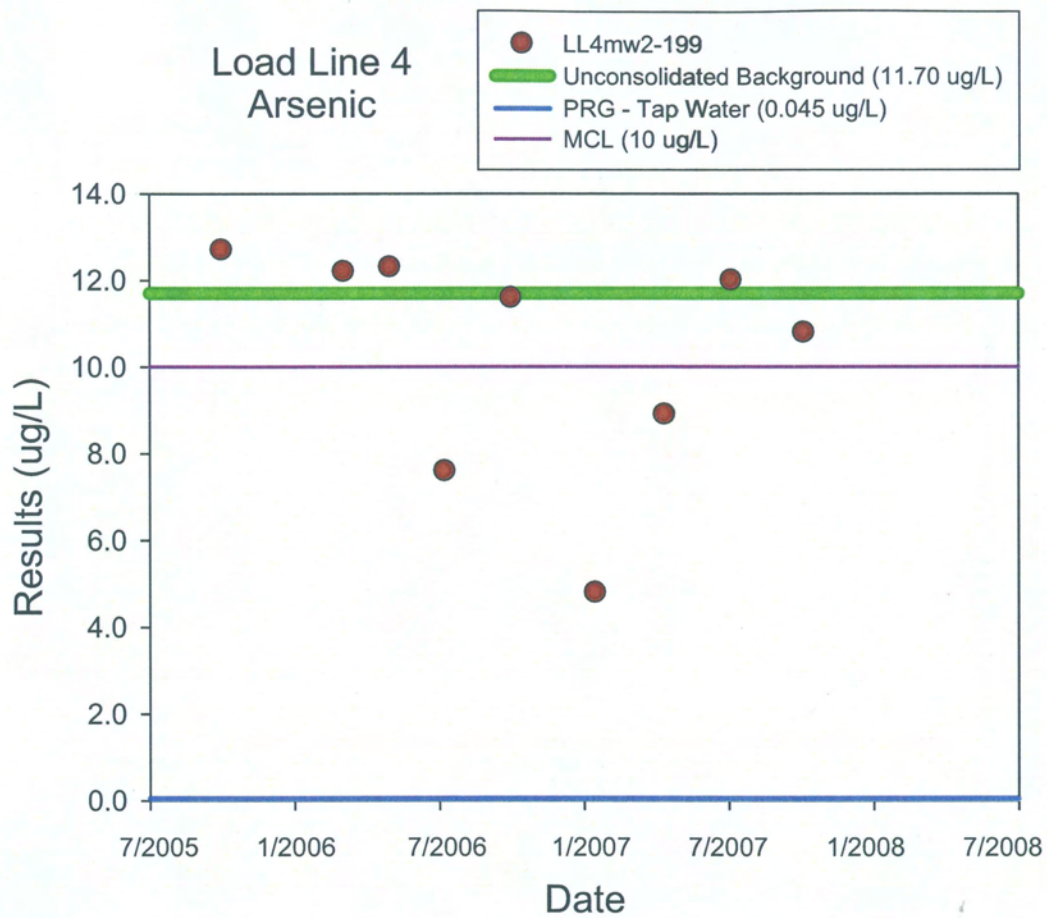


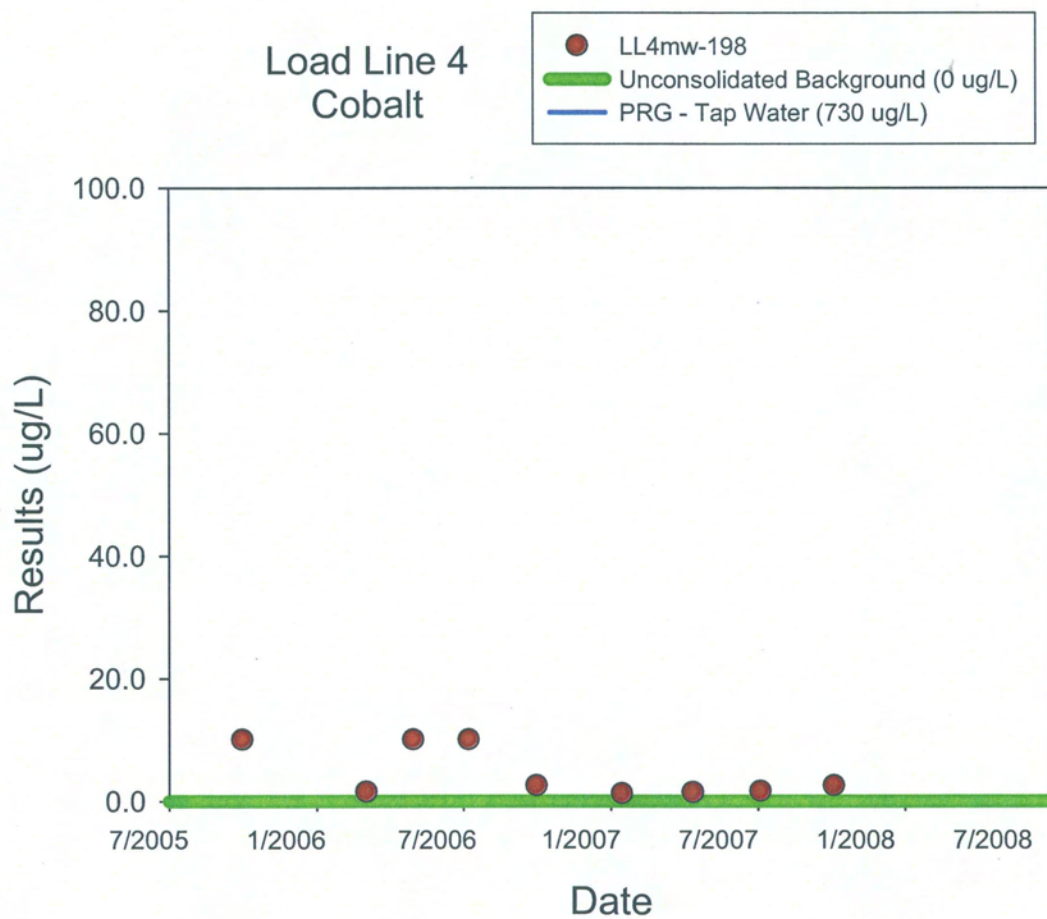
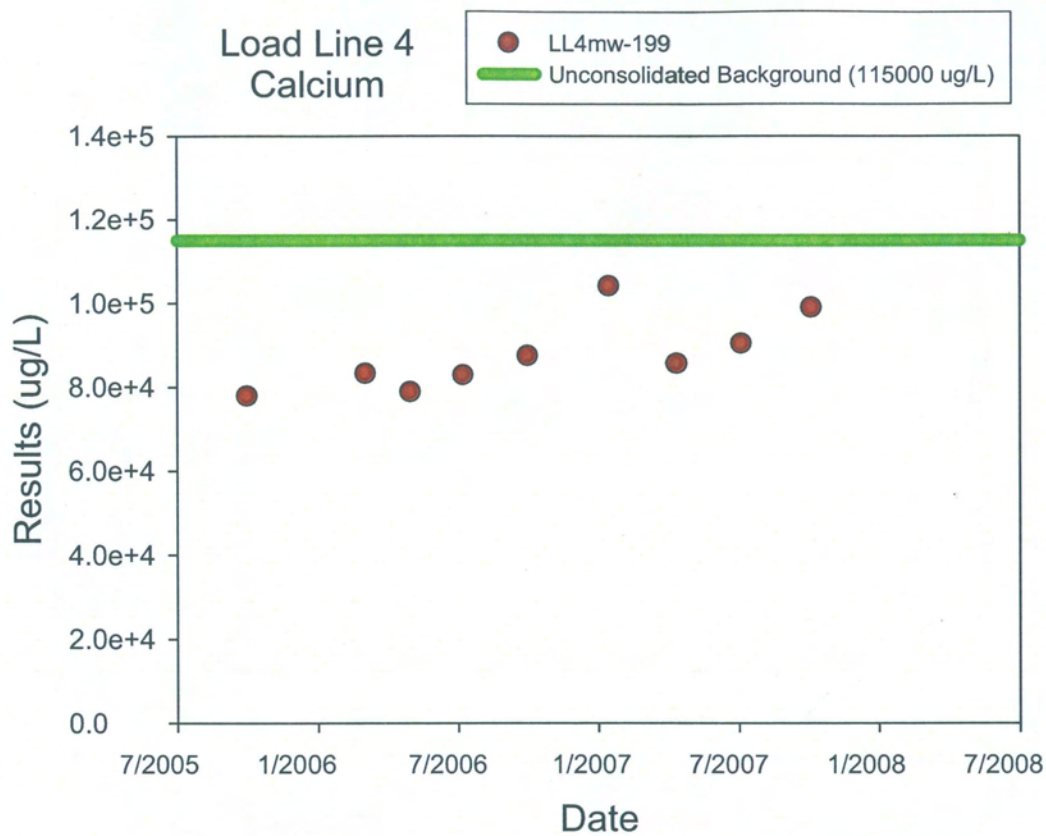




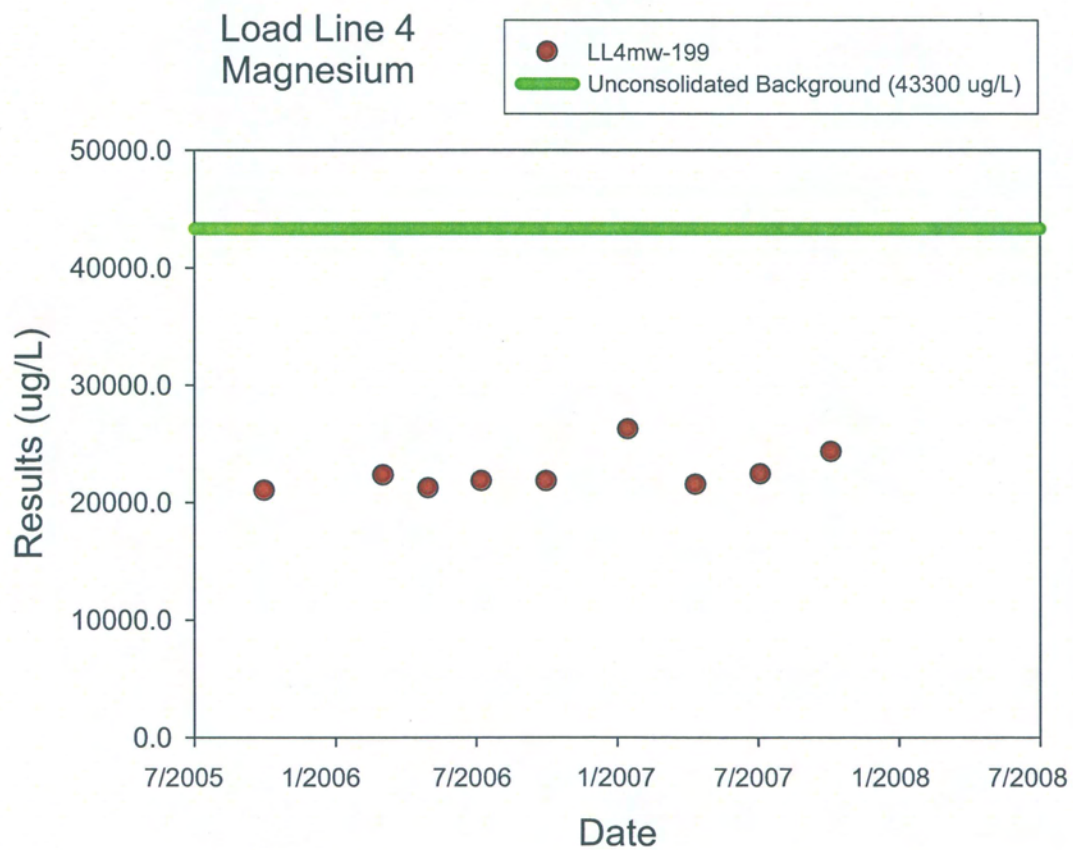
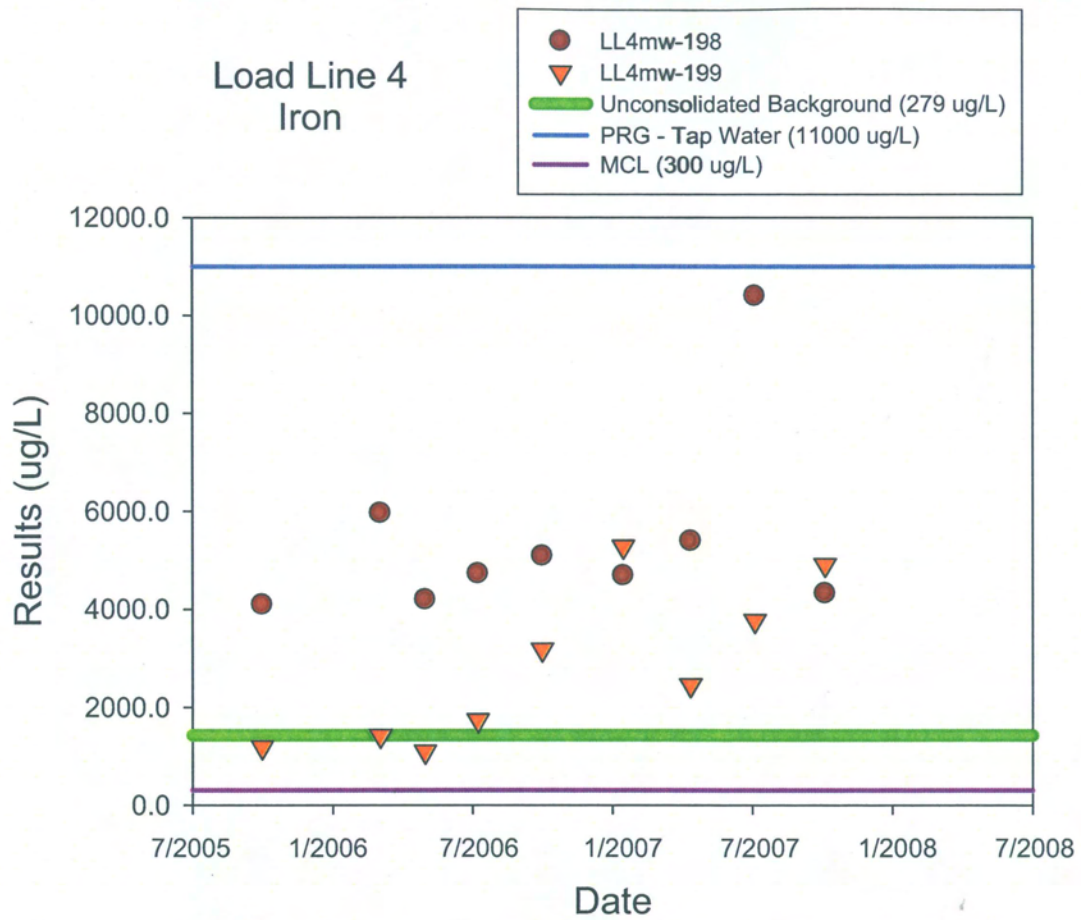


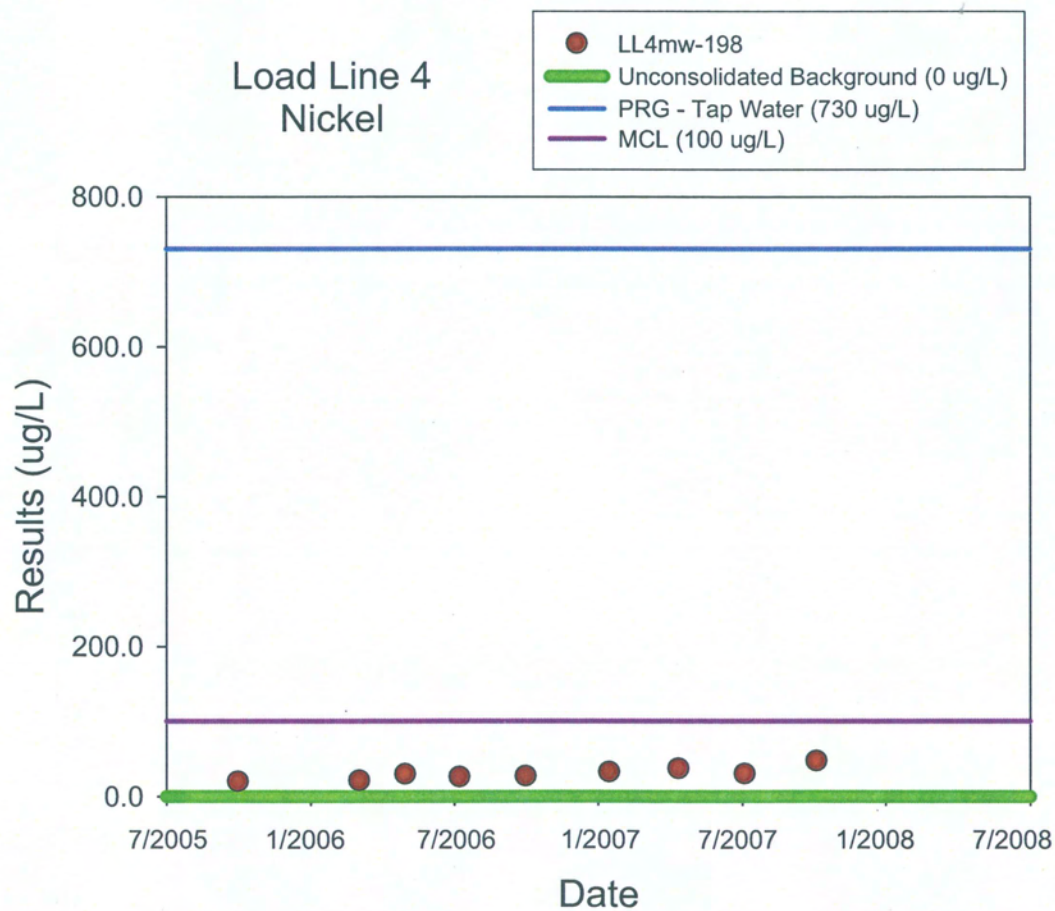
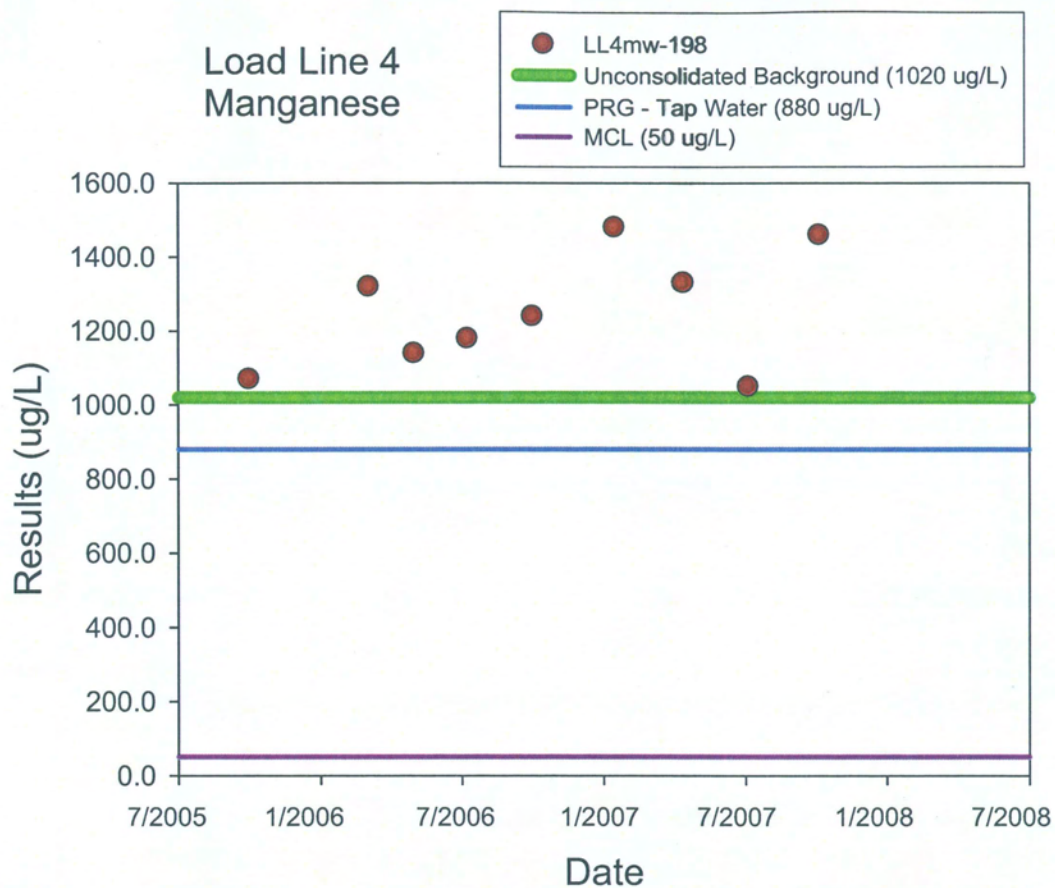


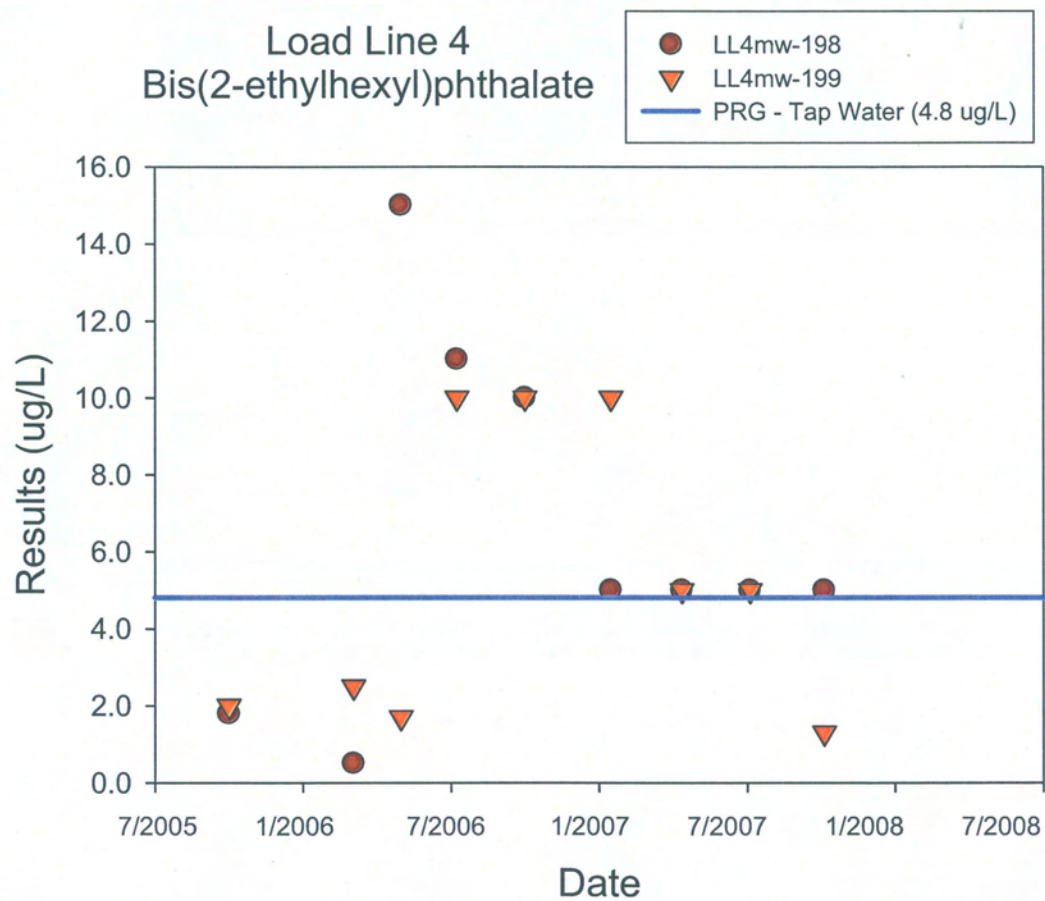
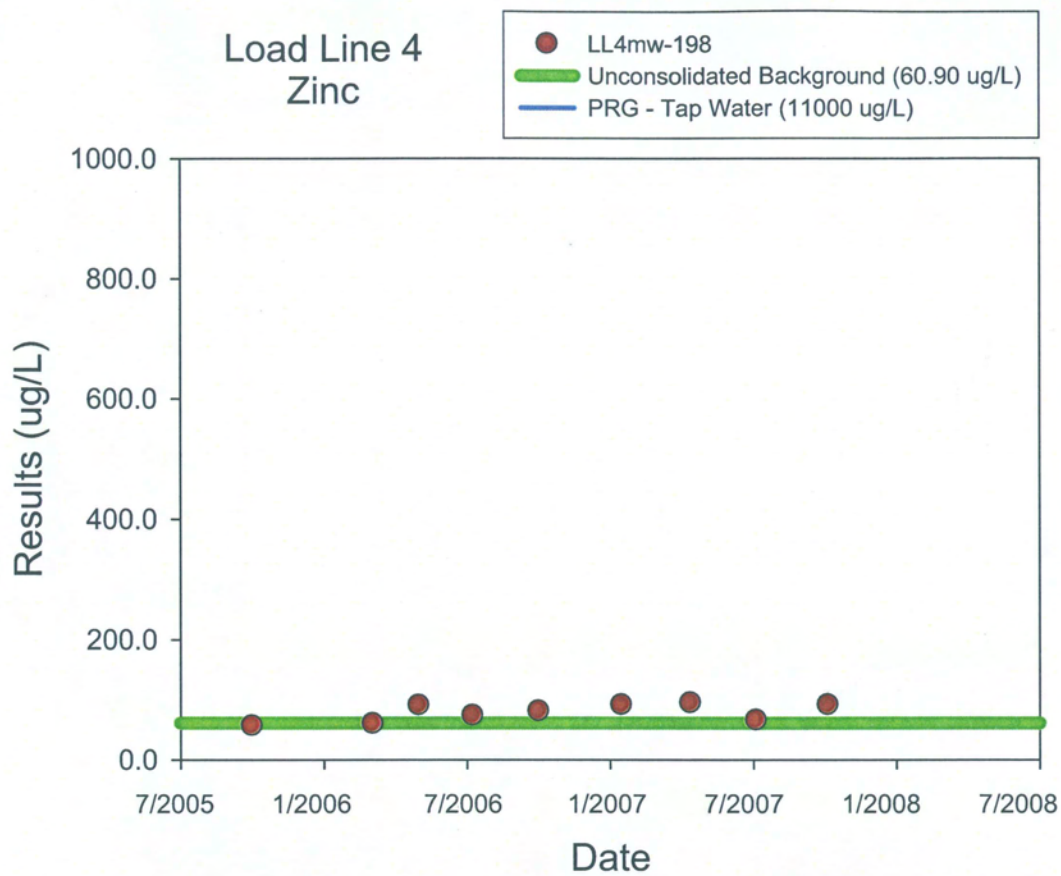




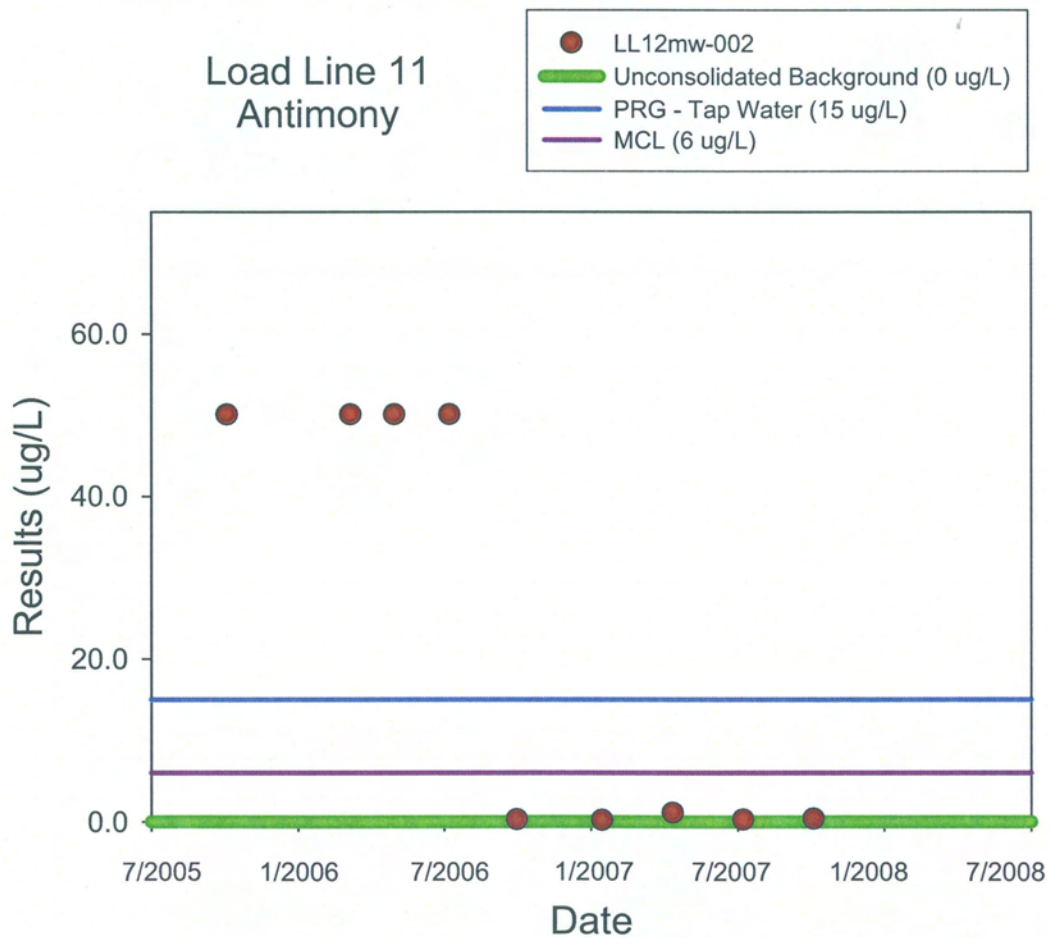
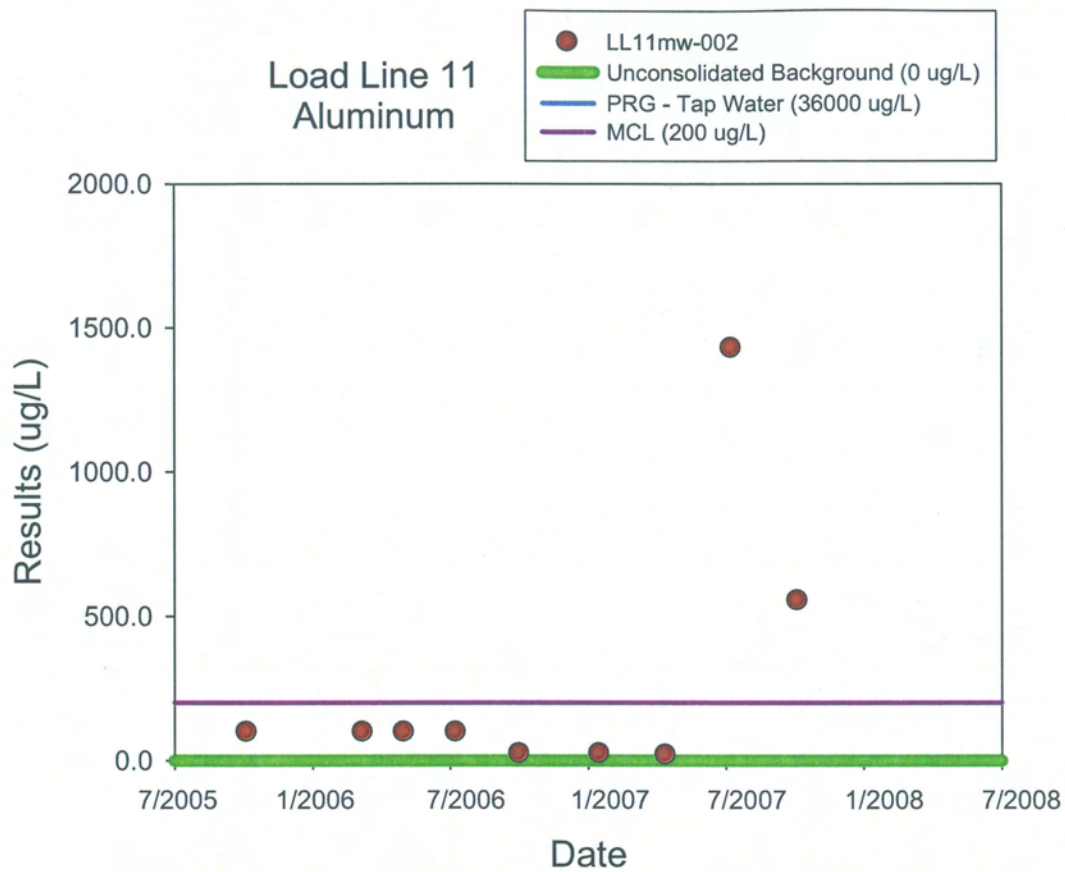




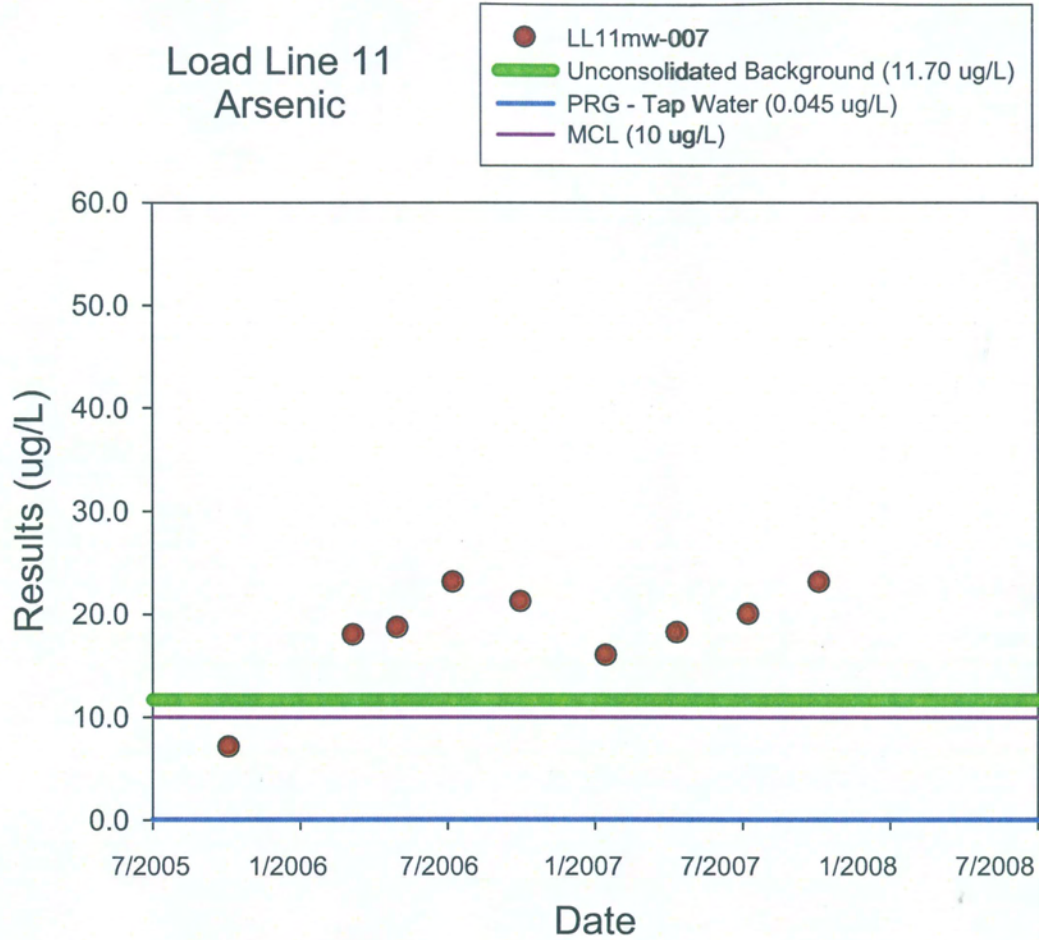




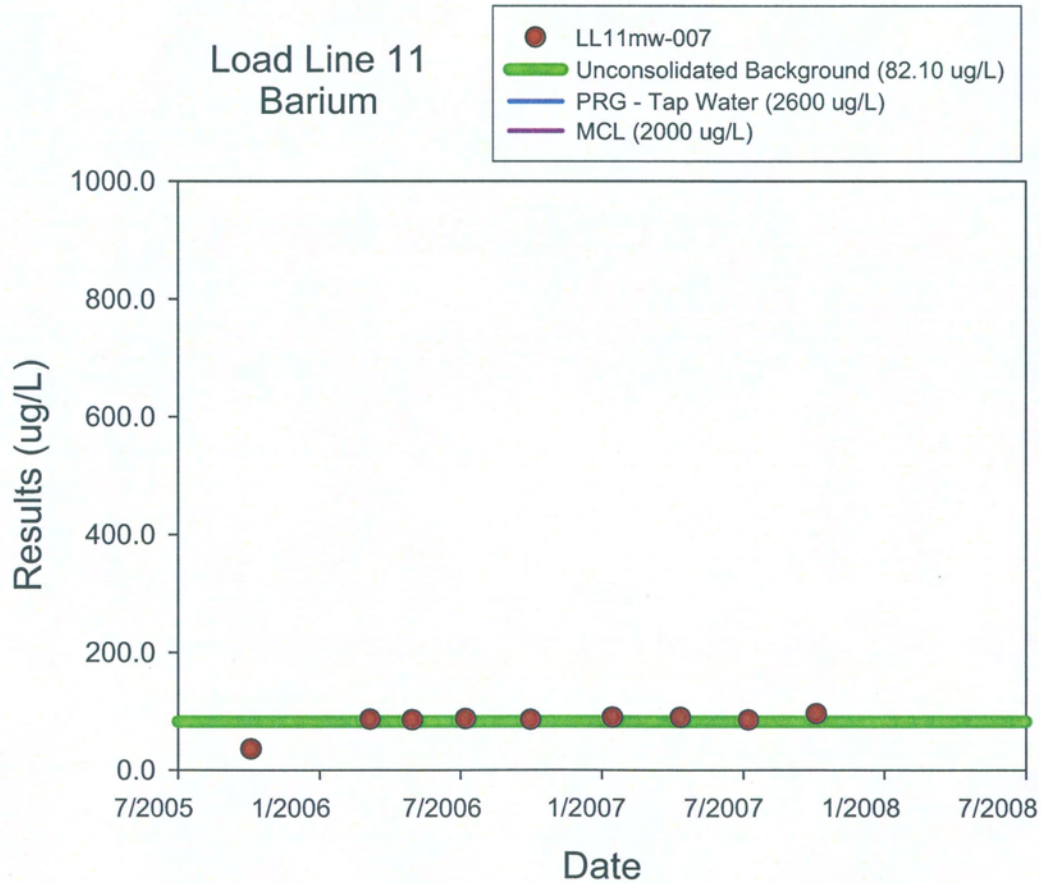




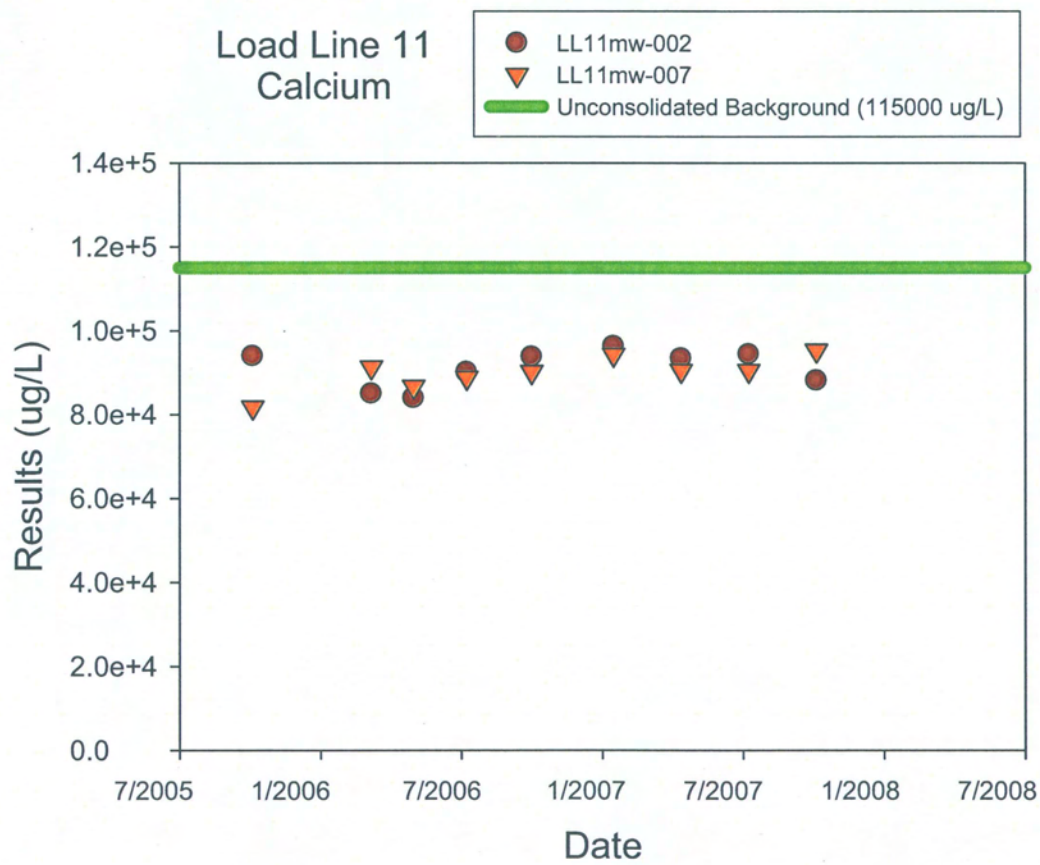
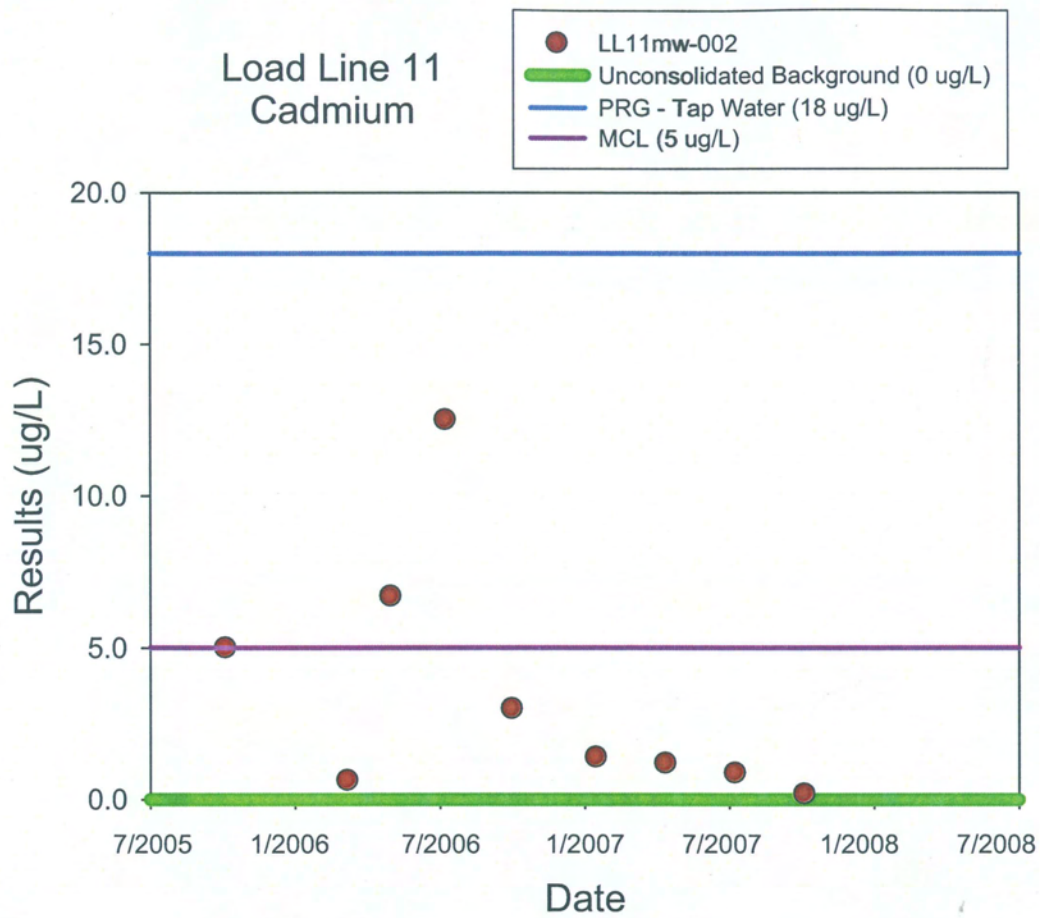
### Load Line 11 Arsenic

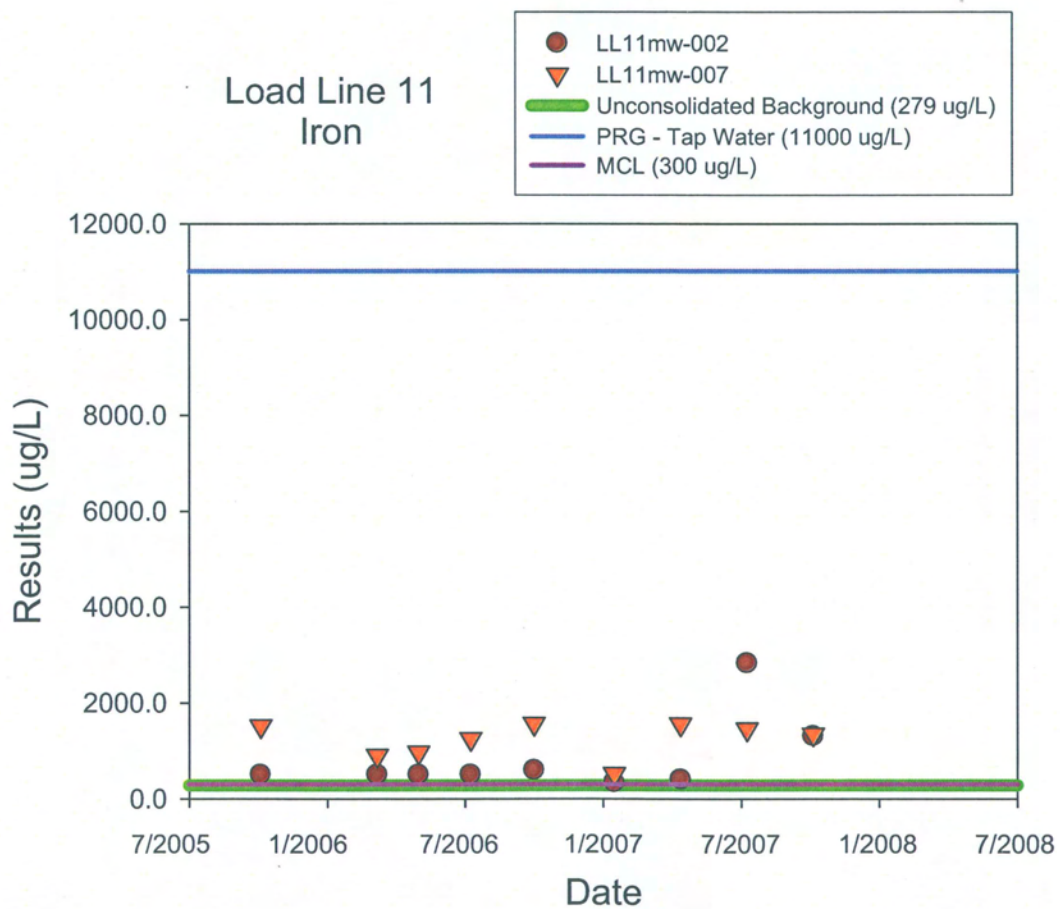
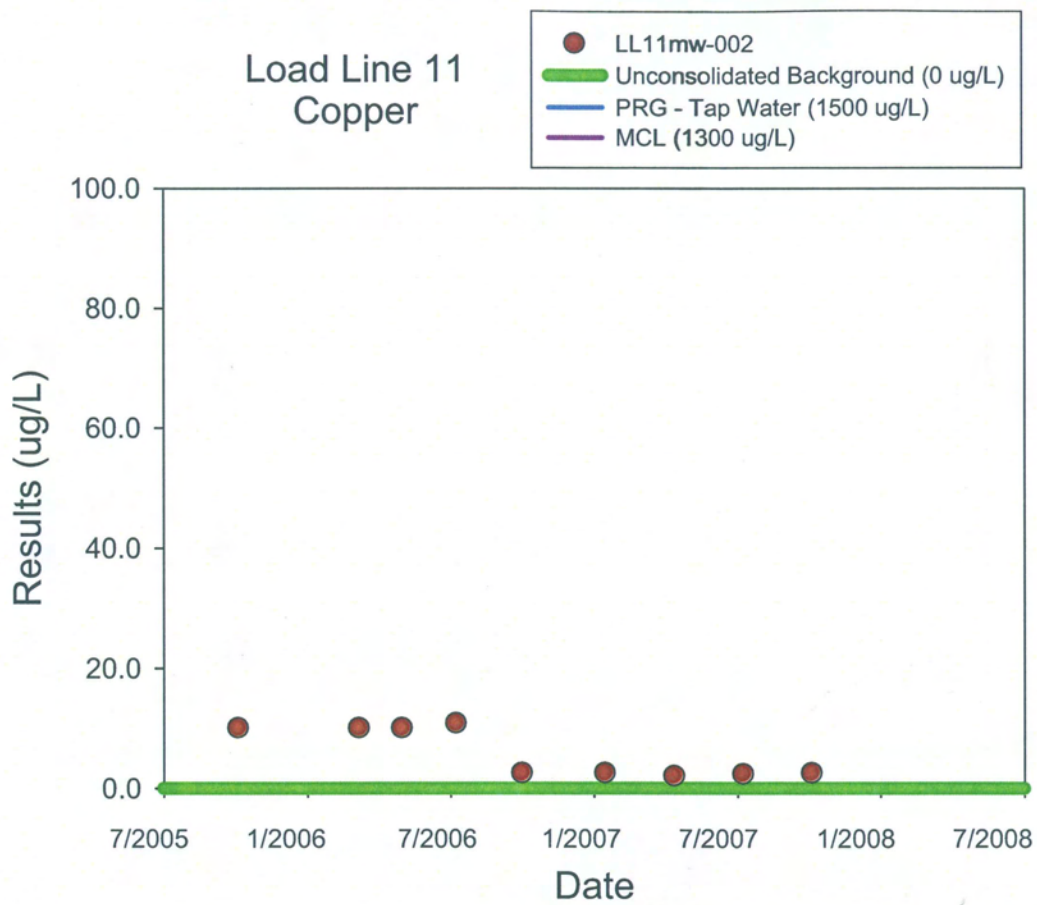


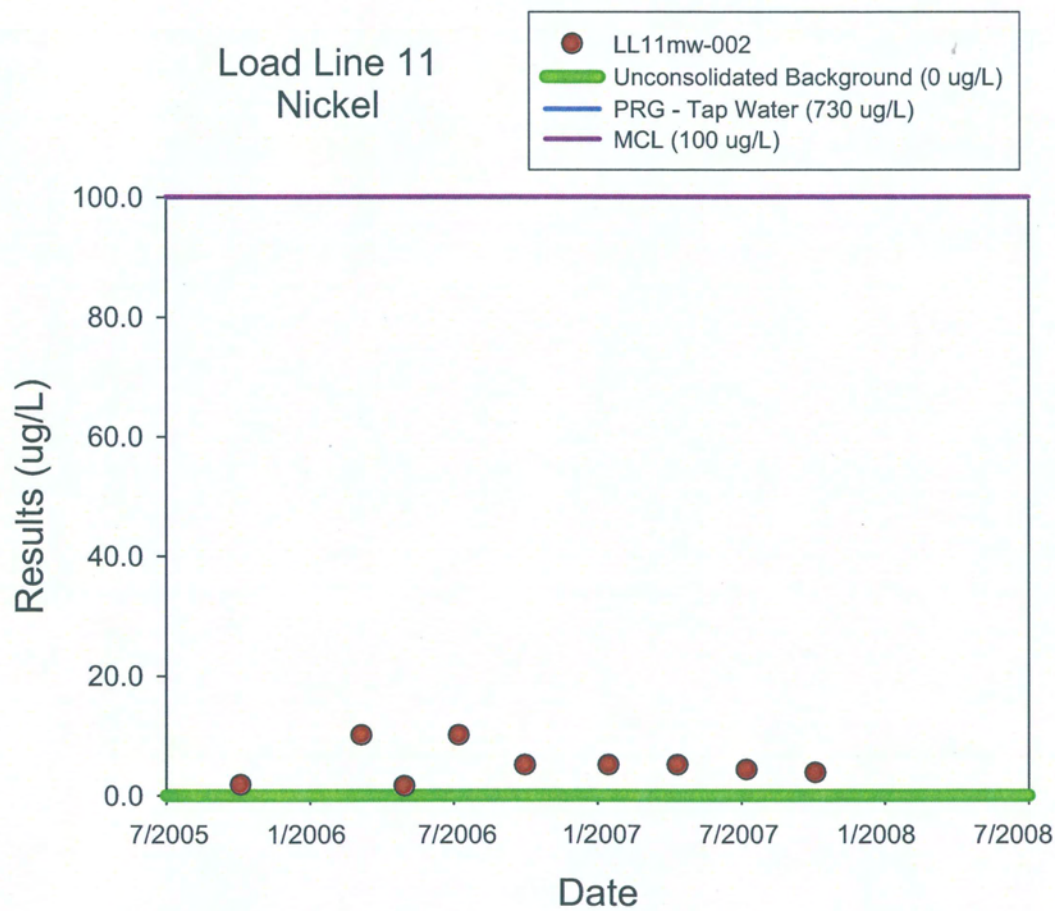
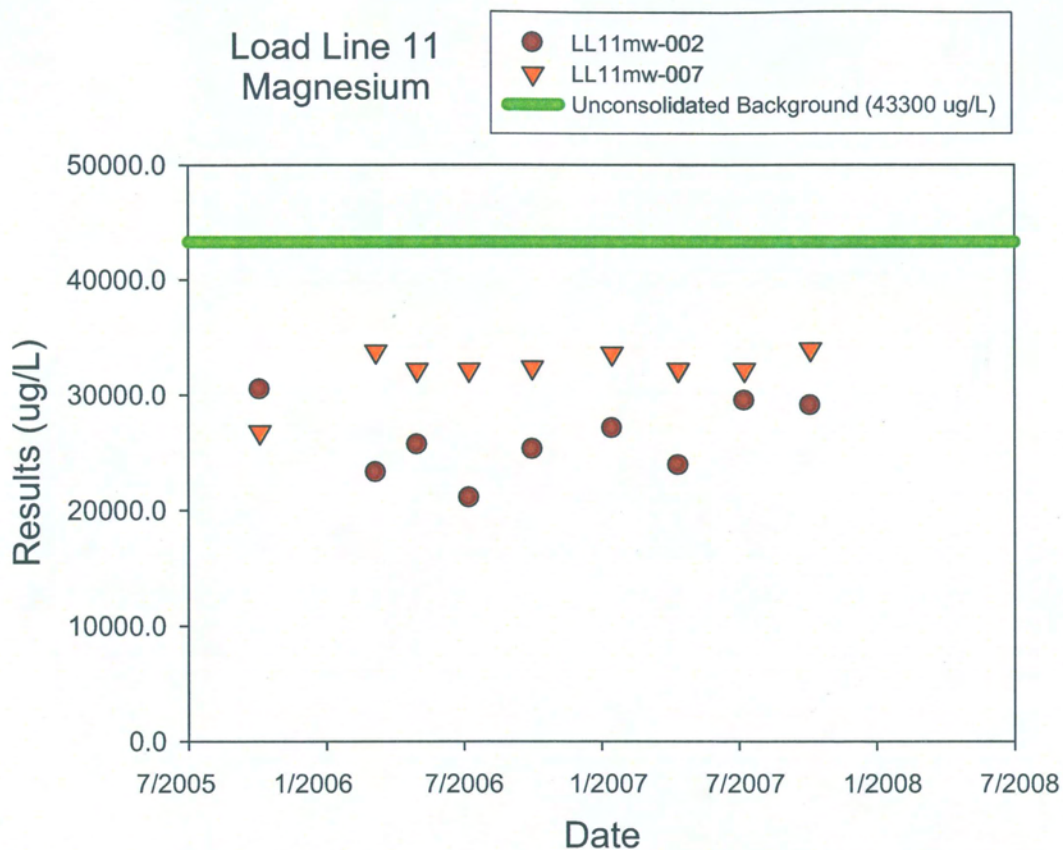
### Load Line 11 Barium



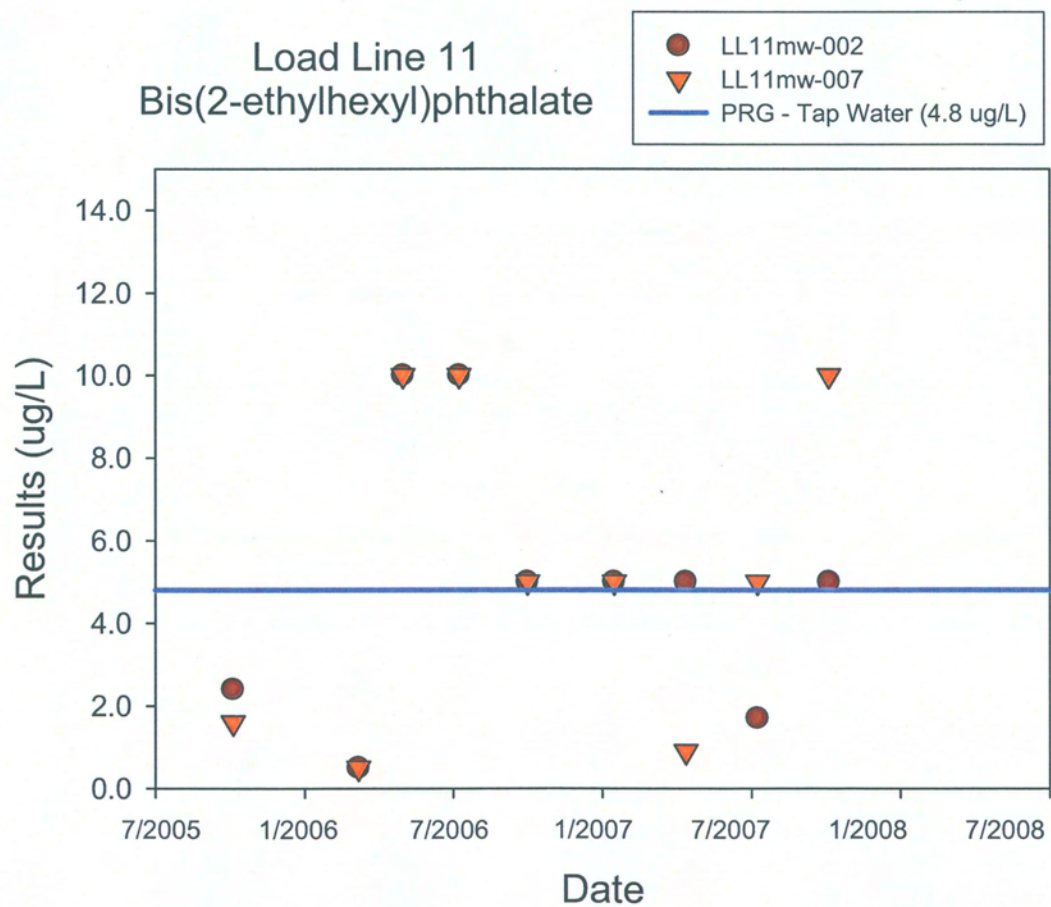
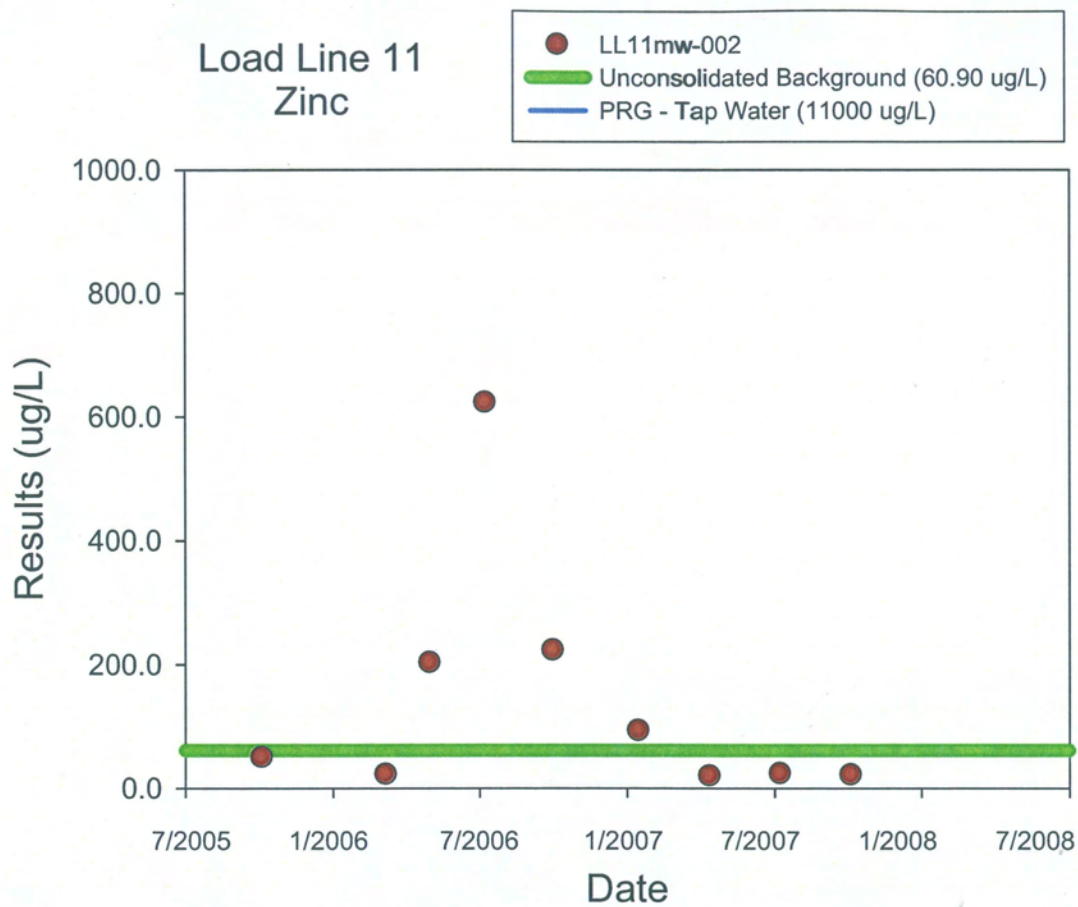


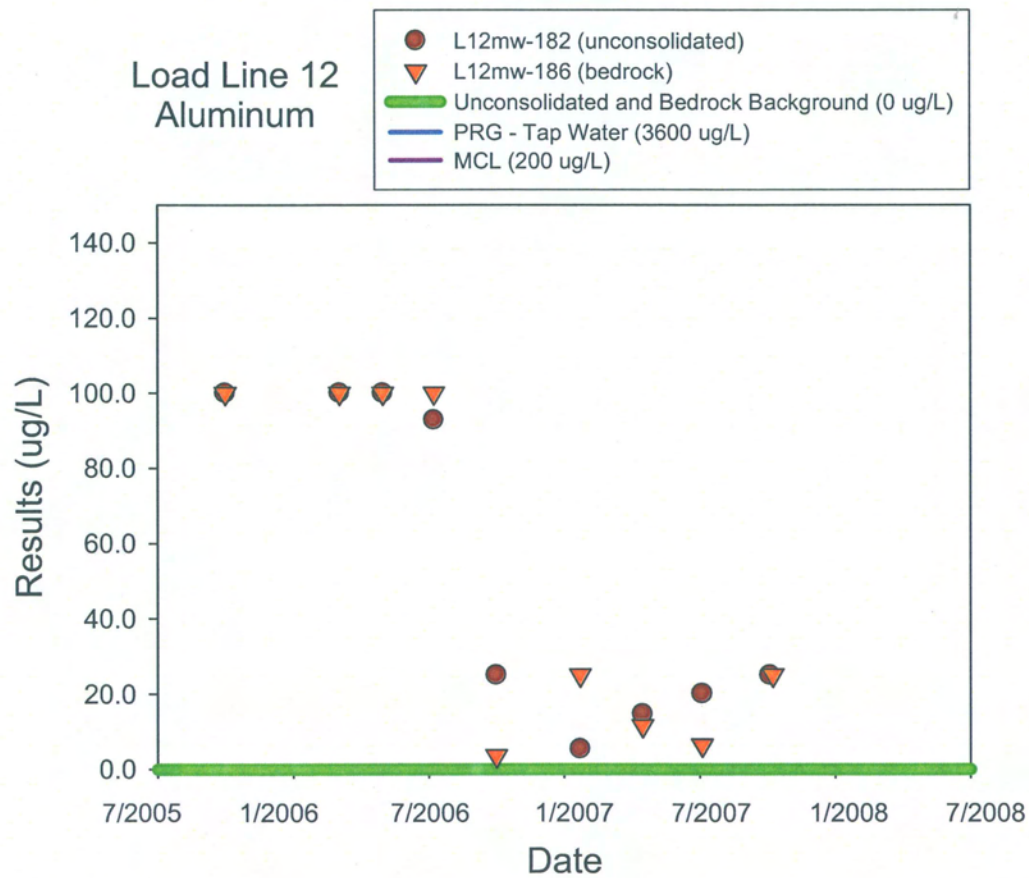
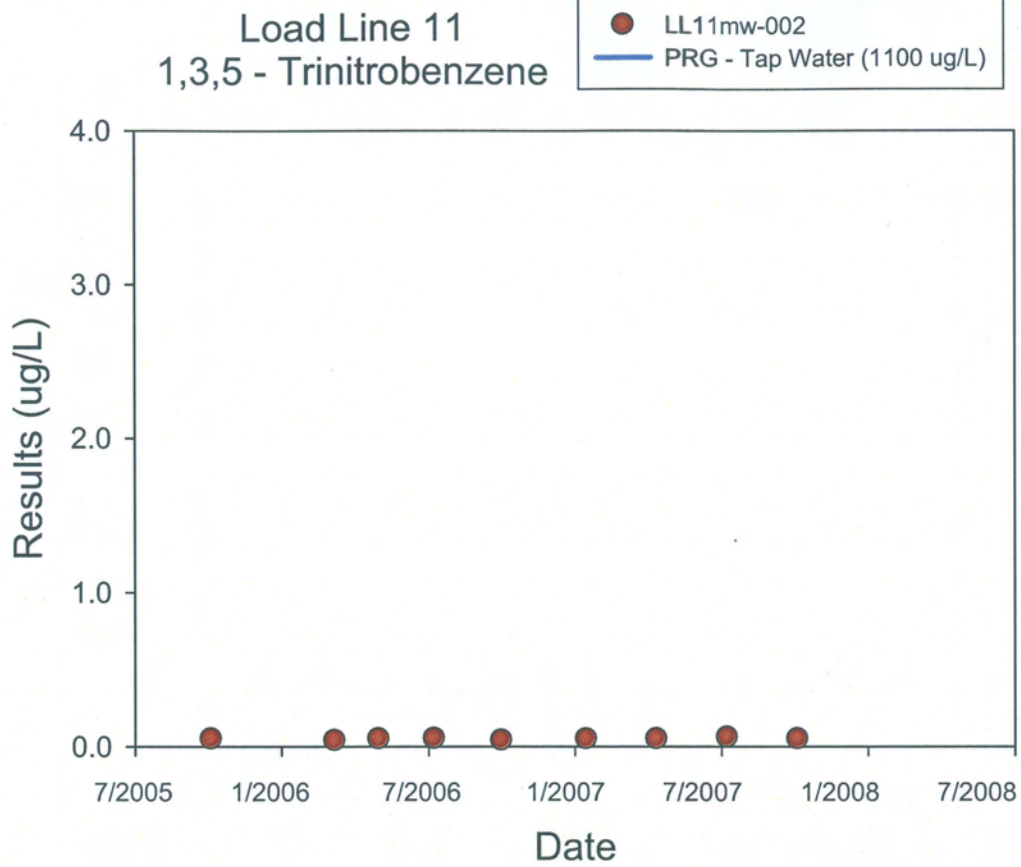




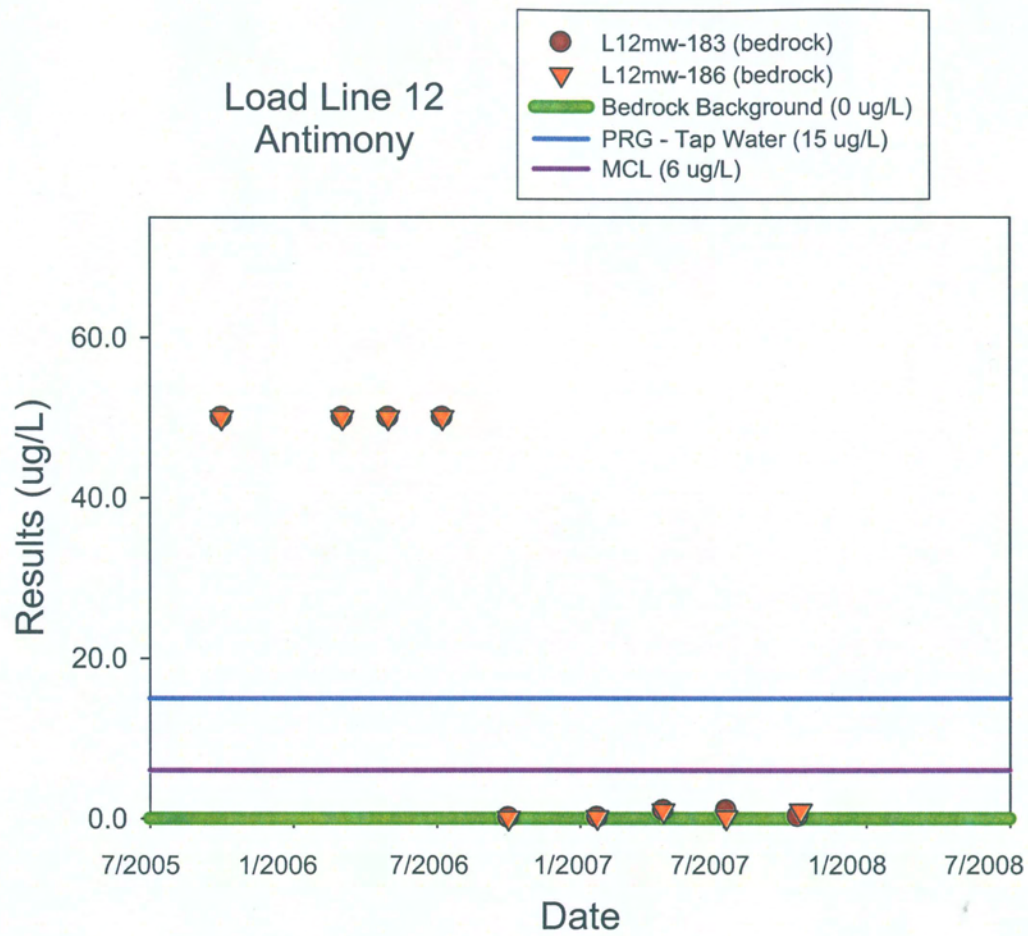




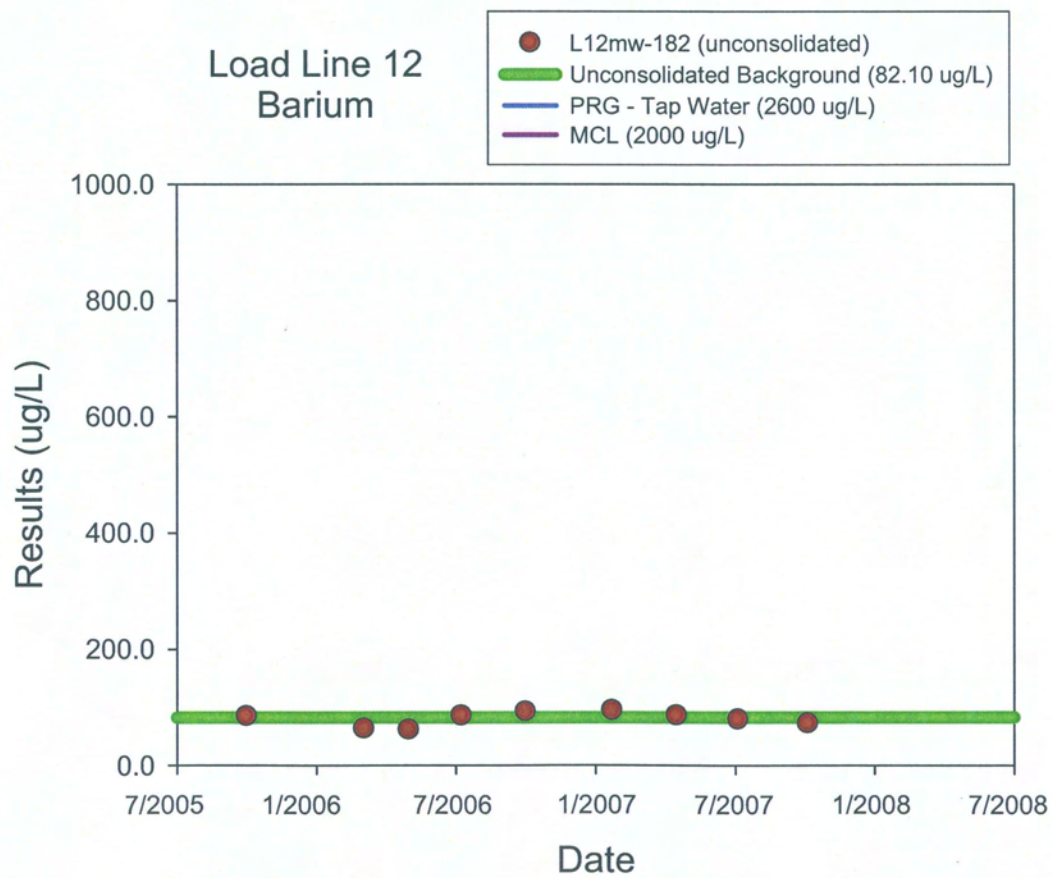
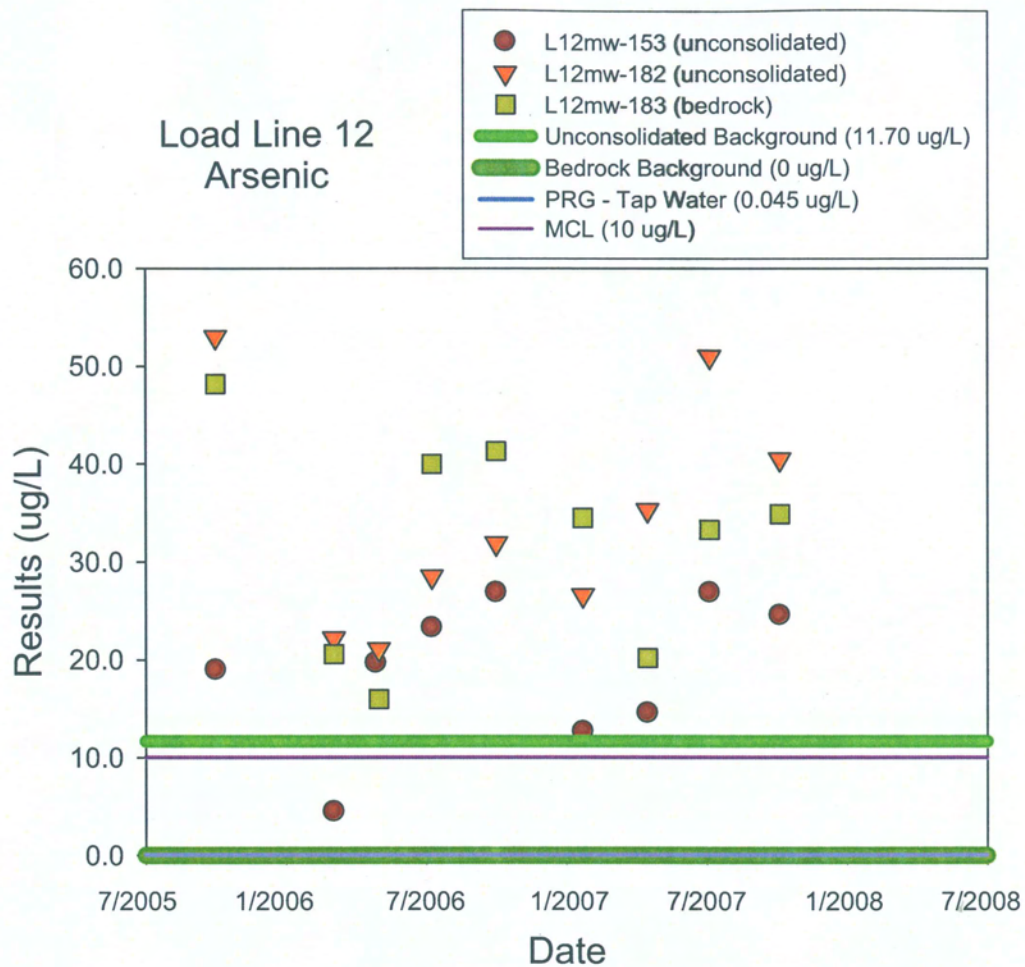


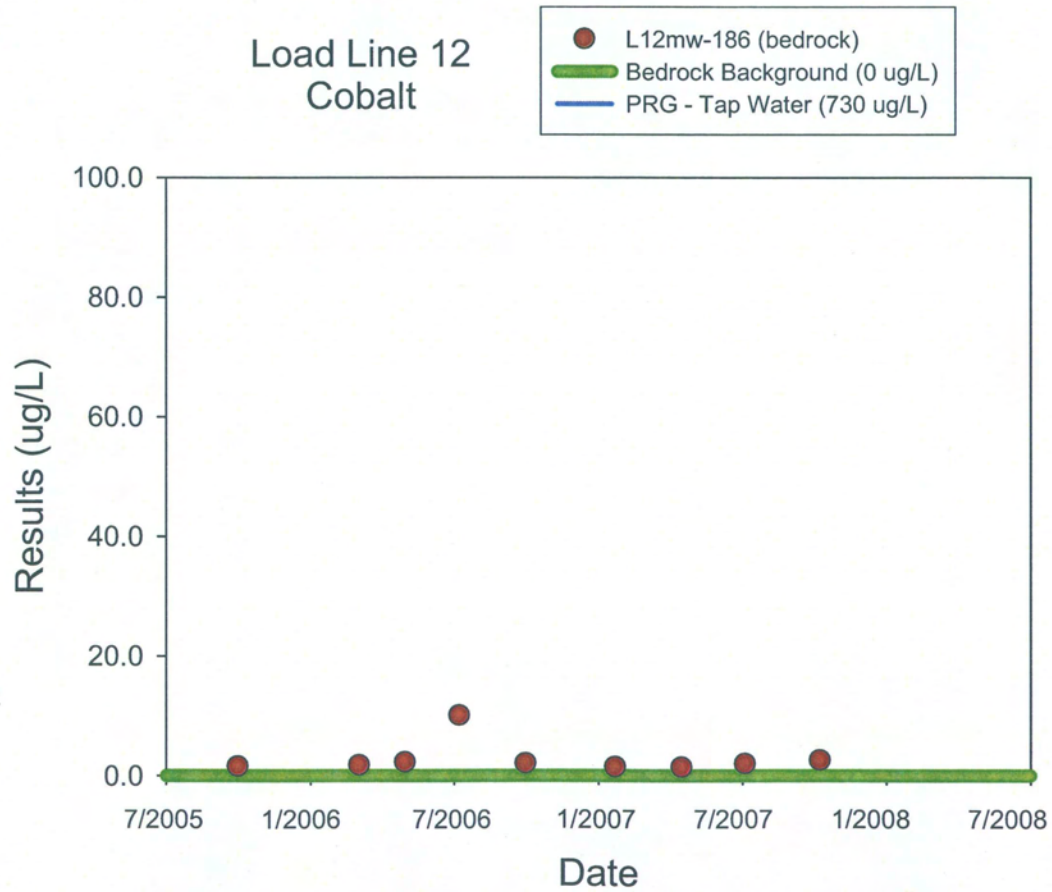
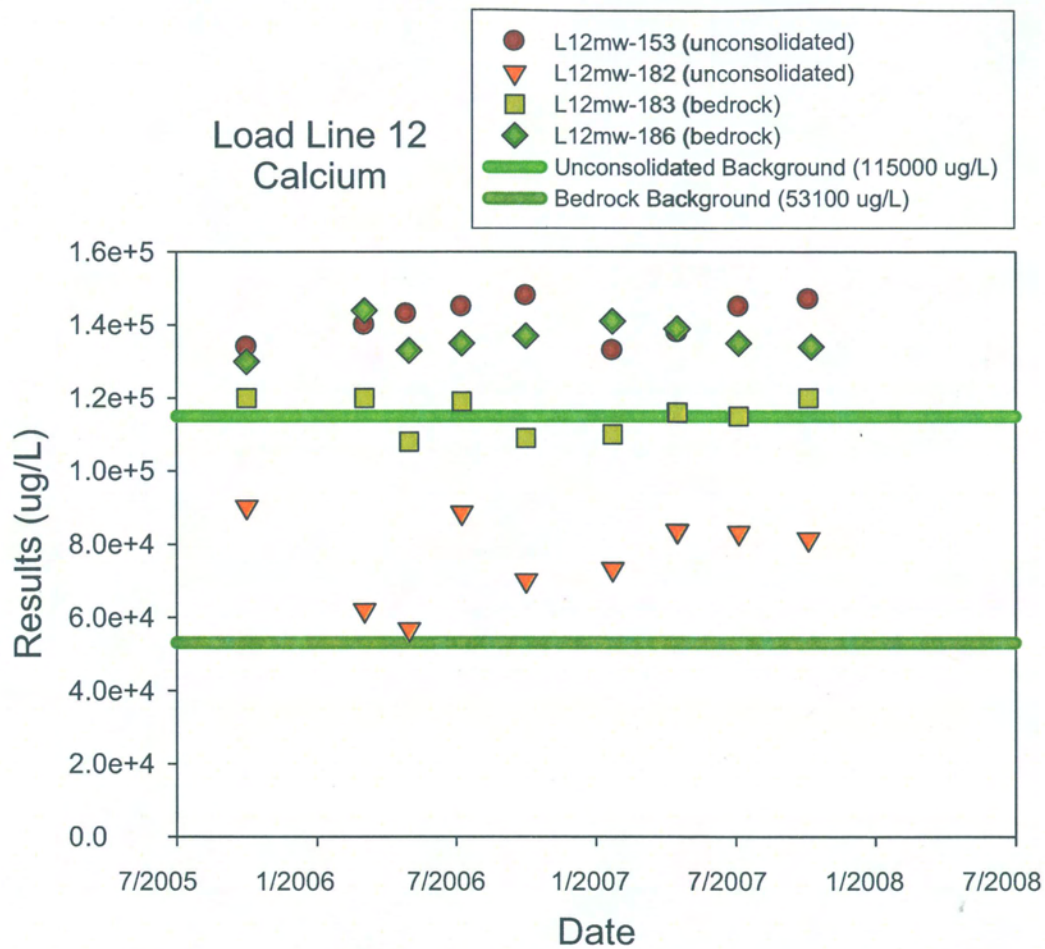


# Load Line 12 Antimony



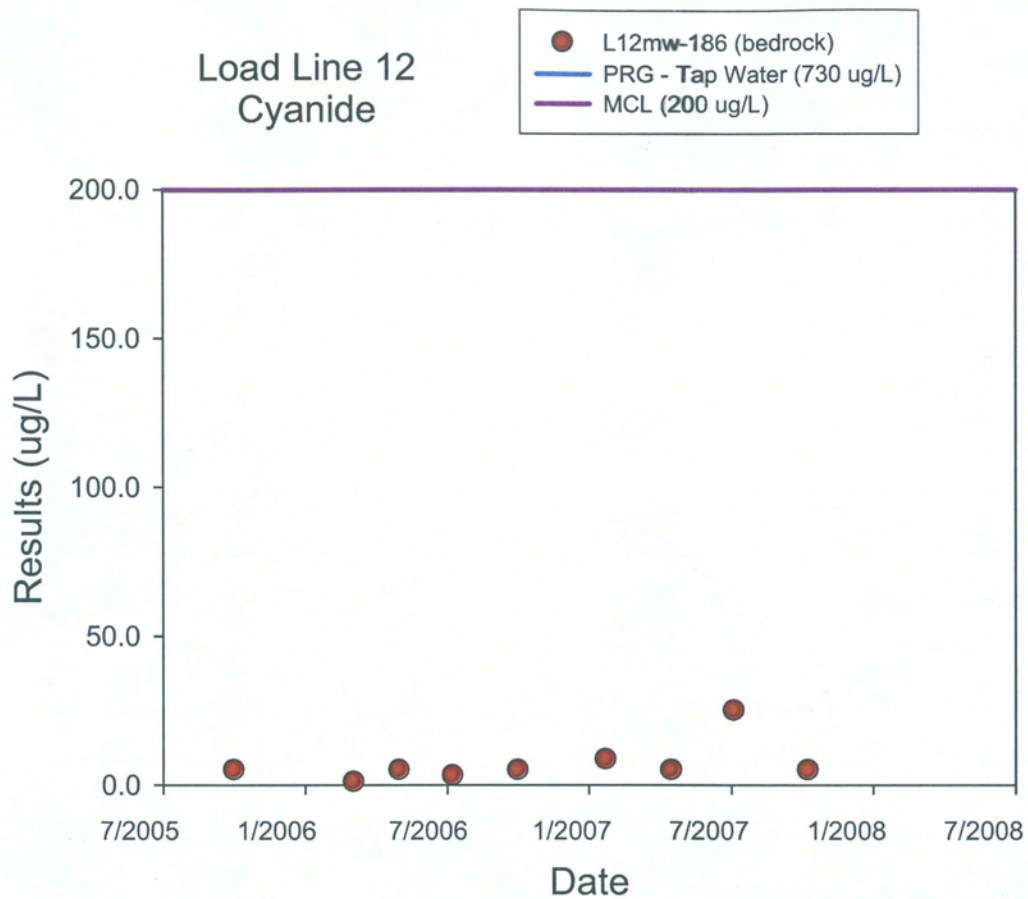




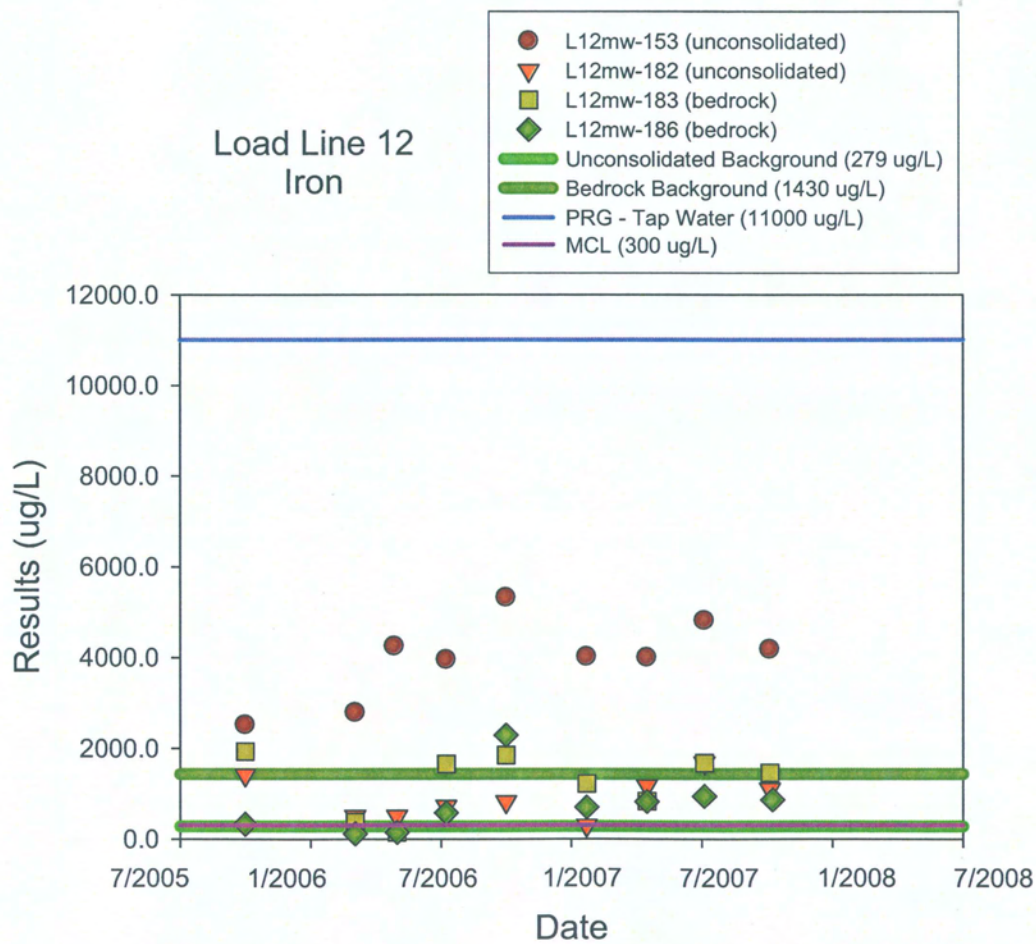


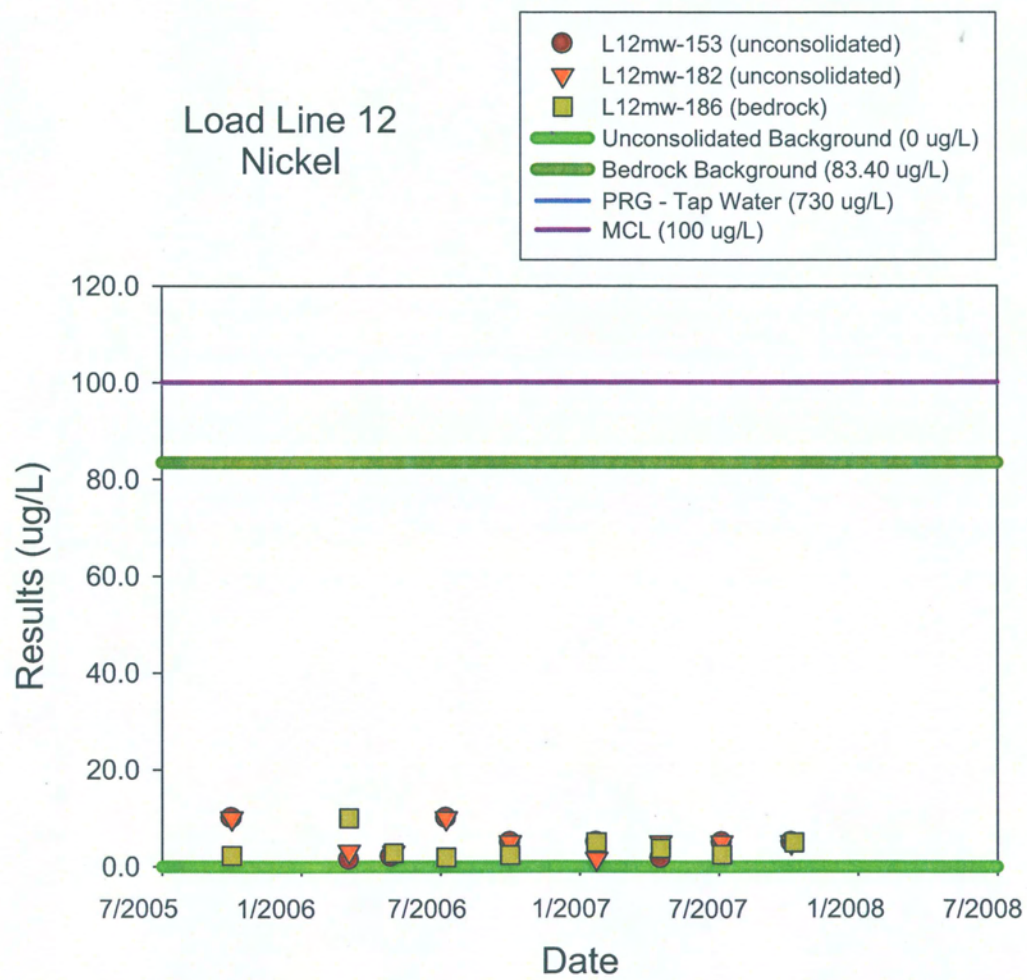
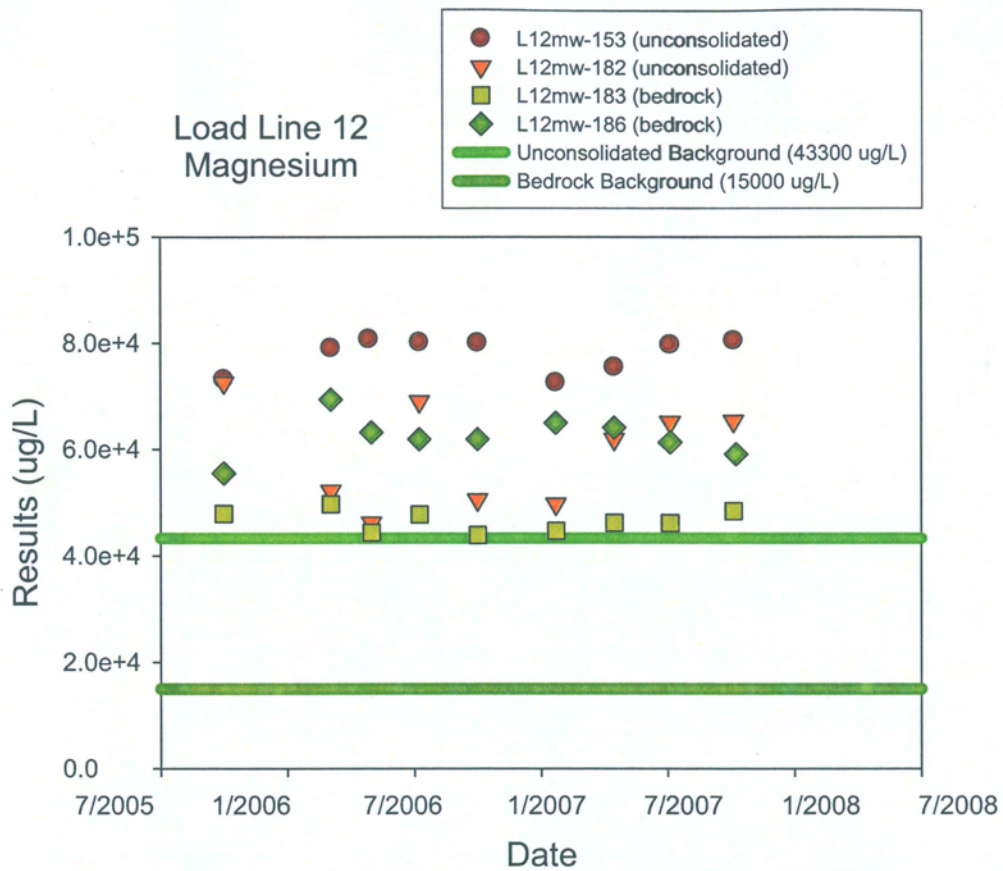


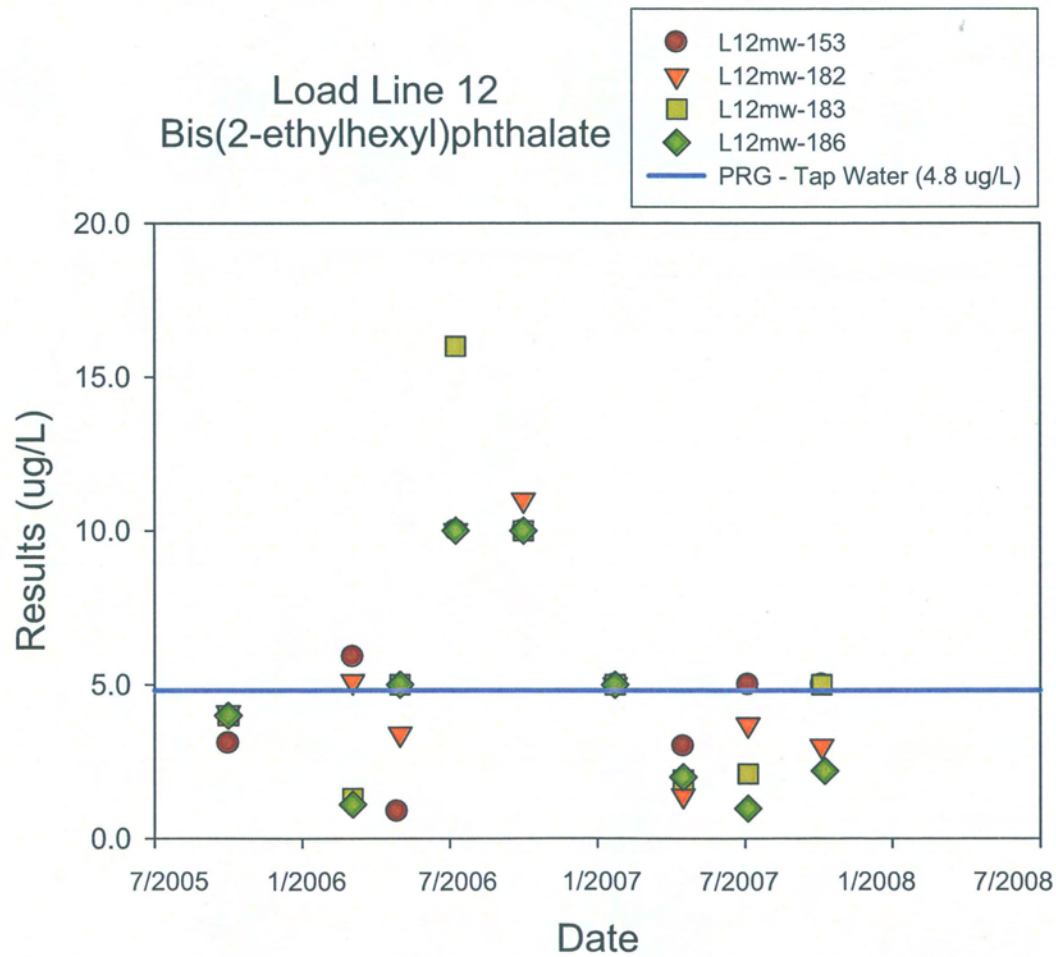
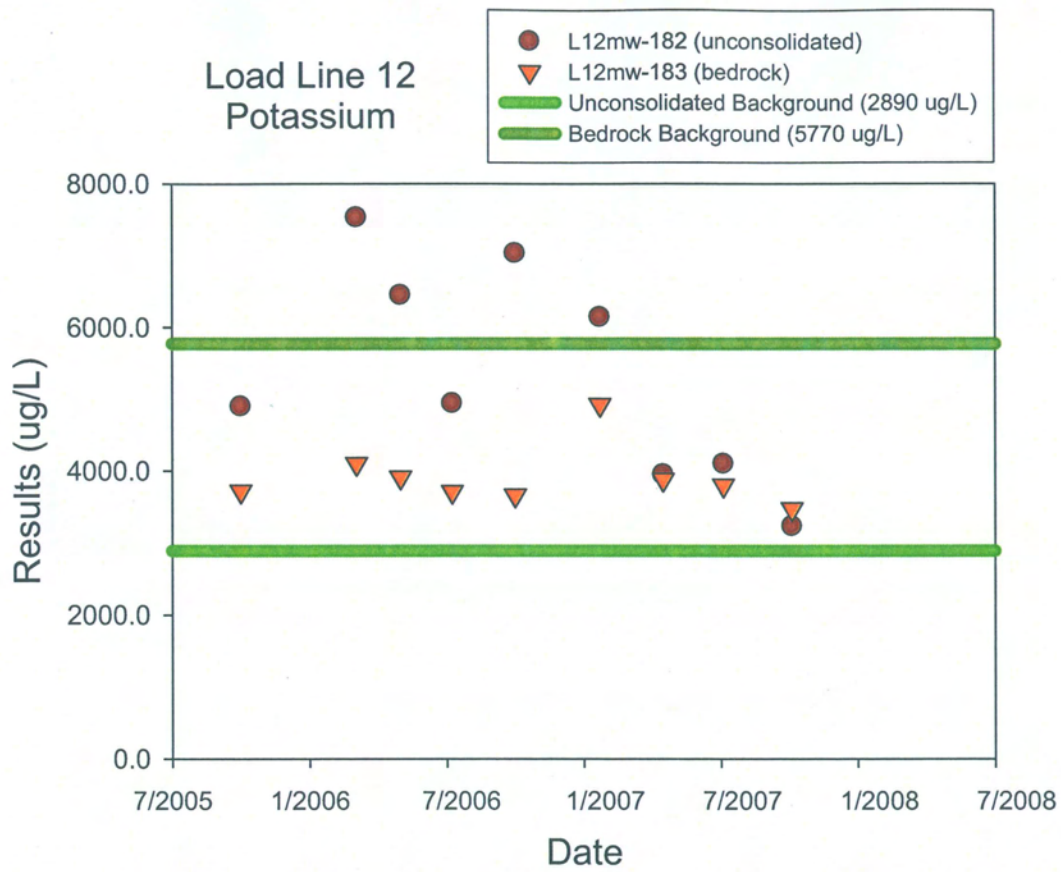
# Load Line 12 Cyanide



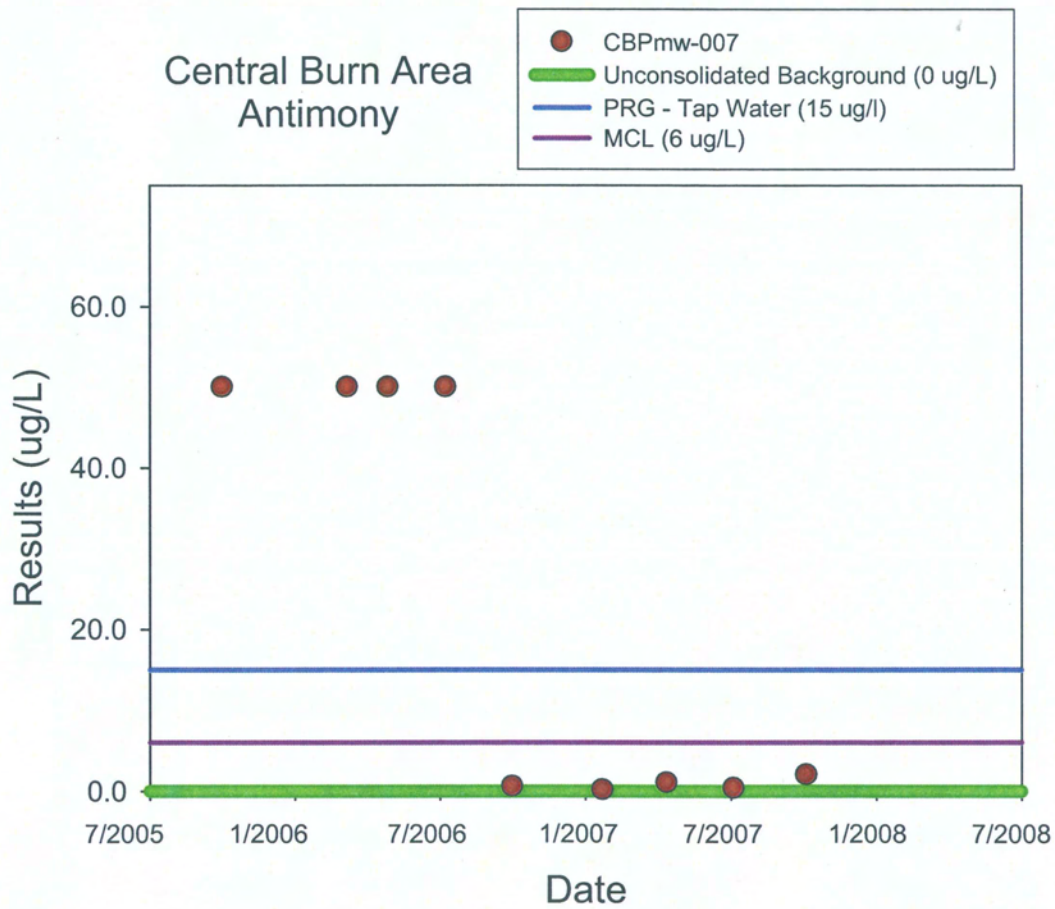
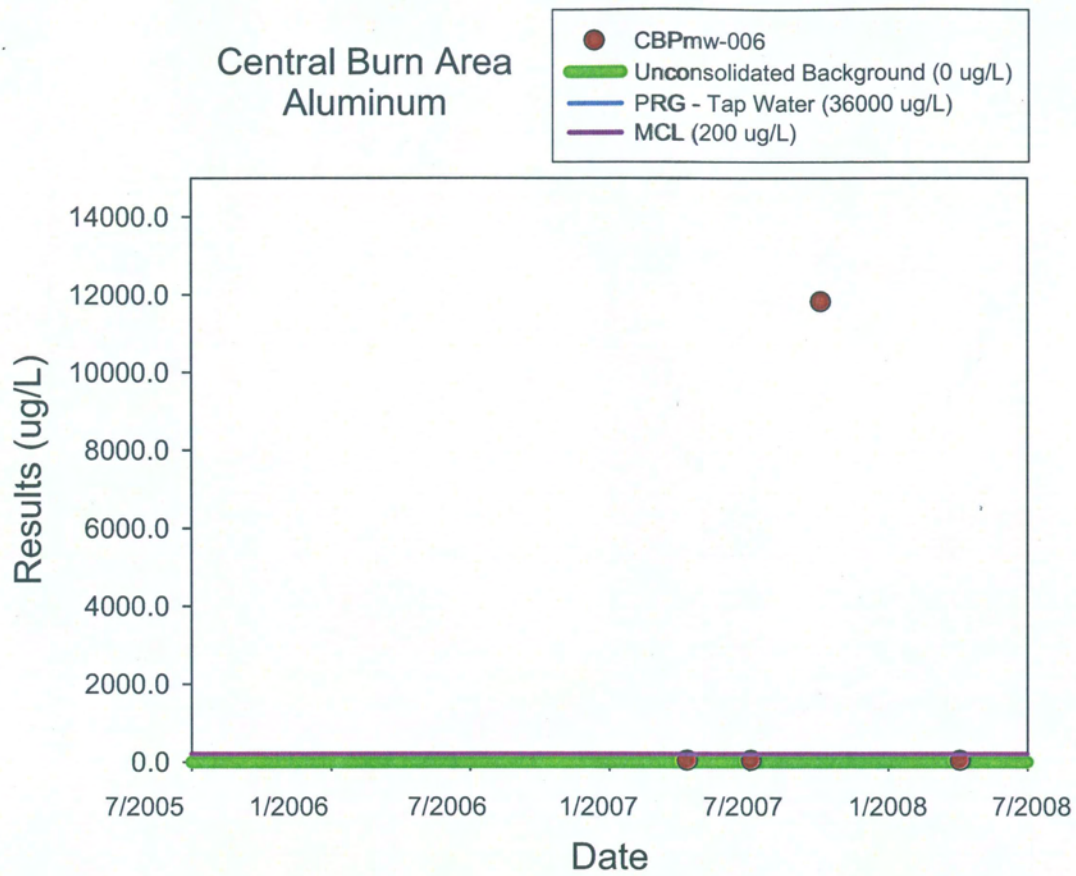
# Load Line 12 Iron

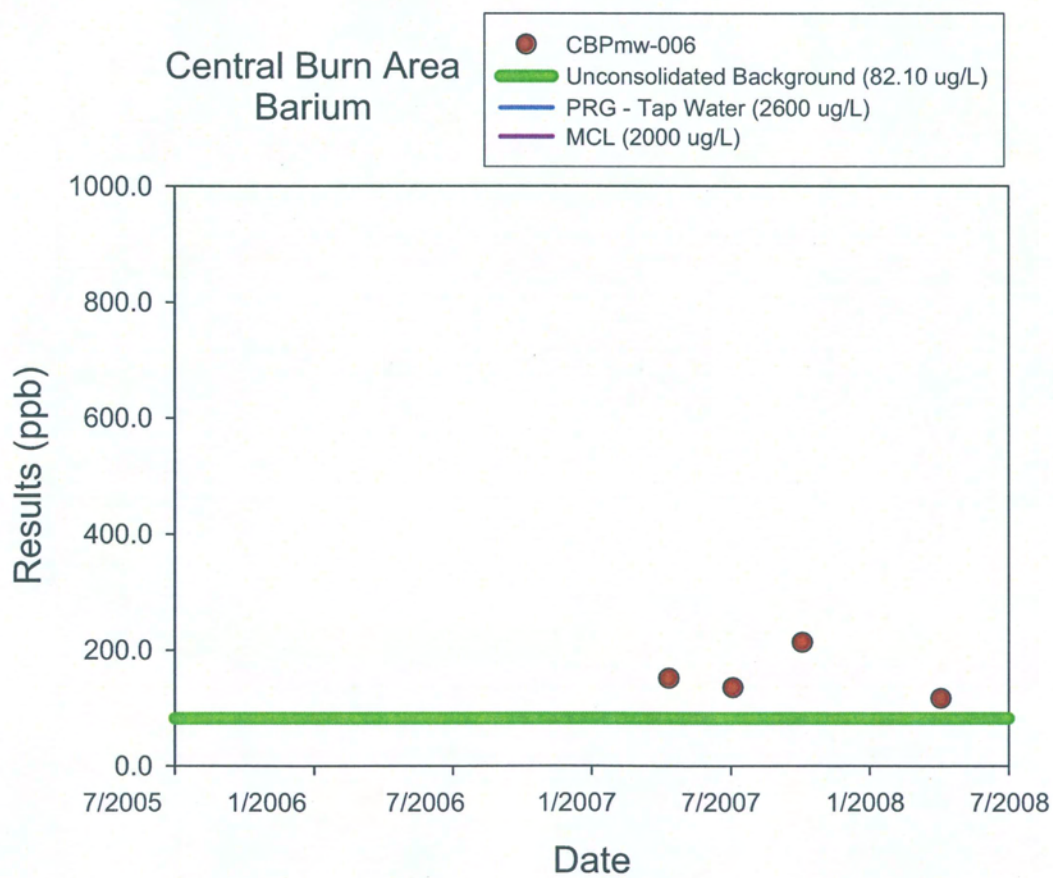
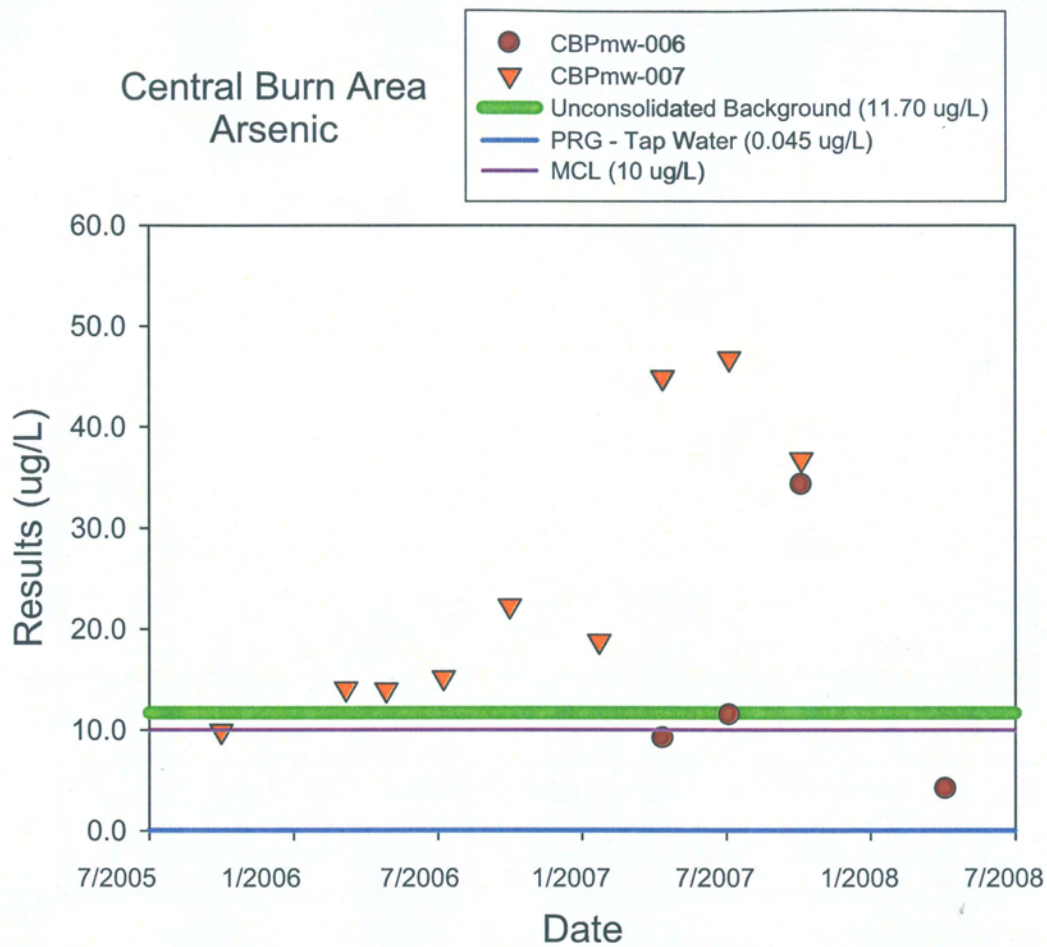


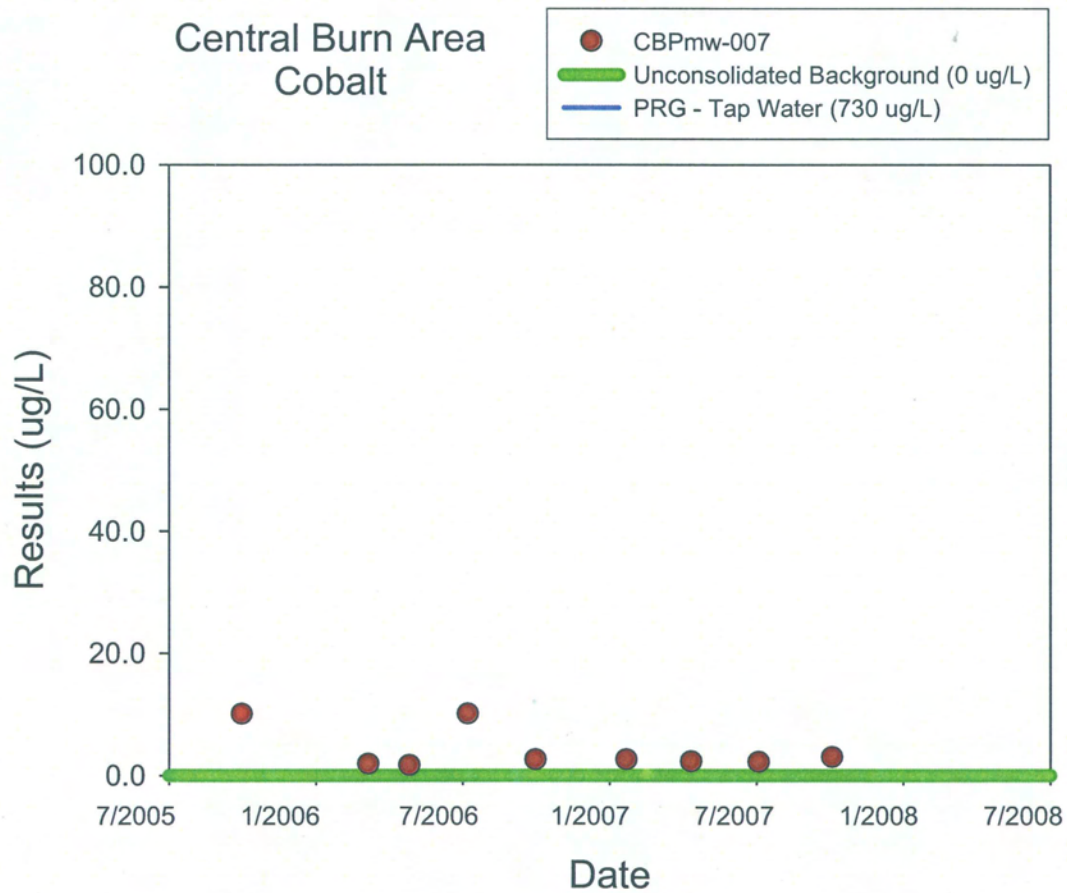
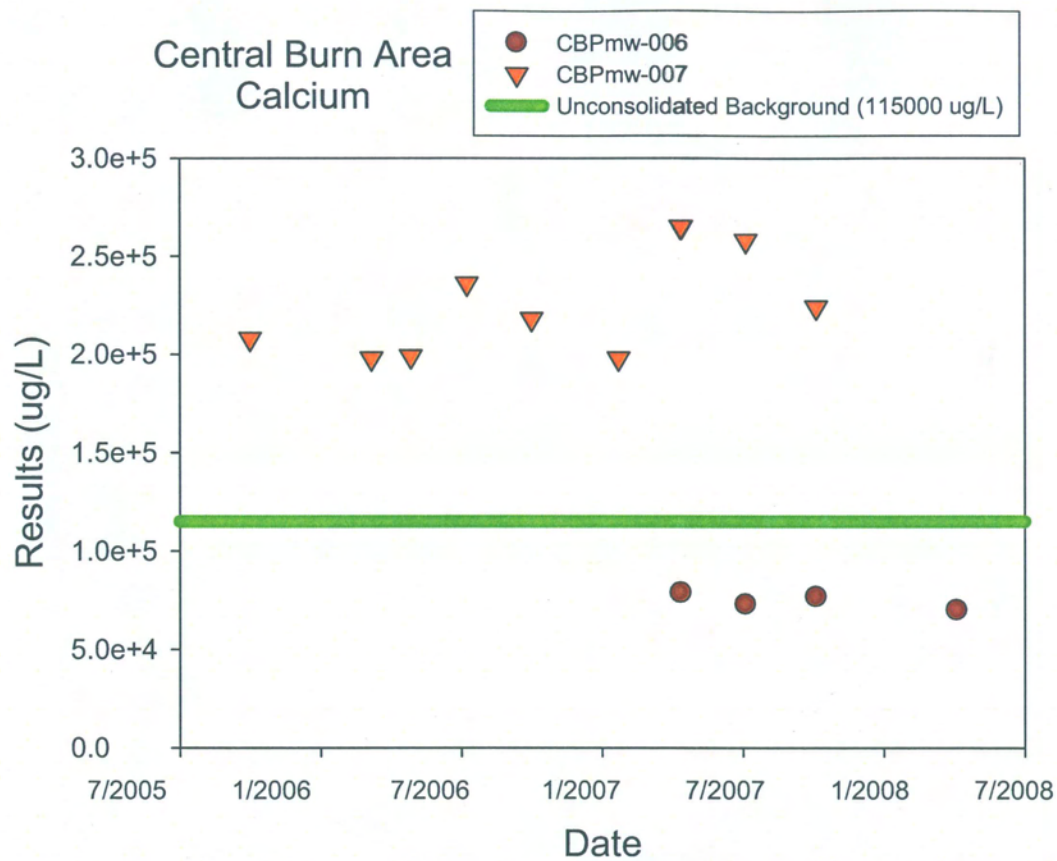




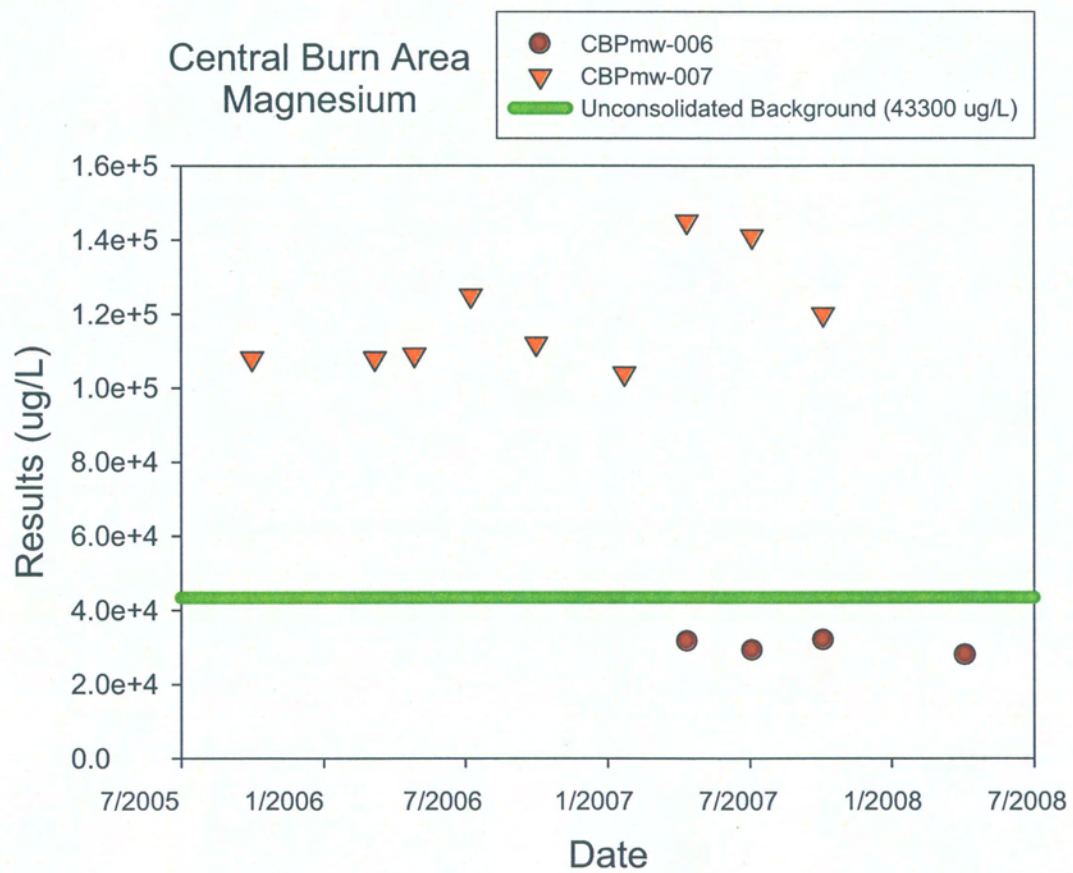
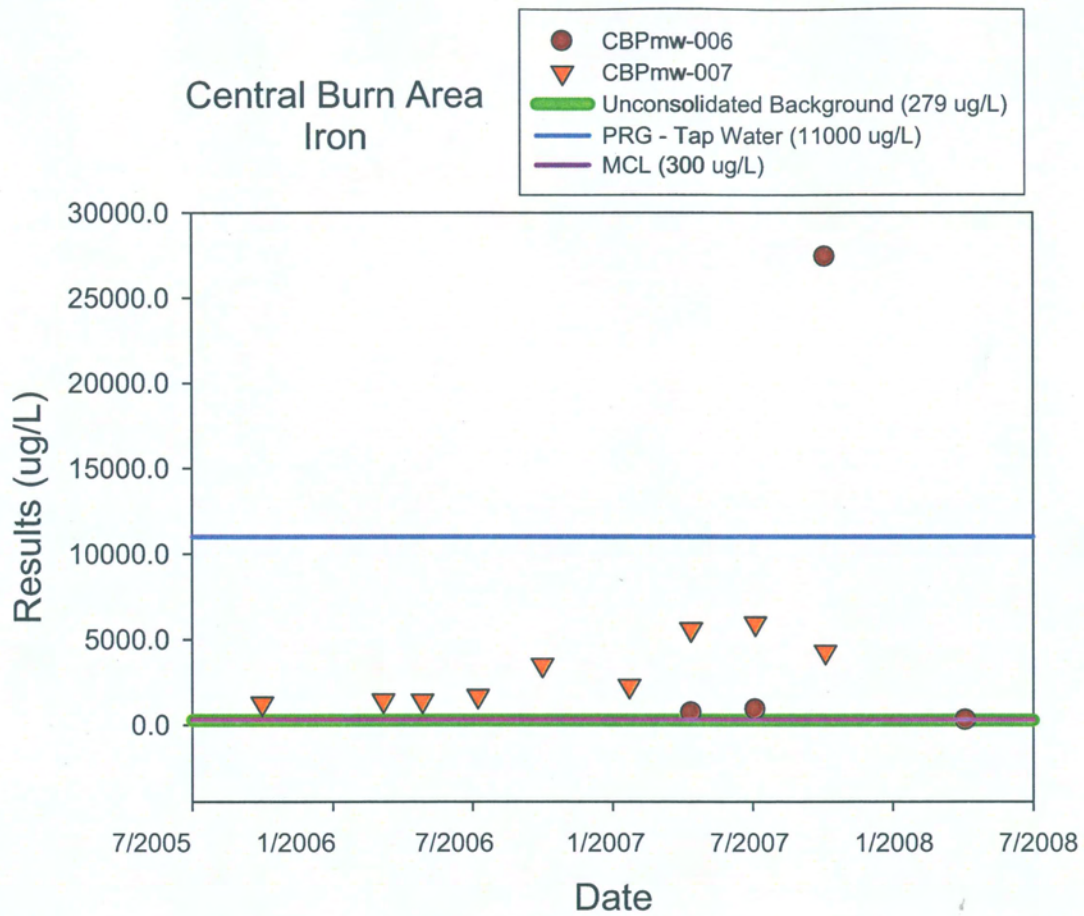


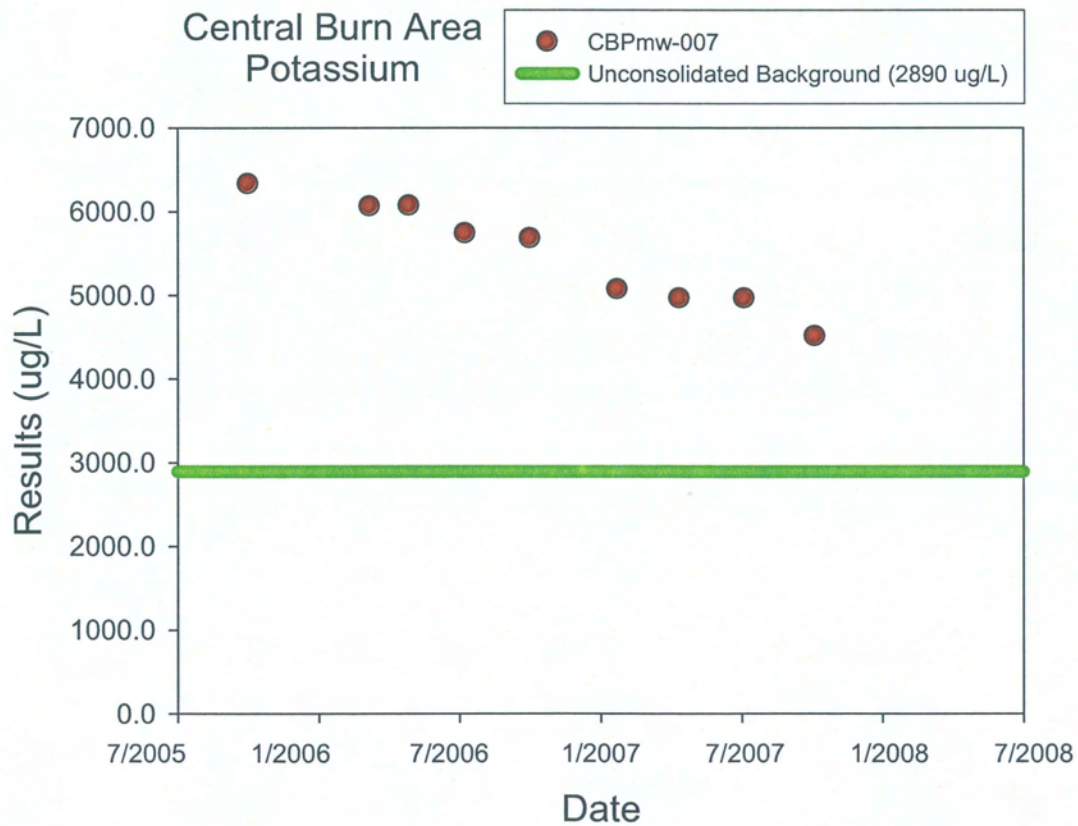
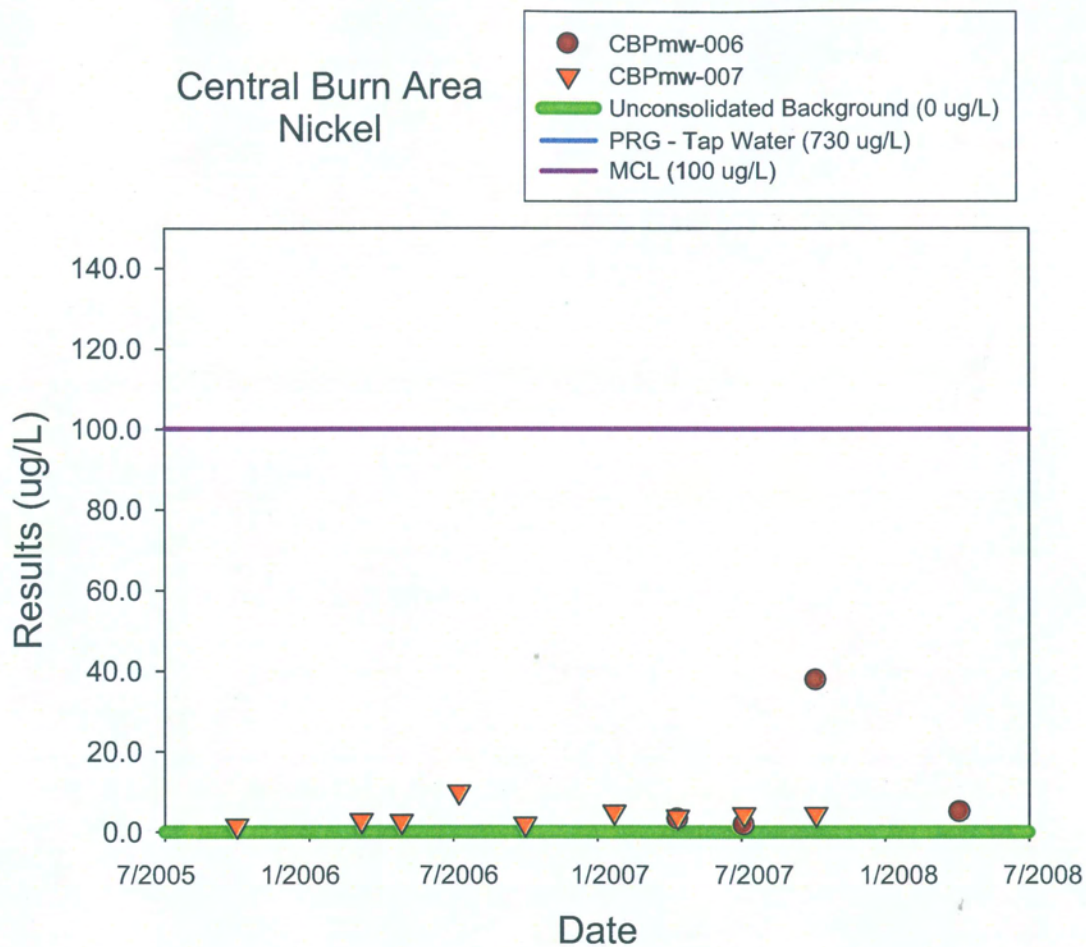




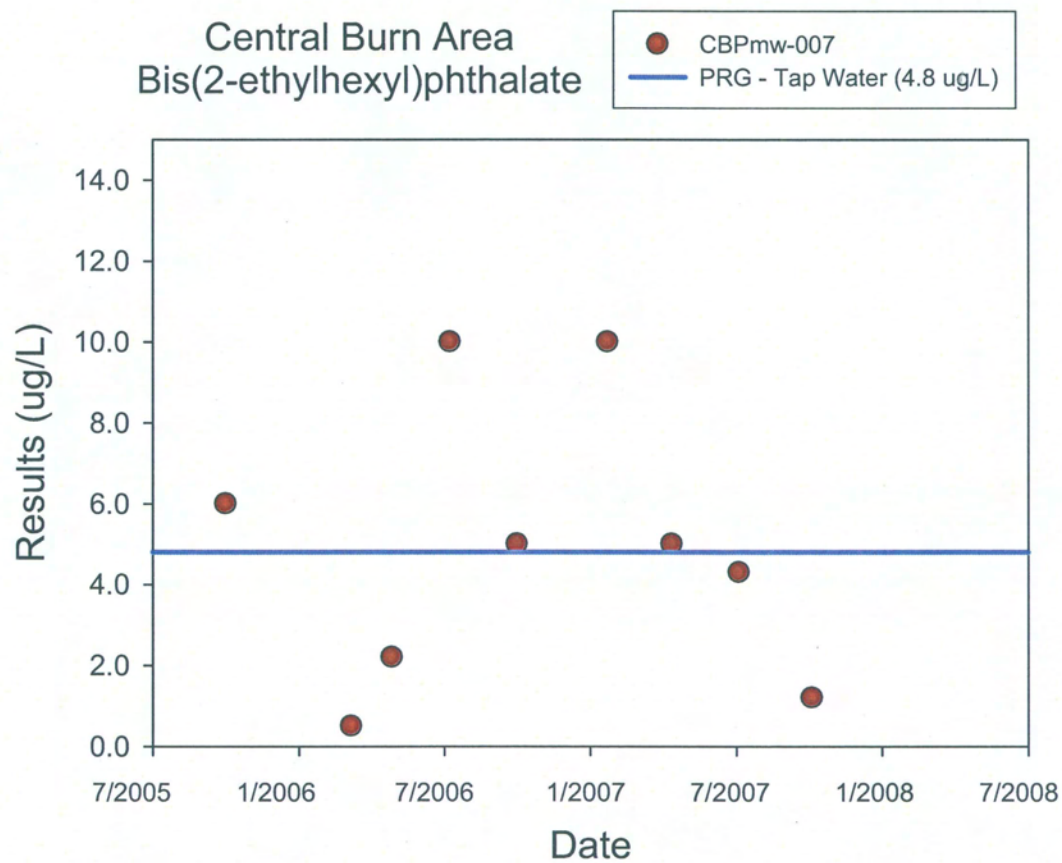
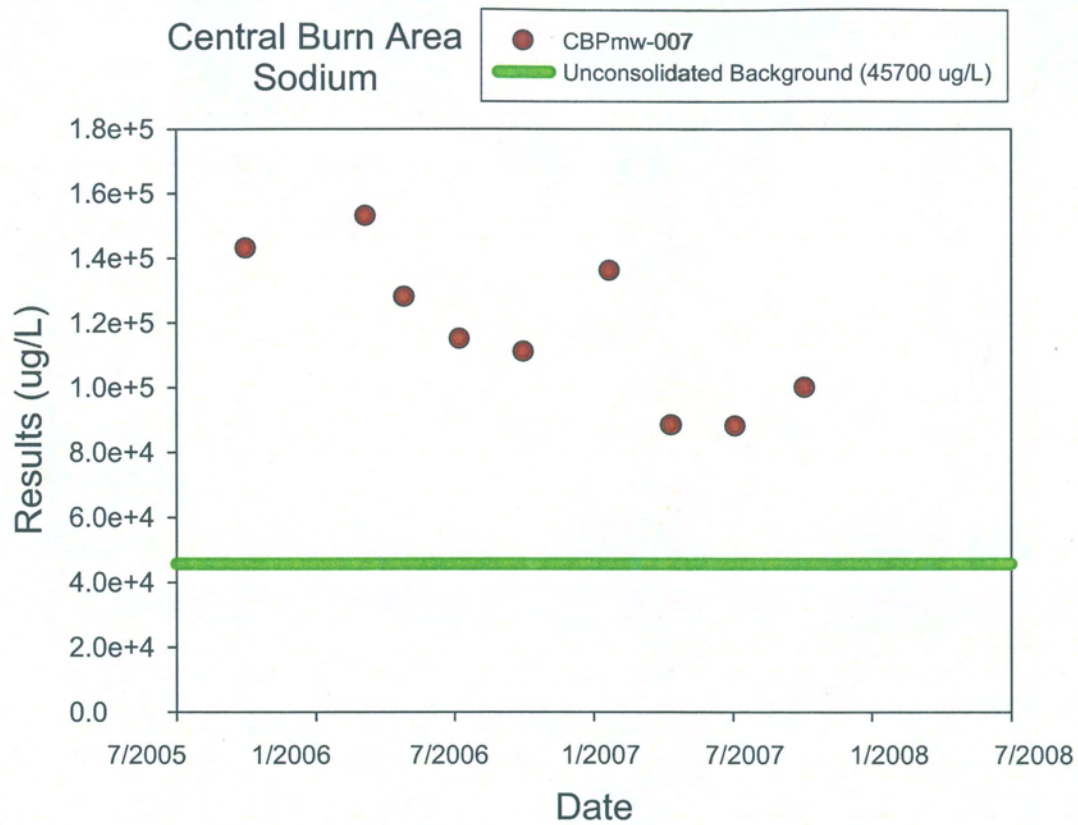




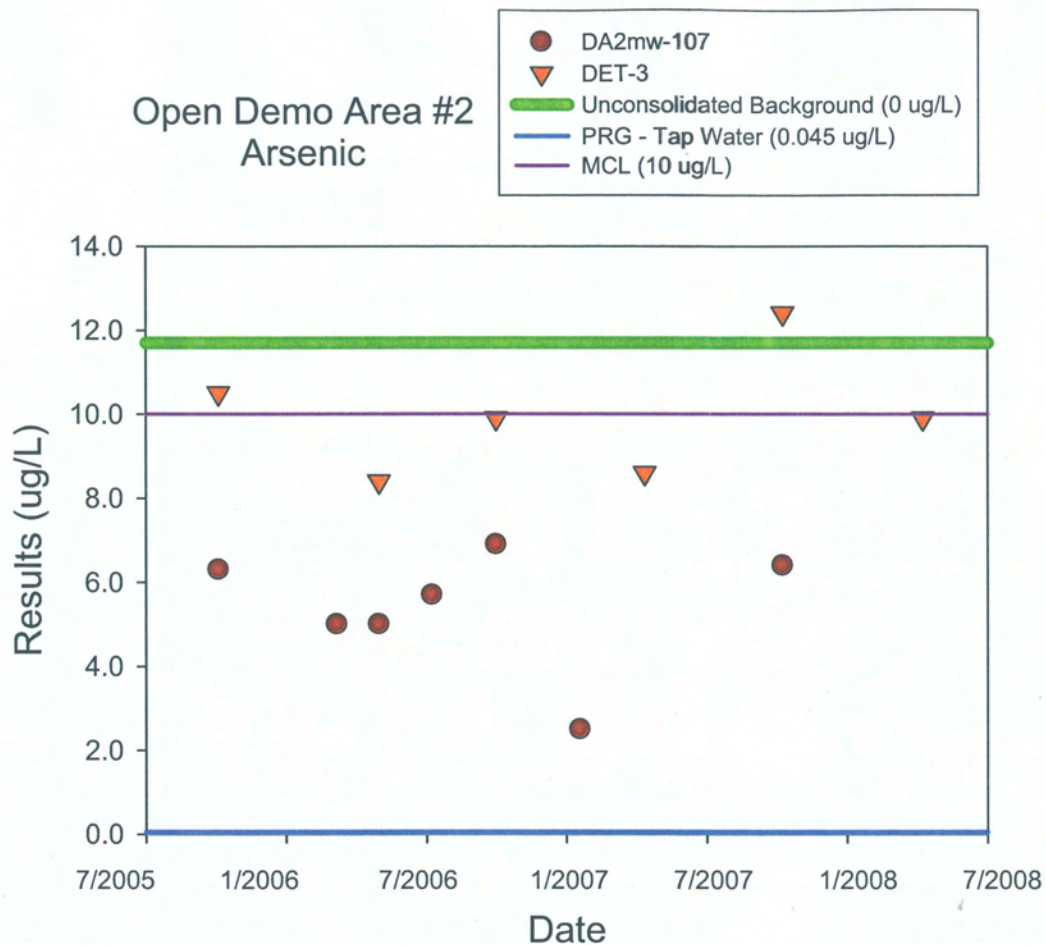




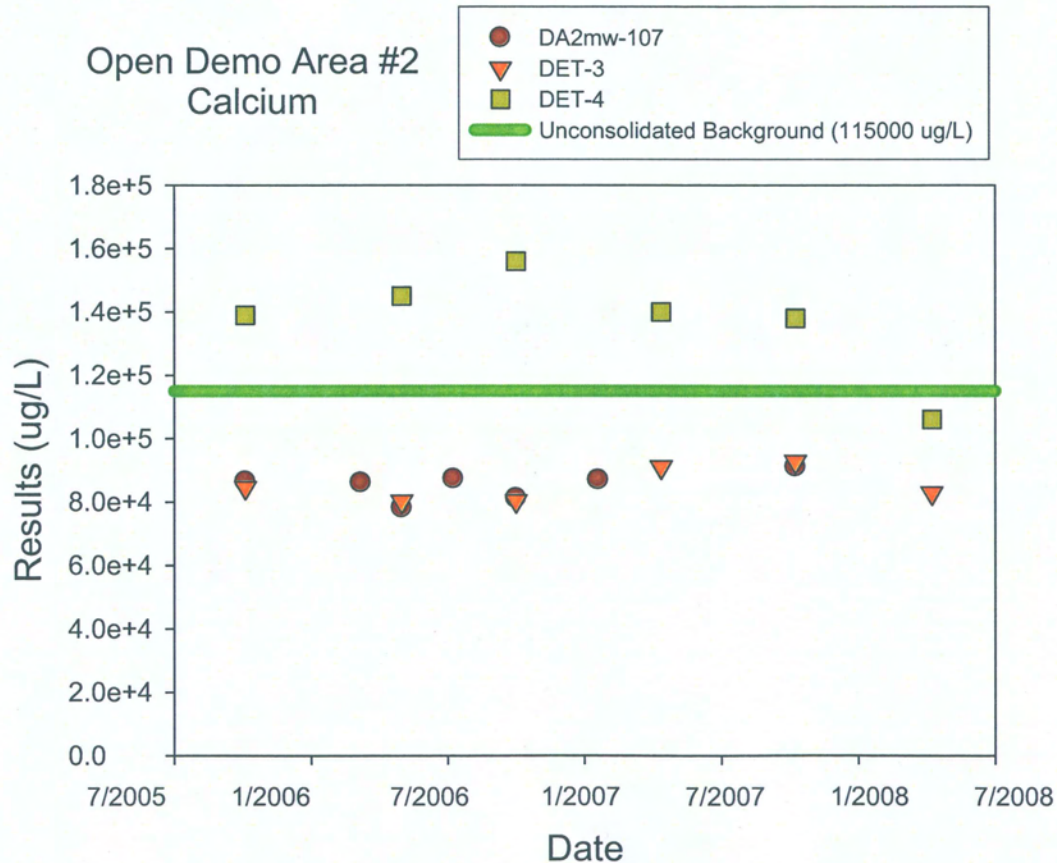


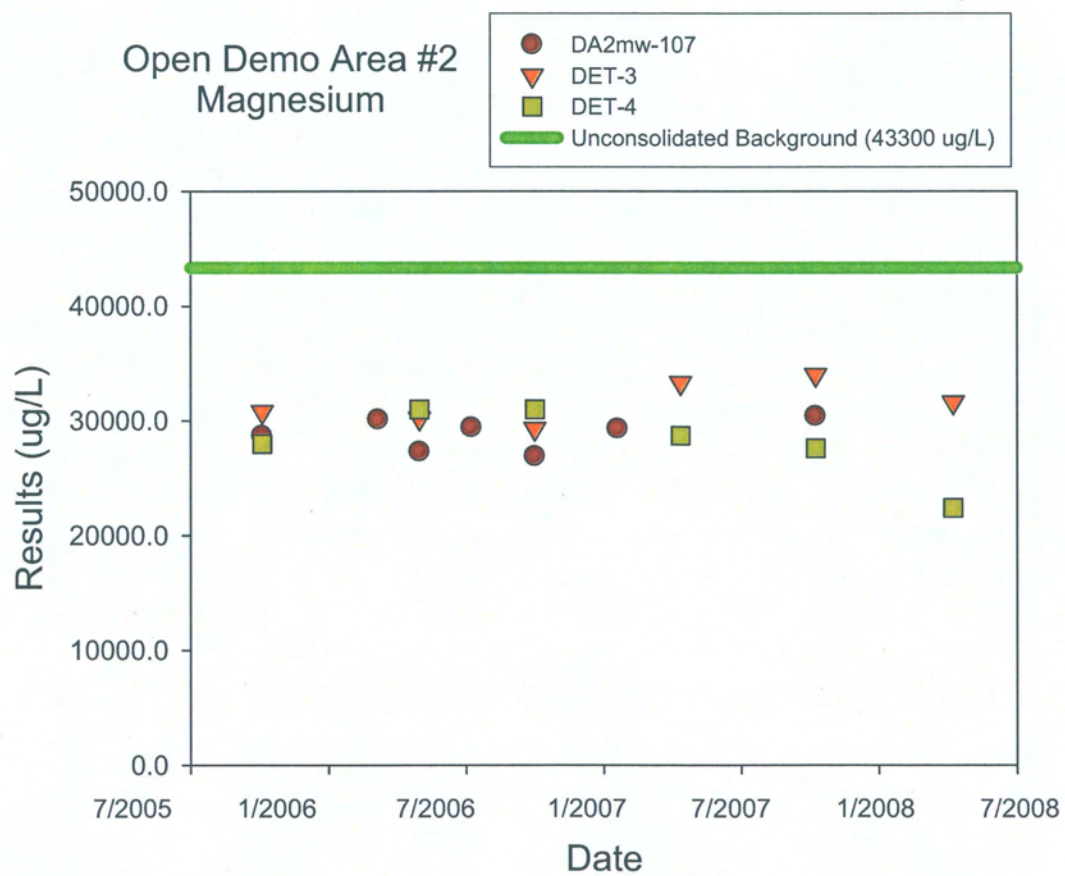
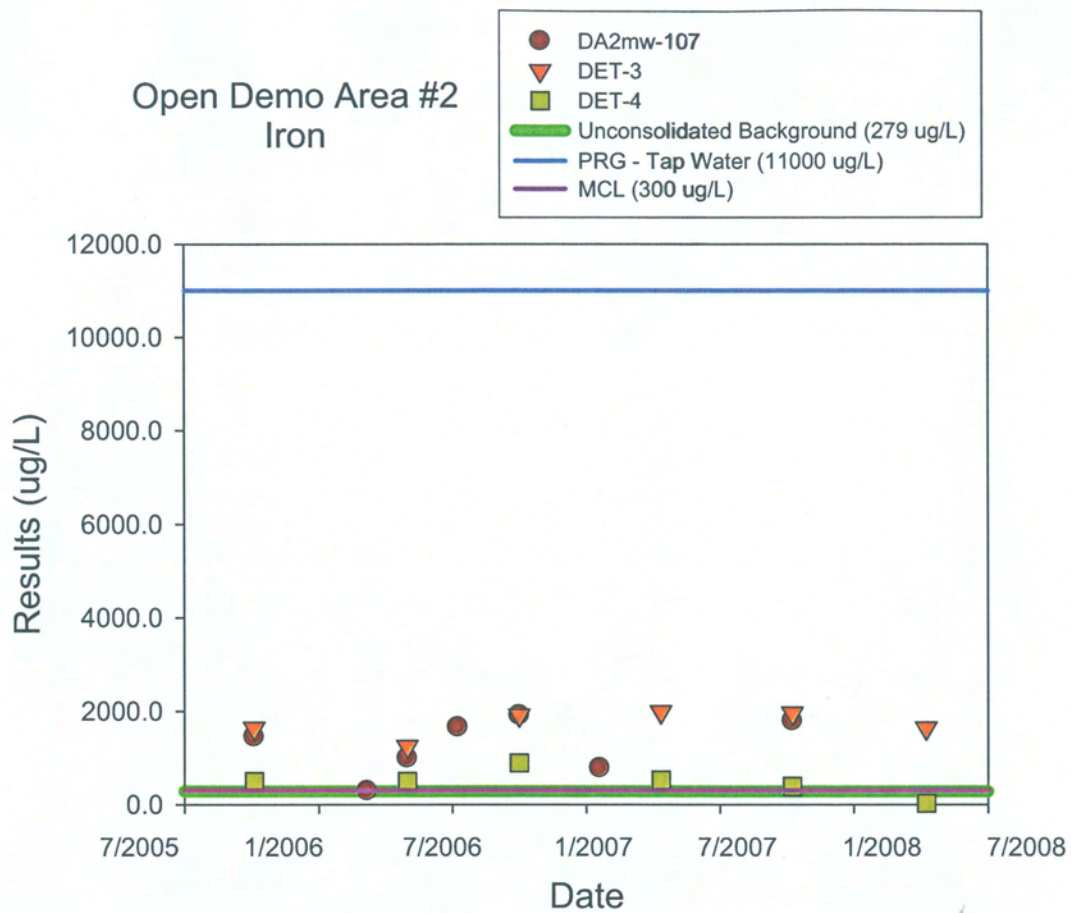


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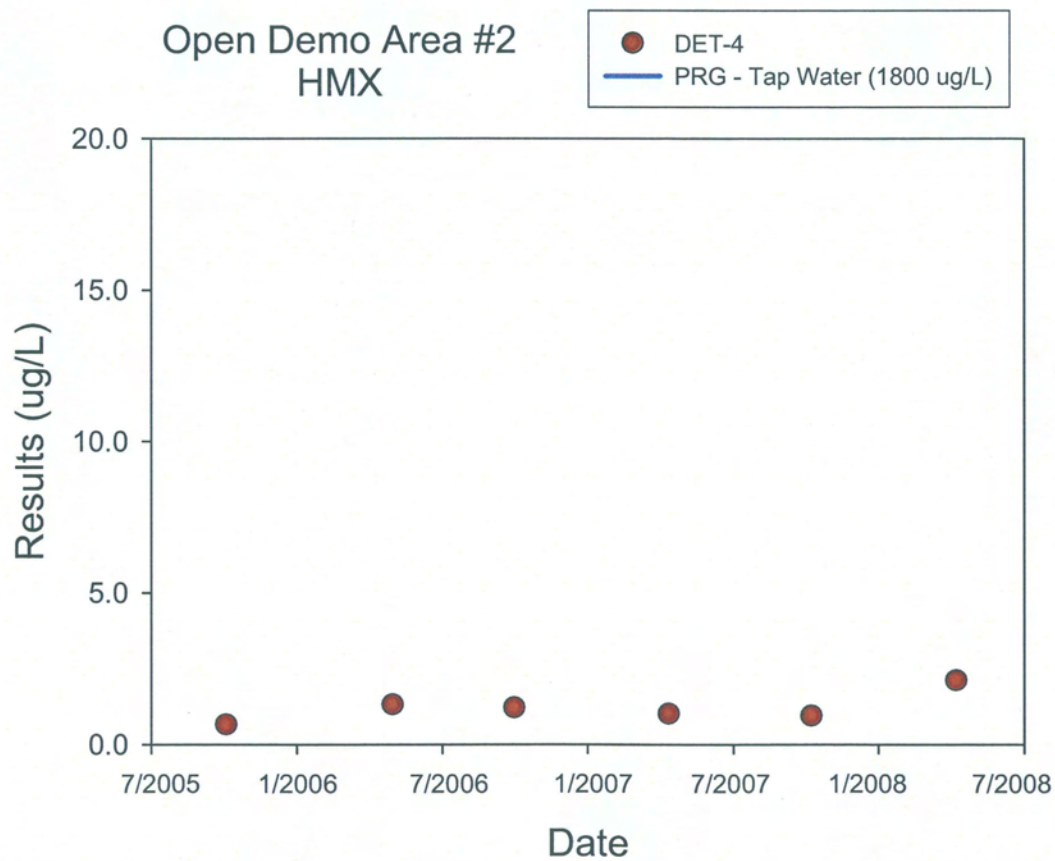
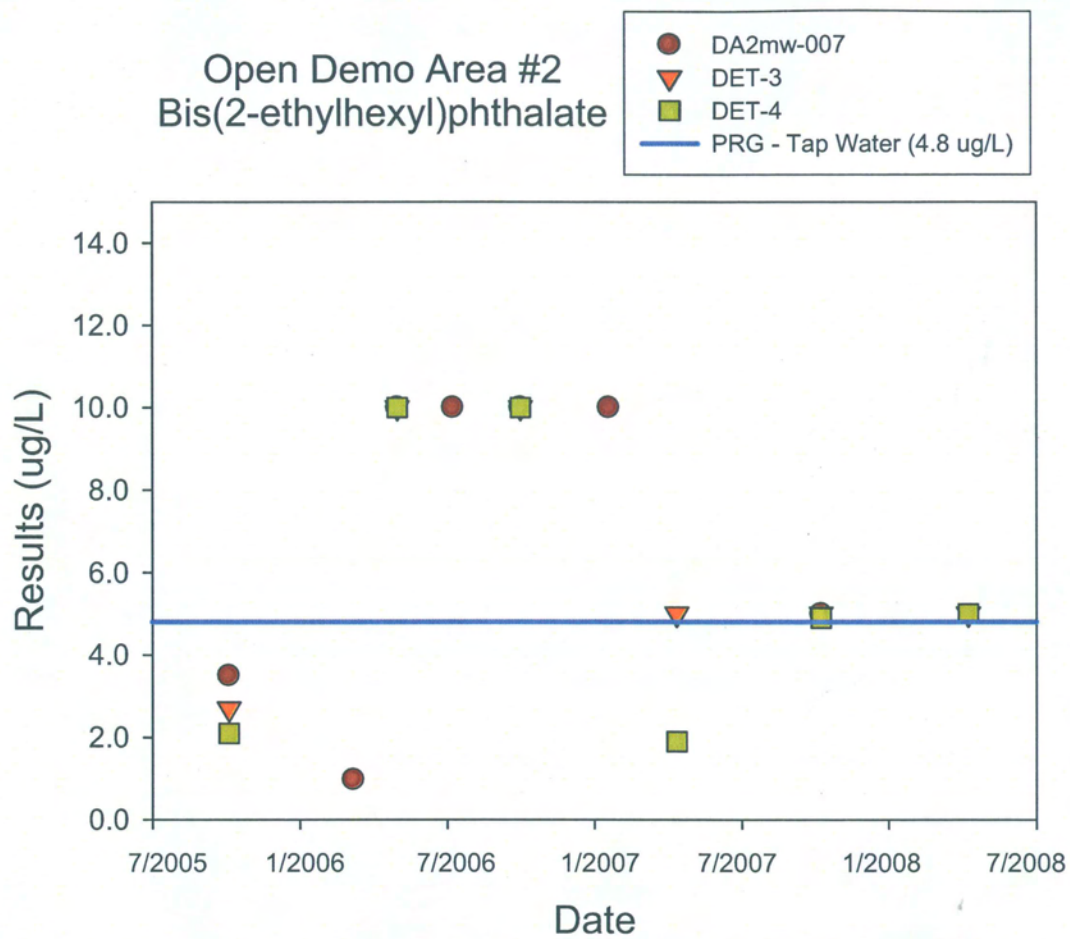


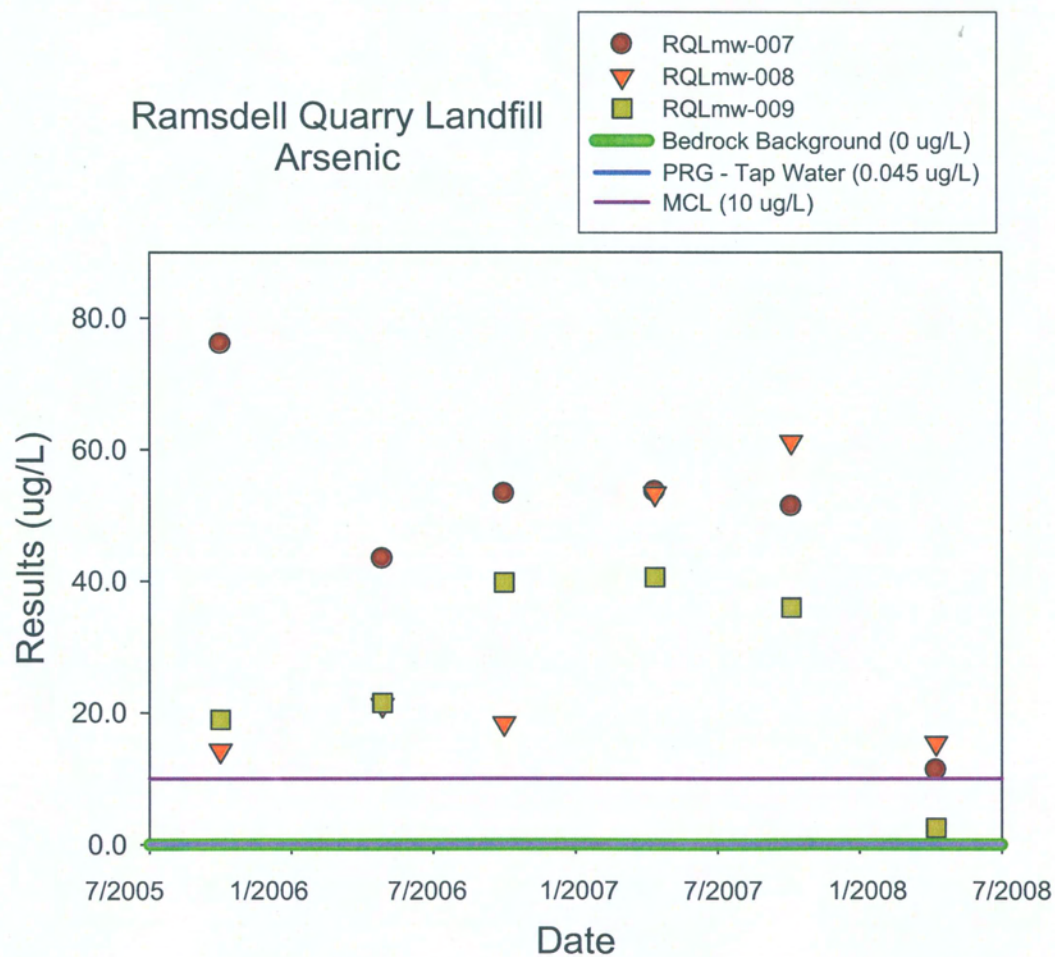
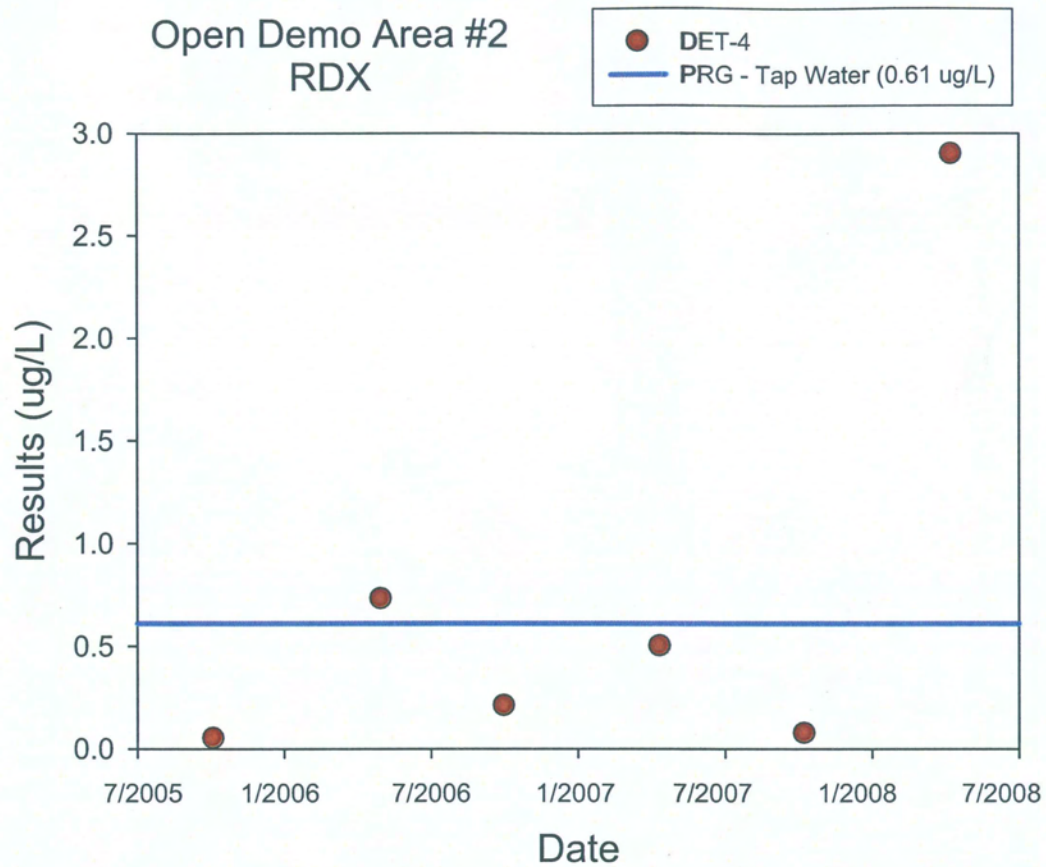
# Open Demo Area #2 Calcium



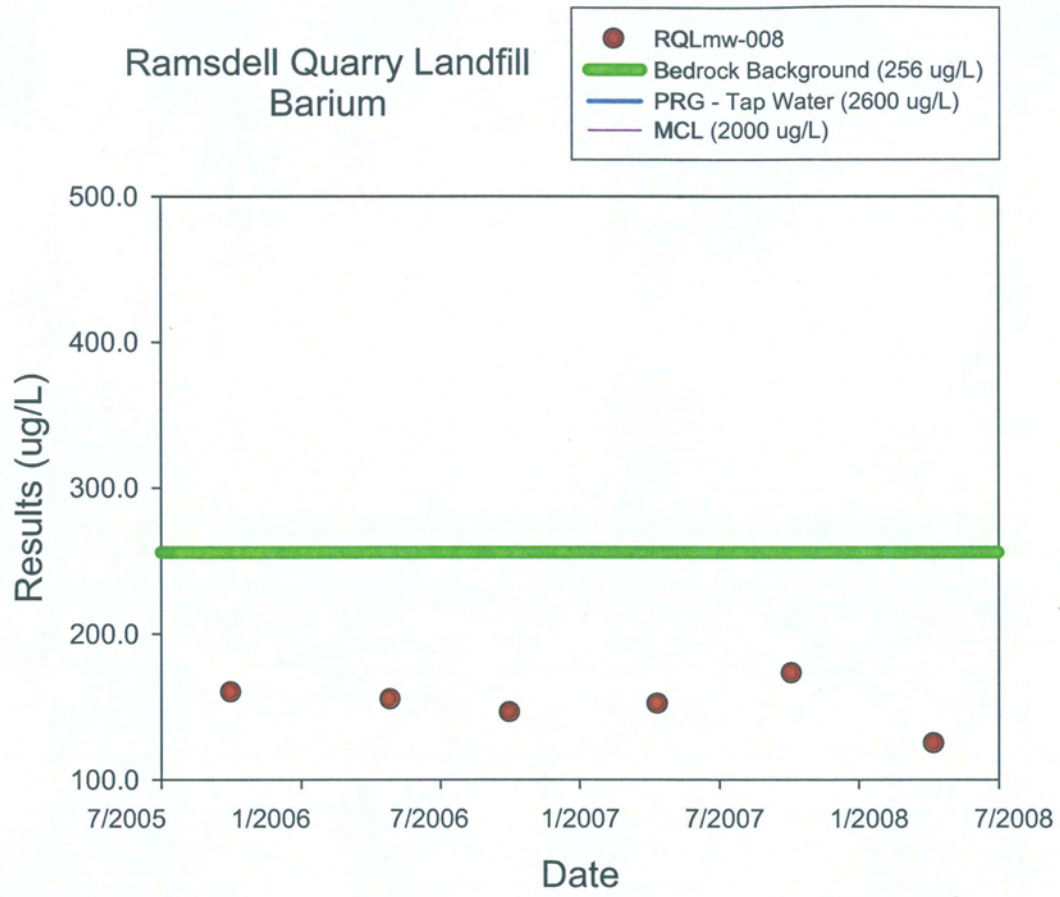




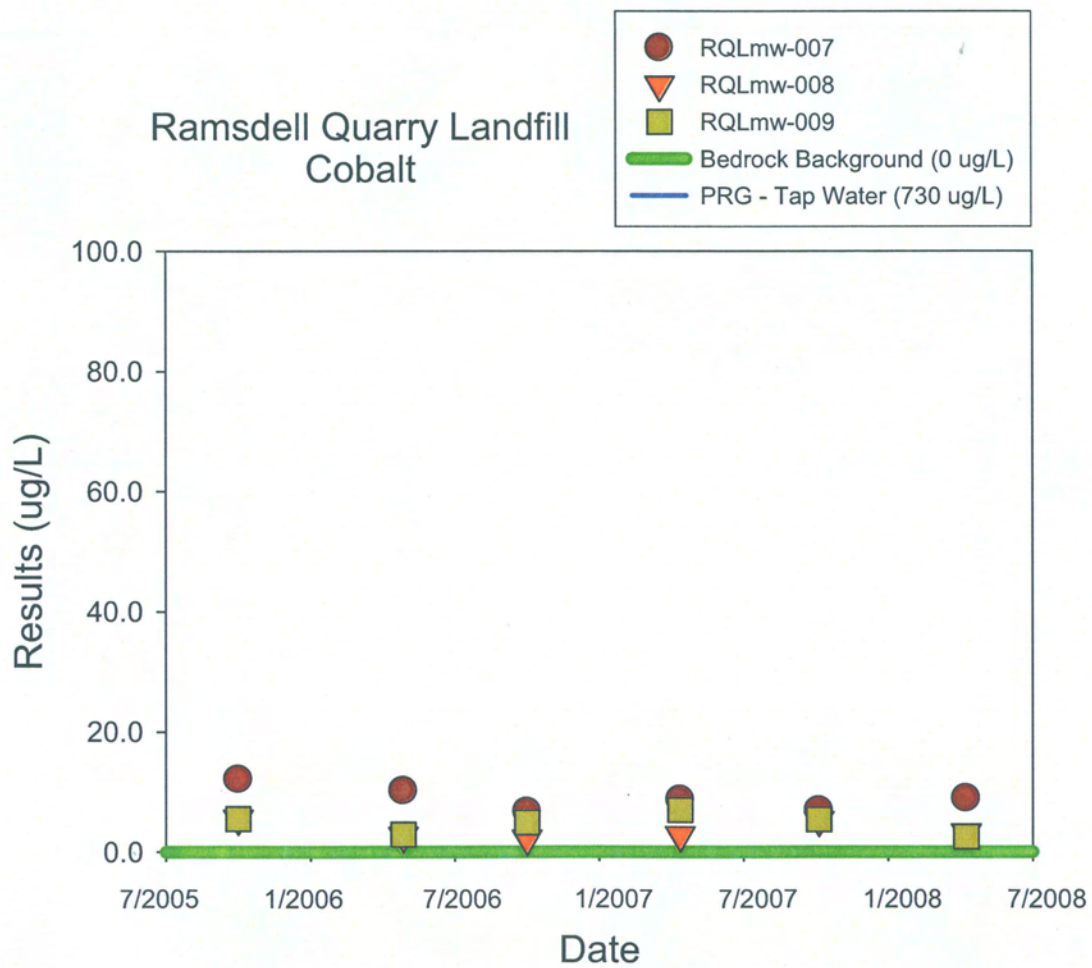
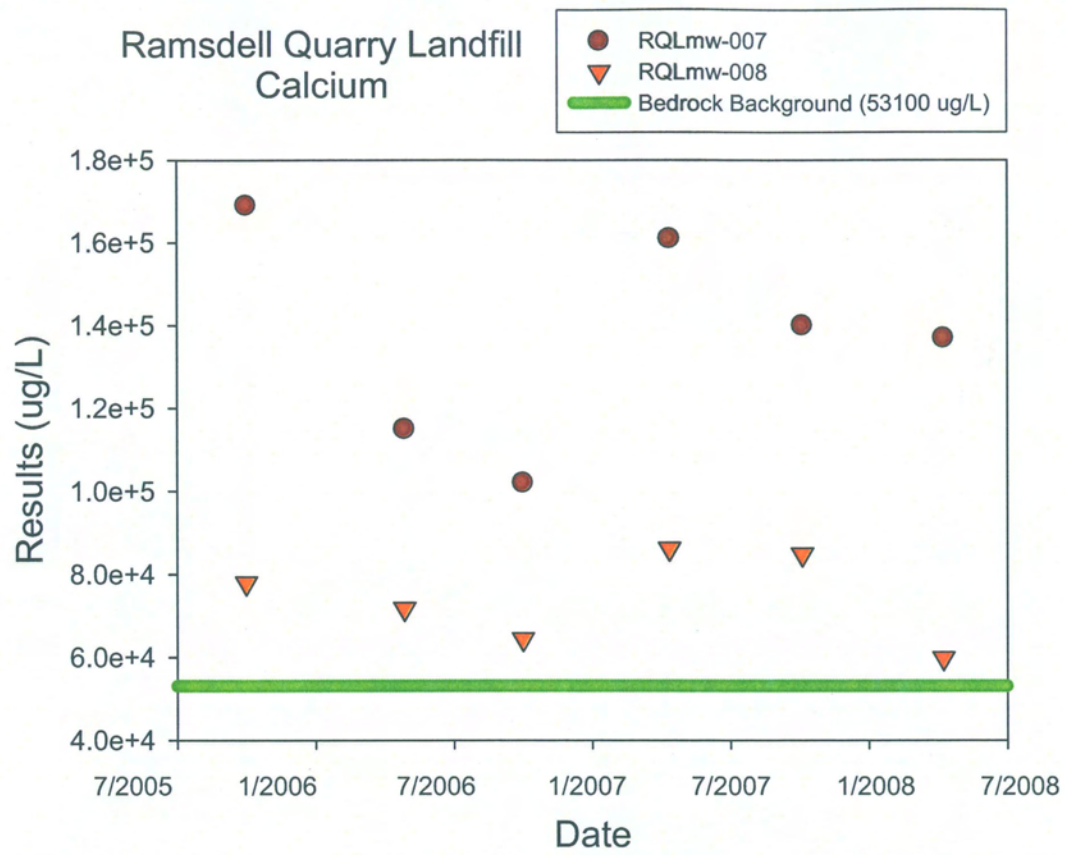


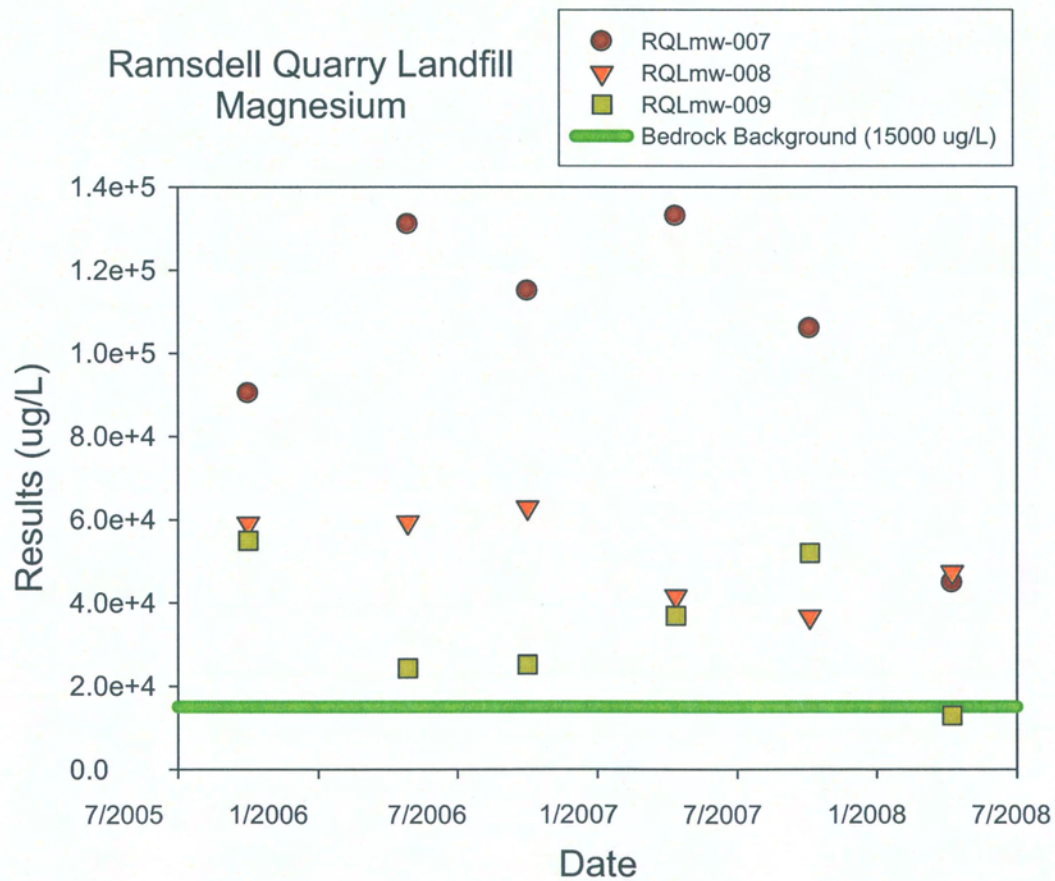
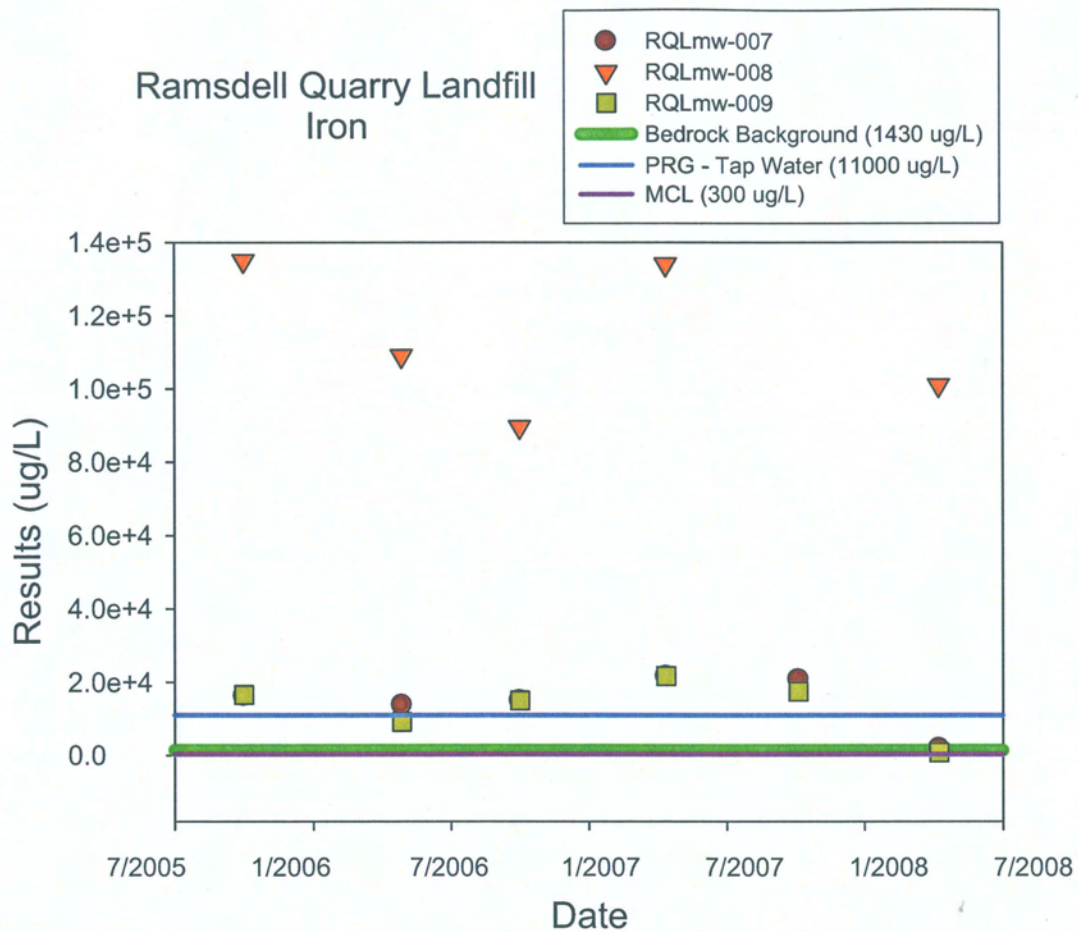


# Ramsdell Quarry Landfill Barium

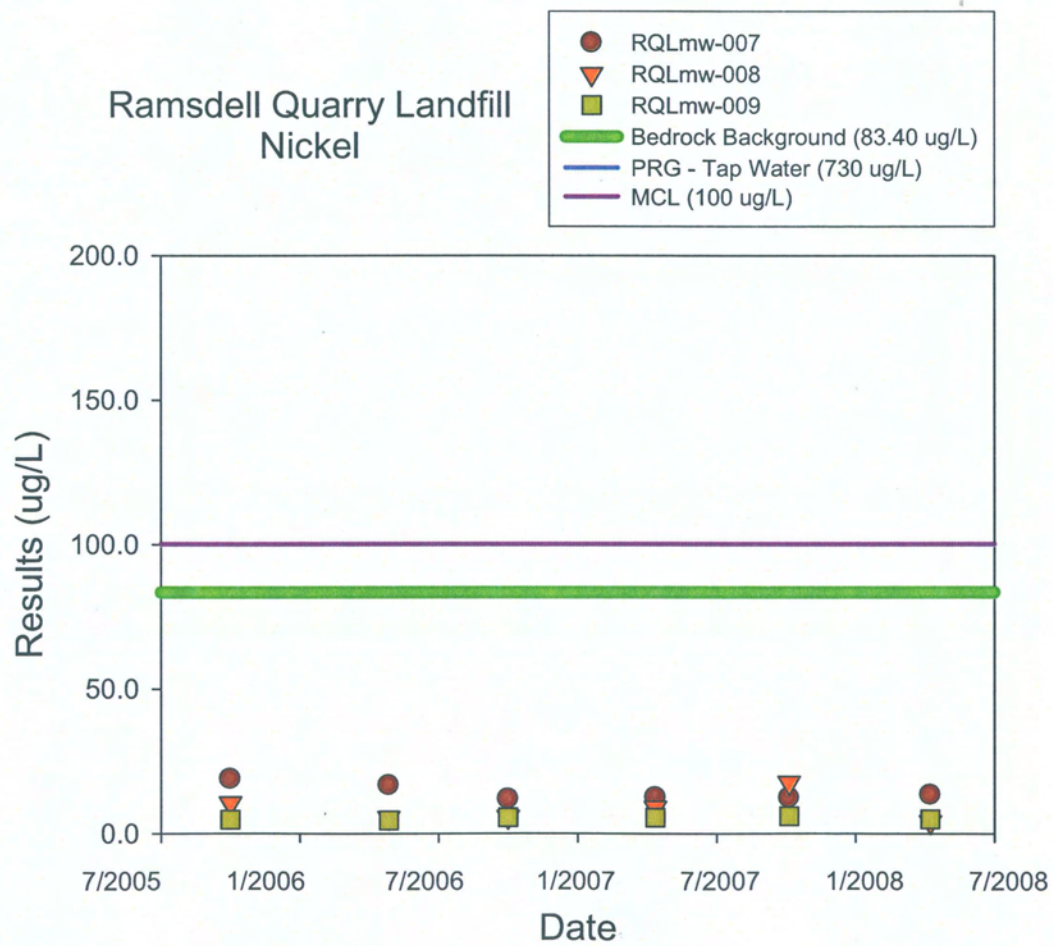
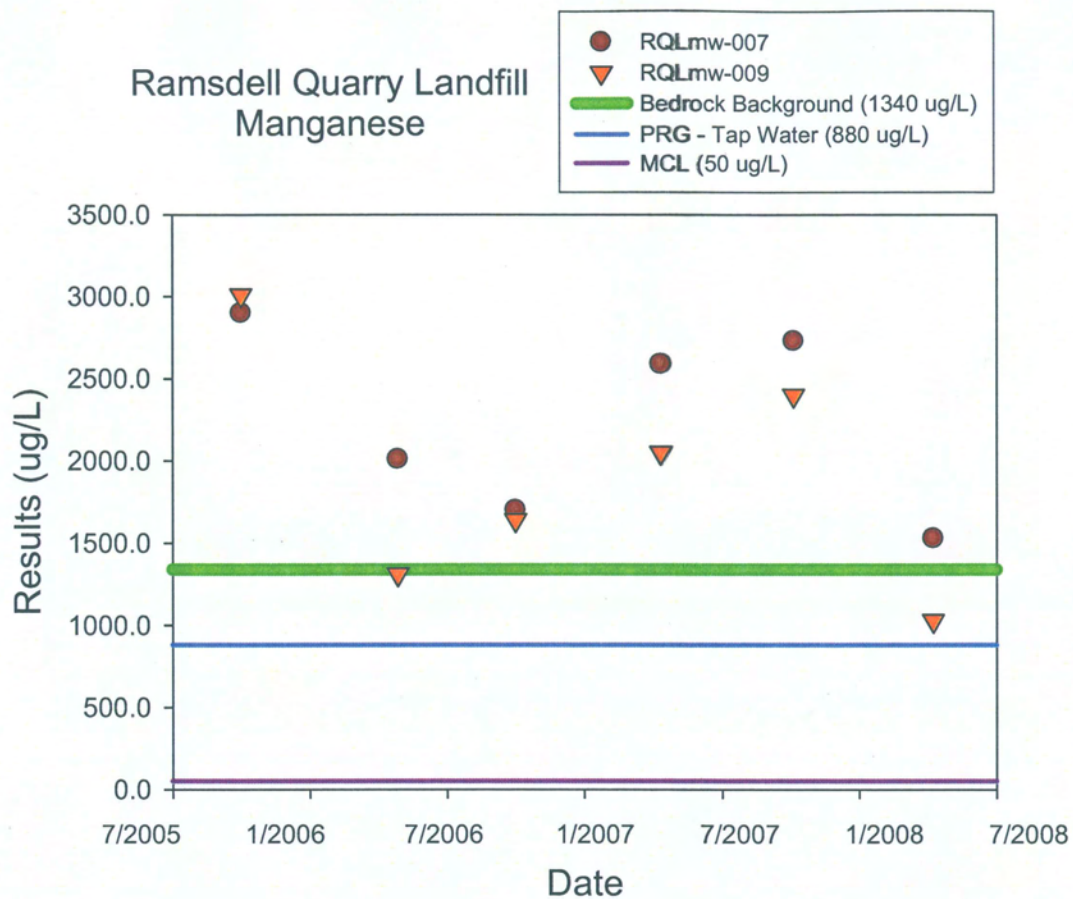


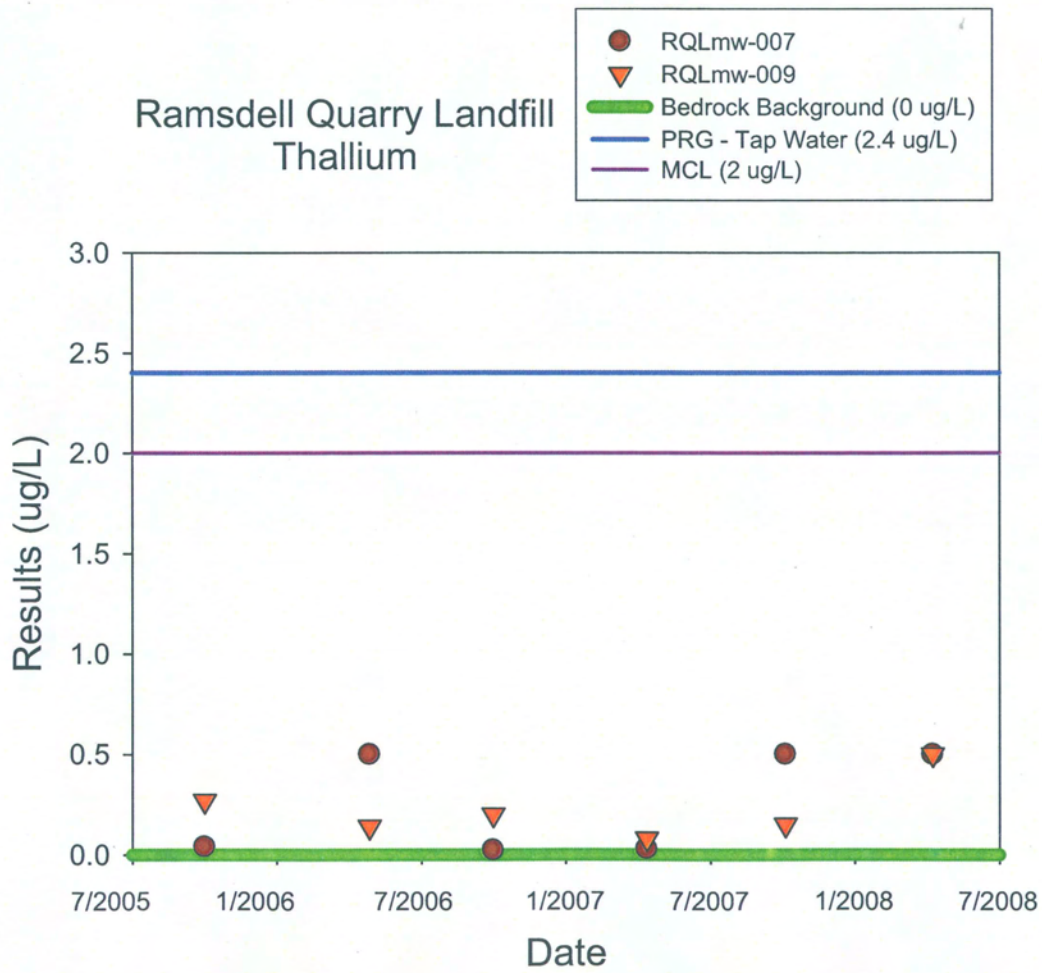
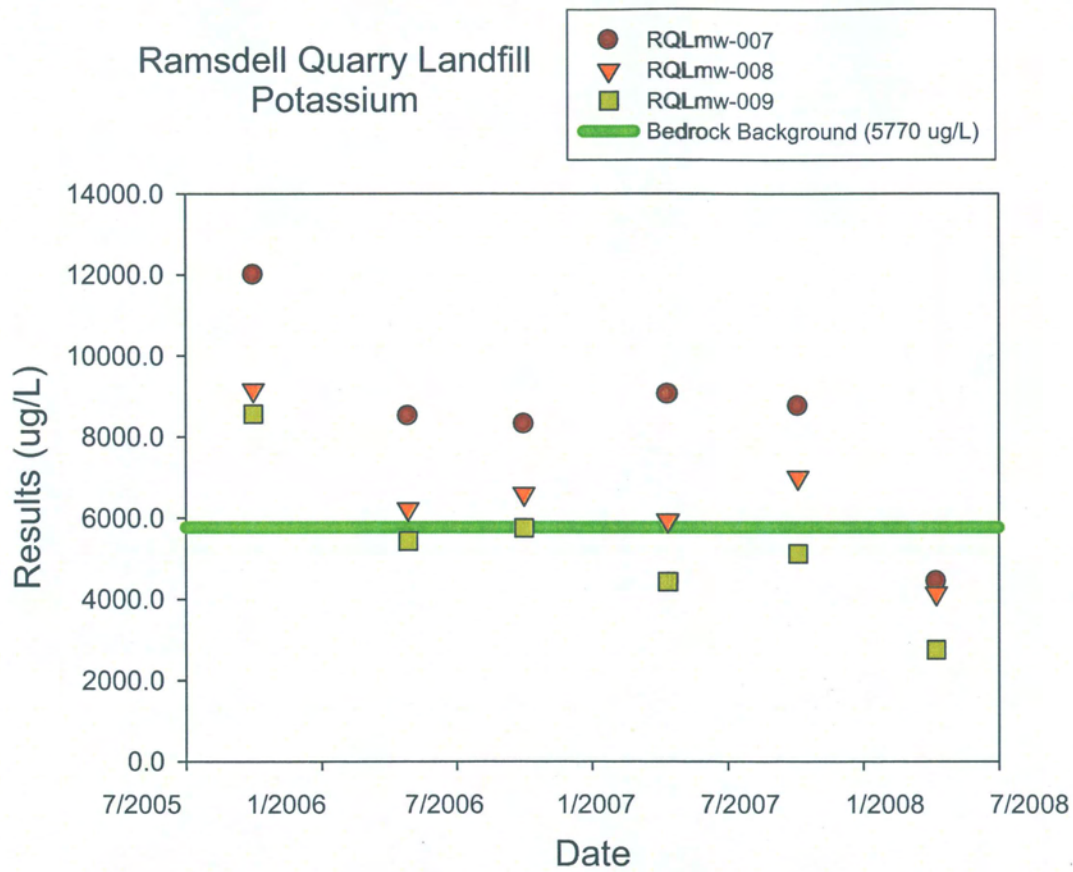




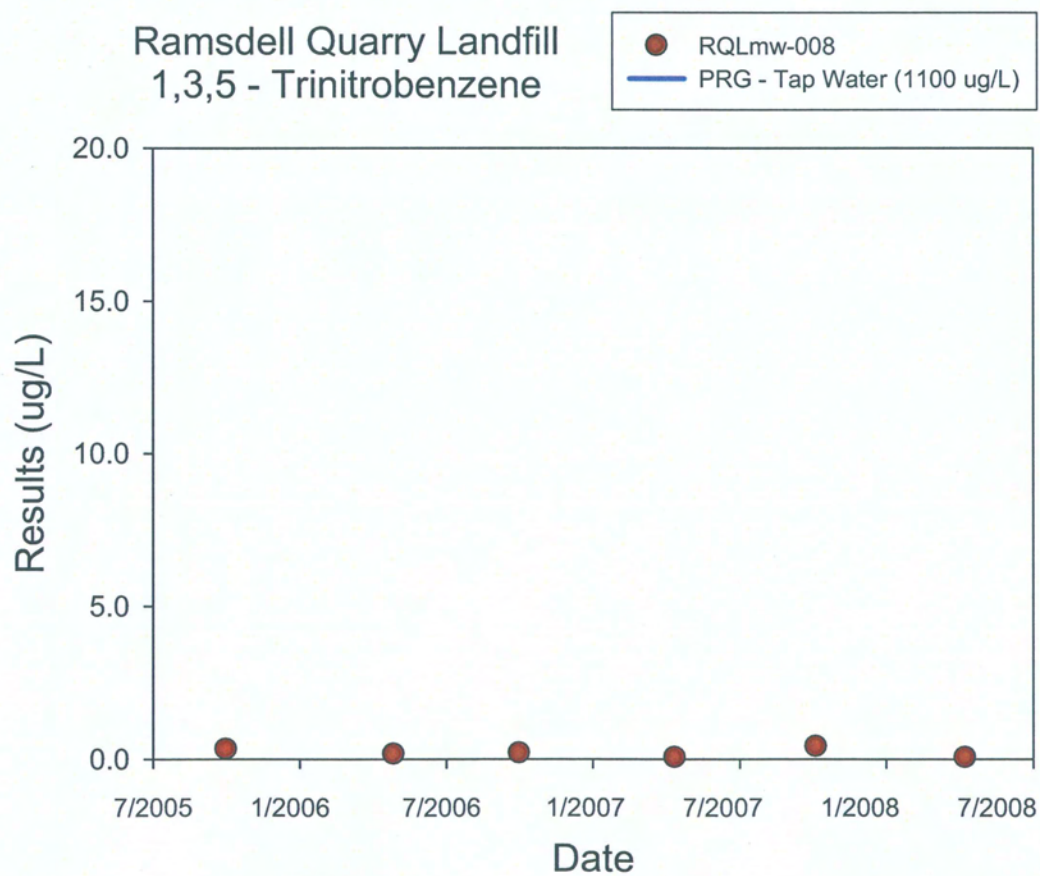
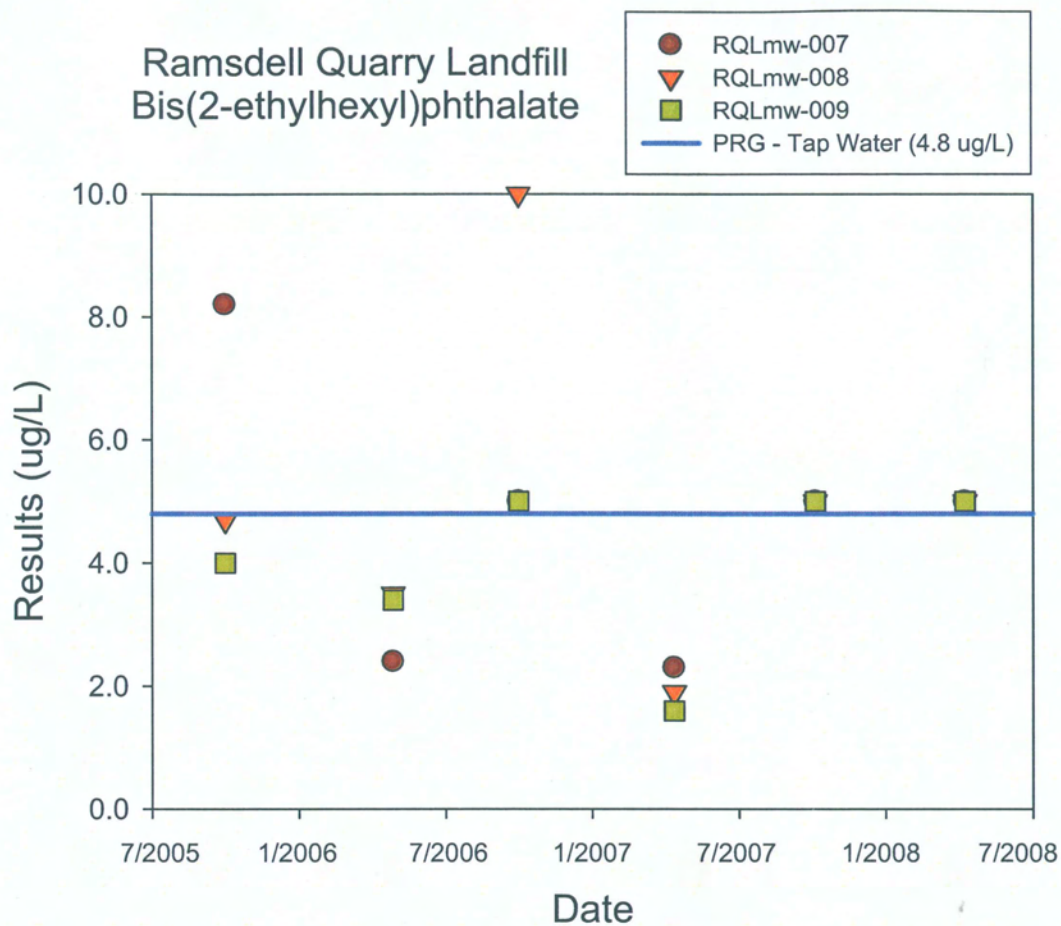


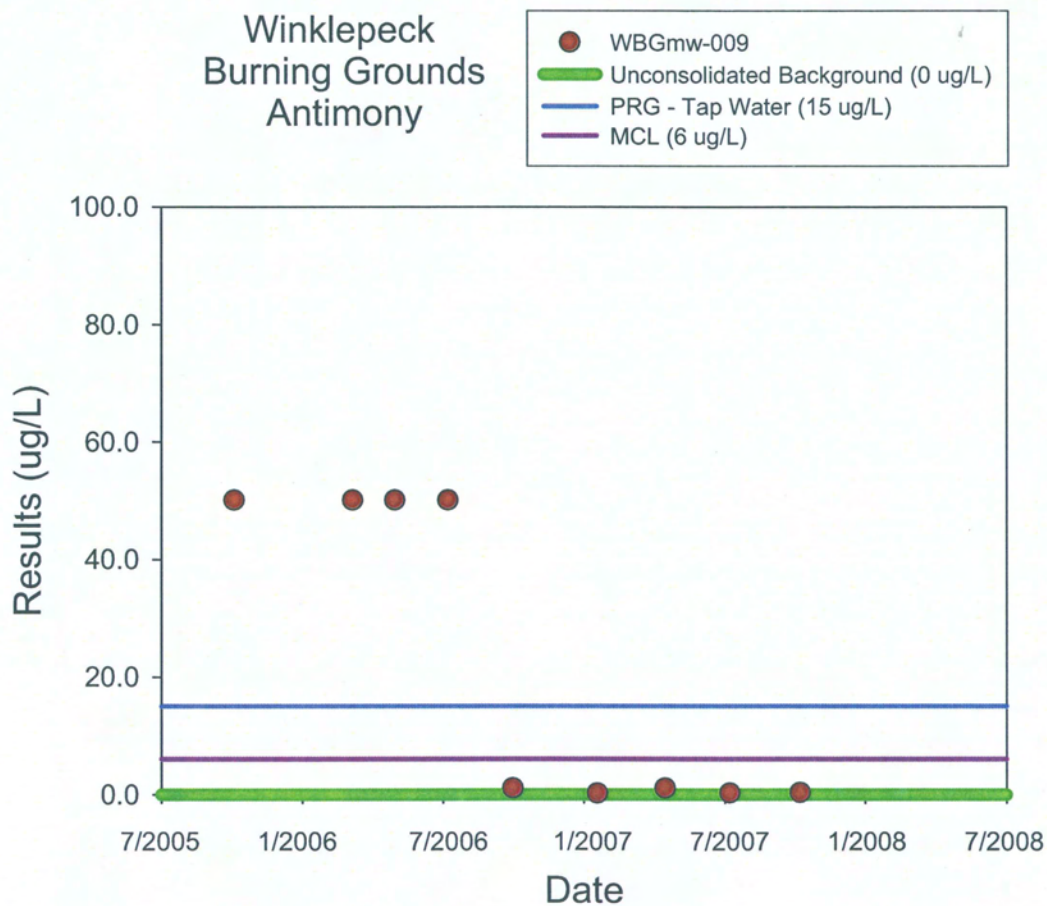
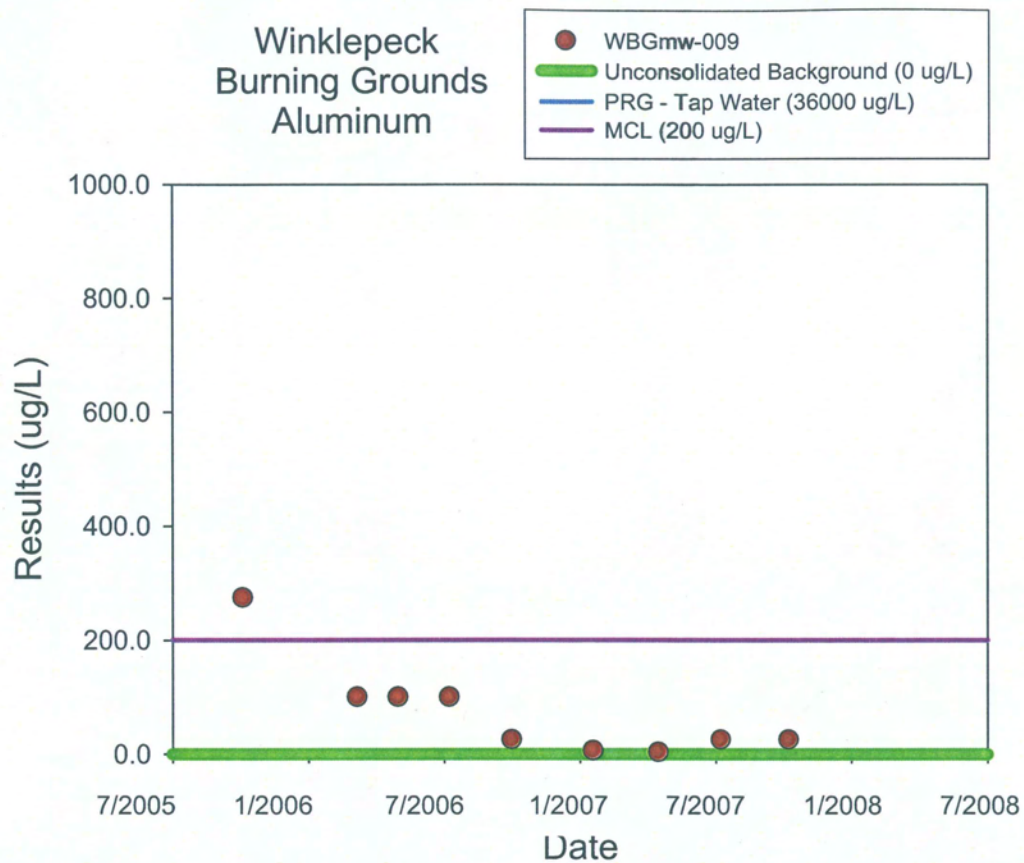




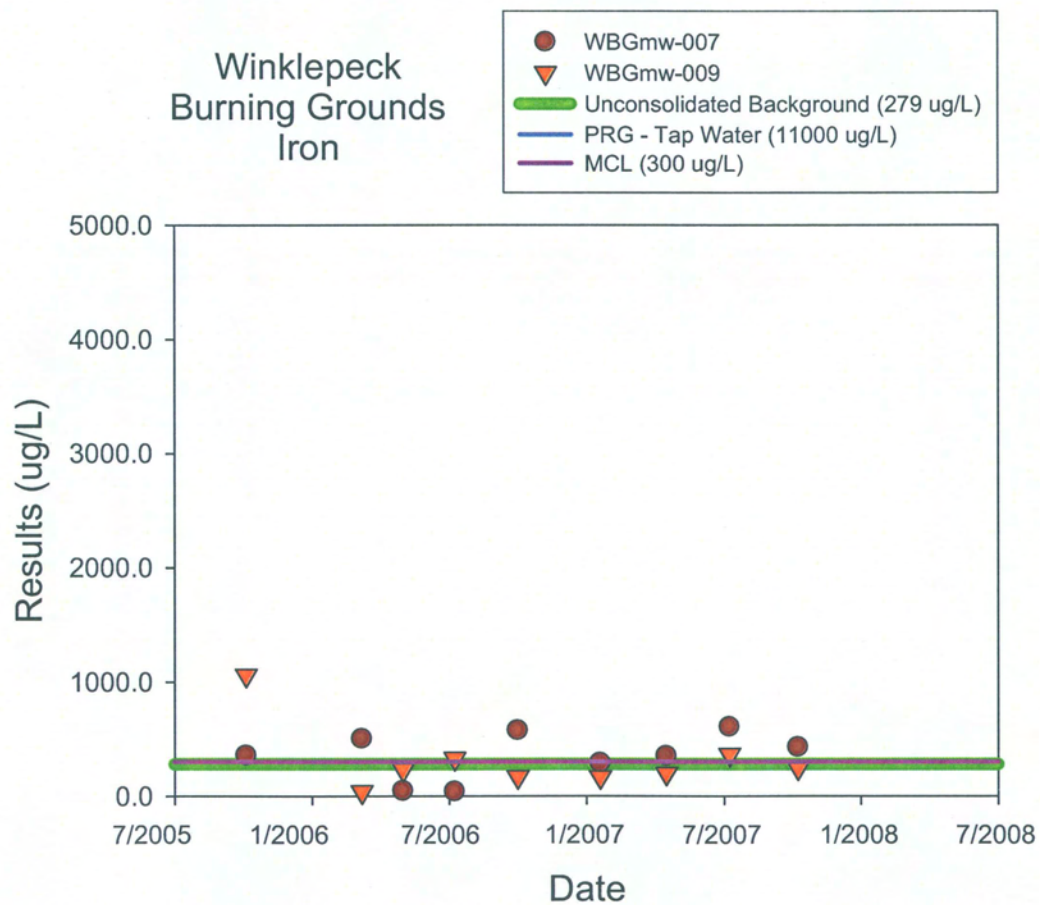
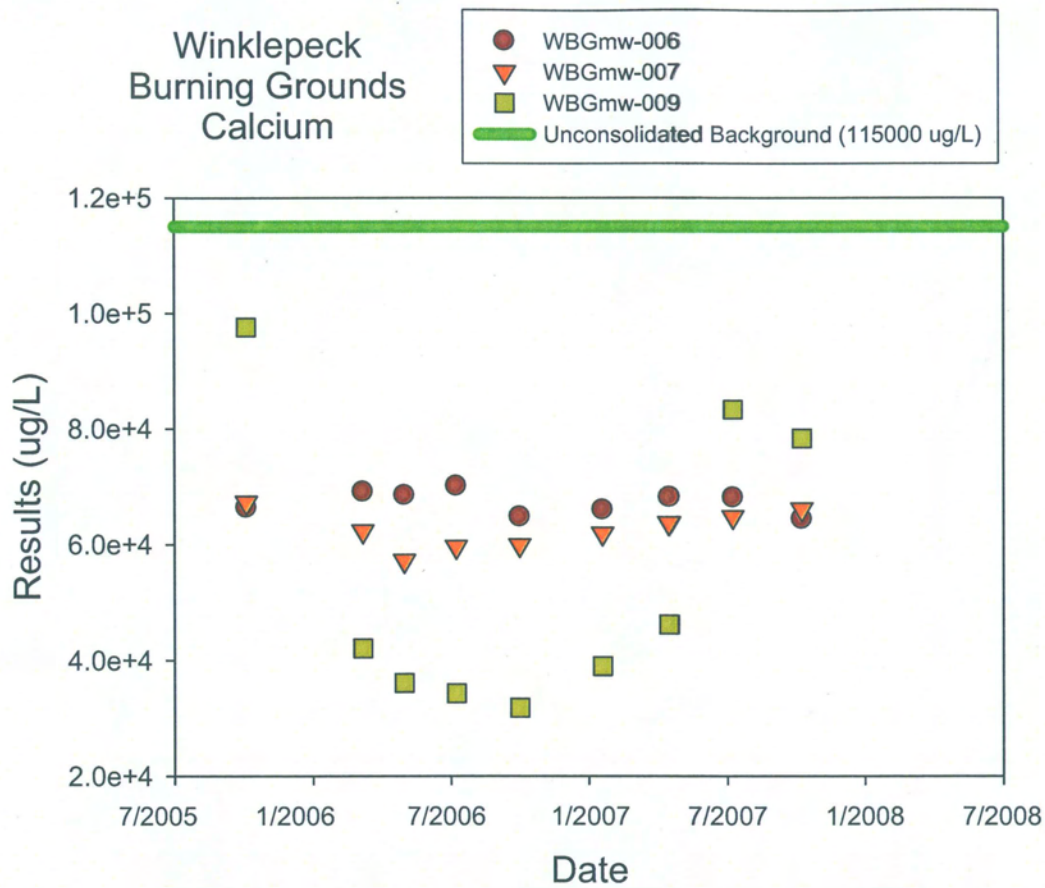


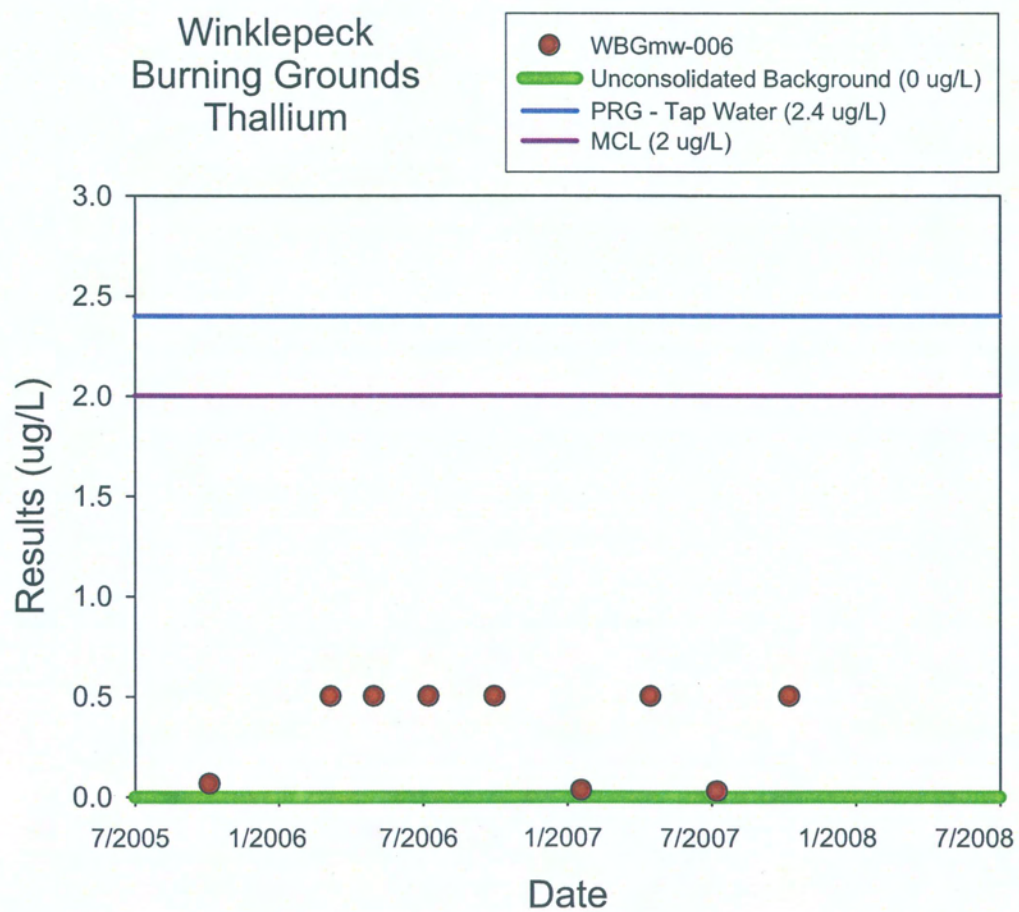
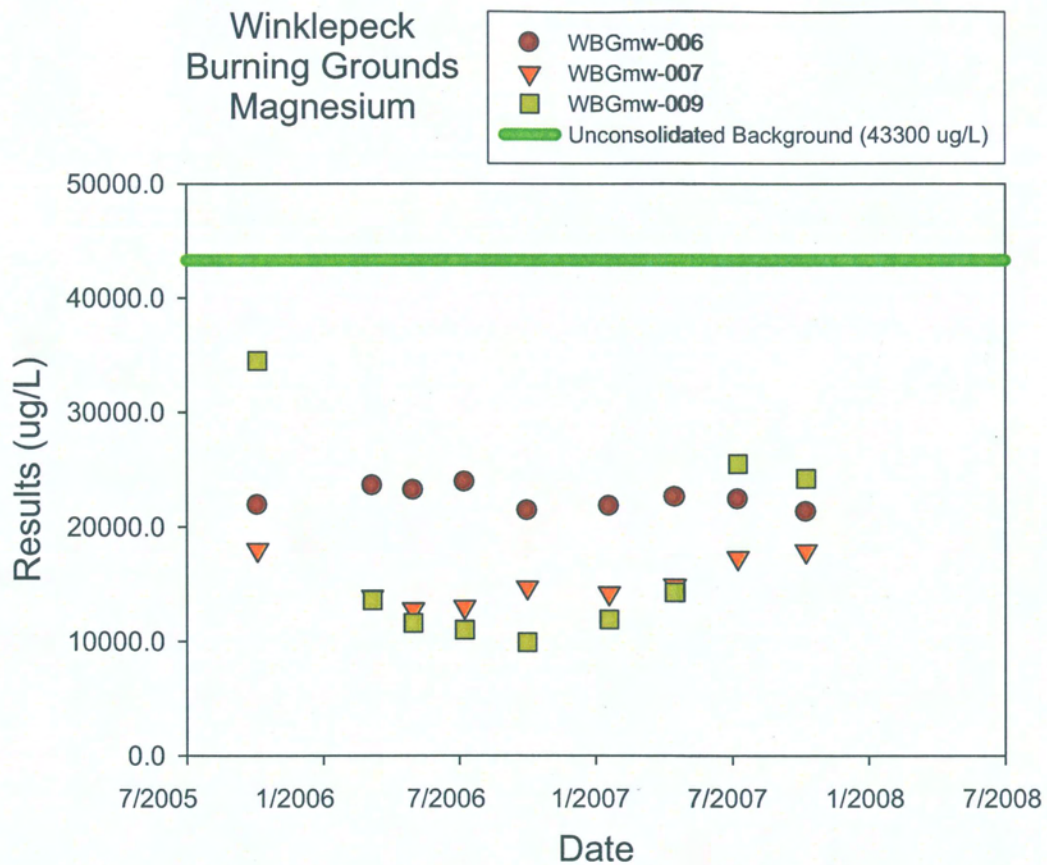




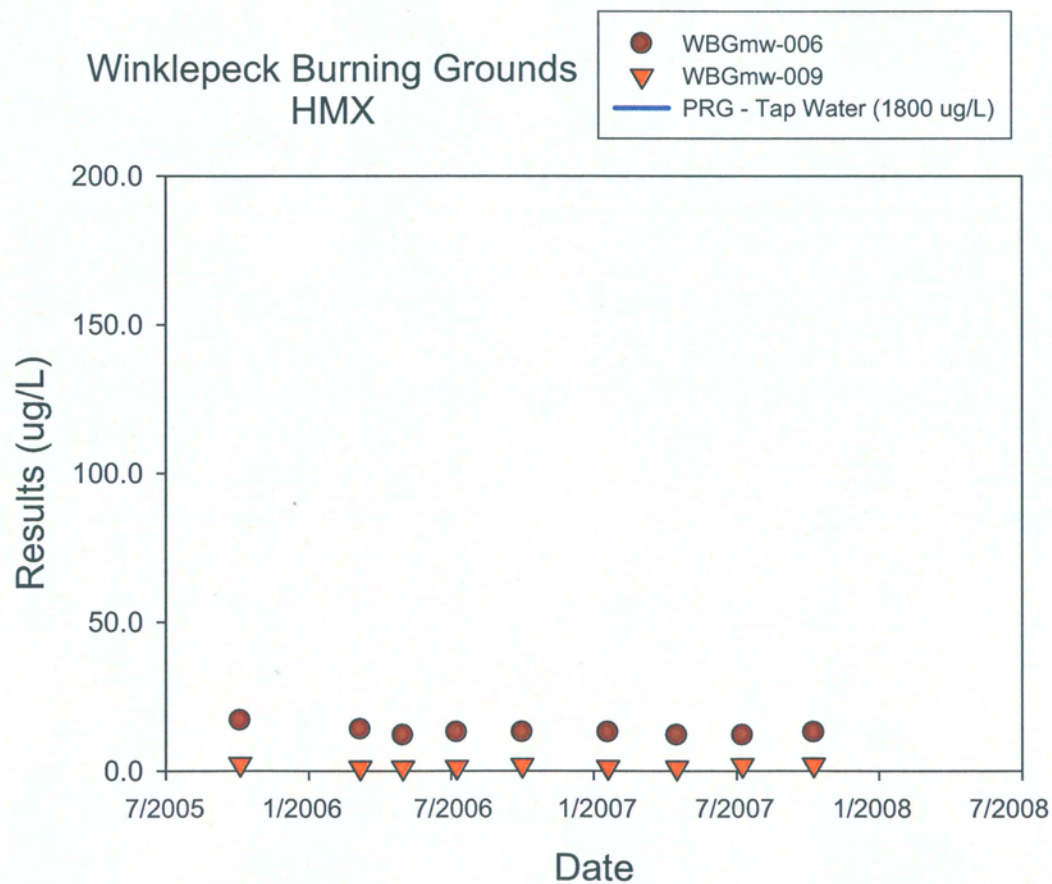
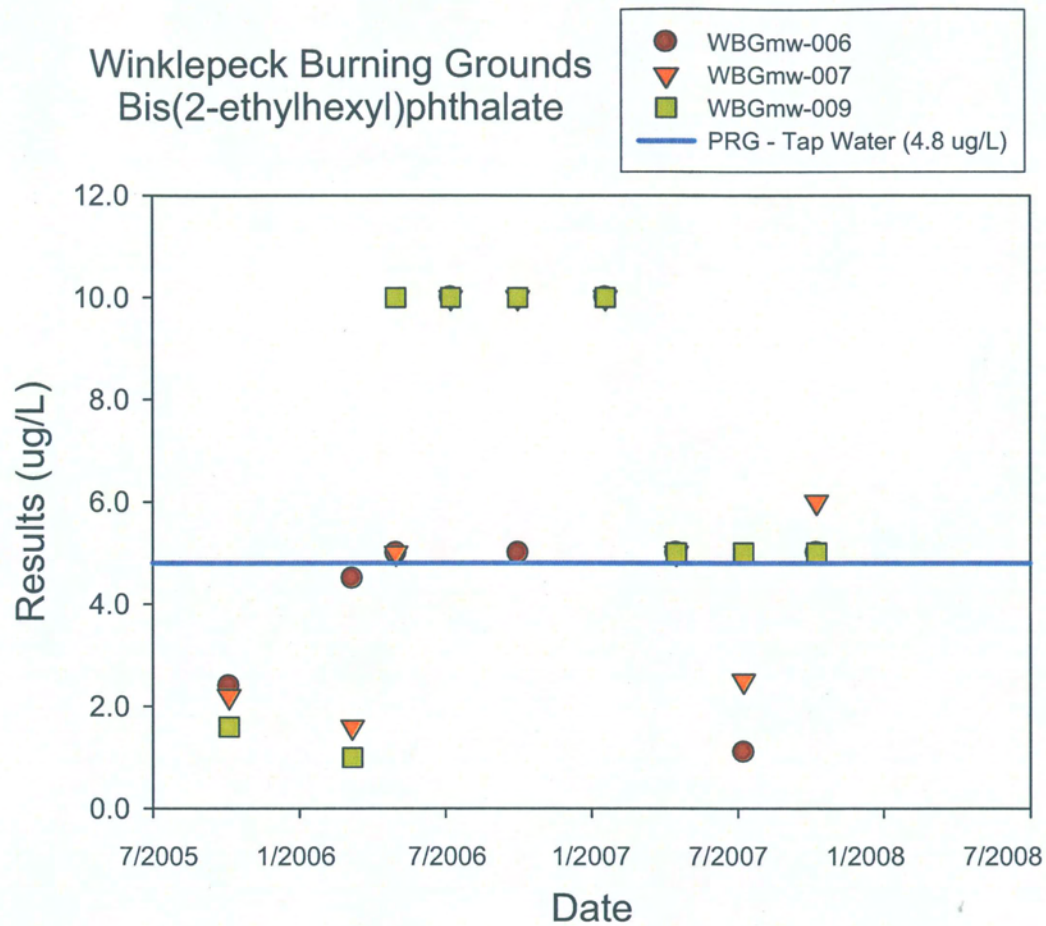


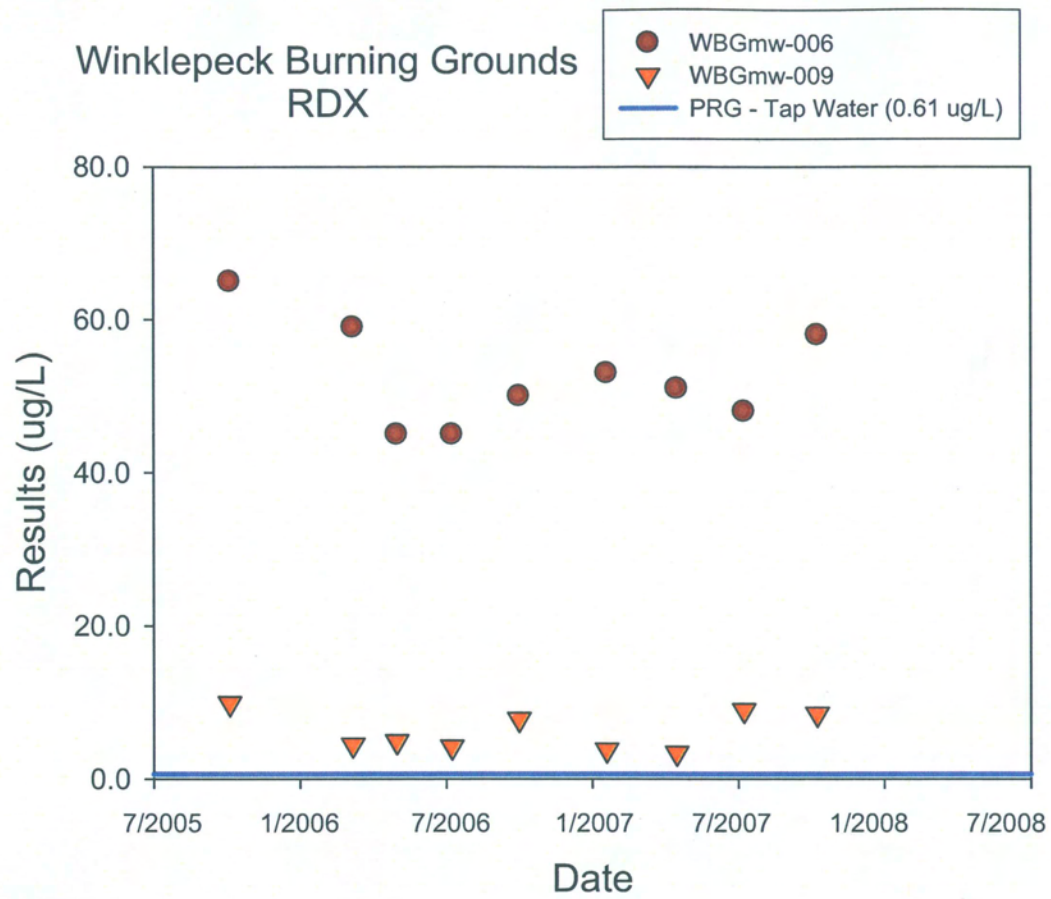






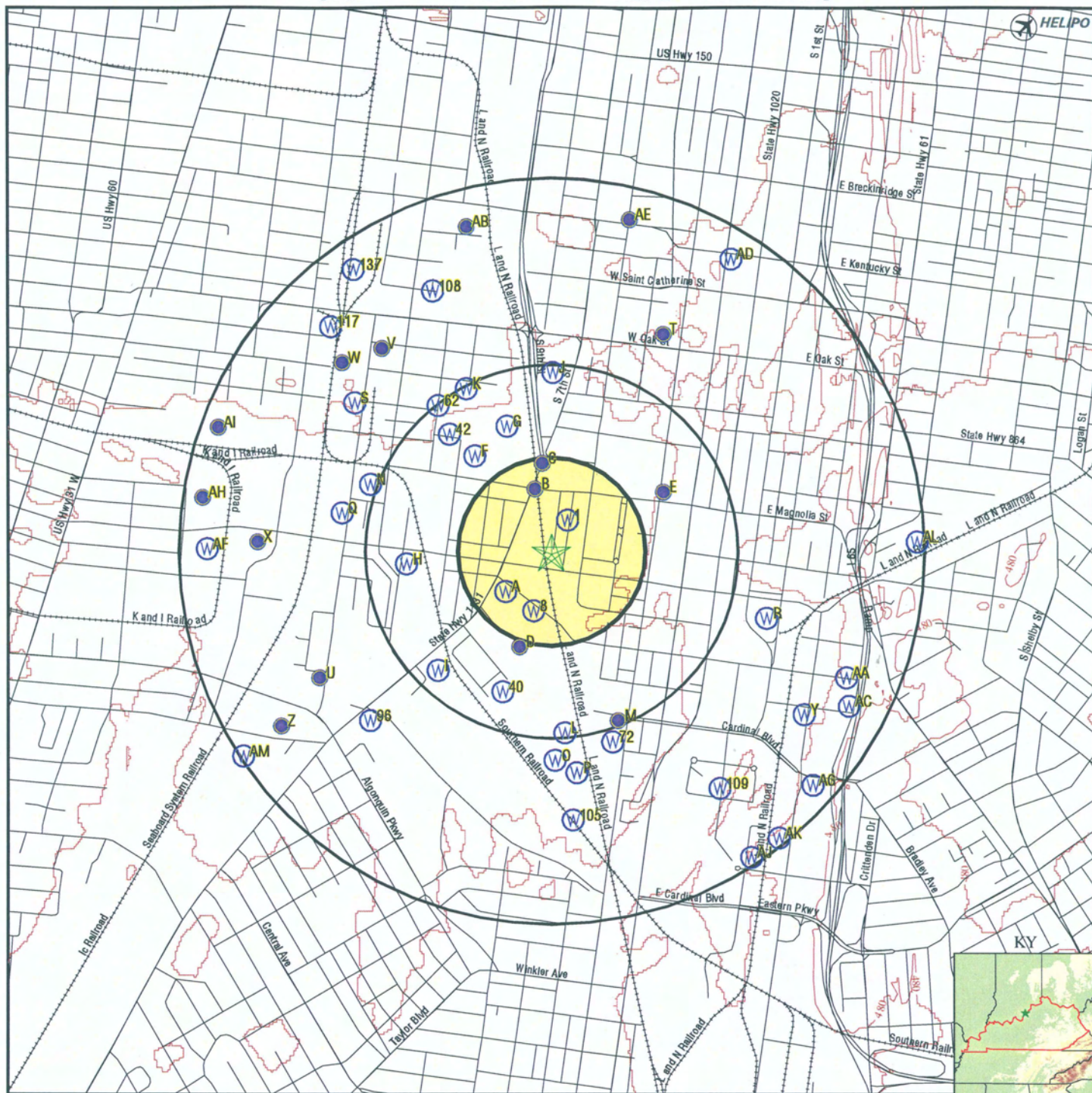








# PHYSICAL SETTING SOURCE MAP - 2351626.2s



- County Boundary
- Major Roads
- Contour Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons

- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Oil, gas or related wells

SITE NAME: Pepsi Site 1  
 ADDRESS: 625 West Hill Street  
 Louisville KY 40208  
 LAT/LONG: 38.2272 / 85.7666

CLIENT: Environmental Quality Mgmt.  
 CONTACT: Stephanie Werner  
 INQUIRY #: 2351626.2s  
 DATE: October 29, 2008 1:03 pm

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**APPENDIX H**  
**MAPS OF FWGWMP STUDY AREAS**

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**Note: The following maps have been reproduced from various separate reports. Each map has not been altered in any way from the original format from which it was copied.**



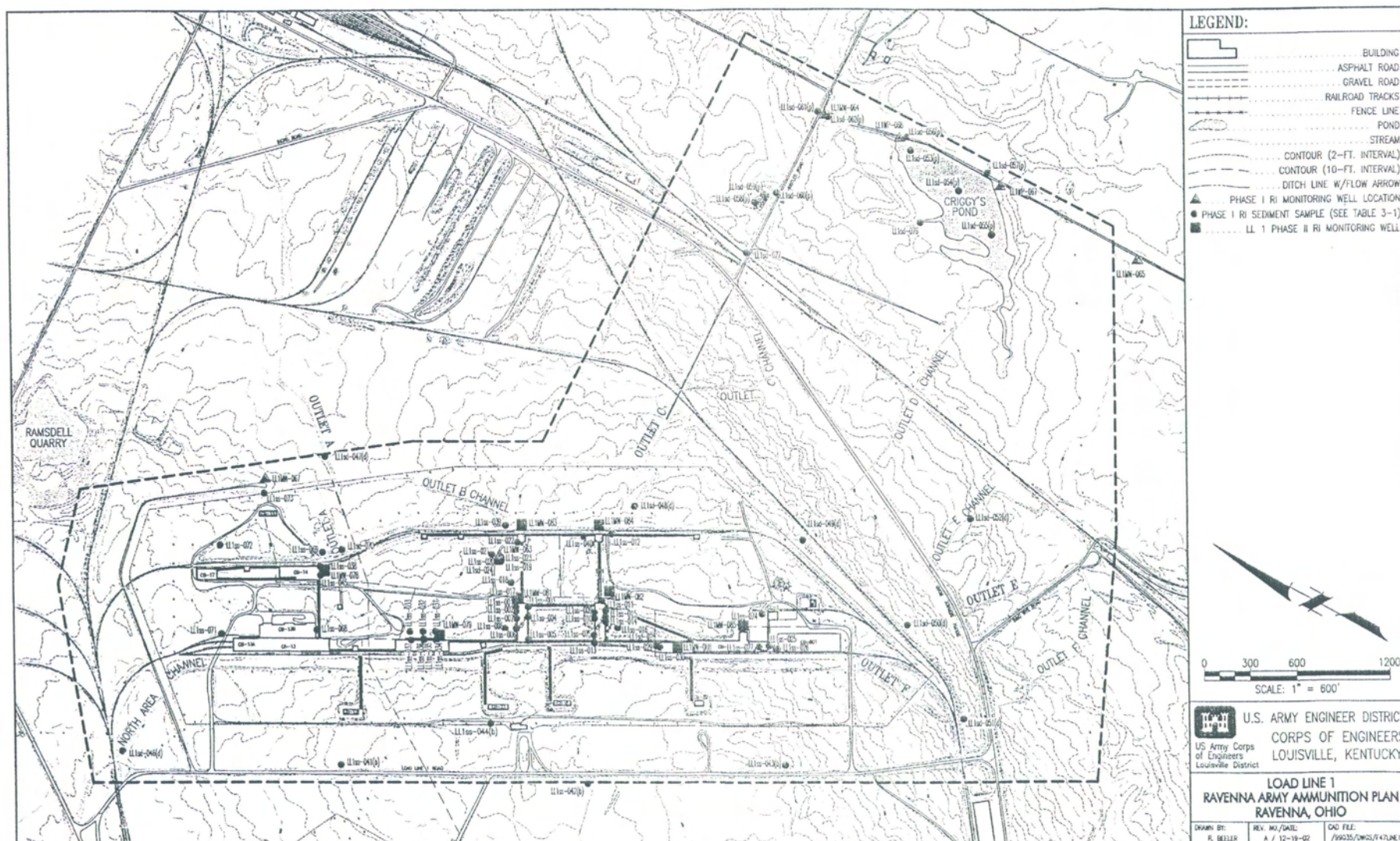


Figure 1-6. Existing Phase I RI Sampling Locations and Phase II RI Monitoring Wells at Load Line 1



2-12

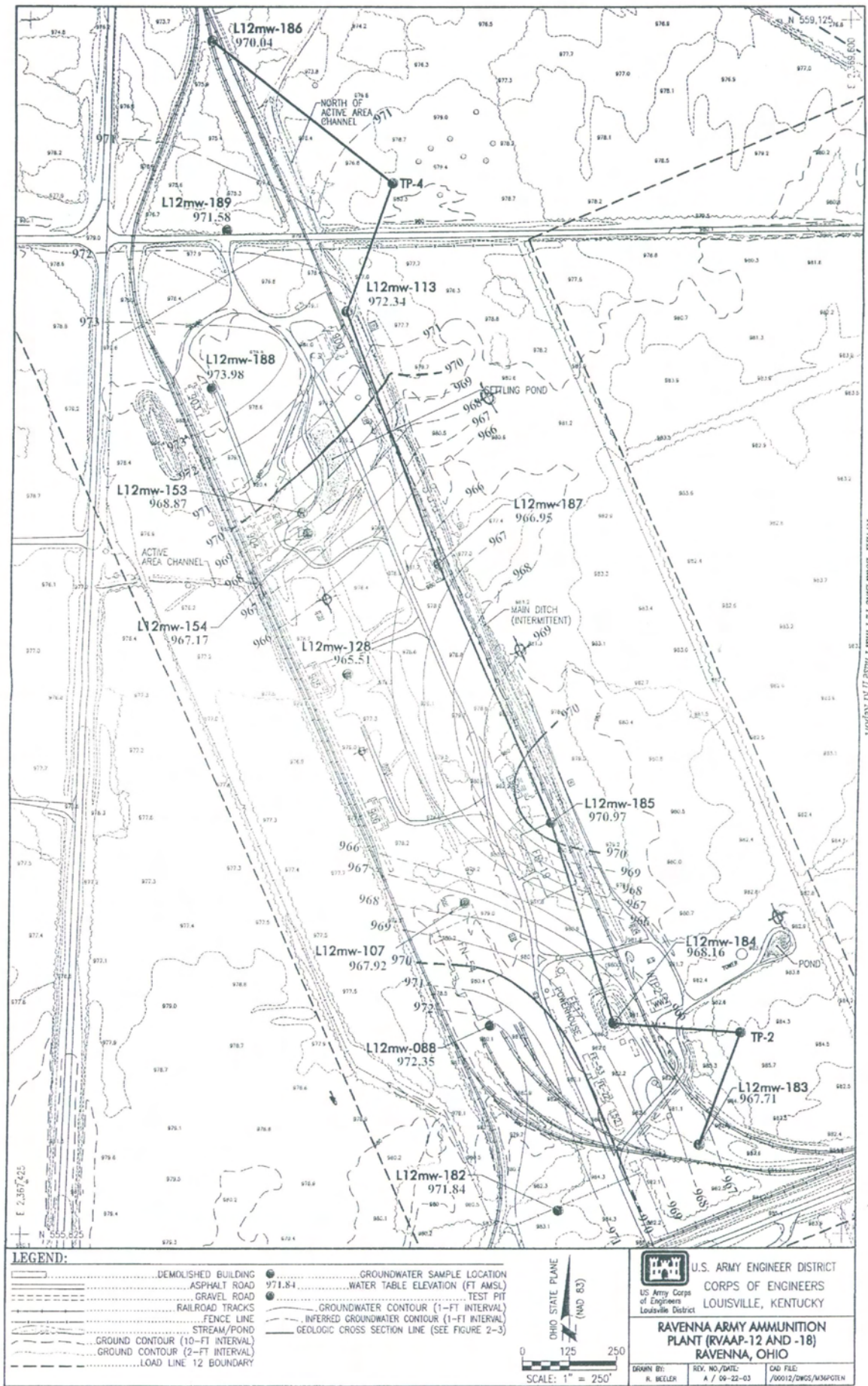


Figure 2-5. Potentiometric Groundwater Surface at Load Line 12, November 9, 2000



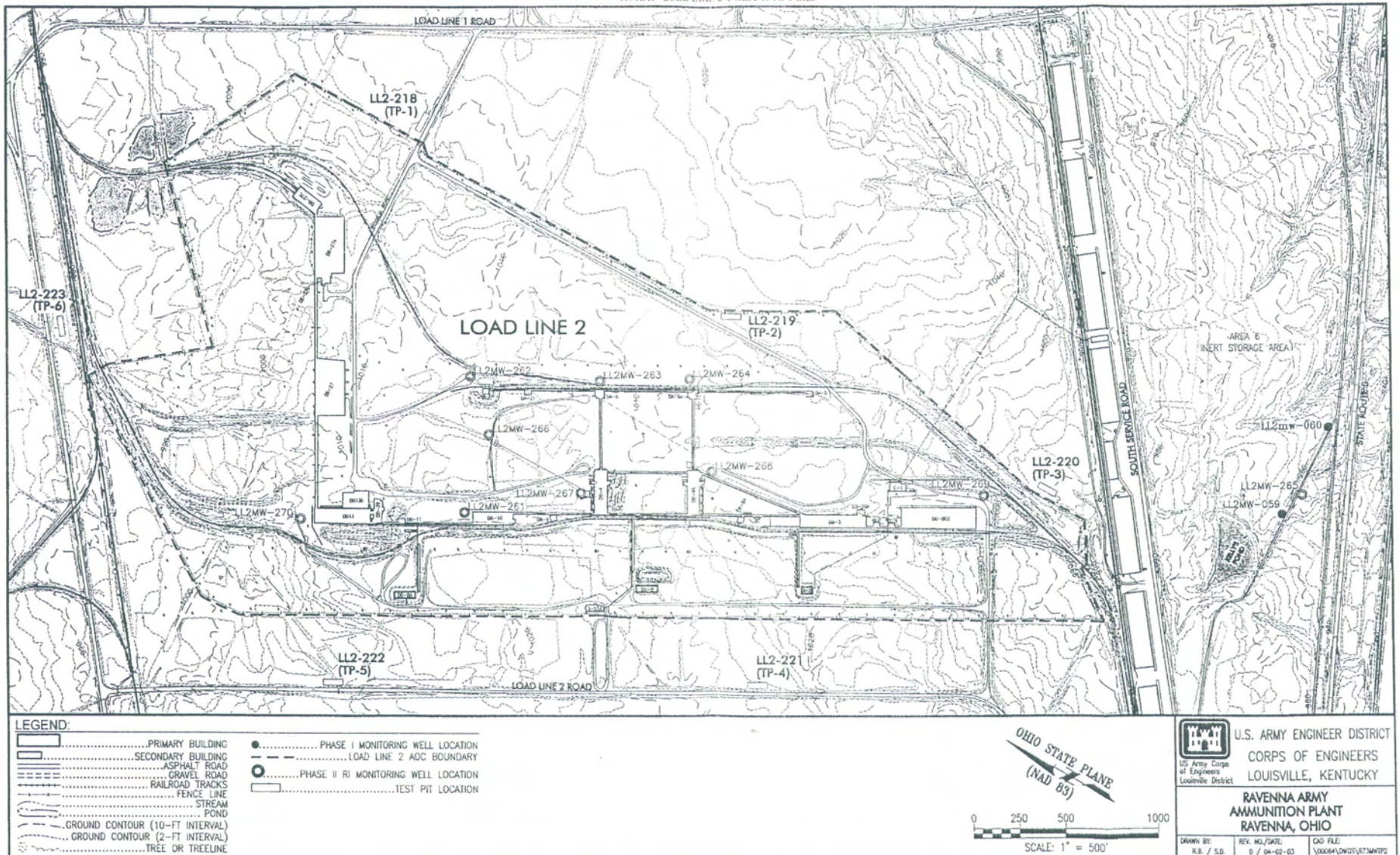


Figure 3-6. Phase II RI Monitoring Well and Test Pit Locations at Load Line 2



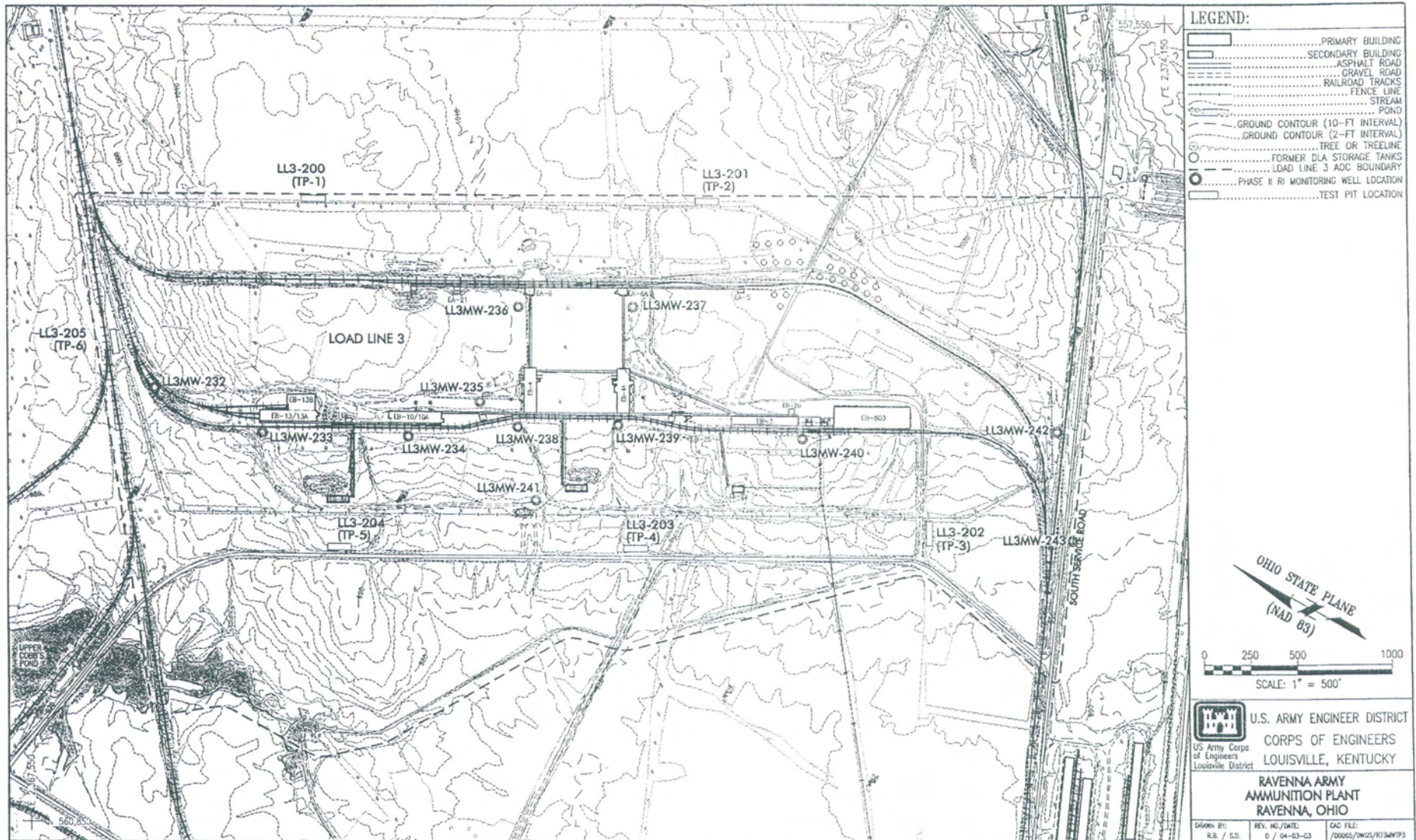
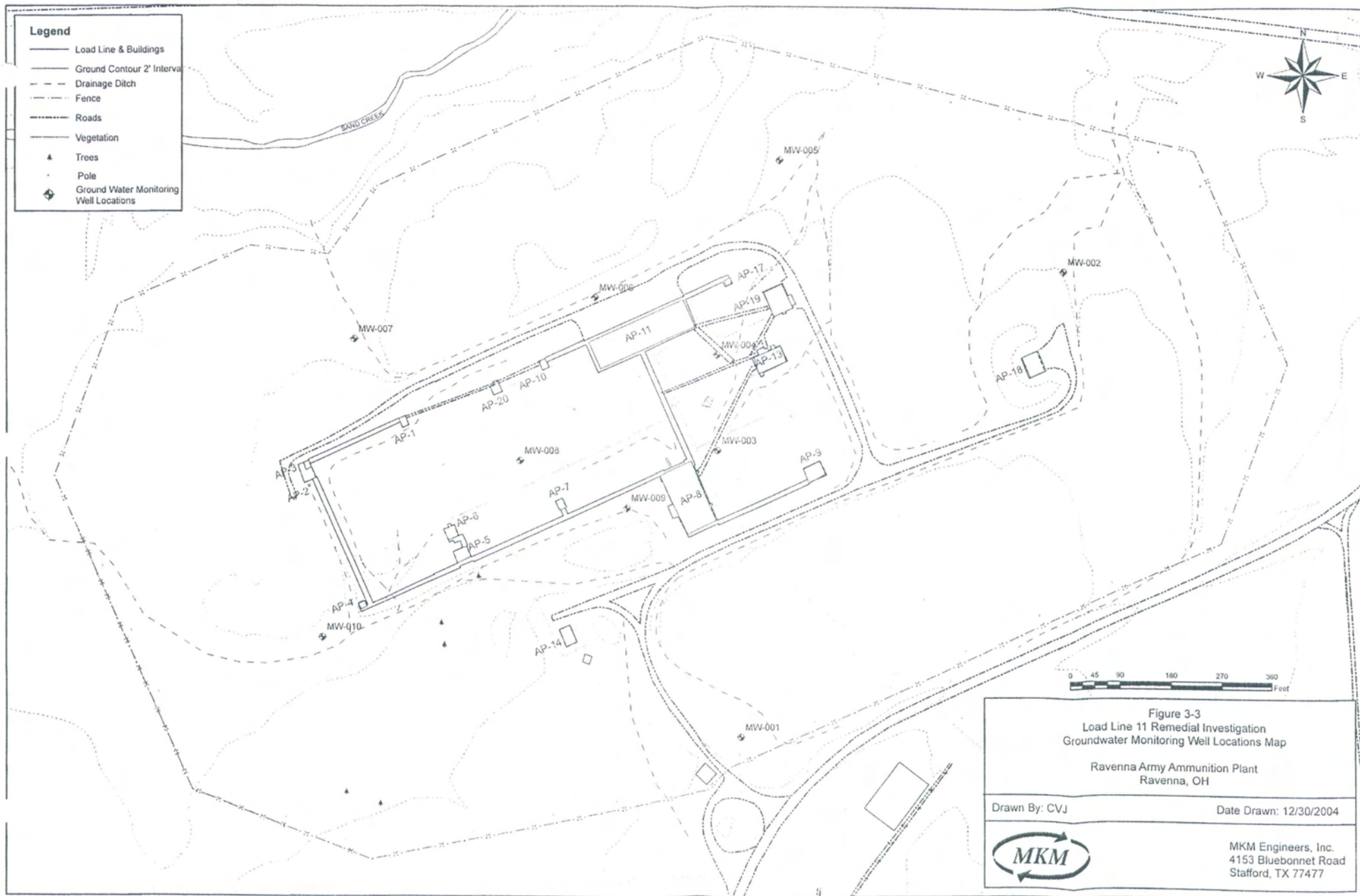


Figure 3-6. Phase II RI Monitoring Well and Test Pit Locations at Load Line 3





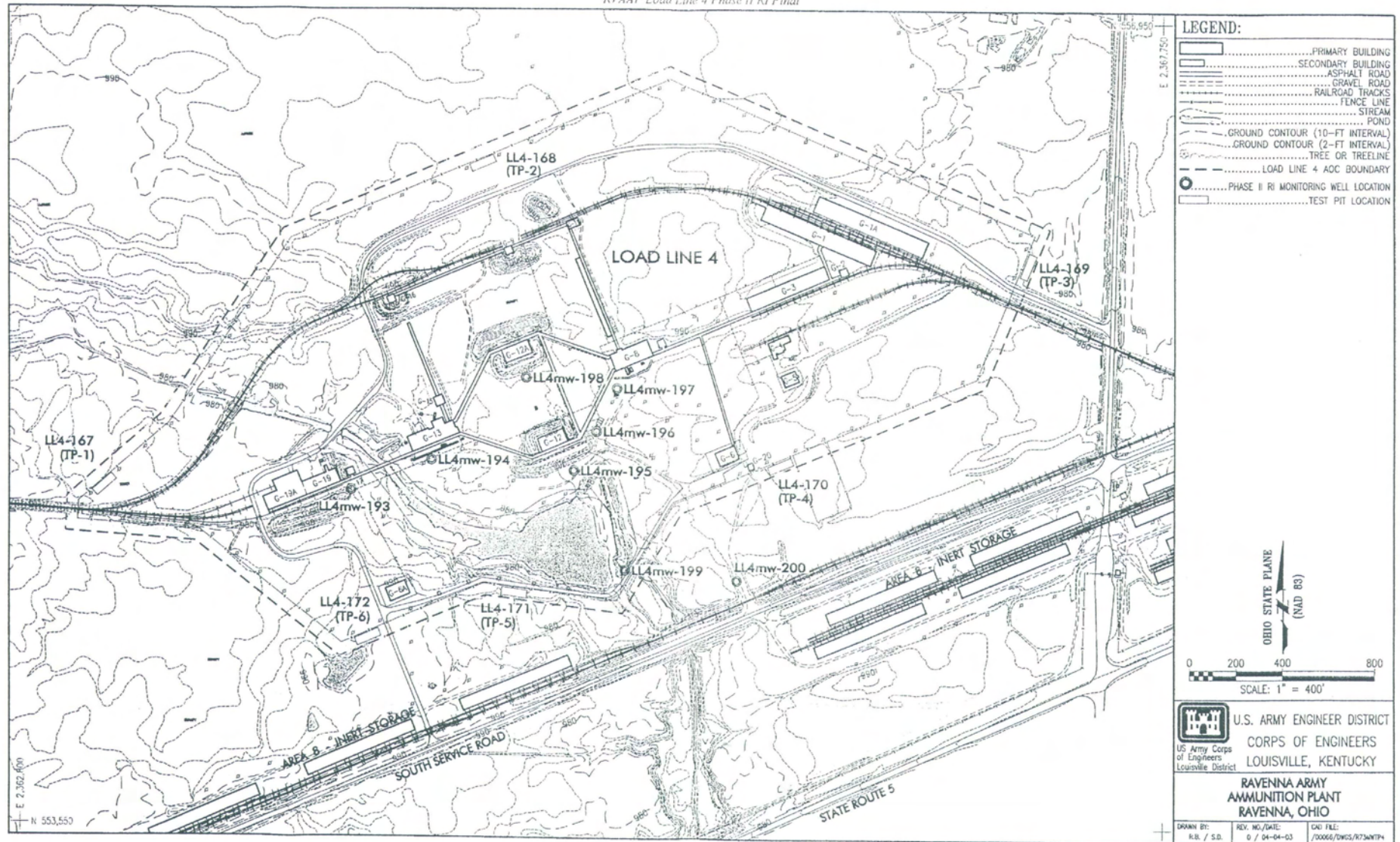


Figure 3-5. Phase II RI Monitoring Well and Test Pit Locations for Load Line 4





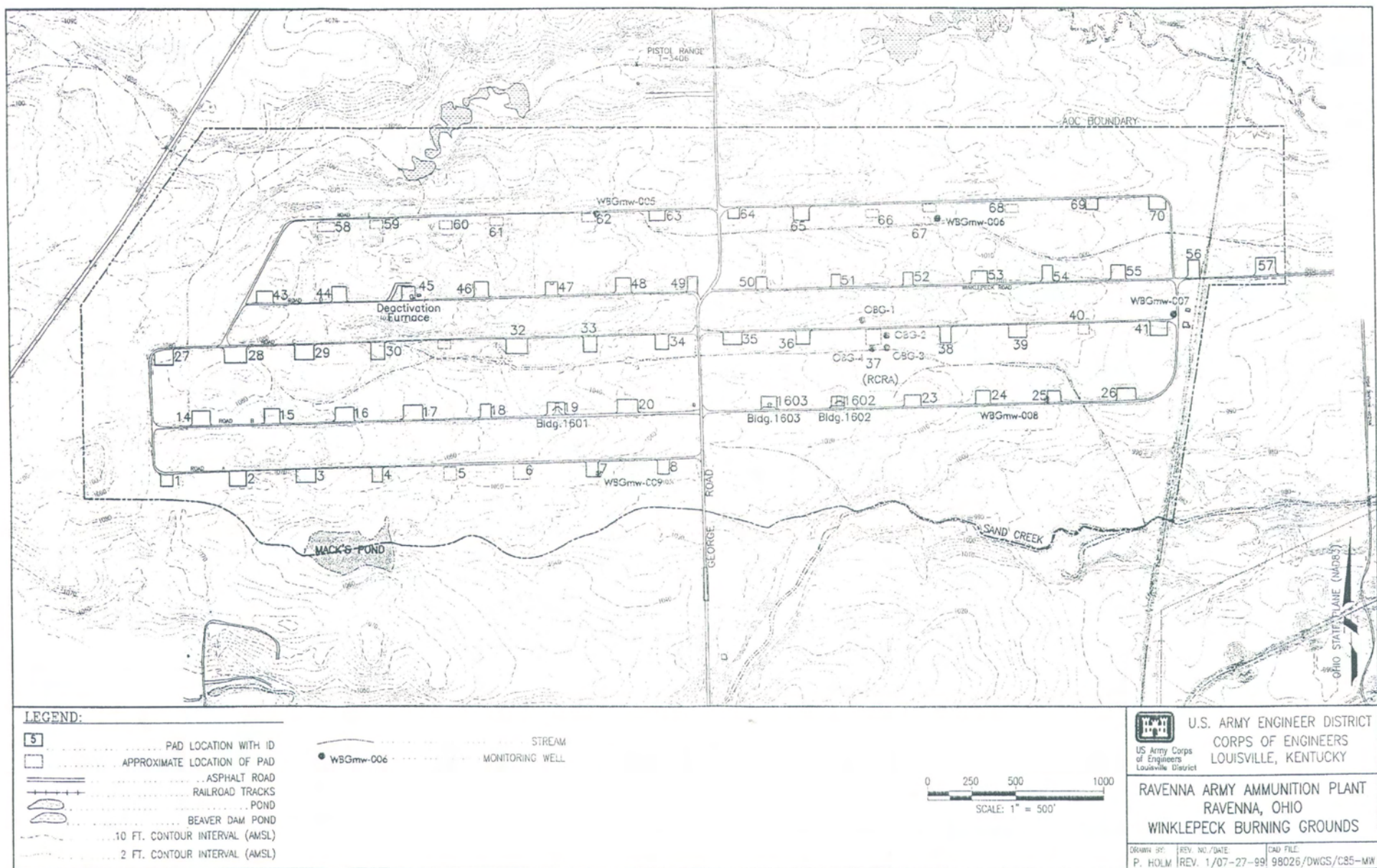
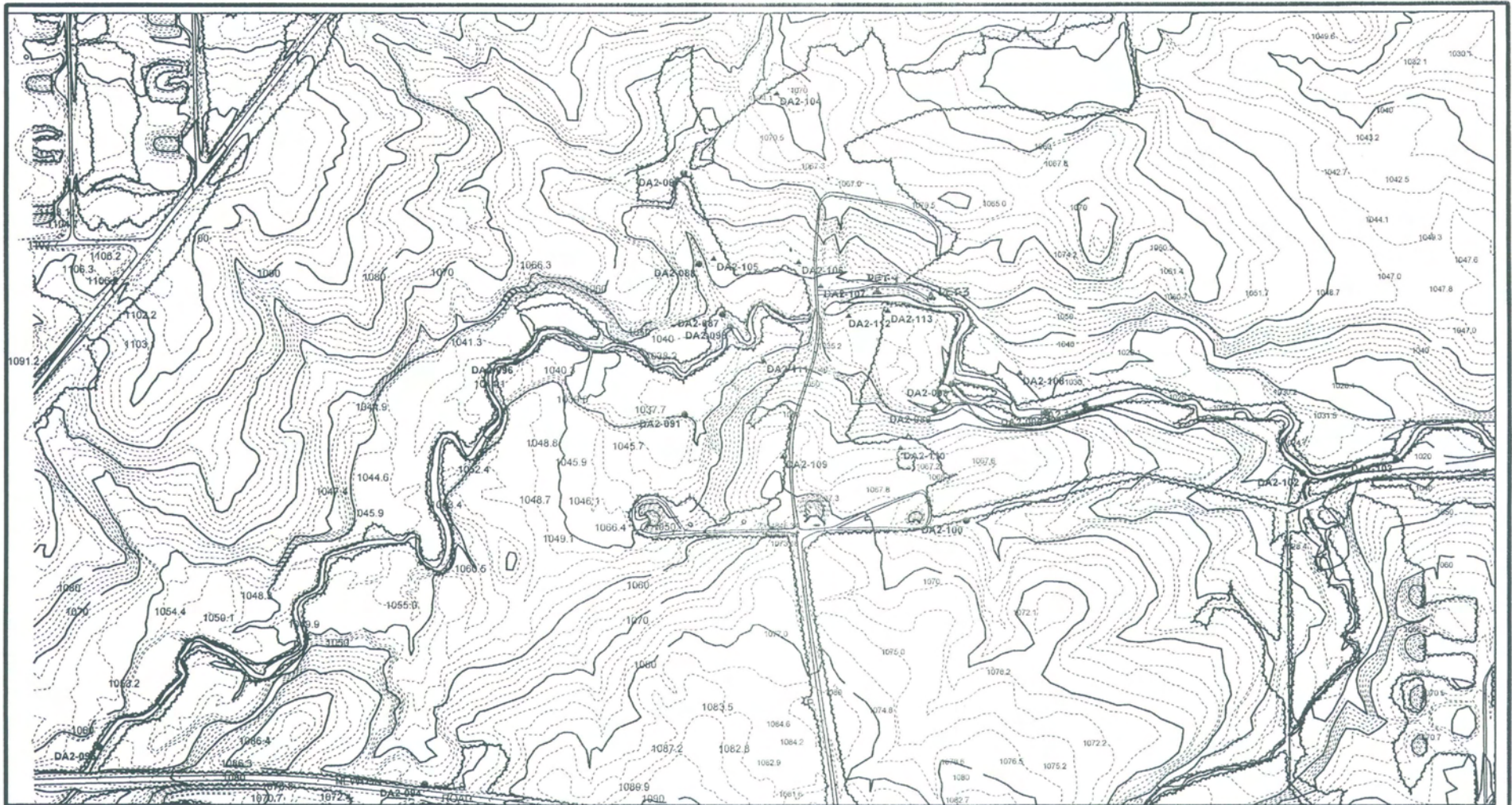


Figure 7-5 WBC Monitoring Well Locations





<p><b>DEMOLITION AREA 2</b></p> <p><b>Figure 3-2 : Sediment, Surface Water, and Groundwater Sample Location Map</b></p>	<p align="center"><b>Legend</b></p> <table border="0"> <tr> <td><b>Sample Type</b></td> <td>● Sediment/Surface Water</td> <td><b>Features</b></td> <td>— Water</td> </tr> <tr> <td></td> <td>▲ Monitor Well</td> <td>— Roads</td> <td>— Fence</td> </tr> <tr> <td></td> <td></td> <td>— Rail Road</td> <td>--- 2' Contour</td> </tr> <tr> <td></td> <td></td> <td>— Vegetation</td> <td>— 10' Contour</td> </tr> </table>	<b>Sample Type</b>	● Sediment/Surface Water	<b>Features</b>	— Water		▲ Monitor Well	— Roads	— Fence			— Rail Road	--- 2' Contour			— Vegetation	— 10' Contour	<p align="center"><b>Monitoring Wells / Surface Water/ Sediment Map</b></p> <div style="display: flex; align-items: center;"> <div style="margin-right: 10px;"> <p align="center">N</p> </div> <div> <p>Drawn By: Chantelle Carroll</p> <hr/> <p>Sheet No. ArcView File: Ravenna_Sediment_SWGW</p> <hr/> <p>FLLINE5/R1415/R151 Date: 5-10-03</p> </div> </div>
		<b>Sample Type</b>	● Sediment/Surface Water	<b>Features</b>	— Water													
	▲ Monitor Well	— Roads	— Fence															
		— Rail Road	--- 2' Contour															
		— Vegetation	— 10' Contour															



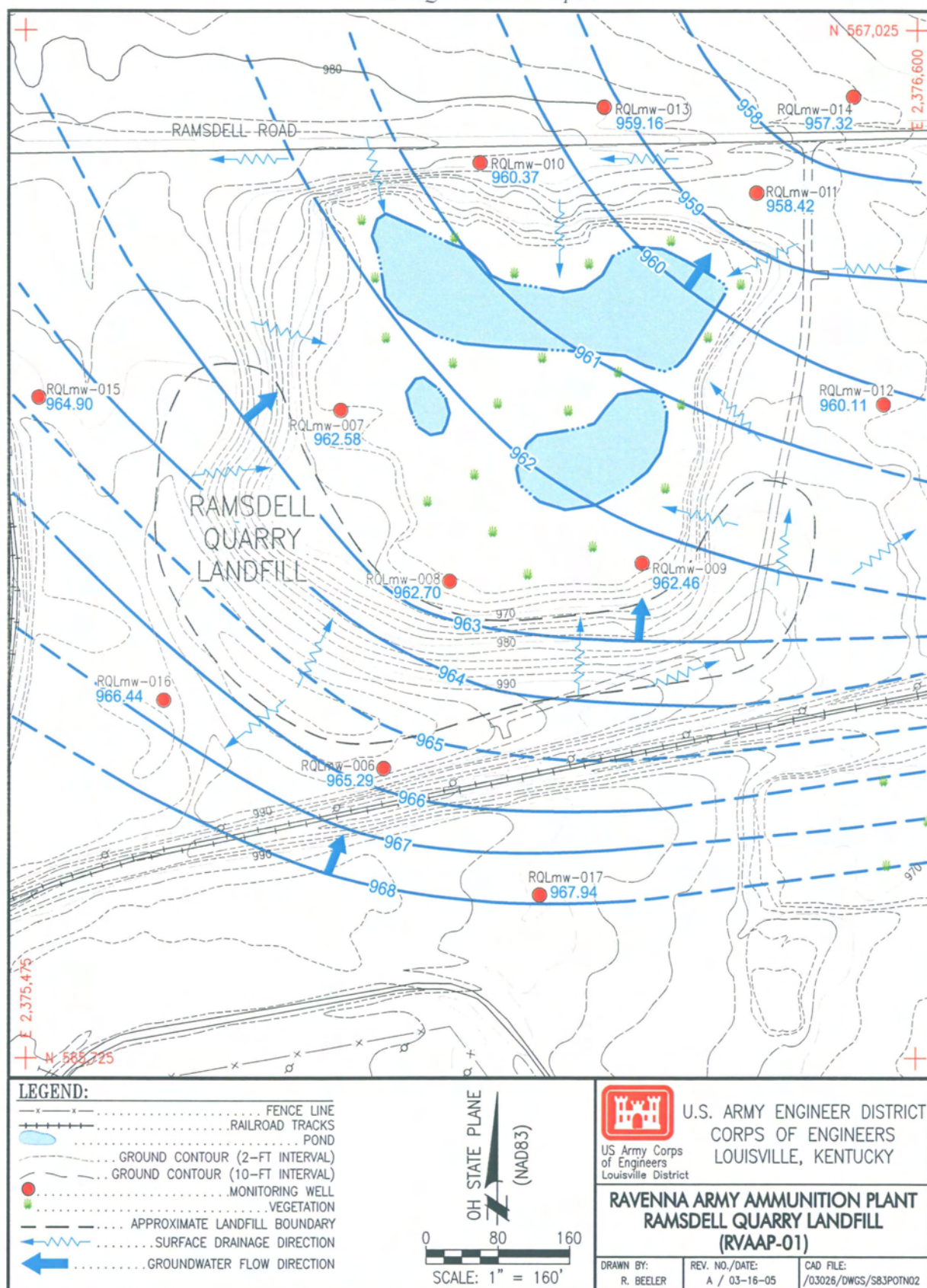


Figure 2-4. Ramsdell Quarry Potentiometric Surface, May 2004

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## **APPENDIX I**

### **REPORTING LIMITS THAT CURRENTLY DO NOT MEET THE RVAAP QAAP PQLS AND/OR REGION 9 PRGS**

### VOCs

CAS No	Analyte Name	MDL	Lab RL	RVAAP QAPP PQL	Region 9 PRG
107-06-2	1,2-Dichloroethane	0.16	1.0	1.0	0.12
71-43-2	Benzene	0.22	1.0	1.0	0.35
67-66-3	Chloroform	0.16	1.0	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	0.12	1.0	1.0	0.4
75-01-4	Vinyl chloride	0.21	1.0	1.0	0.02
79-34-5	1,1,2,2-Tetrachloroethane	0.22	1.0	1.0	0.055
106-93-4	1,2-Dibromoethane	0.24	1.0	1.0	0.0056
79-01-6	Trichloroethene	0.28	1.0	1.0	0.028
127-18-4	Tetrachloroethene	0.19	1.0	1.0	0.1
75-27-4	Bromodichloromethane	0.14	1.0	1.0	0.18
79-00-5	1,1,2-Trichloroethane	0.22	1.0	1.0	0.2
124-48-1	Dibromochloromethane	0.19	1.0	1.0	0.13
10061-02-6	trans-1,3-Dichloropropene	0.17	1.0	1.0	0.4
56-23-5	Carbon tetrachloride	0.19	1.0	1.0	0.17

Note: All units are ug/L

### SVOCs

CAS No	Analyte Name	MDL	Lab RL	RVAAP QAPP PQL	Region 9 PRG
111-44-4	Bis(2-Chloroethyl) ether	0.088	1.0	10	0.01
50-32-8	Benzo(a)pyrene	0.048	0.20	10	0.0092
53-70-3	Dibenz(a,h)anthracene	0.039	0.20	10	0.0093
118-74-1	Hexachlorobenzene	0.065	0.20	10	0.042
205-99-2	Benzo(b)fluoranthene	0.049	0.20	10	0.092
193-39-5	Indeno(1,2,3-cd)pyrene	0.065	0.20	10	0.092
56-55-3	Benzo(a)anthracene	0.052	0.20	10	0.092
91-94-1	3,3'-Dichlorobenzidine	0.48	5.0	10	0.15
106-46-7	1,4-Dichlorobenzene	0.52	1.0	10	0.5
87-86-5	Pentachlorophenol	0.48	5.0	25	0.56
87-68-3	Hexachlorobutadiene	0.51	1.0	10	0.86
88-06-2	2,4,6-Trichlorophenol	1.4	5.0	10	3.6

Note: All units are ug/L

### Pesticides

CAS No	Analyte Name	MDL	Lab RL	RVAAP QAPP PQL	Region 9 PRG
60-57-1	Dieldrin	0.0067	0.030	0.05	0.0042
309-00-2	Aldrin	0.0061	0.030	0.05	0.004
1024-57-3	Heptachlor epoxide	0.0065	0.030	0.05	0.0074
319-84-6	alpha-BHC	0.0062	0.030	0.05	0.011
76-44-8	Heptachlor	0.0062	0.030	0.05	0.015

Note: All units are ug/L

### Explosives

CAS No	Analyte Name	MDL	Lab RL	RVAAP QAPP PQL	Region 9 PRG
88-72-2	2-Nitrotoluene	0.1	0.48	0.2	120
99-08-1	3-Nitrotoluene	0.1	0.48	0.2	0.049
99-99-0	4-Nitrotoluene	0.1	0.48	0.2	0.66

Note: All units are ug/L

### PCBs

CAS No	Analyte Name	MDL	Lab RL	RVAAP QAPP PQL	Region 9 PRG
11104-28-2	PCB-1221	0.49	0.50	0.50	0.034
11141-16-5	PCB-1232	0.41	0.50	0.50	0.034
53469-21-9	PCB-1242	0.11	0.50	0.50	0.034
12672-29-6	PCB-1248	0.049	0.50	0.50	0.034
11097-69-1	PCB-1254	0.087	0.50	0.50	0.034
11096-82-5	PCB-1260	0.071	0.50	0.50	0.034

Note: All units are ug/L



### Inorganics

<b>CAS No</b>	<b>Analyte Name</b>	<b>MDL</b>	<b>Lab RL</b>	<b>RVAAP QAPP PQL</b>	<b>Region 9 PRG</b>
7440-70-2	Calcium	80	1000	100	NS
7440-23-5	Sodium	410	1000	200	NS

**Notes:**

NS = Not Specified

These compounds will not meet the reporting limits specified in the QAPP. However, both of these chemicals have been consistently been found naturally occurring on the site at values that exceed the QAPP RLs.

### Inorganics

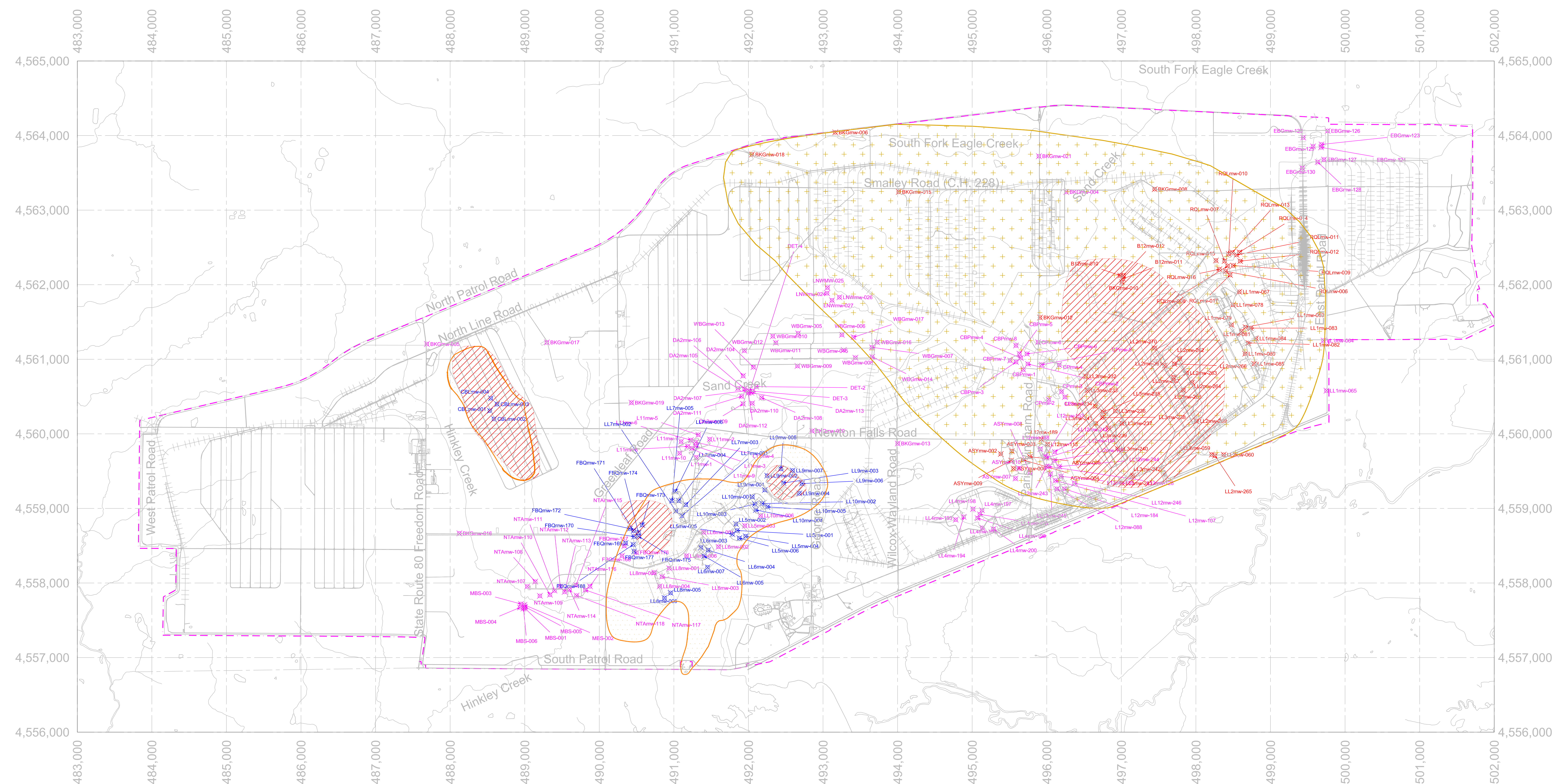
<b>CAS No</b>	<b>Analyte Name</b>	<b>MDL</b>	<b>Lab RL</b>	<b>RVAAP QAPP PQL</b>	<b>Region 9 PRG</b>
7440-70-2	Calcium	80	100	100	NS
7440-23-5	Sodium	410	1000	200	NS
7440-09-7	Potassium	72	1000	200	NS

**Notes:**

NS=Not Specified

These compounds will not meet the reporting limits specified in the QAPP. However, these chemicals have consistently been found naturally occurring on the site at values that exceed the QAPP RLs.



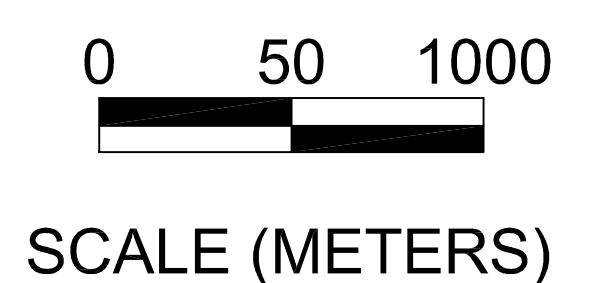


### LEGEND

- ✕ UNCONSOLIDATED WELL  
 ✕ HOMEWOOD MEMBER WELL  
 ✕ SHARON MEMBER WELL  
 -- PROPERTY LINE

 **HOMewood MEMBER**

SHARON MEMBER



COORDINATE SYSTEM UTM NAD 83 ZONE 17

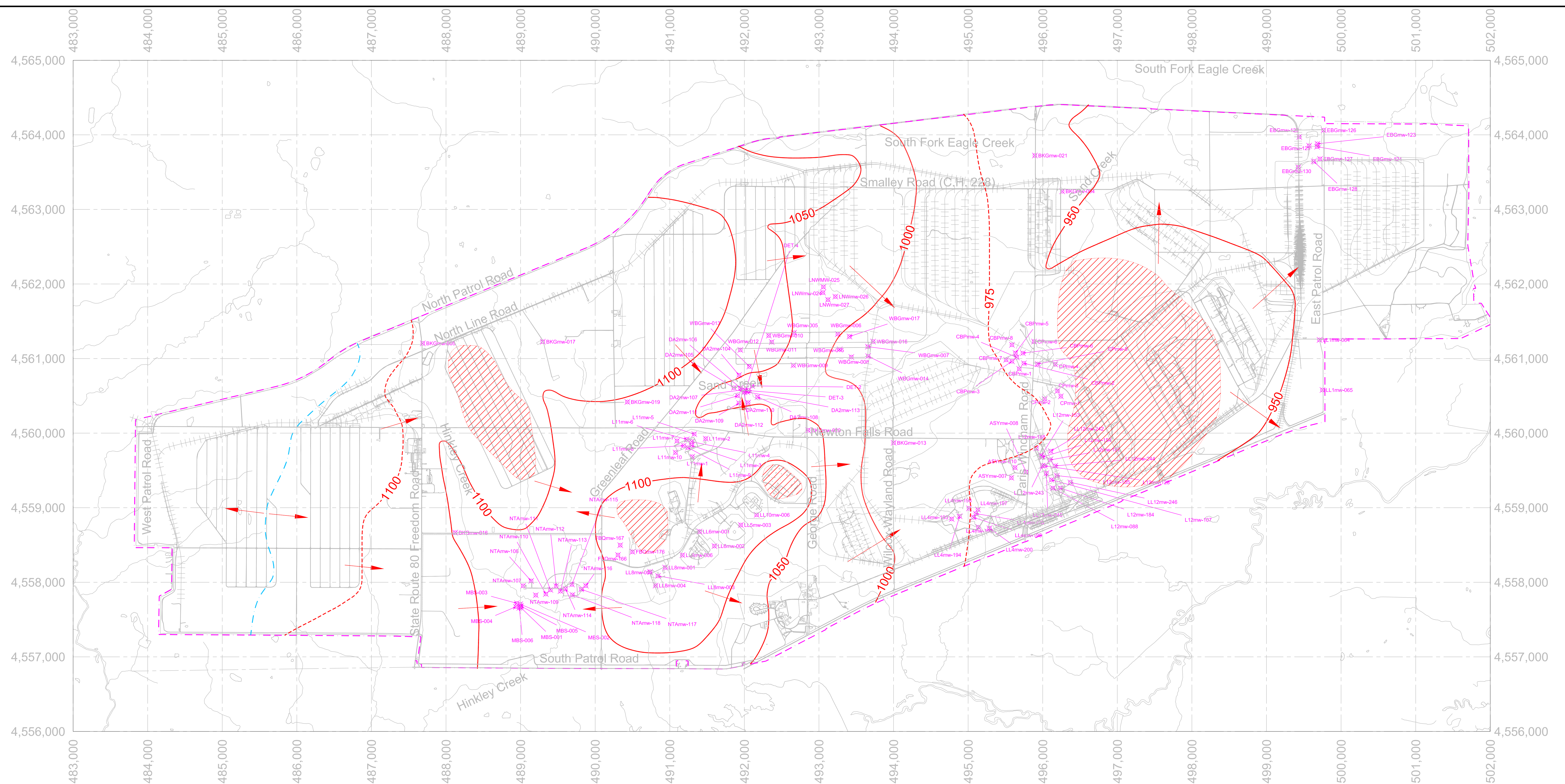


ENVIRONMENTAL QUALITY  
MANAGEMENT, INC.  
1800 CARILLON BLVD.  
CINCINNATI, OHIO 45240  
P (513)825-7500  
F (513)825-7495

## MONITORING WELLS AT RVAAP

				DRAWN CHECKED APPROVED	D.TOMO	10/22/07	<div>MONITORING WELLS AT RVAAP</div>			
REV	DESCRIPTION	DATE	APPROVED	SCALE: NONE			ORIGINAL SIZE	PROJECT NO.	DWG NO.	REV
	REVISIONS						E	030240.0006	PLATE 1	0





WELL ID	ELEVATION (ft.amsl)
BKGmw-004	954.52
BKGmw-005	1139.92
BKGmw-013	976.82
BKGmw-016	1094.58
BKGmw-017	1117.20
BKGmw-019	1090.75
BKGmw-020	1058.09
BKGmw-021	961.29
LL1mw-064	932.98
LL1mw-065	932.56
LL4mw-193	975.60
LL4mw-194	974.98
LL4mw-195	971.77
LL4mw-196	971.70
LL4mw-197	971.40
LL4mw-198	975.05
LL4mw-199	970.26
LL4mw-200	970.46
LL5mw-003	1108.11
LL6mw-001	1110.24
LL6mw-002	1108.17
LL6mw-006	1110.32
LL8mw-001	1110.22

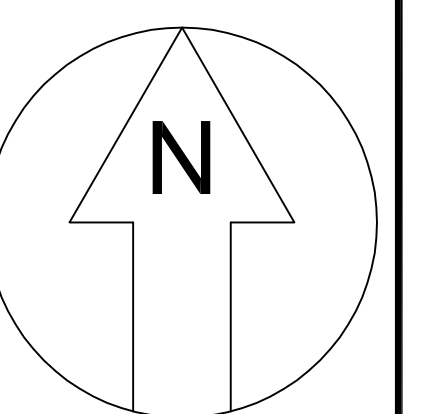
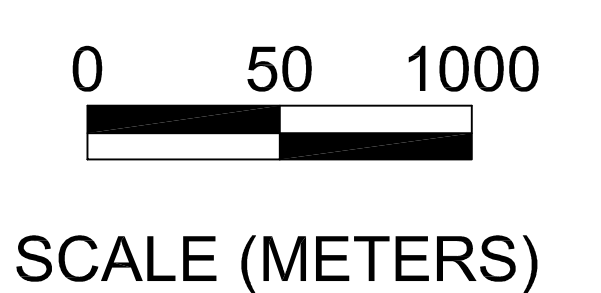
WELL ID	ELEVATION (ft,amsl)
LL8mw-002	1106.48
LL8mw-003	1107.28
LL8mw-004	1104.96
LL10mw-006	1111.20
LL11mw-001	1090.42
LL11mw-002	1077.18
LL11mw-003	1085.99
LL11mw-004	1083.17
LL11mw-005	1071.51
LL11mw-006	1081.79
LL11mw-007	1067.70
LL11mw-008	1084.70
LL11mw-009	1084.43
LL11mw-010	1078.08
LL12mw-088	974.83
LL12mw-107	971.32
LL12mw-128	968.86
LL12mw-153	971.98
LL12mw-154	970.77
LL12mw-182	974.81
LL12mw-184	971.19
LL12mw-185	974.38
LL12mw-187	970.88

WELL ID	ELEVATION (ft.amsl)
LL12mw-188	975.00
LL12mw-242	972.45
LL12mw-243	972.37
LL12mw-244	970.95
LL12mw-245	972.88
LL12mw-246	968.98
ASYmw-007	969.47
ASYmw-008	973.29
ASYmw-010	968.21
CBPmw-001	963.17
CBPmw-002	962.18
CBPmw-003	962.96
CBPmw-004	960.49
CBPmw-005	959.61
CBPmw-006	959.94
CBPmw-007	961.05
CBPmw-008	957.58
CPmw-001	970.76
CPmw-002	971.32
CPmw-003	970.80
CPmw-004	969.31
CPmw-005	962.57
CPmw-006	956.35

WELL ID	ELEVATION (ft,amsl)
DET-001B	1043.07
DET-002	1028.49
DET-003	1027.09
DET-004	1027.75
DA2mw-104	1053.37
DA2mw-105	1041.76
DA2mw-106	1038.54
DA2mw-107	1034.58
DA2mw-108	1026.16
DA2mw-109	1057.52
DA2mw-110	1054.85
DA2mw-111	1037.86
DA2mw-112	1029.62
DA2mw-113	1028.73
EBGmw-123	938.25
EBGmw-124	938.20
EBGmw-125	938.17
EBGmw-126	938.32
EBGmw-127	936.72
EBGmw-128	938.31
EBGmw-129	938.23
EBGmw-130	937.30
FBQmw-166	1103.71

WELL ID	ELEVATION (ft,amsl)
FBQmw-167	1111.01
FBQmw-176	1122.81
LNWmw-024	1025.90
LNWmw-025	1024.17
LNWmw-026	1022.17
LNWmw-027	1020.41
NTAmw-107	1067.55
NTAmw-108	1067.83
NTAmw-109	1067.72
NTAmw-110	1068.32
NTAmw-111	1077.05
NTAmw-112	1069.37
NTAmw-113	1068.73
NTAmw-114	1072.54
NTAmw-115	1075.60
NTAmw-116	1087.98
NTAmw-117	1080.89
NTAmw-118	1072.67
WBGmw-005	1048.87
WBGmw-006	1006.67
WBGmw-007	983.22
WBGmw-008	993.22
WBGmw-009	1033.94

WELL ID	ELEVATION (ft.amsl)
WBGmw-010	1061.79
WBGmw-011	1061.77
WBGmw-012	1063.50
WBGmw-013	1061.21
WBGmw-014	980.45
WBGmw-015	999.04
WBGmw-016	979.91
WBGmw-017	997.49
MBS-001	1064.61
MBS-002	1065.21
MBS-003	1065.92
MBS-004	1065.13
MBS-005	1064.57
MBS-006	1064.53



COORDINATE SYSTEM UTM NAD 83 ZONE 17

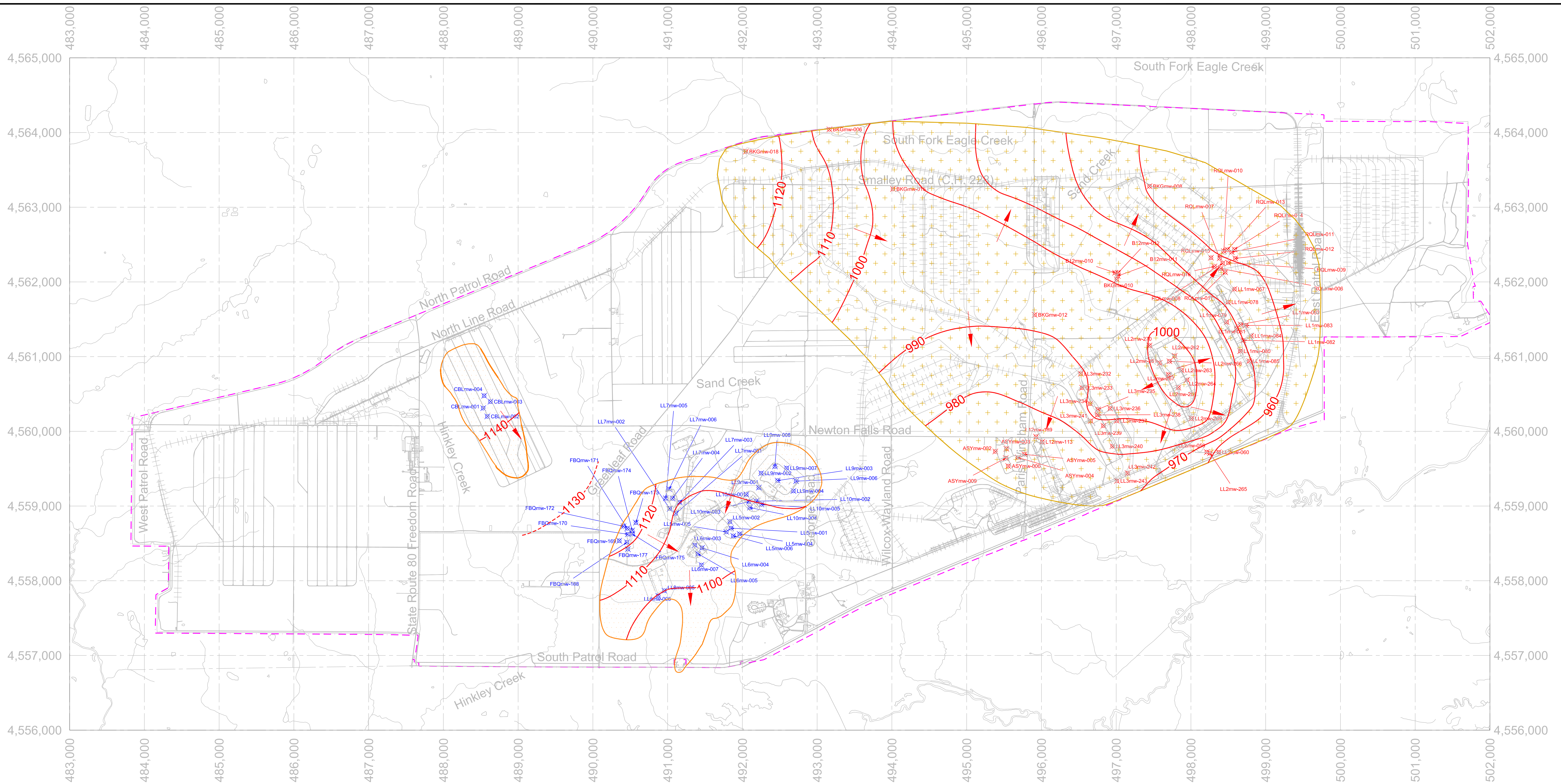


ENVIRONMENTAL QUALITY  
MANAGEMENT, INC.  
1800 CARILLON BLVD.  
CINCINNATI, OHIO 45240  
P (513)825-7500  
F (513)825-7495

POTENTIOMETRIC SURFACE OF  
UNCONSOLIDATED AQUIFER (JULY 2008)

				DRAWN	D.TOMO	7-30-08	<div style="text-align: center;"> <h2>POTENTIOMETRIC SURFACE OF UNCONSOLIDATED AQUIFER (JULY 2008)</h2> </div>			
				CHECKED	W.THOMPSON	7-31-08				
				APPROVED						
REV	DESCRIPTION	DATE	APPROVED	SCALE:	NONE		ORIGINAL SIZE	PROJECT NO.	DWG NO.	REV
	REVISIONS						E	030240.0006	PLATE 2	0



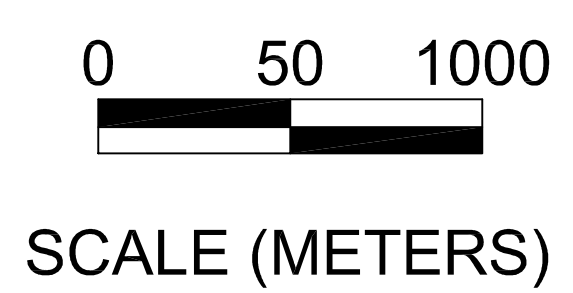


HOMEWOOD MEMBER WELLS

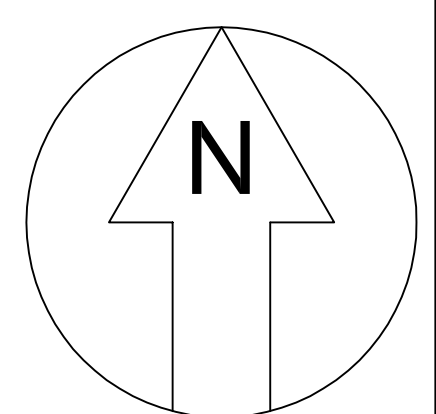
Well ID	ELEVATION (ft,amsl)	Well ID	ELEVATION (ft,amsl)
LL5mw-001	1107.73	LL9mw-005	1114.34
LL5mw-002	1106.78	LL9mw-006	1110.68
LL5mw-004	1107.66	LL9mw-007	1110.42
LL5mw-005	1107.72	LL10mw-001	1109.03
LL5mw-006	1107.68	LL10mw-002	1109.44
LL6mw-003	1109.24	LL10mw-003	1108.94
LL6mw-004	1108.14	LL10mw-004	1109.01
LL6mw-005	1108.27	LL10mw-005	1109.98
LL6mw-007	1108.80	CBLmw-001	1140.43
LL7mw-001	1109.38	CBLmw-002	1139.93
LL7mw-002	1114.30	CBLmw-003	1141.93
LL7mw-003	1109.65	CBLmw-004	1141.25
LL7mw-004	1111.77	FBQmw-168	1121.67
LL7mw-005	1114.44	FBQmw-169	1113.70
LL7mw-006	1112.64	FBQmw-170	1123.62
LL8mw-005	1102.49	FBQmw-171	1125.43
LL8mw-006	1097.42	FBQmw-172	1124.31
LL9mw-001	1118.83	FBQmw-173	1123.69
LL9mw-002	1114.70	FBQmw-174	1123.95
LL9mw-003	1123.06	FBQmw-175	1123.85
LL9mw-004	1111.38	FBQmw-177	1115.82

SHARON MEMBER WELLS

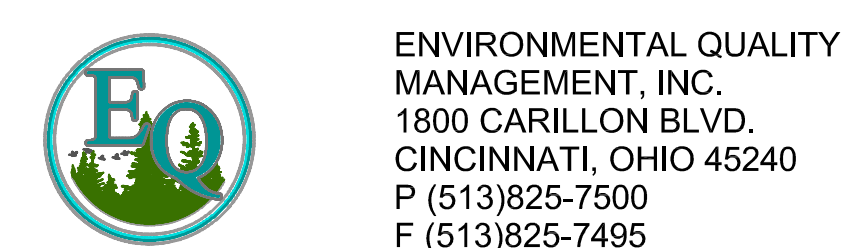
Well ID	ELEVATION (ft,amsl)	Well ID	ELEVATION (ft,amsl)	Well ID	ELEVATION (ft,amsl)
BKGmw-006	1006.50	LL2mw-265	951.91	ASYmw-001	969.70
BKGmw-008	956.21	LL2mw-266	1004.41	ASYmw-002	971.60
BKGmw-010	989.72	LL2mw-267	1004.89	ASYmw-003	969.81
BKGmw-012	990.66	LL2mw-268	1002.26	ASYmw-004	970.24
BKGmw-015	991.60	LL2mw-269	994.61	ASYmw-005	971.62
BKGmw-018	1029.94	LL2mw-270	1000.93	ASYmw-006	969.39
LL1mw-063	970.90	LL3mw-232	980.80	ASYmw-009	970.41
LL1mw-067	963.41	LL3mw-233	978.08	B12mw-010	988.73
LL1mw-078	965.62	LL3mw-234	995.79	B12mw-011	987.38
LL1mw-079	967.61	LL3mw-235	991.64	B12mw-012	987.61
LL1mw-080	986.59	LL3mw-236	994.77	RQLmw-006	962.30
LL1mw-081	969.35	LL3mw-237	989.59	RQLmw-007	960.75
LL1mw-082	979.17	LL3mw-238	991.01	RQLmw-008	960.88
LL1mw-083	964.00	LL3mw-239	978.24	RQLmw-009	960.61
LL1mw-084	970.97	LL3mw-240	978.72	RQLmw-010	957.91
LL1mw-085	963.31	LL3mw-241	982.53	RQLmw-011	955.67
LL2mw-059	953.92	LL3mw-242	983.16	RQLmw-012	956.93
LL2mw-060	951.80	LL3mw-243	975.53	RQLmw-013	956.39
LL2mw-261	1004.31	LL12mw-113	973.90	RQLmw-014	954.46
LL2mw-262	1004.07	LL12mw-183	971.25	RQLmw-015	961.77
LL2mw-263	1002.84	LL12mw-186	972.74	RQLmw-016	962.80
LL2mw-264	1004.86	LL12mw-189	972.96	RQLmw-017	963.00



- LEGEND
- × HOMEWOOD MEMBER WELL
  - × SHARON MEMBER WELL
  - - - PROPERTY LINE
  - 1100 — LINE OF EQUAL GROUNDWATER ELEVATION (ft,amsl)
  - 1030 - - - (INTERMEDIATE DASHED)
  - GROUNDWATER DIRECTION
  - HOMEWOOD MEMBER
  - SHARON MEMBER



COORDINATE SYSTEM UTM NAD 83 ZONE 17



POTENTIOMETRIC SURFACE OF BEDROCK  
-HOMEWOOD AND SHARON (JULY 2008)

REV	DESCRIPTION	DATE	APPROVED	SCALE	NONE	ORIGINAL SIZE	PROJECT NO.	DWS NO.	REV.
							030240.0006	PLATE 3	0