

FINAL

FACILITY WIDE GROUNDWATER MONITORING PROGRAM

ANNUAL REPORT FOR 2006,

RAVENNA ARMY AMMUNITION PLANT, RAVENNA, OHIO

PREPARED FOR

US ARMY CORPS OF ENGINEERS LOUISVILLE, KENTUCKY GSA CONTRACT NO. GS-10F-0448P

MAY 2007

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Prepared by

Spec Pro, Inc. 8451 State Route 5 Ravenna, OH 44266 FWGWMP Annual Report for 2006 Distribution List

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TABLE OF CONTENTS

1.0 INTRO	DDUCTION	1
1.1 SITE D	DESCRIPTION	1
1.2 PROJE	ECT DESCRIPTION	1
1.3 SUMM	ARY OF 2006 SCOPE OF WORK	5
1.4 ANNU	AL REPORT REQUIREMENTS and REPORT PRESENTATION	6
1.5 CHAN	GES TO FWGWMPP IN 2006	7
1.6 CHAN	GES TO FWGWMPP FOR 2007	7
2.0 SUMM	IARY OF WELLS INSTALLED OR ABANDONED IN 2006	8
2.1 NE\	N WELL INSTALLATIONS	8
2.2 MO	NITORING WELL ABANDONMENTS	8
3.0 SUMMA	RY OF 2006 FWGWMPP EVENTS	9
3.1 GR	OUNDWATER ELEVATION MONITORING	9
3.2 MO	NITORING WELL INSPECTION RESULTS	26
3.3 SUI	MMARY OF SAMPLING EVENTS	28
3.3.1	October 2005	28
3.3.2	March 2006	28
3.3.3	May 2006	29
3.3.4	July 2006	29
3.4 INV	ESTIGATION DERIVED WASTE (IDW)	31
4.0 SUMMA	RY OF ANNUAL FWGWMP ANALYTICAL RESULTS	32
4.1 INT	RODUCTION	32
4.2 BAC	CKGROUND WELLS	33
4.2.1	BKGmw-004	33
4.2.2	BKGmw-006	33
4.2.3	BKGmw-010	33
4.2.4	BKGmw-012	33
4.2.5	BKGmw-013	34
4.2.6	BKGmw-015	34
4.2.7	BKGmw-016	34
4.2.8	BKGmw-017	34
4.2.9	BKGmw-018	34
4.2.10	BKGmw-020	34
4.2.11	BKGmw-021	34
4.3 LOA	AD LINE 1	35
4.3.1	LL1mw-078	35
4.3.2	LL1mw-080	35
4.3.3	LL1mw-083	36
4.4 LOA	AD LINE 2	36
4.4.1	LL2mw-059	36
4.4.2	LL2mw-262	37
4.4.3	LL2mw-263	37
4.5 LOA	AD LINE 3	37
4.5.1	LL3mw-238	37

4.5.2 LL3mw-242	37
4.6 LOAD LINE 4	38
4.6.1 LL4mw-198	38
4.6.2 LL4mw-199	38
4.7 LOAD LINE 11	38
4.7.1 LL11mw-007	38
4.8 LOAD LINE 12	38
4.8.1 LL12mw-153	38
4.8.2 LL12mw-182	39
4.8.3 LL12mw-183	39
4.8.4 LL12mw-186	39
4.9 CENTRAL BURN PITS	39
4.9.1 CBPmw-005	39
4.9.2 CBPmw-007	39
4.10 OPEN DEMOLITION AREA 2	40
4.10.1 DA2mw-107	40
4.10.2 DA2mw-Det4	40
4.11 RAMSDELL QUARRY LANDFILL	40
4.11.1 RQLmw-007	40
4.11.2 RQLmw-008	40
4.11.3 RQLmw-009	40
4.12 WINKLEPECK BURNING GROUNDS	41
4.12.1 WBGmw-006	41
4.12.2 WBGmw-007	41
4.12.3 WBGmw-009	41
5.0 FWGWMP ANNUAL ASSESSMENTS	63
5.1 EVALUATION OF CONTAMINANT TRENDS IN GROUNDWATER	63
5.2 ASSESSMENT OF GROUNDWATER REMEDIAL ACTION	
EFFECTIVENESS	63
6.0 FWGWMP ANNUAL RECOMMENDATIONS/REVIEW	68
6.1 ASSESSMENT OF PROGRAM EFFECTIVENESS	68
6.2 ADDITIONS TO THE FWGWMP	68
6.3 DELETIONS TO THE FWGWMP	69
7.0 REFERENCES	70

List of Figures

Figure 1-1 RVAAP	General Location Map	3
Figure 1-2 RVAAP	Facility Map	4

List of Plates

1 RVAAP Groundwater Potentiometric and Monitoring Well Location Map

List of Tables

RVAAP Well Construction Details	11
RVAAP Potentiometric Data for FWGWMP 2006 Annual Report	17
Comparison of selected Explosive and Propellant data results by	
sampling event from monitoring wells BKG-012 and LL3-238	30
Summary of Constituents detected in 2005	42
RVAAP Facility Wide Background Criteria	62
FWGWMP 2006 Region 9 PRG and MCL Exceedances	64
	RVAAP Well Construction Details RVAAP Potentiometric Data for FWGWMP 2006 Annual Report Comparison of selected Explosive and Propellant data results by sampling event from monitoring wells BKG-012 and LL3-238 Summary of Constituents detected in 2005 RVAAP Facility Wide Background Criteria FWGWMP 2006 Region 9 PRG and MCL Exceedances

Appendices

- A Amendment No. 1 to the FWGWMP
- B Well Logs and Construction Diagrams of Newly Installed Monitoring Wells
- C Well Inspection Sheets
- D Time-trend Graphs
- E Investigation Derived Waste Report
- F Maps of FWGWMP Study Areas
- G Compounds That Cannot Comply with RVAAP QAPP Reporting Limits and Inorganic Analytical Methods Used to Meet RVAAP QAPP Reporting Limits

LIST OF ACRONYMS

Amsl AOC DOD FWGWMPP FWGWMP FWSAP HMX IDW MCL ODA2 OHARNG Ohio EPA	above mean sea level Area of Concern Department of Defense Facility Wide Groundwater Monitoring Program Plan Facility Wide Groundwater Monitoring Program Facility Wide Groundwater Monitoring Program Facility Wide Sampling and Analysis Plan high melting point explosive (octogen) Investigation Derived Waste Maximum contaminant level Open Demolition Area 2 Ohio Army National Guard Ohio Environmental Protection Agency
PCB	polychlorinated biphenyl
QAPP	Quality Assurance Project Plan
PRG	Preliminary remediation goal
RDX	cyclotrimethylenetrinitramine (explosive)
REIMS	RVAAP Environmental Information Management System
RI	Remedial Investigation
RQL	Ramsdell Quarry Landfill
RTLS	Ravenna Training and Logistics Site
RVAAP	Ravenna Army Ammunition Plant
SRC	Site Related Contaminant
SVOC	semi-volatile organic compound
TNT	trinitrotoluene
ug/L	microgram per liter
USACE	U.S. Army Corps of Engineers
USEPA VOC	Volatile organic compound

1.0 INTRODUCTION

1.1 SITE DESCRIPTION

Past Department of Defense (DOD) activities at the Ravenna Army Ammunition Plant (RVAAP) date back to 1940 and include the manufacturing, loading, handling and storage of military explosives and ammunition. Up 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 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 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 industrial facility. The RVAAP Installation Restoration Program 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 EPA finalized the Facility Wide Groundwater Monitoring Program Plan (FWGWMPP) which details the requirements of the program. The plan and subsequent agreements between the U.S Army and Ohio Environmental Protection Agency (Ohio EPA) states that groundwater from select wells (specified in the FWGWMPP) would be sampled quarterly, with the exception of Ramsdell Quarry Landfill (RQL) (3 wells) and Open Detonation Area 2 (ODA2) (2 wells). The RQL and ODA2 wells will only be sampled twice per year.

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 Sampling and Analysis Plan, and the Site Safety and Health and Quality Assurance Project Plan 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 FWGWMPP, the monitoring program consists of the sampling of 41 wells specified in Table 4-1 of the FWGWMPP. Fourteen of these wells are "Background Wells", and the remainder are wells situated at various Areas of Concern (AOC) at RVAAP. The first three sampling events for this project were conducted in 2005 and the results are reported in the following:

- "Facility Wide Groundwater Monitoring Program, Report on the April 2005 Sampling Event, Ravenna Training and Logistics Site/Ravenna Army Ammunition Plant, Ravenna, Ohio" (SpecPro, 2005a), dated August 2005.
- "Facility Wide Groundwater Monitoring Program, Report on the July 2005 Sampling Event, Ravenna Training and Logistics Site/Ravenna Army Ammunition Plant, Ravenna, Ohio" (SpecPro, 2005b), dated November 2005.
- *"Facility-Wide Groundwater Monitoring Program, Annual Report for 2005, Ravenna Training and Logistics Site/Ravenna Army Ammunition Plant, Ravenna, Ohio"* (SpecPro, 2006a), dated May 2006. This report also includes the October 2005 (third) sampling event results

By agreement with the U.S. Army and the Ohio EPA and in accordance with Amendment No. 1 to the FWGWMPP (Appendix A), this Annual Report for 2006 will summarize the October 2005 sampling event, and the March, May, and July 2006 sampling events. The data from the October 2005 sampling event was also used in the FWGWMP 2005 Annual Report. 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 guarter of 2005, and the 1st, 2nd, and 3rd guarters of 2006. Subsequent annual monitoring periods would also follow this pattern, such as the 2007 annual report will cover the fourth guarter of 2006 and the first, second, and third guarters 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.

RVAAP Facility-Wide Groundwater Monitoring Program 2006 Annual Report



Figure 1-1 General location and Orientation of RVAAP.



Figure 1-2. RVAAP Installation Map

FWGWMP 2006 Annual Report

Final

Four quarterly sampling events were conducted in 2006. The results of the first three sampling events for 2006 are presented in the following documents:

- Facility- Wide Groundwater Monitoring Program, Report on the March 2006 Sampling Event, Ravenna Army Ammunition Plant, Ravenna, Ohio", dated August 2006.
- "Facility- Wide Groundwater Monitoring Program, Report on the May 2006 Sampling Event, Ravenna Army Ammunition Plant, Ravenna, Ohio", dated October 2006.
- "Facility- Wide Groundwater Monitoring Program, Report on the July 2006 Sampling Event, Ravenna Army Ammunition Plant, Ravenna, Ohio", dated May 2007.

The results for the October 2006 sampling event will be submitted in a separate document and will be summarized in the Annual Report for 2007.

1.3 SUMMARY OF 2006 SCOPE OF WORK

SpecPro, Inc. was contracted (GSA Contract No. GS-10F-0448P) by the U.S. Army Corps of Engineers, Louisville District (USACE) to conduct the 2006 FWGWMPP monitoring. The following tasks were performed in accordance with specifications contained in the FWGWMPP, the FWSAP, and the Scope of Work written by the USACE in December 2005:

Task 1. Perform groundwater sampling of select wells (36) for four consecutive quarters including the requisite Investigation Derived Waste (IDW) characterization, reporting and disposal. The RQL (3 wells) and ODA2 wells (DET-3 and DET-4) were only sampled in May and October 2006. This task also includes obtaining water level measurements from the 237 RVAAP monitoring wells immediately prior to the May sampling event;

Task 2.Perform select laboratory analyses and data validation for collectedsamples;

Task 3.Reduce quarterly data and preparation of individual sampling event
reports;

Task 4.Prepare an annual report including the overall program reviewrequirement, and,

Task 5.Perform maintenance on selected groundwater monitoring wells.

1.4 ANNUAL REPORT REQUIREMENTS and REPORT PRESENTATION

This report presents the FWGWMP 2006 Annual Report. The report is structured in the following way:

- Section 1.0 Introduction
- Section 2.0 Summary of Monitoring Wells Installed or Abandoned in 2006
- Section 3.0 Summary of Annual FWGWMP Events
- Section 4.0 Summary of Annual FWGWMP Analytical Results
- Section 5.0 FWGWMP Annual Assessments
- Section 6.0 FWGWMP Annual Recommendations/Review
- Section 7.0 References

The appendices contain the following items:

- Appendix A Changes to FWGWMPP
- Appendix B Well Logs and Construction Diagrams of Newly Installed Monitoring Wells
- Appendix C Well Inspection Sheets
- Appendix D Time-trend Graphs (Time trend graphs have been removed from this report and will be discussed by the FWGWMP Team at a FWGWMP program meeting in June 2007)
- Appendix E Investigation Derived Waste Report
- Appendix F Maps of FWGWMP Study Areas
- Appendix G Compounds That Cannot Comply with RVAAP QAPP Reporting Limits and Inorganic Analytical Methods Used to Meet RVAAP QAPP Reporting Limits

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

- A summary of the additional hydrogeological investigations that were conducted is presented in Section 2.0. Summary data for the newly installed wells is included in Table 3-1. Drilling logs and construction diagrams for these wells are presented in Appendix B.
- A summary of contamination for samples collected from the newly installed monitoring wells is discussed in Section 2.0.
- Estimates of groundwater flow velocities and/or contamination migration rates, as well as an evaluation of the current groundwater flow direction(s) based on water level elevation data collected in April 2006 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 5.0.
- The plots of concentration trends are presented in Appendix D, and are discussed in Section 4.0 (Time trend graphs have been removed from this report and will be discussed by the FWGWMP Team at a FWGWMP program meeting in June 2007).
- The facility map is presented in Section 1.0. The monitoring well network map and groundwater flow map is presented in Plate 1. Additional FWGWMP monitoring well locations are shown in Appendix F.
- The results of the monitoring well inspections are presented in Appendix C and summarized in Section 3.2.
- A review of the overall effectiveness and applicability of the FWGWMP is presented in Section 6.0.

1.5 CHANGES TO FWGWMPP IN 2006

The FWGWMPP was amended in August 2006 by *Amendment No. 1 to the FWGWMPP* (Appendix A). This amendment changed the annual reporting period to run from 01 October to 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 will cover the fourth quarter of 2006 and the first, second, and third quarters of 2007.

1.6 CHANGES TO FWGWMPP FOR 2007

The first sampling event of the FWGWMP 2007 Annual Report period will be the October 2006 Sampling Event. A number of Inorganic Analytical Methods will be changed starting with the October 2006 sampling event so that the reporting limits contained in the RVAAP Quality Assurance Project Plan (QAPP) for inorganics can be met. Table G-4 in Appendix G presents the revised analytical testing methods used to analyze each of the inorganic elements starting with the October 2006 sampling event.

Several analytical methods used to analyze a number of volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), and pesticides cannot meet the RVAAP QAPP reporting limits or Region 9 preliminary remediation goals (PRGs). Tables listing these compounds that do not or can not meet Region 9 PRG levels are also are presented Appendix G.

2.0 SUMMARY OF WELLS INSTALLED OR ABANDONED IN 2006

This section presents a summary of the monitoring wells that were either installed or abandoned at RVAAP in late 2005 and 2006. Two monitoring wells were installed at the Suspected Mustard Agent Burial AOC during this period. Four monitoring wells at the Winklepeck Burning Grounds and five wells at the Ramsdell Quarry Landfill were abandoned during this time. Summary data for the newly installed monitoring wells is included in Table 3-1. The newly installed monitoring wells are described and a summary of analytical results for constituents detected in the wells is presented in this section. Well logs and construction diagrams for these wells are presented in Appendix B.

2.1 NEW WELL INSTALLATIONS

Two monitoring wells (MBSmw-005 and MBSmw-006) were installed at the Suspected Mustard Agent Burial Site (RVAAP-28) in October 2005. The monitoring wells were all installed in unconsolidated deposits to depths between 26 and 30 ft below ground surface. Groundwater from all six monitoring wells at the site (MBSmw-001 through MBSmw-006) was sampled and tested for the following mustard agent breakdown products: thiodiglycol, 1,4-oxathine, and 1,4dithiane. The newly installed downgradient wells (MBSmw-005 and MBSmw-006) were also analyzed for explosives, propellants, Target Analyte List (TAL) metals, cyanide, volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), pesticides and polychlorinated biphenyls (PCBs). No mustard agent breakdown products, or other contamination, were detected in samples collected from these wells in November 2005. Details for this investigation are presented in Report on the Additional Groundwater Monitoring Well Installation and Groundwater Sampling at the Suspected Mustard Agent Burial Area of Concern, Ravenna Army Ammunition Plant, Ravenna, Ohio, (SpecPro, Inc., 2006d).

2.2 MONITORING WELL ABANDONMENTS

Monitoring wells RQLmw-001 through -005 at the Ramsdell Quarry Landfill and OBG-1 through OBG-4 at Winklepeck Burning Grounds were plugged and abandoned by SAIC in June 2006. These wells did not meet current well construction requirements for RVAAP and did not provide representative potentiometric data for the shallow groundwater zone at their respective AOCs. The wells were plugged and abandoned in accordance with Section 4.3.2.5 *Well Abandonment*, of the FWSAP.

3.0 SUMMARY OF 2006 FWGWMPP EVENTS

3.1 GROUNDWATER ELEVATION MONITORING

Groundwater elevations were measured at the 237 RVAAP monitoring wells during the week of April 24, 2006. Potentiometric data was not collected from the nine wells that were plugged and abandoned in June 2006. The locations of all monitoring wells at RVAAP are shown on Plate 1. Many of the monitoring wells are also shown on the FWGWMP study area maps included in Appendix F.

Water level measurements were collected 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 taken from the top of the inner casing to the top of the groundwater surface with electronic water level indicators. The depth to the bottom of the well from the top of the inner casing was also measured with the electronic water level indicator. All monitoring wells were inspected at the time of groundwater elevation measurements and the results are discussed in Section 3.2. The monitoring well inspection sheets are presented in Appendix C. Well construction details for all RVAAP monitoring wells are presented in Table 3-1. Depth-to-water and depth-to-bottom measurements and groundwater elevations for the RVAAP wells are presented in Table 3-2.

A single facility-wide potentiometric map was prepared using the water-level measurements taken during the survey (Plate 1). Monitoring wells from which data were collected are screened within the uppermost groundwater zone; either at the water table or immediately below it. Previously, separate potentiometric maps were prepared for both the unconsolidated aquifer and the bedrock aquifer. Because of the widely separated and non-uniform spacing of the monitoring wells at the facility, the resulting potentiometric maps would occasionally present unrealistic situations, such as known dry areas of the facility as being several feet below the water table. In order to present a more realistic potentiometric map, both bedrock and unconsolidated zone wells are included in the data set.

Historical data suggests that groundwater in both the unconsolidated deposits and bedrock flow in an easterly direction. The unconsolidated aquifer, however, also shows numerous local flow variations that are influenced by topography and drainage patterns. The local variations in flow direction suggest that groundwater in the unconsolidated deposits are in direct hydraulic communication with surface water, and that surface water drainageways may also act as groundwater discharge locations. In addition, topographic ridges between surface water drainage features act as groundwater divides for groundwater found in the unconsolidated deposits (Portage Environmental, 2004).

Historical data suggests that groundwater flow in the bedrock aquifer is more uniform and not as affected by local surface topography. For much of the eastern half of the facility, the bedrock potentiometric surface is higher than the overlying unconsolidated potentiometric surface which indicates an upward hydraulic potential. This suggests that there is a confining layer that separates the two aquifers. In the far eastern site area, the two potentiometric surfaces are approximately at the same elevation, suggesting that hydraulic communication between the two aquifers is occurring (Portage Environmental, 2004).

Because of the variability of monitoring well density, lack of well coverage in large areas of RVAAP, and differences in monitoring well screened intervals, the facility-wide potentiometric map should be considered as a general representation of groundwater flow patterns. The southeastern (e.g., Load Lines 1 through 4 area) and central (e.g., fuze and booster lines, Demolition Area 2, and Winklepeck Burning Grounds) portions of RVAAP have the highest density of monitoring wells. Therefore, the potentiometric surface configuration in these areas can be more accurately determined.

The facility-wide map illustrates that the potentiometric surface for the shallow groundwater zone is generally a subdued expression of the surface topography of the region. Overall measured groundwater flow patterns follow those of the major streams within RVAAP (e.g., Hinkley Creek, Eagle Creek, and Sand Creek). Overall, groundwater potentiometric elevations decrease approximately 207 ft from west to east across RVAAP; with a maximum measured elevation of about 1141.86 ft above mean sea level (amsl) at well BKGmw-005 in the northwest portion of the facility and minimum measured elevation of 934.05 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 strongly influenced by topography and the drainage patterns of the major streams. The influence of surface topography on groundwater flow causes significant variations from the generalized east to west flow pattern across the site, which generally results in ground water flow being diverted to the north and south.

Significant perturbations from the general west to east groundwater flow configuration evident from the 2006 data include the following:

- An area of southerly flow towards the southwestern RVAAP boundary occurs coincident with the Hinkley Creek watershed (e.g., NACA Test Area, Suspected Mustard Agent Burial Site, and Demolition Area 1 vicinity).
- A substantial potentiometric high is evident in the vicinity of Fuze and Booster Quarry and Load Lines 5 through 10, which reflects topographic controls. This potentiometric high is bounded on the east by comparatively high flow gradients as inferred from topographic controls.

											Bottom of			April 2006
											Inner		Reported	Measured
											Casing		Bottom of	Bottom of
		Ohio State	Ohio State		Total		Well		Top of	Bottom	Plug or	Stickup	Inner	Inner
		Plane	Plane	GL	Drilled	тос	Head	Monitoring	Screen	of Screen	End Cap	height (ft	Casing	Casing
RVAAP Area	Well ID	Easting	Northing	Elevation ^a	Depth ^b	Elevation ^a	Type ^c	Zone	(ft BGS)	(ft BGS)	(ft BGS)	AGS)	(BTOC)	(BTOC)
Facility-Wide														
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	22.32
	BKGmw-005	2340835.86	562288.45	1149.44	19.0	1151.94	A	Unconsolidated	8.2	18.2	18.5	2.50	21.0	21.03
	BKGmw-006	2358643.96	571910.47	1026.38	35.1	1028.88	A	Bedrock	24.7	34.7	35.1	2.50	37.6	37.62
	BKGmw-008	2372741.08	569654.23	970.40	25.0	972.90	A	Bedrock	14./	24.7	25.0	2.50	27.5	27.48
	BKGmw-010	23/13/2.86	565540.54	1003.80	22.0	1006.18	A	Bedrock	8.9	18.9	19.2	2.38	21.6	22.08
	BKGmw-012	2367795.23	563918.86	997.57	59.8	1000.07	A	Bedrock	38.6	59.6	59.8	2.50	62.3	62.26
	BKGMW-013	2301027.39	558269.16	986.59	20.0	989.09	A	Unconsolidated	15.2	25.2	25.5	2.50	28.0	28.90
	BKGIIW-015	2301402.22	552092.50	1037.90	51.0	1040.40	A	Deurock	30.1	30.1	30.4	2.50	52.9	23.12
	BKGIIIW-010	2342407.00	562452.04	1090.42	19.0	1125.20	A	Unconsolidated	0.4	10.0	10.0	2.50	21.1	21.20
	BKGmw-018	2340115.35	570873 35	1043.00	34.0 24.7	1045 56	A A	Bedrock	23.2	24.5	24.7	2.50	30.1 27.2	30.00
	BKGmw-010	23/0882 1/	550864 55	1108.24	24.7	1110 74	Δ	Linconsolidated	23.0	24.3	24.7	2.50	35.7	35.80
	BKGmw-019	2357856.24	558756 24	1065.00	30.7	1067.50	Δ	Bedrock	20.0	30.5	30.7	2.50	33.2	33.30
	BKGmw-021	2367622.95	571016 75	972.16	19.0	974.66	Δ	Unconsolidated	7 7	17.8	18.1	2.50	20.6	21.46
	DICOMW 021	2001022.00	0/1010./0	072.10	10.0	014.00		Onconsolidated	1.1	17.0	10.1	2.00	20.0	21.40
Load Line 1	111mw-063	2376841 36	563650 53	992 20	27 4	994 84	Α	Bedrock	17 1	27 1	27.4	2 64	30.0	30.32
	LL1mw-064	2380286.97	563118.74	932.32	18.4	935.10	A	Unconsolidated	8.0	18.0	18.4	2.78	21.1	21.17
	LL1mw-065	2380452.00	560916.92	941.53	20.5	944.41	A	Unconsolidated	10.2	20.2	20.5	2.88	23.4	23.17
	LL1mw-067	2376545.30	565201.14	977.55	22.8	980.36	A	Bedrock	12.8	22.5	22.8	2.81	25.6	27.81
	LL1mw-078	2376275.85	564623.87	993.40	38.7	995.84	A	Bedrock	28.7	38.2	38.7	2.44	41.1	41.77
	LL1mw-079	2376228.31	563739.63	995.30	29.5	997.87	A	Bedrock	29.5	38.9	39.5	2.57	42.0	42.27
	LL1mw-080	2376845.07	562479.73	993.70	19.5	996.27	Α	Bedrock	9.5	19.0	19.5	2.57	22.0	22.45
	LL1mw-081	2376672.66	563462.73	996.40	39.4	998.92	Α	Bedrock	29.4	38.9	39.4	2.52	41.9	42.10
	LL1mw-082	2376977.38	562956.86	1003.70	39.0	1006.45	Α	Bedrock	28.9	38.5	39.0	2.75	41.8	41.66
	LL1mw-083	2377074.80	563612.75	992.80	39.3	995.20	А	Bedrock	29.1	38.6	39.3	2.40	41.7	41.66
	LL1mw-084	2377316.02	563160.44	996.40	37.0	998.73	Α	Bedrock	26.7	36.3	37.0	2.33	39.3	39.16
	LL1mw-085	2377246.94	562046.25	994.30	42.1	996.84	А	Bedrock	32.2	41.6	42.1	2.54	44.7	45.32
Load Line 2	LL2mw-059	2375453.00	558020.00	964.33	19.5	966.67	Α	Bedrock	9.3	19.1	19.5	2.34	21.8	22.10
	LL2mw-060	2375978.00	558022.00	958.93	18.3	961.57	A	Bedrock	8.1	17.9	18.3	2.64	20.9	20.91
	LL2mw-261	2373317.81	561898.25	1009.55	22.5	1011.40	A	Bedrock	9.8	19.8	20.0	1.85	21.9	22.54
	LL2mw-262	2373970.79	562219.87	1011.12	21.2	1012.62	Α	Bedrock	10.6	20.6	20.8	1.50	22.3	22.72
	LL2mw-263	2374289.51	561591.19	1009.42	22.2	1011.47	Α	Bedrock	10.8	20.8	21.0	2.05	23.0	22.73
	LL2mw-264	2374532.00	561173.60	1010.10	20.5	1011.88	A	Bedrock	9.8	19.8	20.0	1.78	21.7	22.48
	LL2mw-265	2375594.06	557972.91	959.47	22.5	961.24	A	Bedrock	11.8	21.8	22.0	1.77	23.8	24.52
	LL2mw-266	2373744.03	561981.86	1014.09	20.5	1016.28	A	Bedrock	9.8	19.8	20.0	2.19	22.2	22.80
	LL2mw-267	2373715.04	561393.22	1012.81	20.5	1014.81	A	Bedrock	9.8	19.8	20.0	2.00	22.0	21.20
	LL2mw-268	2374157.30	560831.04	1015.47	28.8	1017.28	A	Bedrock	17.3	27.3	27.5	1.81	29.3	30.00
	LL2mw-269	2374756.07	559484.12	1009.49	28.0	1011.62	A	Bedrock	17.1	27.1	27.3	2.13	29.4	30.58
	LL2mw-270	2372858.41	562655.93	1009.93	20.5	1010.18	A	Bedrock	9.8	19.8	20.0	0.25	20.3	22.49
						4000.00								
Load Line 3	LL3mw-232	2369862.96	561365.91	998.59	37.8	1000.41	A	Bedrock	26.8	36.8	37.0	1.82	38.8	40.22
	LL3mw-233	2369934.52	560750.41	1002.47	31.1	1004.36	A	Bedrock	20.1	30.1	30.3	1.89	32.2	33.05
	LL3mw-234	23/029/.47	560058.89	1004.47	20.5	1006.56	A	Redrock	9.8	19.8	20.0	2.09	22.1	22.73

											Bottom of			April 2006
											Inner		Reported	Measured
											Casing		Bottom of	Bottom of
		Ohio State	Ohio State		Total		Well		Top of	Bottom	Plug or	Stickup	Inner	Inner
		Plane	Plane	GL	Drilled	тос	Head	Monitoring	Screen	of Screen	End Cap	height (ft	Casing	Casing
RVAAP Area	Well ID	Easting	Northing	Elevation ^a	Depth ^b	Elevation ^a	Туре ^с	Zone	(ft BGS)	(ft BGS)	(ft BGS)	AGS)	(BTOC)	(BTOC)
	LL3mw-235	2370642.47	559812.63	1008.05	21.2	1009.94	Α	Bedrock	10.1	20.1	20.3	1.89	22.2	23.08
	LL3mw-236	2371178.58	559866.75	1008.94	25.5	1011.17	Α	Bedrock	13.8	23.8	24.0	2.23	26.2	26.82
	LL3mw-237	2371475.00	559328.09	1003.57	23.9	1005.57	A	Bedrock	12.7	22.7	22.9	2.00	24.9	25.64
	LL3mw-238	2370625.34	559569.06	1004.75	20.7	1006.91	A	Bedrock	10.5	20.5	20.7	2.16	22.9	23.56
	LL3mw-239	2370895.01	559101.39	1001.70	35.7	1003.50	A	Bedrock	24.9	34.9	35.0	1.80	36.8	38.09
	LL3mw-240	2371309.57	558204.34	1005.60	35.5	1007.52	A	Bedrock	24.4	34.4	34.6	1.92	36.5	37.35
	LL3mw-241	2370332.80	559298.09	992.41	23.8	994.65	A	Bedrock	12.7	22.7	22.9	2.24	25.1	21.83
	LL3mw-242	2371993.30	557034.21	997.39	20.5	999.32	A	Bedrock	9.8	19.8	20.0	1.93	21.9	22.64
	LL3MW-243	2371532.61	556688.92	989.36	24.5	991.16	A	Bearock	13.8	23.8	24.0	1.80	25.8	24.46
Load Line 4	114mw-193	2364237 44	554959 74	980 88	21.9	982.92	Δ	Unconsolidated	11 3	21.3	21.5	2 04	23.5	24 43
	LL 4mw-194	2364584 76	555088 18	981.87	22.0	983.76	A	Unconsolidated	11.0	21.0	21.0	1 89	23.4	23.87
	LL4mw-195	2365198.84	555045.69	980.83	21.0	982.59	A	Unconsolidated	10.3	20.3	20.5	1.76	22.3	23.00
	LL4mw-196	2365297.28	555212.59	982.56	20.0	984.55	Α	Unconsolidated	9.2	19.2	19.4	1.99	21.4	21.92
	LL4mw-197	2365385.95	555396.55	983.79	21.7	985.46	Α	Unconsolidated	10.8	20.8	21.0	1.67	22.7	23.71
	LL4mw-198	2364991.12	555440.99	981.61	22.0	983.42	Α	Unconsolidated	10.3	20.3	20.5	1.81	22.3	21.64
	LL4mw-199	2365421.66	554621.06	975.20	22.0	977.28	Α	Unconsolidated	10.3	20.3	20.5	2.08	22.6	23.41
	LL4mw-200	2365904.12	554579.72	985.97	23.5	987.93	Α	Unconsolidated	12.6	22.6	23.0	1.96	25.0	25.37
Load Line 5	LL5mw-001	2354625.07	554319.25	1125.00	24.0	1127.92	Α	Unconsolidated	14.0	24.0	24.0	2.92	26.9	27.13
	LL5mw-002	2354571.52	554604.01	1125.80	25.0	1128.68	Α	Unconsolidated	15.0	25.0	25.0	2.88	27.9	27.58
	LL5mw-003	2354964.47	554535.41	1124.70	21.0	1127.70	A	Unconsolidated	11.0	21.0	21.0	3.00	24.0	24.07
	LL5mw-004	2355006.44	554073.73	1122.90	22.4	1125.81	A	Unconsolidated	12.0	22.0	22.0	2.91	24.9	25.47
	LL5mw-005	2354422.02	554152.73	1126.50	27.8	1129.42	A	Unconsolidated	17.0	27.0	27.0	2.92	29.9	29.82
	LL5MW-006	2354730.78	553984.82	1125.10	24.5	1128.00	A	Unconsolidated	14.0	24.0	24.0	2.90	26.9	27.05
Load Line 6	LI 6mw-001	2353153 23	554214 84	NA	18.0	1124 16	F	Unconsolidated	7.0	17.0	17 0	0.00	17.0	17 65
	LL6mw-002	2353820.09	553589.88	NA	23.0	1129.36	F	Unconsolidated	12.5	22.5	22.5	0.00	22.5	24.45
	LL6mw-003	2353048.68	553544.34	NA	23.4	1125.38	A	Unconsolidated	12.5	22.5	22.5	3.35	25.9	25.83
	LL6mw-004	2353368.79	553431.82	NA	23.0	1125.39	Α	Unconsolidated	12.5	22.5	22.5	2.58	25.1	24.62
	LL6mw-005	2353194.52	553170.76	NA	19.9	1120.47	Α	Unconsolidated	9.5	19.5	19.5	2.96	22.5	22.46
	LL6mw-006	2352419.15	553165.28	NA	20.0	1124.37	Α	Unconsolidated	7.0	17.0	17.0	0.00	17.0	17.88
	LL6mw-007	2353354.89	552677.17	NA	20.0	1115.62	F	Unconsolidated	9.5	19.5	19.5	0.00	19.5	19.39
Load Line 7	LL7mw-001	2352192.91	554925.77	1126.90	30.0	1129.64	Α	Unconsolidated	19.5	29.5	29.5	2.74	32.2	33.16
	LL7mw-002	2351918.23	555126.55	1126.70	26.5	1129.55	A	Bedrock	15.0	25.0	25.0	2.85	27.8	27.24
	LL7mw-003	2352351.04	555417.04	1118.23	31.5	1120.84	A	Bedrock	21.0	31.0	31.0	2.61	33.6	33.63
	LL7mw-004	2352035.20	555581.14	1123.30	29.5	1126.32	A	Bedrock	19.5	29.5	29.5	3.02	32.5	32.32
	LL7mw-005	2351741.47	555581.80	1133.30	28.2	1135.87	A	Bedrock	18.0	28.0	28.0	2.57	30.6	30.44
	LL/mw-006	2351879.92	555990.59	1120.70	28.0	1123.56	A	Bedrock	17.5	27.5	27.5	2.86	30.4	30.42
Lood Line 9		2251666 40	552607.06	1110 60	04.0	1101 /6	Δ.	Unconcolidated	110	24.0	24.0	0 77	JE 0	07.60
		2351000.10	552409 49	110.09	24.0	1121.40	A	Unconsolidated	14.0	24.0	24.0	2.11	<u>∠0.8</u> 22.9	27.02
		2351010.33	5522400.10	1116 30	30.4 21 0	1110.05	Δ Α	Unconsolidated	20.0	20.0	20.0	2.04	32.0 23.2	32.00 22.10
	118mw-003	2351261 83	551807 58	1110.30	21.0	1115.05	Δ	Unconsolidated	10.5	20.0	20.5	3.02	23.3	23.10
		2001201.00	001007.00	1112.73	20.0	1110.70		Shoonsonualeu	10.0	20.0	20.0	0.02	20.0	22.10

Table 3-1 RVAAP	Well Construction	Details
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											Bottom of			April 2006
											Inner		Reported	Measured
											Casing		Bottom of	Bottom of
		Ohio State	Ohio State		Total		Well		Top of	Bottom	Plug or	Stickup	Inner	Inner
		Plane	Plane	GL	Drilled	TOC	Head	Monitoring	Screen	of Screen	End Cap	height (ft	Casing	Casing
RVAAP Area	Well ID	Easting	Northing	Elevation ^a	Depth ^b	Elevation ^a	Type [℃]	Zone	(ft BGS)	(ft BGS)	(ft BGS)	AGS)	(BTOC)	(BTOC)
	LL8mw-005	2351748.32	551522.48	1112.51	24.0	1115.73	Α	Unconsolidated	14.0	24.0	24.0	3.22	27.2	27.26
	LL8mw-006	2351483.58	551296.77	1114.33	24.2	1117.17	A	Unconsolidated	14.0	24.0	24.0	2.84	26.8	27.18
Load Line 9	119mw-001	2355817.04	556125.81	ΝΔ	21.6	1134.62	Δ	Bedrock	10.5	20.5	20.5	2 78	23.3	23.40
	LL9mw-002	2355907.76	556755 11	NA	21.0	1127 30	Δ	Bedrock	10.0	20.0	20.0	2.10	20.0	20.40
	119mw-003	2356635.21	556445.31	NA	22.0	1135 76	A	Bedrock	11.5	21.5	21.5	2.12	23.8	24 29
	LL9mw-004	2357338.76	556002.00	NA	33.0	1131.83	A	Bedrock	22.0	32.0	32.0	2.91	34.9	34.74
	LL9mw-005	2356505.95	557063.36	NA	20.6	1130.93	A	Bedrock	10.0	20.0	20.0	3.30	23.3	23.58
	LL9mw-006	2357446.67	556434.79	NA	26.8	1129.88	Α	Bedrock	16.0	26.0	26.0	2.90	28.9	28.90
	LL9mw-007	2357024.34	557000.56	NA	19.0	1119.99	F	Bedrock	8.5	18.5	18.5	0.00	18.5	18.22
Load Line 10	LL10mw-001	2355272.22	555816.25	1130.00	28.0	1132.77	Α	Bedrock	17.0	27.0	27.0	2.77	29.8	29.65
	LL10mw-002	2355710.51	555523.36	1124.40	28.0	1127.13	A	Bedrock	17.0	27.0	27.0	2.73	29.7	29.87
	LL10mw-003	2355389.92	555494.71	1127.40	26.4	1130.28	A	Bedrock	16.0	26.0	26.0	2.88	28.9	28.62
	LL10mw-004	2355438.20	555236.59	1119.60	31.2	1122.39	A	Bedrock	21.0	31.0	31.0	2.79	33.8	33.61
	LL10mw-005	2355943.55	555380.53	1122.90	27.0	1125.67	A	Bedrock	16.5	26.5	26.5	2.77	29.3	29.34
	LL10mw-006	2355654.80	554995.25	1121.20	24.0	1123.83	A	Unconsolidated	13.5	23.5	23.5	2.63	26.1	26.59
Lood Line 11	1110011	2252770 00	557505 02	1007.46	22.0	1100.16	۸	Unconcolidated	11 /	21.4	21.4	2 70	24.1	21 59
	$\perp 1100 \cdot 2$	2352770.09	559310 52	1097.40	23.0	100.10		Unconsolidated	6.2	16.2	21.4	2.70	24.1	21.50
	L1110w-2	23535354.20	557000 62	1088.45	20.0	1080.00	F	Unconsolidated	5.0	10.3	10.3	-0.29	10.0	16.33
	L11mw-4	2352737.24	558164 36	1084 60	17.0	1084 72	F	Unconsolidated	6.1	16.0	16.0	0.00	16.2	16.14
	L 11mw-5	2352847.56	558501.02	1079.60	17.0	1079 40	F	Unconsolidated	6.1	16.1	16.1	-0.20	16.2	16.20
	L11mw-6	2352521.36	558263.28	1086.61	17.0	1086.50	F	Unconsolidated	5.6	15.6	15.6	-0.11	15.5	15.77
	L11mw-7	2352094.81	558189.71	1079.22	23.0	1082.00	A	Unconsolidated	12.4	22.4	22.4	2.78	25.2	25.37
	L11mw-8	2352388.60	557981.17	1087.90	17.0	1087.74	F	Unconsolidated	5.6	15.6	15.6	-0.16	15.4	15.78
	L11mw-9	2352577.18	557901.18	1088.38	17.0	1088.28	F	Unconsolidated	6.7	16.7	16.7	-0.10	16.6	17.02
	L11mw-10	2352039.00	557675.43	1080.22	22.0	1082.68	Α	Unconsolidated	10.9	20.9	20.9	2.46	23.4	23.52
Load Line 12	L12mw-088	2368667.75	556393.79	978.94	29.0	981.06	A	Unconsolidated	14.8	24.8	25.0	2.12	27.1	27.62
	L12mw-107	2368595.67	556759.02	978.03	33.0	980.15	A	Unconsolidated	20.7	30.7	31.0	2.12	33.1	33.76
	L12mw-113	2368223.73	558345.37	977.67	23.0	980.18	A	Unconsolidated	12.3	22.3	22.5	2.51	25.0	20.62
	L12mw-128	2368293.20	557371.54	976.21	34.0	978.24	A	Unconsolidated	21.1	31.1	31.3	2.03	33.3	34.46
	L12mw 153	2308138.87	557823.23	975.34	26.0	977.85	A	Unconsolidated	12.3	22.3	22.5	2.51	25.0	25.10
	L12111W-104	2300103.00	555900 25	977.00	29.0	979.00	A	Unconsolidated	25.2	20.4	20.0	2.00	20.7	20.90
	12mw-183	2369224 36	556068 15	902.20	36.0	904.42	Δ	Unconsolidated	23.2	33.2	33.5	2.22	36.0	36.38
	1 12mw-184	2368997 48	556399 46	900.09	29.5	982.90	Δ	Unconsolidated	18.8	28.8	29.0	2.39	31.2	31 46
	L12mw-185	2368829 86	556946 75	979.09	23.3	981.31	A	Unconsolidated	10.0	20.0	23.0	2.20	23.2	23.35
	L12mw-186	2367912.39	559065.95	976.34	23.0	978.31	A	Unconsolidated	8.8	18.8	19.0	1.97	21.0	21.11
	L12mw-187	2368524.14	557633.10	977.90	29.0	979.94	A	Unconsolidated	17.2	27.2	27.4	2.04	29.4	30.00
	L12mw-188	2367908.82	558132.59	978.46	20.5	980.63	A	Unconsolidated	9.8	19.8	20.0	2.17	22.2	22.40
	L12mw-189	2367945.92	558569.27	976.17	18.5	978.04	Α	Unconsolidated	7.5	17.5	17.7	1.87	19.6	20.14
	LL12mw-242	2368545.29	558020.51	978.40	26.3	981.20	А	Unconsolidated	15.5	25.5	25.5	2.80	28.3	29.43
	LL12mw-243	2368190.04	557376.32	978.10	24.0	980.79	Α	Unconsolidated	13.0	23.0	23.0	2.69	25.7	25.85

Table 3-1 RVAAP	Well Construction	Details
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											Bottom of			April 2006
											Inner		Reported	Measured
											Casing		Bottom of	Bottom of
		Ohio State	Ohio State		Total		Well		Top of	Bottom	Plug or	Stickup	Inner	Inner
		Plane	Plane	GL	Drilled		Head	Monitoring	Screen	of Screen	End Cap	height (ft	Casing	Casing
RVAAP Area	Well ID	Easting	Northing	Elevation	Depth	Elevation	Туре	Zone	(ft BGS)	(ft BGS)	(ft BGS)	AGS)	(BTOC)	(BTOC)
	LL12mw-244	2368751.42	557377.17	978.10	30.0	980.65	Α	Unconsolidated	19.5	29.5	29.5	2.55	32.1	31.59
	LL12mw-245	2368370.74	557044.55	977.50	29.0	980.04	A	Unconsolidated	18.0	28.0	28.0	2.54	30.5	30.38
	LL12mw-246	2369432.17	556658.89	982.00	32.0	984.83	A	Unconsolidated	21.5	31.5	31.5	2.83	34.3	35.06
Atlas Consu Vand		0000000.05	550404.04	070.40	00.0	004.40	•	l la concellatera	44.0	01.0	04.0	0.70	00.7	00.04
Atlas Scrap Taro	ASYMW-001	2300200.83	558404.04	978.40	22.0	981.13	A	Unconsolidated	11.0	21.0	21.0	2.73	23.7	23.21
	ASTINV-002	2366651.40	558015.00	902.00	20.0	905.24	A	Unconsolidated	10.0	19.0	19.0	3.24 2.51	22.7	23.02
	ASTINW-003	2367166.04	557640.81	977.10	21.3	902.21		Unconsolidated	17.0	21.0	27.0	2.51	23.3	20.30
	ASYmw-005	2367448 16	557783.01	977.60	27.0	979.80	A	Unconsolidated	14.0	24.0	24.0	2.30	26.0	27.25
	ASYmw-006	2366746.73	557257.72	980.20	27.0	983.01	A	Unconsolidated	16.0	26.0	26.0	2.81	28.8	28.97
	ASYmw-007	2366834.49	556818.08	981.40	28.0	984.16	A	Unconsolidated	16.0	26.0	26.0	2.76	28.8	28.98
	ASYmw-008	2367475.07	557087.66	976.20	26.0	978.85	Α	Unconsolidated	15.0	25.0	25.0	2.65	27.7	27.76
	ASYmw-009	2366631.94	557603.68	979.90	22.0	982.70	Α	Unconsolidated	11.5	21.5	21.5	2.80	24.3	24.65
	ASYmw-010	2366985.37	557270.61	978.20	28.0	981.05	А	Unconsolidated	17.0	27.0	27.0	2.85	29.8	31.21
Building 1200	B12mw-010	2371292.81	565827.43	1002.72	21.0	1005.92	A	Bedrock	10.0	20.0	20.0	3.20	23.2	22.90
	B12mw-011	2371416.15	565687.82	1003.76	24.7	1006.70	A	Bedrock	14.0	24.0	24.0	2.94	26.9	26.77
	B12mw-012	2371430.41	565828.01	1003.43	22.3	1006.32	A	Bedrock	12.0	22.0	22.0	2.89	24.9	24.92
		0040057.00	550400.40	1170 50	50.0	4404.00		Destruct	00.0	40.0	10.0	0.50	54.0	
C-BIOCK Quarry	CBLmw-001	2343657.08	559403.12	1178.50	50.0	1181.08	A	Bedrock	39.0	49.0	49.0	2.58	51.6	49.81
	CBLIIIW-002	2343845.22	559044.48	1172.30	45.3	1175.24	A	Bedrock	34.5	44.5	44.5	2.74	47.2	47.44
	CBLmw-004	2343970.00	550051 58	1172.22	44.0	1173.00		Bedrock	34.0	43.0	43.0	2.04	45.8	44.02
	CDLIIIW-004	2343000.70	00001.00	1172.00	40.0	1174.04		Deditock	54.0	44.0	-++.0	2.70	40.0	47.15
Central Burn Pits	CBPmw-1	2367095.37	561616.01	972.71	32.3	975.84	Α	Unconsolidated	21.8	31.8	31.8	3.13	34.9	32.85
	CBPmw-2	2367295.66	561865.83	967.33	30.0	970.04	A	Unconsolidated	19.5	29.5	29.5	2.71	32.2	32.14
	CBPmw-3	2366768.68	561944.14	972.04	25.0	974.67	A	Unconsolidated	14.5	24.5	24.5	2.63	27.1	30.28
	CBPmw-4	2366978.80	562123.80	968.58	27.5	971.13	Α	Unconsolidated	17.0	27.0	27.0	2.55	29.5	29.82
	CBPmw-5	2366919.66	562311.88	968.83	25.0	971.59	Α	Unconsolidated	14.5	24.5	24.5	2.76	27.3	27.54
	CBPmw-6	2367243.68	562311.87	965.01	23.0	967.64	A	Unconsolidated	12.5	22.5	22.5	2.63	25.1	25.12
	CBPmw-7	2366512.62	562006.41	973.47	30.0	976.37	A	Unconsolidated	19.5	29.5	29.5	2.90	32.4	31.92
	CBPmw-8	2366757.21	562668.84	970.57	25.5	973.19	A	Unconsolidated	15.0	25.0	25.0	2.62	27.6	28.02
				075.40						1			1.5.0	
Cobbs Pond	CPmw-1	2368948.81	560440.91	975.46	16.0	975.26		Unconsolidated	5.5	15.5	15.5	-0.20	15.3	14.84
	CPmw-2	2368239.23	560311.26	972.72	16.0	972.31		Unconsolidated	5.5	15.5	15.5	-0.41	15.1	15.12
	CPIIIW-3	2368674 31	561843.46	973.27	20.0	972.92		Unconsolidated	0.0	10.0	10.0	-0.30	17.0	17.03
	CPmw-5	2367900 41	561846 78	970.51	20.0	901.20		Unconsolidated	9.5	19.0	39.5	2.09	42.2	43.27
	CPmw-6	2367727 13	562830 13	962 97	18 5	965.13	Δ	Unconsolidated	23.J 8 0	18.0	18.0	2.07	20.2	20.74
		2001121.10	002000.10	502.97	10.0	000.10			0.0	10.0	10.0	2.10	20.2	20.14
Demo. Area 2	DET-1B	2354959.47	560820.03	1064.35	39.0	1065.85	Α	Unconsolidated	34.0	39.0	39.0	1.50	40.5	38.61
	DET-2	2355360.33	560664.71	1060.24	39.0	1061.24	A	Unconsolidated	34.0	39.0	39.0	1.00	40.0	42.05
	DET-3	2355204.94	560456.10	1035.81	15.0	1036.81	Α	Unconsolidated	7.0	12.0	12.0	1.00	13.0	16.10
	DET-4	2355072.36	560454.22	1037.68	11.0	1038.68	A	Unconsolidated	6.0	11.0	11.0	1.00	12.0	NA
	DA2mw-104	2354773.79	561129.59	1070.82	27.0	1073.89	Α	Unconsolidated	16.3	26.3	26.5	3.07	29.6	29.34

											Bottom of			April 2006
											Inner		Reported	Measured
											Casing		Bottom of	Bottom of
		Ohio State	Ohio State		Total		Well		Top of	Bottom	Plug or	Stickup	Inner	Inner
		Plane	Plane	GL	Drilled	тос	Head	Monitoring	Screen	of Screen	End Cap	height (ft	Casing	Casing
RVAAP Area	Well ID	Easting	Northing	Elevation ^a	Depth ^b	Elevation ^a	Туре ^с	Zone	(ft BGS)	(ft BGS)	(ft BGS)	AGS)	(BTOC)	(BTOC)
	DA2mw-105	2354557.62	560572.58	1042.66	14.0	1045.34	А	Unconsolidated	8.3	13.3	13.5	2.68	16.2	16.32
	DA2mw-106	2354848.85	560560.49	1041.19	16.0	1043.79	Α	Unconsolidated	8.3	15.3	15.5	2.60	18.1	16.89
	DA2mw-107	2354924.29	560480.05	1039.18	15.0	1041.63	Α	Unconsolidated	8.8	13.8	14.0	2.45	16.5	16.94
	DA2mw-108	2355604.43	560181.78	1029.92	15.0	1032.36	А	Bedrock	9.3	14.3	14.5	2.44	16.9	17.25
	DA2mw-109	2354793.14	559897.89	1068.66	24.0	1071.29	А	Unconsolidated	11.3	21.3	21.5	2.63	24.1	24.44
	DA2mw-110	2355195.91	559927.02	1061.39	20.0	1063.78	Α	Unconsolidated	9.3	19.3	19.5	2.39	21.9	22.42
	DA2mw-111	2354728.33	560222.94	1039.63	12.6	1042.12	Α	Bedrock	7.1	12.1	12.3	2.49	14.8	14.89
	DA2mw-112	2355018.98	560378.36	1034.87	15.0	1037.44	А	Unconsolidated	8.8	13.8	14.0	2.57	16.6	17.16
	DA2mw-113	2355153.13	560394.81	1034.51	14.0	1037.11	Α	Unconsolidated	8.3	13.3	13.5	2.60	16.1	16.39
	FD (00			0.45.50		0.47.00								
Erie Burning	EBGmw-123	2380049.21	5/1/4/.04	945.59	32.0	947.82	A	Unconsolidated	21.0	31.0	31.5	2.23	33.7	34.86
Grounds	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
	EBGMW-125	2379679.20	571000.03	947.55	25.0	949.89	A	Unconsolidated	14.0	24.0	24.5	2.34	20.8	27.55
	EBGIIIW-120	2300307.31	571092.61	930.20	20.0	940.01	A	Unconsolidated	10.2	20.2	20.0	2.41	27.9	20.00
	EBGIIIW-127	2300172.10	570070 22	940.21	30.0	943.07	A	Unconsolidated	19.0	29.0	29.0	2.00	32.4	32.94
	EBGIIIW-120	2379092.79	572025.69	942.47	20.0	945.15	A	Unconsolidated	15.0	25.0	20.0	2.00	20.0	20.32
	EBGIIIW-129	2379240.32	570605.61	0/1 19	29.0	944.30	A	Unconsolidated	10.0	20.0	20.0	2.39	20.4	29.40
	EbGiliw-130	2379220.09	570095.01	941.10	20.0	944.00	A	Onconsolidated	10.2	20.2	20.0	2.02	20.3	20.49
Fuze and Booster														
Quarry	FBQmw-166	2349584.33	553123.86	1104.87	16.0	1108.86	А	Unconsolidated	5.5	15.5	15.5	3,99	19.5	19.82
	FBQmw-167	2349675.45	553556.12	1112.05	18.0	1115.90	A	Unconsolidated	5.0	15.0	15.0	3.85	18.9	19.08
	FBQmw-168	2350066.87	553620.85	1131.27	19.5	1133.91	A	Unconsolidated	9.0	19.0	19.0	2.64	21.6	21.40
	FBQmw-169	2349730.90	553681.21	1117.36	16.0	1120.58	A	Unconsolidated	5.0	15.0	15.0	3.22	18.2	18.20
	FBQmw-170	2350102.41	553975.40	1139.67	30.5	1142.26	A	Bedrock	20.0	30.0	30.0	2.59	32.6	32.79
	FBQmw-171	2350072.44	554230.93	1140.49	30.0	1143.55	Α	Bedrock	18.0	28.0	28.0	3.06	31.1	31.51
	FBQmw-172	2349907.37	554322.17	1145.71	33.0	1150.09	Α	Bedrock	20.0	30.0	30.0	4.38	34.4	34.50
	FBQmw-173	2350449.01	554491.35	1162.43	50.0	1165.94	А	Bedrock	29.5	49.5	49.5	3.51	53.0	51.73
	FBQmw-174	2350289.81	554142.44	1135.78	22.5	1139.97	А	Bedrock	12.0	22.0	22.0	4.19	26.2	22.94
	FBQmw-175	2350297.98	553989.24	1137.16	22.5	1140.73	А	Bedrock	12.0	22.0	22.0	3.57	25.6	25.85
	FBQmw-176	2350219.45	553273.33	1129.57	21.5	1131.91	А	Unconsolidated	11.0	21.0	21.0	2.34	23.3	24.22
	FBQmw-177	2350112.18	553321.94	1125.73	22.5	1128.57	А	Unconsolidated	12.0	22.0	22.0	2.84	24.8	25.02
Landfill North of							-							
Winklepeck	LNWmw-024	2358403.21	564825.89	1035.30	24.0	1038.00	A	Unconsolidated	10.0	20.0	20.0	2.70	22.7	22.67
	LNWmw-025	2358417.06	565071.92	1027.20	19.0	1029.13	A	Unconsolidated	8.0	18.0	18.0	1.93	19.9	20.43
	LNWmw-026	2358952.24	564658.16	1025.00	24.0	1027.80	A	Unconsolidated	13.0	23.0	23.0	2.80	25.8	26.12
	LNWmw-027	2358628.75	564517.41	1024.40	25.0	1027.13	A	Bedrock	14.0	24.0	24.0	2.73	26.7	26.97
NACA Test Area		2345433 40	551607 20	1077 65	22 O	1080 30	Δ	Unconsolidated	12 0	22 ∩	22 0	2 65	216	21 25
INACA TESLATED		2345781.60	551016 22	1077.03	23.0	1085.62		Unconsolidated	12.0	22.0	22.0	2.00	24.0	24.23
		2345007 72	551202 25	1076 80	20.0 10 0	1070.02	Δ	Unconsolidated	۱۲۲۵ ۵ ۵	18 0	22.0 18 0	2.40	24.4	24.02
	NTAmw-110	2346438 0/	551351 /6	1020.03	28.0	1082.62	Δ	Unconsolidated	17 0	27 0	27 0	2.33	20.9	21.01
	NTAmw-111	2346638.01	551538 60	1078.07	20.0	1080 9/	Δ	Unconsolidated	9.5	10 5	10 5	2.03	20.0	20.07
	NTAmw-112	2346880 /8	551712 1/	1075 36	20.0	1078 33	Δ	Unconsolidated	13.0	23.0	23.0	2.07	22.4	22.10
L	P117411W-11Z	2070003.40	001712.14	1070.00	20.9	1070.00	Л	Chechsonaleu	10.9	20.9	20.9	2.31	20.9	20.12

		Ohio State	Ohio State		Total		Well		Top of	Bottom	Bottom of Inner Casing Plug or	Stickup	Reported Bottom of Inner	April 2006 Measured Bottom of Inner
RVAAP Area	Well ID	Plane Easting	Plane Northing	GL Elevation ^a	Drilled Depth ^b	TOC Elevation ^a	Head Type ^c	Monitoring Zone	Screen (ft BGS)	of Screen (ft BGS)	End Cap (ft BGS)	height (ft AGS)	Casing (BTOC)	Casing (BTOC)
	NTAmw-113	2347082.83	551488.52	1072.61	27.5	1075.68	А	Unconsolidated	17.0	27.0	27.5	3.07	30.6	29.67
	NTAmw-114	2347301.57	551592.94	1075.61	20.0	1078.71	A	Unconsolidated	9.5	19.5	19.5	3.10	22.6	22.90
	NTAmw-115	2347581.16	551791.78	1086.91	24.0	1089.65	A	Unconsolidated	12.5	22.5	22.5	2.74	25.2	25.40
	NTAmw-116	2348196.39	551748.00	1091.68	22.0	1094.33	A	Unconsolidated	10.0	20.0	20.0	2.65	22.6	22.68
	NTAmw-117	2347994.83	551584.57	1091.67	25.0	1094.54	A	Unconsolidated	14.5	24.5	24.5	2.87	27.4	27.62
	NIAmw-118	2347609.41	551335.04	1078.86	22.5	1081.44	A	Unconsolidated	12.0	22.0	22.0	2.58	24.6	24.84
Bemedell Querry		0075007 74	566001.26	002.52	40.4	005.20	Δ.	Dodrook	10.4	20.4	20.6	1 07	11 1	42.07
L andfill	RQLIIIW-000	2375872.56	566544.36	993.32	42.1	995.39	A A	Bedrock	19.4	39.4	39.0	1.07	41.4	42.07
	ROL mw-008	2376011.08	566327.94	903.00	18.7	966.08	Δ	Bedrock	6.0	16.0	16.2	2.05	18.5	18.72
	RQL mw-009	2376253.65	566351.20	962.60	18.8	964.58	A	Bedrock	5.9	15.9	16.4	1.20	18.4	18.91
	RQI mw-010	2376048 58	566857.39	980.04	35.4	982.14	A	Bedrock	12.5	32.5	33.0	2 10	35.1	35.37
	RQLmw-011	2376398.19	566819.66	974.60	35.4	976.57	A	Bedrock	12.0	32.4	32.6	1.97	34.6	35.40
	RQLmw-012	2376558.19	566551.95	975.12	30.5	977.65	A	Bedrock	19.8	29.8	30.0	2.53	32.5	32.72
	RQLmw-013	2376204.93	566928.09	978.04	34.4	980.71	Α	Bedrock	23.7	33.7	33.9	2.67	36.6	36.54
	RQLmw-014	2376519.38	566941.29	970.83	29.4	973.49	Α	Bedrock	18.6	28.6	28.9	2.66	31.6	33.57
	RQLmw-015	2375490.96	566560.90	989.19	40.1	991.26	Α	Bedrock	29.2	39.2	39.5	2.07	41.6	42.08
	RQLmw-016	2375649.55	566177.68	994.02	39.5	996.60	A	Bedrock	28.5	38.5	39.0	2.58	41.6	42.74
	RQLmw-017	2376124.18	565931.38	988.69	30.5	991.23	А	Bedrock	19.8	29.8	30.0	2.54	32.5	32.88
Winklepeck Burning														
Grounds	WBGmw-005	2357163.55	563037.18	1052.20	19.0	1054.70	A	Unconsolidated	8.3	18.3	18.6	2.50	21.1	21.33
	WBGmw-006	2359087.79	563008.87	1012.16	19.0	1014.66	A	Unconsolidated	7.6	17.6	17.9	2.50	20.4	20.34
	WBGmw-007	2360420.44	562479.87	998.09	24.0	1000.59	A	Unconsolidated	13.5	23.5	23.8	2.50	26.3	26.50
	WBGmw-008	2359700.57	562010.35	1005.71	18.5	1008.21	A	Unconsolidated	8.1	18.2	18.5	2.50	21.0	20.93
	WBGmw-009	2357159.20	561603.54	1045.03	24.0	1047.53	A	Unconsolidated	11.4	21.4	21.5	2.50	24.0	24.37
	WBGMW-010	2356051.96	562693.20	1067.10	21.0	1009.85	A	Unconsolidated	10.5	20.5	20.8	2.75	23.0	23.48
	WBGmw-012	2354810.65	562240.90	1009.70	22.0	1072.30	Δ		10.0	21.0	21.3	2.00	24.0	23.95
	WBGmw-012	2355223 25	561518 27	1070.30	22.0	1079.11	Δ	Unconsolidated	11.0	29.0	29.4	2.01	23.0	24.25
	WBGmw-014	2360439.22	562061.26	994 10	22.0	996.78	Δ	Unconsolidated	12.0	21.0	21.3	2.00	25.9	24.23
	WBGmw-015	2359182 41	562340 12	1009.10	22.0	1011.60	A	Unconsolidated	11.0	21.0	21.3	2.00	23.8	23.62
	WBGmw-016	2360645.88	562709.13	994.90	24.0	997.03	A	Unconsolidated	13.0	23.0	23.3	2.13	25.4	25.33
	WBGmw-017	2359603.84	562913.24	1004.00	22.0	1006.62	A	Unconsolidated	11.0	21.0	21.3	2.62	23.9	23.83
Suspected Mustard														
Agent Burial Site	MBS-001	2345323.00	550759.50	1079.68	30.0	1082.20	A	Unconsolidated	19	28.7	29	2.52	31.5	31.05
	MBS-002	2345322.30	550886.20	1080.50	30.0	1083.22	A	Unconsolidated	18	27.3	28	2.72	30.7	30.45
	MBS-003	2345172.40	550922.80	1082.45	30.0	1084.45	A	Unconsolidated	18.5	28.2	28.5	2.00	30.5	30.80
	MBS-004	2345134.20	550767.90	1079.55	26.0	1081.80	Α	Unconsolidated	14.7	24.4	24.7	2.25	27.0	26.68
	MBS-005	2345354.10	550800.70	1080.50	30.0	1082.42	A	Unconsolidated	18	28	28.08	1.92	30.2	30.15
	MBS-006	2345282.3	550726.1	1080.29	28.0	1081.83	A	Unconsolidated	16.5	26.5	26.56	1.54	28.2	28.22

^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.

			тос	Potentio- metric Elevation	Potentio- metric Elevation	Difference in Groundwater Elevations	April 2006 Depth to	Potentio- metric Elevation	Difference in Groundwater Elevations	Potentio- metric Elevation	Difference in Groundwater Elevations
RVAAP Area	Well ID	Zone ^c	Elevation ^a	(2005-4)	(2006-1)	2005-1 VS 2005-4 (ft)	Water ^b	(2006-2)	2006-2 VS 2006-1 (ft)	(2006-3)	2006-3 VS 2006-2 (ft)
Facility-Wide				. ,					. ,	. ,	
Background	BKGmw-004	U	967.66	953.24	953.93	0.69	13.58	954.08	0.15	954.59	0.51
	BKGmw-005	U	1151.94	1137.82	1140.88	3.06	10.08	1141.86	0.98	1141.91	0.05
	BKGmw-006	В	1028.88	1005.66	1006.20	0.54	22.55	1006.33	0.13	1007.03	0.70
	BKGmw-008	В	972.90	954.36	956.32	1.96	15.53	957.37	1.05	957.53	0.16
	BKGmw-010	В	1006.18	985.84	993.11	7.27	14.62	991.56	-1.55	993.87	2.31
	BKGmw-012	В	1000.07	988.40	992.30	3.90	7.41	992.66	0.36	992.35	-0.31
	BKGmw-013	U	989.09	976.26	977.03	0.77	11.74	977.35	0.32	977.50	0.15
	BKGmw-015	В	1040.40	989.43	991.66	2.23	48.38	992.02	0.36	991.99	-0.03
	BKGmw-016	U	1100.92	1093.73	1095.28	1.55	5.21	1095.71	0.43	1095.71	0.00
	BKGmw-017	U	1135.30	1115.02	1118.77	3.75	16.22	1119.08	0.31	1118.72	-0.36
	BKGmw-018	В	1045.56	1029.33	1029.69	0.36	15.74	1029.82	0.13	1030.16	0.34
	BKGmw-019	U	1110.74	1090.06	1092.24	2.18	18.07	1092.67	0.43	1092.64	-0.03
	BKGmw-020	В	1067.50	1055.92	1059.47	3.55	7.22	1060.28	0.81	1059.85	-0.43
	BKGmw-021	U	974.66	955.67	956.00	0.33	17.85	956.81	0.81	959.32	2.51
Load Line 1	LL1mw-063	В	994.84	968.39	NM	NM	26.41	968.43	NM	NM	NM
	LL1mw-064	U	935.10	931.59	NM	NM	0.70	934.40	NM	NM	NM
	LL1mw-065	U	944.41	930.20	NM	NM	10.36	934.05	NM	NM	NM
	LL1mw-067	В	980.36	962.04	NM	NM	18.39	961.97	NM	NM	NM
	LL1mw-078	В	995.84	964.46	963.39	-1.07	31.85	963.99	0.60	965.80	1.81
	LL1mw-079	В	997.87	966.51	NM	NM	32.12	965.75	NM	NM	NM
	LL1mw-080	В	996.27	984.78	986.07	1.29	9.30	986.97	0.90	987.04	0.07
	LL1mw-081	В	998.92	967.84	NM	NM	30.84	968.08	NM	NM	NM
	LL1mw-082	В	1006.45	977.07	NM	NM	27.93	978.52	NM	NM	NM
	LL1mw-083	В	995.20	962.67	961.76	-0.91	32.93	962.27	0.51	964.12	1.85
	LL1mw-084	В	998.73	968.13	NM	NM	28.81	969.92	NM	NM	NM
	LL1mw-085	В	996.84	962.36	NM	NM	35.00	961.84	NM	NM	NM

 Table 3-2 RVAAP Potentiometric Data for FWGWMP 2006 Annual Report

RVAAP Area	Well ID	Zone ^c	TOC Elevation ^a	Potentio- metric Elevation Sept. 05 ^a (2005-4)	Potentio- metric Elevation March 06 ^a (2006-1)	Difference in Groundwater Elevations 2006-1 vs 2005-4 (ft)	April 2006 Depth to Water ^b	Potentio- metric Elevation April 06 ^a (2006-2)	Difference in Groundwater Elevations 2006-2 vs 2006-1 (ft)	Potentio- metric Elevation July 06 ^a (2006-3)	Difference in Groundwater Elevations 2006-3 vs 2006-2 (ft)
Load Line 2	LL2mw-059	В	966.67	953.09	954.45	1.36	11.51	955.16	0.71	954.99	-0.17
	LL2mw-060	В	961.57	951.16	NM	NM	7.54	954.03	NM	NM	NM
	LL2mw-261	В	1011.40	1004.18	NM	NM	6.22	1005.18	NM	NM	NM
	LL2mw-262	В	1012.62	1001.63	1005.65	4.02	6.10	1006.52	0.87	1006.01	-0.51
	LL2mw-263	В	1011.47	1000.50	1004.26	3.76	6.39	1005.08	0.82	1004.94	-0.14
	LL2mw-264	В	1011.88	1003.06	NM	NM	4.64	1007.24	NM	NM	NM
	LL2mw-265	В	961.24	951.20	NM	NM	7.71	953.53	NM	NM	NM
	LL2mw-266	В	1016.28	1002.14	NM	NM	9.50	1006.78	NM	NM	NM
	LL2mw-267	В	1014.81	1004.53	NM	NM	7.73	1007.08	NM	NM	NM
	LL2mw-268	В	1017.28	1002.23	NM	NM	13.07	1004.21	NM	NM	NM
	LL2mw-269	В	1011.62	991.77	NM	NM	17.43	994.19	NM	NM	NM
	LL2mw-270	В	1010.18	1000.02	NM	NM	7.04	1003.14	NM	NM	NM
Load Line 3	LL3mw-232	В	1000.41	977.49	NM	NM	16.74	983.67	NM	NM	NM
	LL3mw-233	В	1004.36	977.75	NM	NM	24.84	979.52	NM	NM	NM
	LL3mw-234	В	1006.56	996.22	NM	NM	9.09	997.47	NM	NM	NM
	LL3mw-235	B	1009.94	988.37	NM	NM	16.06	993.88	NM	NM	NM
	LL3mw-236	B	1011.17	992.34	NM	NM	15.59	995.58	NM	NM	NM
	LL3mw-237	В	1005.57	986.96	NM	NM	13.50	992.07	NM	NM	NM
	LL3mw-238	В	1006.91	989.83	991.29	1.46	14.63	992.28	0.99	992.07	-0.21
	LL3mw-239	В	1003.50	974.67	NM	NM	23.78	979.72	NM	NM	NM
	LL3mw-240	В	1007.52	978.65	NM	NM	27.19	980.33	NM	NM	NM
	LL3mw-241	В	994.65	979.72	NM 004.00		9.28	985.37		NM	NM 0.01
	LL3mw-242	В	999.32	980.60	984.32	3.72	13.29	986.03	1.71	985.12	-0.91
	LL3MW-243	В	991.16	973.24	INIVI	INIVI	11.19	979.97	INIVI	INIVI	INIVI
Lood Line 4	114mw 102	11	082.02	074 20	NIM	NIM	7.02	075.80	NIM	NIM	NIM
LUau Lille 4	LL4mw-195	<u> </u>	983.76	974.29	NM	NM	6.86	976.90	NM	NM	NM
	LL4mw-194	 	982 59	971.42	NM	NM	8 74	973.85	NM	NM	NM
	114mw-196	<u> </u>	984 55	970 44	NM	NM	13 14	971 41	NM	NM	NM
	LI 4mw-197	Ŭ	985.46	970,69	NM	NM	14.23	971.23	NM	NM	NM
	LL4mw-198	Ŭ	983.42	973.60	976.61	3.01	6.26	977.16	0.55	977.54	0.38
	LL4mw-199	Ū	977.28	969.47	970.36	0.89	6.49	970.79	0.43	970.96	0.17
	LL4mw-200	U	987.93	970.07	NM	NM	17.26	970.67	NM	NM	NM

Table 3-2 RVAAP Potentiometric Data for FWGWMP 2006 Annual Report

				Potentio- metric Elevation	Potentio- metric Elevation	Difference in Groundwater Elevations	April 2006	Potentio- metric Elevation	Difference in Groundwater Elevations	Potentio- metric Elevation	Difference in Groundwater Elevations
RVAAP Area	Well ID	Zone ^c	TOC Elevation ^a	Sept. 05 ^a (2005-4)	March 06 ^a (2006-1)	2006-1 vs 2005-4 (ft)	Depth to Water ^b	April 06 ^a (2006-2)	2006-2 vs 2006-1 (ft)	July 06 ^a (2006-3)	2006-3 vs 2006-2 (ft)
Load Line 5	LL5mw-001	U	1127.92	1106.65	NM	NM	17.90	1110.02	NM	NM	NM
	LL5mw-002	U	1128.68	1106.63	NM	NM	18.70	1109.98	NM	NM	NM
	LL5mw-003	U	1127.70	1106.85	NM	NM	16.99	1110.71	NM	NM	NM
	LL5mw-004	U	1125.81	1106.64	NM	NM	15.67	1110.14	NM	NM	NM
	LL5mw-005	U	1129.42	1106.65	NM	NM	19.40	1110.02	NM	NM	NM
	LL5mw-006	U	1128.00	1106.67	NM	NM	18.38	1109.62	NM	NM	NM
Load Line 6	LL6mw-001	U	1124.16	1108.38	NM	NM	11.64	1112.52	NM	NM	NM
	LL6mw-002	U	1129.36	1107.15	NM	NM	19.01	1110.35	NM	NM	NM
	LL6mw-003	U	1125.38	1107.98	NM	NM	14.42	1110.96	NM	NM	NM
	LL6mw-004	U	1125.39	1107.30	NM	NM	15.50	1109.89	NM	NM	NM
	LL6mw-005	U	1120.47	1107.55	NM	NM	10.64	1109.83	NM	NM	NM
	LL6mw-006	U	1124.37	1108.49	NM	NM	11.52	1112.85	NM	NM	NM
	LL6mw-007	U	1115.62	1107.06	NM	NM	2.74	1112.88	NM	NM	NM
Load Line 7	LL7mw-001	U	1129.64	1108.15	NM	NM	18.76	1110.88	NM	NM	NM
	LL7mw-002	В	1129.55	1109.97	NM	NM	16.14	1113.41	NM	NM	NM
	LL7mw-003	В	1120.84	1108.45	NM	NM	9.78	1111.06	NM	NM	NM
	LL7mw-004	В	1126.32	1110.98	NM	NM	13.20	1113.12	NM	NM	NM
	LL7mw-005	В	1135.87	1114.31	NM	NM	19.88	1115.99	NM	NM	NM
	LL7mw-006	В	1123.56	1111.98	NM	NM	8.92	1114.64	NM	NM	NM
Load Line 8	LL8mw-001	U	1121.46	1108.31	NM	NM	8.83	1112.63	NM	NM	NM
	LL8mw-002	U	1124.51	1103.25	NM	NM	15.52	1108.99	NM	NM	NM
	LL8mw-003	U	1119.05	1103.79	NM	NM	9.82	1109.23	NM	NM	NM
	LL8mw-004	U	1115.75	1101.91	NM	NM	8.21	1107.54	NM	NM	NM
	LL8mw-005	U	1115.73	1099.85	NM	NM	11.13	1104.60	NM	NM	NM
	LL8mw-006	U	1117.17	1095.87	NM	NM	17.75	1099.42	NM	NM	NM

Table 3-2 RVAAP Potentiometric Data for FWGWMP 2006 Annual Report

			тос	Potentio- metric Elevation Sept. 05 ^a	Potentio- metric Elevation March 06 ^a	Difference in Groundwater Elevations 2006-1 vs	April 2006 Depth to	Potentio- metric Elevation April 06 ^a	Difference in Groundwater Elevations 2006-2 vs	Potentio- metric Elevation July 06 ^a	Difference in Groundwater Elevations 2006-3 vs
RVAAP Area	Well ID	Zone ^c	Elevation ^a	(2005-4)	(2006-1)	2005-4 (ft)	Water ^b	(2006-2)	2006-1 (ft)	(2006-3)	2006-2 (ft)
Load Line 9	LL9mw-001	В	1134.62	1117.59	NM	NM	14.37	1120.25	NM	NM	NM
	LL9mw-002	В	1127.30	1111.36	NM	NM	10.08	1117.22	NM	NM	NM
	LL9mw-003	В	1135.76	1123.28	NM	NM	11.26	1124.50	NM	NM	NM
	LL9mw-004	В	1131.83	1109.77	NM	NM	19.36	1112.47	NM	NM	NM
	LL9mw-005	В	1130.93	1112.84	NM	NM	15.49	1115.44	NM	NM	NM
	LL9mw-006	В	1129.88	1109.15	NM	NM	17.73	1112.15	NM	NM	NM
	LL9mw-007	В	1119.99	1109.01	NM	NM	8.00	1111.99	NM	NM	NM
Load Line	LL10mw-001	В	1132.77	1106.96	NM	NM	22.97	1109.80	NM	NM	NM
10	LL10mw-002	В	1127.13	1108.34	NM	NM	16.34	1110.79	NM	NM	NM
	LL10mw-003	В	1130.28	1108.88	NM	NM	19.96	1110.32	NM	NM	NM
	LL10mw-004	В	1122.39	1107.59	NM	NM	11.63	1110.76	NM	NM	NM
	LL10mw-005	В	1125.67	1108.53	NM	NM	14.07	1111.60	NM	NM	NM
	LL10mw-006	U	1123.83	1110.53	NM	NM	10.42	1113.41	NM	NM	NM
Load Line	LL11mw-1	U	1100.16	1088.89	NM	NM	7.94	1092.22	NM	NM	NM
11	LL11mw-2	U	1080.00	1076.99	1078.30	1.31	0.99	1079.01	0.71	1079.10	0.09
	LL11mw-3	U	1088.48	1087.31	NM	NM	0.88	1087.60	NM	NM	NM
	LL11mw-4	U	1084.72	1084.64	NM	NM	(+0.09)	1084.81	NM	NM	NM
	LL11mw-5	U	1079.40	1069.60	NM	NM	5.88	1073.52	NM	NM	NM
	LL11mw-6	U	1086.50	1079.97	NM	NM	4.55	1081.95	NM	NM	NM
	LL11mw-7	U	1082.00	1066.26	1068.31	2.05	13.36	1068.64	0.33	1068.66	0.02
	LL11mw-8	U	1087.74	1085.56	NM	NM	1.51	1086.23	NM	NM	NM
	LL11mw-9	U	1088.28	1086.94	NM	NM	*	1088.28	NM	NM	NM
	LL11mw-10	U	1082.68	1078.24	NM	NM	4.26	1078.42	NM	NM	NM
Load Line	L12mw-088	U	981.06	973.60	NM	NM	6.30	974.76	NM	NM	NM
12	L12mw-107	U	980.15	969.46	NM	NM	8.02	972.13	NM	NM	NM
	L12mw-113	U	980.18	972.52	NM	NM	4.99	975.19	NM	NM	NM
	L12mw-128	U	978.24	967.51	NM	NM	8.79	969.45	NM	NM	NM
	L12mw-153	U	977.85	970.28	972.21	1.93	5.25	972.60	0.39	972.73	0.13
	L12mw-154	U	979.06	969.08	NM	NM	7.59	971.47	NM	NM	NM
	L12mw-182	U	984.42	971.90	975.51	3.61	8.49	975.93	0.42	975.90	-0.03
	L12mw-183	U	982.98	969.07	971.58	2.51	10.82	972.16	0.58	972.16	0.00

Table 3-2 RVAAP Potentiometric Data for FWGWMP 2006 Annual Report

			тос	Potentio- metric Elevation	Potentio- metric Elevation	Difference in Groundwater Elevations	April 2006 Depth to	Potentio- metric Elevation	Difference in Groundwater Elevations	Potentio- metric Elevation	Difference in Groundwater Elevations
RVAAP Area	Well ID	Zone℃	Elevation ^a	(2005-4)	(2006-1)	2006-1 VS 2005-4 (ft)	Water ^b	(2006-2)	2006-2 VS 2006-1 (ft)	(2006-3)	2006-3 VS 2006-2 (ft)
	L12mw-184	U	983.16	969.47	NM	NM	11.22	971.94	NM	NM	NM
	L12mw-185	U	981.31	970.98	NM	NM	6.48	974.83	NM	NM	NM
	L12mw-186	U	978.31	970.92	972.91	1.99	5.12	973.19	0.28	973.25	0.06
	L12mw-187	U	979.94	968.62	NM	NM	8.03	971.91	NM	NM	NM
	L12mw-188	U	980.63	973.93	NM	NM	3.99	976.64	NM	NM	NM
	L12mw-189	U	978.04	971.97	NM	NM	3.00	975.04	NM	NM	NM
	LL12mw-242	U	981.20	969.75	NM	NM	7.46	973.74	NM	NM	NM
	LL12mw-243	U	980.79	970.42	NM	NM	8.40	972.39	NM	NM	NM
	LL12mw-244	U	980.65	968.73	NM	NM	8.61	972.04	NM	NM	NM
	LL12mw-245	U	980.04	971.20	NM	NM	7.19	972.85	NM	NM	NM
	LL12mw-246	U	984.83	967.04	NM	NM	14.90	969.93	NM	NM	NM
Atlas Scrap	ASYmw-001	U/B	981.13	968.20	NM	NM	10.85	970.28	NM	NM	NM
Yard	ASYmw-002	U	985.24	969.74	NM	NM	14.46	970.78	NM	NM	NM
	ASYmw-003	U	982.21	968.19	NM	NM	11.88	970.33	NM	NM	NM
	ASYmw-004	U	979.66	968.38	NM	NM	7.77	971.89	NM	NM	NM
	ASYmw-005	U	979.80	969.07	NM	NM	6.99	972.81	NM	NM	NM
	ASYmw-006	U	983.01	968.31	NM	NM	13.19	969.82	NM	NM	NM
	ASYmw-007	U	984.16	969.81	NM	NM	14.42	969.74	NM	NM	NM
	ASYmw-008	U	978.85	971.46	NM	NM	4.57	974.28	NM	NM	NM
	ASYmw-009	U	982.70	968.81	NM	NM	11.60	971.10	NM	NM	NM
	ASYmw-010	U	981.05	968.26	NM	NM	11.38	969.67	NM	NM	NM
Building	B12mw-010	В	1005.92	985.95	NM	NM	15.43	990.49	NM	NM	NM
1200	B12mw-011	В	1006.70	984.89	NM	NM	19.55	987.15	NM	NM	NM
	B12mw-012	В	1006.32	984.75	NM	NM	20.38	985.94	NM	NM	NM
C-Block	CBLmw-001	В	1181.08	1137.58	NM	NM	44.34	1136.74	NM	NM	NM
Quarry	CBLmw-002	В	1175.24	1137.15	NM	NM	39.01	1136.23	NM	NM	NM
	CBLmw-003	В	1175.06	1138.38	NM	NM	37.09	1137.97	NM	NM	NM
	CBLmw-004	В	1174.84	1138.47	NM	NM	36.69	1138.15	NM	NM	NM

 Table 3-2 RVAAP Potentiometric Data for FWGWMP 2006 Annual Report

			тос	Potentio- metric Elevation	Potentio- metric Elevation	Difference in Groundwater Elevations	April 2006	Potentio- metric Elevation	Difference in Groundwater Elevations	Potentio- metric Elevation	Difference in Groundwater Elevations
RVAAP Area	Well ID	Zone ^c	Elevation ^a	(2005-4)	(2006-1)	2006-1 VS 2005-4 (ft)	Water ^b	(2006-2)	2006-2 VS 2006-1 (ft)	(2006-3)	2006-3 VS 2006-2 (ft)
Central Burn	CBPmw-1	U	975.84	961.76	NM	NM	12.00	963.84	NM	NM	NM
Pits	CBPmw-2	Ū	970.04	959.81	NM	NM	7.46	962.58	NM	NM	NM
	CBPmw-3	U	974.67	961.06	NM	NM	10.91	963.76	NM	NM	NM
	CBPmw-4	U	971.13	959.35	NM	NM	9.65	961.48	NM	NM	NM
	CBPmw-5	U	971.59	958.58	960.20	1.62	10.92	960.67	0.47	960.84	0.17
	CBPmw-6	U	967.64	959.19	NM	NM	6.37	961.27	NM	NM	NM
	CBPmw-7	U	976.37	958.82	961.38	2.56	14.22	962.15	0.77	962.35	0.20
	CBPmw-8	U	973.19	956.24	NM	NM	14.37	958.82	NM	NM	NM
Cobbs Pond	CPmw-1	U	975.26	969.49	NM	NM	3.00	972.26	NM	NM	NM
	CPmw-2	U	972.31	969.84	NM	NM	(+.41)	972.72	NM	NM	NM
	CPmw-3	U	972.92	970.89	NM	NM	(+.35)	973.25	NM	NM	NM
	CPmw-4	U	981.20	969.10	NM	NM	9.18	972.02	NM	NM	NM
	CPmw-5	U	973.58	961.48	NM	NM	19.83	953.75	NM	NM	NM
	CPmw-6	U	965.13	957.16	NM	NM	8.63	956.50	NM	NM	NM
Demo. Area	DET-1B	U	1065.85	1046.01	NM	NM	21.38	1044.47	NM	NM	NM
2	DET-2	U	1061.24	1031.97	NM	NM	32.23	1029.01	NM	NM	NM
	DET-3	U	1036.81	1031.08	1027.53	-3.55	9.18	1027.63	0.10	NM	NM
	DET-4	U	1038.68	1031.37	NM	NM	10.35	1028.33	NM	NM	NM
	DA2mw-104	U	1073.89	1052.89	NM	NM	19.94	1053.95	NM	NM	NM
	DA2mw-105	U	1045.34	1042.01	NM	NM	3.24	1042.10	NM	NM	NM
	DA2mw-106	U	1043.79	1036.16	NM	NM	3.65	1040.14	NM	NM	NM
	DA2mw-107	U	1041.63	1032.75	1033.99	1.24	6.95	1034.68	0.69	1034.93	0.25
	DA2mw-108	В	1032.36	1026.24	NM	NM	5.03	1027.33	NM	NM	NM
	DA2mw-109	U	1071.29	1054.81	NM	NM	10.48	1060.81	NM	NM	NM
	DA2mw-110	U	1063.78	1051.82	NM	NM	5.70	1058.08	NM	NM	NM
	DA2mw-111	В	1042.12	1034.88	NM	NM	4.97	1037.15	NM	NM	NM
	DA2mw-112	U	1037.44	1033.06	NM	NM	7.02	1030.42	NM	NM	NM
	DA2mw-113	U	1037.11	1028.96	NM	NM	7.08	1030.03	NM	NM	NM

 Table 3-2 RVAAP Potentiometric Data for FWGWMP 2006 Annual Report

			700	Potentio- metric Elevation	Potentio- metric Elevation	Difference in Groundwater Elevations	April 2006	Potentio- metric Elevation	Difference in Groundwater Elevations	Potentio- metric Elevation	Difference in Groundwater Elevations
RVAAP Area	Well ID	Zone ^c	I OC Elevation ^a	Sept. 05 [°] (2005-4)	March 06 ^e (2006-1)	2006-1 vs 2005-4 (ft)	Depth to Water ^b	April 06ª (2006-2)	2006-2 vs 2006-1 (ft)	July 06 ^ª (2006-3)	2006-3 vs 2006-2 (ft)
Frie Burning	FBGmw-123	U	947 82	937.80	NM	NM	9.69	938 13	NM	NM	NM
Grounds	EBGmw-124	U	941.39	937.74	NM	NM	3.40	937.99	NM	NM	NM
0.00	EBGmw-125	Ū	949.89	937.77	NM	NM	11.90	937.99	NM	NM	NM
	EBGmw-126	U	940.61	937.72	NM	NM	2.33	938.28	NM	NM	NM
	EBGmw-127	U	943.07	938.67	NM	NM	4.50	938.57	NM	NM	NM
	EBGmw-128	U	945.13	937.79	NM	NM	6.65	938.48	NM	NM	NM
	EBGmw-129	U	944.36	937.46	NM	NM	4.94	939.42	NM	NM	NM
	EBGmw-130	U	944.00	937.33	NM	NM	5.70	938.30	NM	NM	NM
Fuze and											
Booster											
Quarry	FBQmw-166	U	1108.86	1103.55	NM	NM	4.51	1104.35	NM	NM	NM
	FBQmw-167	U	1115.90	1110.70	NM	NM	3.73	1112.17	NM	NM	NM
	FBQmw-168	U	1133.91	1121.38	NM	NM	11.12	1122.79	NM	NM	NM
	FBQmw-169	U	1120.58	1114.28	NM	NM	4.29	1116.29	NM	NM	NM
	FBQmw-170	В	1142.26	1123.72	NM	NM	19.30	1122.96	NM	NM	NM
	FBQmw-171	В	1143.55	1124.30	NM	NM	19.12	1124.43	NM	NM	NM
	FBQmw-172	В	1150.09	1122.99	NM	NM	25.90	1124.19	NM	NM	NM
	FBQmw-173	В	1165.94	1123.86	NM	NM	43.63	1122.31	NM	NM	NM
	FBQmw-174	В	1139.97	1123.02	NM	NM	17.38	1122.59	NM	NM	NM
	FBQmw-175	В	1140.73	1122.96	NM	NM	18.20	1122.53	NM	NM	NM
	FBQmw-176	U	1131.91	1121.18	NM	NM	7.85	1124.06	NM	NM	NM
	FBQmw-177	U	1128.57	1113.61	NM	NM	11.02	1117.55	NM	NM	NM
Landfill North											
01 Winkloneok			1028.00	1004 10		NIM	10.22	1007 69		NINA	NIM
winkiepeck	LNV00024		1030.00	1024.13			10.32	1027.08			
			1029.13	1023.03			4.21	1024.92			
		P	1027.00	1019.10	NIM		5.09	1024.21			
		D	1027.13	1019.51		INIVI	0.00	1021.75	INIVI	INIVI	INIVI

 Table 3-2 RVAAP Potentiometric Data for FWGWMP 2006 Annual Report

				Potentio- metric	Potentio- metric	Difference in Groundwater	April	Potentio- metric	Difference in Groundwater	Potentio- metric	Difference in Groundwater
				Elevation	Elevation	Elevations	2006	Elevation	Elevations	Elevation	Elevations
		_	TOC	Sept. 05 ^a	March 06 ^a	2006-1 vs	Depth to	April 06 ^a	2006-2 vs	July 06 ^a	2006-3 vs
RVAAP Area	Well ID	Zone ^c	Elevation ^a	(2005-4)	(2006-1)	2005-4 (ft)	Water ^D	(2006-2)	2006-1 (ft)	(2006-3)	2006-2 (ft)
NACA Test											
Area	NTAmw-107	U	1080.30	1067.18	NM	NM	11.69	1068.61	NM	NM	NM
	NTAmw-108	U	1085.62	1067.51	NM	NM	16.73	1068.89	NM	NM	NM
	NTAmw-109	U	1079.84	1067.46	NM	NM	10.78	1069.06	NM	NM	NM
	NTAmw-110	U	1082.62	1067.65	NM	NM	13.20	1069.42	NM	NM	NM
	NTAmw-111	U	1080.94	1077.13	NM	NM	3.18	1077.76	NM	NM	NM
	NTAmw-112	U	1078.33	1068.66	NM	NM	7.92	1070.41	NM	NM	NM
	NTAmw-113	U	1075.68	1067.91	NM	NM	5.94	1069.74	NM	NM	NM
	NTAmw-114	U	1078.71	1071.46	NM	NM	5.20	1073.51	NM	NM	NM
	NTAmw-115	U	1089.65	1073.85	NM	NM	13.04	1076.61	NM	NM	NM
	NTAmw-116	U	1094.33	1086.22	NM	NM	4.64	1089.69	NM	NM	NM
	NTAmw-117	U	1094.54	1078.67	NM	NM	12.56	1081.98	NM	NM	NM
	NTAmw-118	U	1081.44	1071.40	NM	NM	7.78	1073.66	NM	NM	NM
Ramsdell											
Quarry	RQLmw-006	В	995.39	961.15	NM	NM	34.90	960.49	NM	NM	NM
Landfill	RQLmw-007	В	965.91	959.95	958.74	-1.21	6.78	959.13	0.39	NM	NM
	RQLmw-008	В	966.08	960.06	959.14	-0.92	6.39	959.69	0.55	NM	NM
	RQLmw-009	В	964.58	959.84	958.78	-1.06	5.38	959.20	0.42	NM	NM
	RQLmw-010	В	982.14	956.69	NM	NM	25.14	957.00	NM	NM	NM
	RQLmw-011	В	976.57	944.19	NM	NM	21.22	955.35	NM	NM	NM
	RQLmw-012	В	977.65	955.02	NM	NM	21.30	956.35	NM	NM	NM
	RQLmw-013	В	980.71	954.95	NM	NM	24.86	955.85	NM	NM	NM
	RQLmw-014	В	973.49	952.73	NM	NM	18.95	954.54	NM	NM	NM
	RQLmw-015	В	991.26	960.11	NM	NM	31.50	959.76	NM	NM	NM
	RQLmw-016	В	996.60	962.15	NM	NM	35.63	960.97	NM	NM	NM
	RQLmw-017	В	991.23	961.50	NM	NM	30.35	960.88	NM	NM	NM

 Table 3-2 RVAAP Potentiometric Data for FWGWMP 2006 Annual Report

				Potentio- metric	Potentio- metric	Difference in Groundwater	April	Potentio- metric	Difference in Groundwater	Potentio- metric	Difference in Groundwater
			тос	Elevation	Elevation	Elevations	2006 Depth to		Elevations	Elevation	Elevations
RVAAP Area	Well ID	Zone [℃]	Elevation ^a	(2005-4)	(2006-1)	2006-1 Vs 2005-4 (ft)	Water ^b	April 06" (2006-2)	2006-2 Vs 2006-1 (ft)	July 06" (2006-3)	2006-3 Vs 2006-2 (ft)
Winklepeck				· · /	, ,			· · /		()	
Burning											
Grounds	WBGmw-005	U	1054.70	1047.86	NM	NM	4.67	1050.03	NM	NM	NM
	WBGmw-006	U	1014.66	1005.56	1008.27	2.71	5.25	1009.41	1.14	1009.56	0.15
	WBGmw-007	U	1000.59	981.96	983.54	1.58	16.83	983.76	0.22	984.06	0.30
	WBGmw-008	U	1008.21	992.58	NM	NM	13.75	994.46	NM	NM	NM
	WBGmw-009	U	1047.53	1032.50	1035.06	2.56	11.50	1036.03	0.97	1036.02	-0.01
	WBGmw-010	U	1069.85	1060.85	NM	NM	7.97	1061.88	NM	NM	NM
	WBGmw-011	U	1072.38	1060.95	NM	NM	10.75	1061.63	NM	NM	NM
	WBGmw-012	U	1079.11	1060.17	NM	NM	18.42	1060.69	NM	NM	NM
	WBGmw-013	U	1071.70	1059.71	NM	NM	10.71	1060.99	NM	NM	NM
	WBGmw-014	U	996.78	979.48	NM	NM	15.52	981.26	NM	NM	NM
	WBGmw-015	U	1011.60	993.90	NM	NM	10.26	1001.34	NM	NM	NM
	WBGmw-016	U	997.03	978.51	NM	NM	16.72	980.31	NM	NM	NM
	WBGmw-017	U	1006.62	996.50	NM	NM	7.13	999.49	NM	NM	NM
Suspected											
Mustard											
Agent Burial											
Site	MBS-001	U	1082.20	1064.19	NM	NM	16.53	1065.67	NM	NM	NM
	MBS-002	U	1083.22	1064.84	NM	NM	16.90	1066.32	NM	NM	NM
	MBS-003	U	1084.45	1065.17	NM	NM	17.48	1066.97	NM	NM	NM
	MBS-004	U	1081.80	1064.44	NM	NM	15.63	1066.17	NM	NM	NM
	MBS-005	U	1082.42	not installed	NM	NM	16.70	1065.72	NM	NM	NM
	MBS-006	U	1081.83	not installed	NM	NM	16.21	1065.62	NM	NM	NM

Table 3-2 RVAAP Potentiometric Data for FWGWMP 2006 Annual Report

^a elevations are in feet above mean sea level (amsl)

^b Measurement relative to top of inner casing (TOC).

^c Monitoring Zone: U = Unconsolidated deposits, B = Bedrock

NM = not measured

FWGWMP wells are bold

RVAAP wells installed in 2005 (MBS-005 and MBS-006) in italics

* = unable to measure due to artesian conditions

- Drainage patterns along Sand Creek and Eagle Creek in the northeast portion of RVAAP result in localized north-northeast flow directions in this portion of the facility. Lack of well control in this portion of RVAAP does not allow for detailed delineation of flow patterns.
- A potentiometric high is centered on Load Line 2, which was also evident in previous potentiometric measurements collected at this AOC. South-southeasterly flow occurs from the potentiometric high toward the facility boundary.
- A large area of comparatively low potentiometric gradient encompasses the Atlas Scrap Yard, Load Line 12, Load Line 4, Central Burn Pit, and the Cobb's Pond vicinity. In this area, potentiometric gradients appear to be influenced by the abundant surface water features and relatively flat topography. The low gradients and possible geologic heterogeneities in the Load Line 12 area result in more uncertainty when interpreting the potentiometric surface in this portion of RVAAP. Using the 2006 data, groundwater flow from the majority of Load Line 12 appears to be towards Cobb's Pond to the north, while flow from the southernmost portion of the AOC is to the south-southeast.
- In the vicinity of the Erie Burning Grounds in the northeastern corner of RVAAP, interpretation of groundwater flow patterns is also subject to uncertainty due to a lack of well coverage outside of the AOC, the low topographic relief, and abundant wetland areas. The current data suggests that groundwater flow is to the east off of the AOC and subsequently to the east-southeast consistent with the surface drainage within the unnamed tributary that exits RVAAP at outfall PF534.
- A groundwater divide running in a north-south direction approximately 6000 feet east of the RVAAP western boundary has been inferred from topographic and stream elevation data (Plate 1). Based on this, it is also inferred that groundwater in this area flows in a westerly direction. There are no groundwater monitoring wells in this area to confirm that the groundwater west of the divide flows in a westerly direction.

3.2 MONITORING WELL INSPECTION RESULTS

All monitoring wells at RVAAP were inspected during the week of April 24, 2006. The well inspection sheets are presented in Appendix C, and the wells that had deficiencies noted are summarized below. Additionally in 2006, well maintenance issues identified in 2005 and 2006 were repaired, and are also summarized below. 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 at each well, the total depth of each monitoring well was sounded using the water level indicator. This data allows a determination of the degree of siltation and comparison of the constructed depths recorded in the well construction logs.
- 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 (see Appendix C).

The well inspections did not reveal irreparable damage to any specific monitoring wells. A description of the significant maintenance issues identified in 2005 and 2006 and the resulting repairs are as follows:

- <u>Buckled inner casing</u> The inner casing of CBPmw-006 had been buckled approximately 6 inches above ground surface, most likely due to damage from ice that had formed between the outer casing and the inner casing. The well was repaired by cutting the outer casing off near ground level and removing the approximately top 2 feet of inner casing by cutting the casing below the buckled portion. A new section of inner casing (2-inch diameter Schedule 40 PVC) was coupled to the remaining casing using a rubber coupling device. The outer casing that was cut off to allow access to the inner casing was then rewelded to the remaining outer casing.
- <u>Broken hinges</u> New hinge devices were installed on the outer casings of monitoring wells BKGmw-017, BKGmw-015, and BKGmw-004.
- <u>Replaced concrete pads</u> Concrete pads damaged due to frost heaving were replaced at monitoring wells DA2mw-Det1B, RQLmw-006, and LL6mw-005. The FWGWMP 2005 Annual Report listed LL9mw-003 as being frost-heave damaged and in need of replacement. Upon further inspection this well's concrete pad was found to be undamaged, and instead LL9mw-005was found to be frost-heave damaged. The concrete pad at LL9mw-005 was replaced. The concrete pad at LL11mw-009 is also frostheave damaged. This well is a flush-mounted well that is also

artesian. It is apparent that the groundwater escaping from this well is leading to the frost-heaving damage observed for the concrete pad. By adding a temporary extension to the inner casing, it was observed that the groundwater level rose to approximately 6 inches above ground surface. In consultation with the Ohio EPA and USACE, it was decided to reconfigure this well as an above-ground well and replace the concrete pad in 2007. The concrete pad at DA2mw-Det 4 was reported in the FWGWMP 2005 Annual report to be missing. Upon further inspection, the pad was discovered to be intact, but buried under approximately a 2-inch layer of soil. The soil overlaying the concrete pad was then removed.

- <u>Repaired cracked concrete pads</u> Cracks in the concrete pads were repaired with a concrete-crack filling mixture at LL1mw-080, RQLmw-007, RQLmw-008, RQLmw-009, and LL8mw-005.
- <u>Filled voids underneath concrete pads</u> Voids underneath the concrete pads at DA2mw-106, DA2mw-109, DA2mw-110, and DA2mw-111 were filled using a bentonite/soil mixture.
- <u>Brush clearing</u> Brush was cleared from approximately 50 RVAAP monitoring wells.

Monitoring wells LL1mw-078 and LL9mw-007 were inadvertently listed in the 2005 Annual Report as having frost-heaved/cracked protective pads. Upon reinspection in April 2006, these wells were found to have no frost-heaved/cracked protective pads, and no repairs were needed for these wells.

3.3 SUMMARY OF SAMPLING EVENTS

3.3.1 October 2005

The October 2005 FWGWMP sampling event was performed between October 3 and 6, 2005. Forty-one wells were sampled for this event. The results of this sampling event are reported in *"Facility Wide Groundwater Monitoring Program Annual Report for 2005, Ravenna Training and Logistics Site/Ravenna Army Ammunition Plant, Ravenna, Ohio*", (Specpro, 2006a). The results of this sampling event are also summarized in Section 4.0 of this report.

3.3.2 March 2006

The March 2006 FWGWMP sampling event was performed between March 6 and 9, 2006. Thirty-six wells were sampled for this event. The results of this sampling event are reported in *"Facility-Wide Groundwater Monitoring Program,*"

Report on the May 2006 Sampling Event (Sampling Event No. 1), Ravenna Army Ammunition Plant, Ravenna, Ohio", (Specpro, 2006b).

3.3.3 May 2006

The May 2006 FWGWMP sampling event was performed between May 1 and 4, 2006. Forty-one wells were sampled for this event. The results of this sampling event are reported in *"Facility-Wide Groundwater Monitoring Program, Report on the May 2006 Sampling Event (Sampling event No. 2), Ravenna Army Ammunition Plant, Ravenna, Ohio*", (Specpro, 2006c). All RVAAP monitoring wells were also inspected and groundwater levels measured for this sampling event.

3.3.4 July 2006

The July 2006 FWGWMP sampling event was performed between July 10 and 13, 2006. Thirty-six wells were sampled for this event. The results of this sampling event are reported in *"Facility-Wide Groundwater Monitoring Program, Report on the July 2006 Sampling Event (Sampling event No. 3), Ravenna Army Ammunition Plant, Ravenna, Ohio*", (Specpro, 2007).

During the review phase of the July 2006 Sampling Event Report, a discrepancy was noted for Explosive and Propellant data results for BKG-012. The analytical results for monitoring well BKG-012 showed explosive detects. This well has not shown any explosive detects in any of the past FWGW sampling events, and having detects show up during this event seemed totally out of character for this well. We further investigated the other Explosive and Propellant results from this sampling period and over the other 6 FWGWMP sampling events to see if any patterns in the data helped to explain if the Explosive and Propellant detects in BKG-012 were in fact correct or may possibly be a reporting error.

Our closer examination showed that the Explosive and Propellant results for BKG-012 were always non-detects and the results from the July 2006 sampling event were not characteristic for this well. We also noticed that for the July 2006 sampling event, that monitoring well LL3-238 Explosive and Propellant results were all non-detects. This was also not characteristic of this well. Table 3-3 shows the selected Explosive and Propellant results for LL3-238 and BKG-012 over the past 7 FWGWMP sampling events. It is our opinion after examining Table 3-3 that the lab inadvertently switched the Explosive and Propellant sample bottles of BKG-012 and LL3-238 during processing. This may have led to the accidental reporting of the LL3-238 results as the BKG-012 results and vice versa for Explosive and Propellant.

However, the lab has no way of confirming if this error occurred. The Explosives and Propellants were analyzed by STL in its Sacramento lab. All other samples
(SVOCs, VOCs, inorganic, pesticides and PCBs) were analyzed at STL's North Canton lab. STL's protocol requires that as soon as coolers are unpacked, sample bottles are hand labeled with new lab-unique numbers for processing. These new labels cover up the existing label so that the lab is following proper procedures so they may not introduce any bias to the analytical process. In the case of LL3-238 and BKG-012 in the July 2006 sampling event, the new lab-unique numbers recorded using STL's system ended in -007 and -009. This could have led to a human error where a 9 was mislabeled as a 7 (or vice versa). The lab had since discarded the samples and has no way of telling if we were correct that the samples were mislabeled. Therefore after discussions with the entire Team on the Facility-wide Groundwater Program (OH EPA and USACE), the Explosive and Propellant results from monitoring wells LL3-238 and BKG-012 have been disqualified for use and labeled with an R* in Table 3-2 of the July 2006 Sampling Event Report.

We also investigated the remaining July 2006 sampling results from the SVOCs, VOCs, inorganics, Pesticides, and PCBs samples to insure no other bottles may have been switched. We found no evidence that any other sample bottle might have been inadvertently switched between these two wells or any other well in the sampling program.

	April 2005	July 2005	October 2005	March 2006	May 2006	July 2006
		BKG-		BKG-	BKG-	BKG-
Constituent	BKG-012	012	BKG-012	012	012	012
1,3,5-trinitrobenzene	ND	ND	ND	ND	ND	34
2,4,6-trinitrotoluene	ND	ND	ND	ND	ND	93
2-amino-4,6-						
dinitrotoluene	ND	ND	ND	ND	ND	15
4-amino-2,6-						
dinitrotoluene	ND	ND	ND	ND	ND	37
HMX	ND	ND	ND	ND	ND	1.4
RDX	ND	ND	ND	ND	ND	5.7
				LL3-	LL3-	LL3-
	LL3-238	LL3-238	LL3-238	238	238	238
1,3,5-trinitrobenzene	38	65	49	27	31	ND
2,4,6-trinitrotoluene	89	130	110	68	83	ND
2-amino-4,6-						
dinitrotoluene	13	8.8	13	10	12	ND
4-amino-2,6-						
dinitrotoluene	27	26	41	28	31	ND
HMX	ND	1.5	2.2	1.1	ND	ND
RDX	ND	9.1	8.2	4.7	5.2	ND

Table 3-3 Comparison of selected Explosive and Propellant data results by sampling event from monitoring wells BKG-012 and LL3-238

Please note: all units are recorded in ug/L

3.4 INVESTIGATION DERIVED WASTE (IDW)

Prior to sampling each well, purge water was collected at each well location in 5gallon buckets with locking lids and transferred to 55-gallon drums located behind Building 1036. Purge water drums were each designated for an AOC or for the background wells. No more than four gallons were purged from any well during a single sampling event. Instruments and equipment were decontaminated prior to purging the first well, then subsequently after purging and sampling each monitoring well. Decon fluids were collected in separate 55gallon drums stored behind Building 1036. The IDW fluids were stored in 55gallon drums behind Building 1036 until project completion and final disposal was in accordance with FWSAP requirements. The IDW report is presented in Appendix E.

Beginning with the January 2007 sampling event, IDW will be disposed after each sampling event. IDW sampling results will be submitted to Ohio EPA prior to disposal.

4.0 SUMMARY OF ANNUAL FWGWMP ANALYTICAL RESULTS

4.1 INTRODUCTION

A summary of the constituents detected above background levels or above reporting limits at each of the FWGWMP wells during the 2006 study is discussed in the following subsections. Calcium, magnesium, iron, potassium, and sodium concentrations above background levels are not discussed in this section because they are considered as essential nutrients. Time-trend plots have been removed from this report (Appendix D) and will be discussed by the FWGWMP Team in a June 2007 FWGWMP Program meeting. A summary of all compounds detected in 2006 are presented in Table 4-1. The Maximum Contaminant Levels (MCL) are provided where applicable in the following sections. MCLs and United States Environmental Protection Agency (USEPA) Region 9 Preliminary Remediation Goals (PRG) are provided where applicable in Table 4-1. RVAAP background levels are presented in Table 4-2.

The primary Chemicals of Potential Concern at the RVAAP facility are as follows:

- 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

Other Chemicals of Potential Concern at the facility include:

- 1,3,5-trinitrobenzene
- 1,3-Dinitrobenzene
- Nitrobenzene
- o-Nitrotoluene
- n-nitrotoluene
- p-Nitrotoluene
- Manganese
- VOCs
- SVOCs
- PCBs

4.2 BACKGROUND WELLS

4.2.1 BKGmw-004

Aluminum was detected above the reporting limit (200 ug/L) in July 2006 at a concentration of 644 ug/L. All other measurements were below the method detection limit.

4.2.2 BKGmw-006

Nitrocellulose was detected at 660 ug/L in March 2006. All other measurements were below the method detection limit.

4.2.3 BKGmw-010

Carbon disulfide was detected at 1.3 ug/L in May 2006. All other carbon disulfide measurements were below the method detection limit.

Bis(2-ethylhexyl) phthalate was detected at 2.3 ug/L in March 2006 and 2.1 ug/L in May 2006. All other measurements were below the method detection limit.

Nickel was detected at 84.1 ug/L in March 2006. All other measurements were below background levels. The MCL for nickel is 100 ug/L.

4.2.4 BKGmw-012

Barium was detected above background levels during the October 2005 (315 ug/L), March (333 ug/L), May (268 ug/L) and July (296 ug/L) 2006 sampling events. The MCL for barium is 2000 ug/L. Di-n-octyl phthalate was at 1.8 ug/L during the October 2005 sampling event.

4.2.5 BKGmw-013

Arsenic was detected above the background level (11.7 ug/L) during the July 2006 sampling event (12.6 ug/L). Barium was only detected above the background level of 82.1 ug/L during the March 2006 sampling event (83.5 ug/L). The MCL for arsenic is 10 ug/L and the MCL for barium is 2000 ug/L.

4.2.6 BKGmw-015

Barium was detected above the background level of 256 ug/L during the October 2005 sampling event (262 ug/L). The MCL for barium is 2000 ug/L.

4.2.7 BKGmw-016

Bis(2-ethylhexyl) phthalate was detected at 5.4 ug/L in March 2006 and 37 ug/L in July 2006. All other measurements in 2006 were below the method detection limit.

4.2.8 BKGmw-017

Arsenic was detected above the background level during all four FWGWMP sampling events. The MCL for arsenic is 10 ug/L.

4.2.9 BKGmw-018

Bis(2-ethylhexyl) phthalate was detected at 1.6 ug/L in March 2006. All other measurements were below the method detection limit.

4.2.10 BKGmw-020

Carbon disulfide was detected only during the October 2005 (1.6 ug/L) and March 2006 (1.2 ug/L) sampling events. All other measurements were below the method detection level.

4.2.11 BKGmw-021

Alpha-chlordane was detected at 0.031 ug/L in March 2006. Heptachlor was detected at 0.19 ug/l in March 2006. All other measurements for alpha-chlordane and heptachlor were below method detection limits.

4.3 LOAD LINE 1

4.3.1 LL1mw-078

RDX was detected above method detection limits limit only during the October 2005 sampling event. Heptachlor epoxide was detected above the method detection during the March 2006 (0.066 ug/L) and July 2006 (0.23 ug/L) sampling events. The MCL for heptachlor epoxide is 0.2 ug/L. Butyl benzyl phthalate was detected at 1.5 ug/L for the October 2005 sampling event. Alpha chlordane was detected at 0.034 ug/L for the March 2006 sampling event.

4.3.2 LL1mw-080

The following explosive and propellant compounds were detected at LL1mw-080:

- 1,3,5-trinitrobenzene, detected at concentrations between 0.4 and 2.7 ug/L for all four sampling events.
- 1,3-dinitrobenzene, detected at 0.91 ug/L for the October 2005 sampling event.
- 2,4,6-trinitrotoluene, detected at concentrations between 0.29 and 2.2 ug/L for the October 2005, March 2006, and July 2006 sampling events. This compound was not detected above the method detection limit for the May 2006 sampling event.
- 2,4-dinitrotoluene, detected at 0.65 ug/L for the October 2005 sampling event. This compound was not detected above the method detection limit or reporting limit for the other three sampling events.
- 2,6-dinitrotoluene, although this compound was detected during the 2005 FWGWMP sampling, it was not detected above the method detection limit or above reporting limits during the 2006 sampling events.
- 2-amino-4,6-dinitrotoluene, detected at concentrations between 1.8 and 8.6 ug/L for all four sampling events.
- 4-amino-2,6-dinitrotoluene, detected at concentrations between 3.3 and 11 ug/L for all four sampling events.
- HMX, detected at concentrations between 0.95 and 9.5 ug/L for all four sampling events.
- RDX, detected at concentrations between 3.8 and 58 ug/L for all four sampling events.

Heptachlor epoxide was detected for the October 2005 (2.8 ug/L) and March 2006 (1.1 ug/L) sampling events. The MCL for heptachlor epoxide is 0.2 ug/L.

4.3.3 LL1mw-083

The following explosive and propellant compounds were detected at LL1mw-083:

- 1,3,5-trinitrobenzene, detected at concentrations between 5.1 and 7.0 ug/L for all four sampling events.
- 1,3-dinitrobenzene, detected at 0.28 ug/L for the March 2006 and 0.21 ug/L for the May 2006 sampling events.
- 2,4,6-trinitrotoluene, detected at concentrations between 6.5 and 8.0 ug/L for all four sampling events.
- 2,4-dinitrotoluene, detected at concentrations between 2.3 and 3.4 ug/L for all four sampling events.
- 2,6-dinitrotoluene, detected at concentrations between 1.3 and 2.4 ug/L for all four sampling events.
- 2-amino-4,6-dinitrotoluene, detected at concentrations between 19 and 21 ug/L for all four sampling events.
- 4-amino-2,6-dinitrotoluene, detected at concentrations between 19 and 21 ug/L for all four sampling events.
- HMX, detected at 0.44 ug/L for the October 2005 sampling event.
- RDX, detected at concentrations between 0.13 and 0.32 ug/L for the October 2005, March 2006, and May 2006 sampling events.

Heptachlor epoxide was detected only for the October 2005 (4.6 ug/L) sampling event. The MCL for heptachlor epoxide is 0.2 ug/L. Beta-BHC was only detected for the March 2006 (0.052 ug/L) and July 2006 (0.053 ug/L) sampling events. Aluminum was detected above background levels during all four sampling events for 2006.

4.4 LOAD LINE 2

4.4.1 LL2mw-059

The following explosive and propellant compounds were detected at LL2mw-059:

- 1,3,5-trinitrobenzene, detected at concentrations between 0.71 and 2.5 ug/L for all four sampling events.
- 2,4-dinitrotoluene, detected at concentrations between 0.13 and 0.47 ug/L for all four sampling events.
- 2-amino-4,6-dinitrotoluene, detected at concentrations between 0.35 and 0.96 ug/L for all four sampling events.
- 4-amino-2,6-dinitrotoluene, detected at concentrations between 0.38 and 0.91 ug/L for all four sampling events.

Heptachlor epoxide was detected for the October 2005 (0.46 ug/L) and March 2006 (0.14 ug/L) sampling events. The MCL for heptachlor epoxide is 0.2 ug/L. Phenol was only detected for the July 2006 (1.1 ug/L) sampling event.

4.4.2 LL2mw-262

Cobalt was detected above reporting limits for the October 2005 (23.5 ug/L) sampling event. Manganese (1950 ug/L) was detected above background levels (Background = 1340 ug/L) during the October 2005 sampling event. The MCL for manganese is 50 ug/L. Heptachlor epoxide was detected for the March 2006 (0.12 ug/L) sampling event. The MCL for heptachlor epoxide is 0.2 ug/L.

4.4.3 LL2mw-263

Arsenic was detected at levels between 13.5 and 17.0 ug/L for all sampling events. The MCL for arsenic is 10 ug/L.

4.5 LOAD LINE 3

4.5.1 LL3mw-238

The following explosive and propellant compounds were detected at concentrations above reporting limits at LL3mw-238:

- 1,3,5-trinitrobenzene, between 27 and 49 ug/L.
- 2,4,6-trinitrotoluene, between 68 and 110 ug/L.
- 2-amino-4,6-dinitrotoluene, between 10 and 13 ug/L.
- 4-amino-2,6-dinitrotoluene, between 28 and 41 ug/L.
- HMX, detected at 2.2 ug/L (October 2005 sampling event) and 1.1 ug/L (March 2006 sampling event).
- RDX, between 4.7 and 8.2 ug/L.

The following pesticides were detected above reporting limits at LL3mw-238: Beta-BHC, endrin aldehyde, and heptachlor epoxide. Heptachlor epoxide was detected above the MCL of 0.2 ug/L for the October 2005 (13 ug/L) sampling event. Toxaphene was detected above the reporting limit for the March 2006 sampling event (2.1 ug/L). The MCL for toxaphene is 3 ug/L. Bis(2-ethylhexyl) phthalate was detected at a concentration of 21 ug/L for the October 2005 sampling event.

4.5.2 LL3mw-242

Heptachlor epoxide was detected only for the October sampling event at a concentration of 0.038 ug/L. The MCL for this compound is 0.2 ug/L.

4.6 LOAD LINE 4

4.6.1 LL4mw-198

Manganese was detected during the all four sampling events at concentrations ranging from 1070 ug/L to 1320 ug/L, which is above the background level of 1020 ug/L. The MCL for manganese is 50 ug/L. Nickel was detected during all sampling events in the range of 19 to 29.2 ug/L. The MCL for nickel is 100 ug/L. Zinc was detected above background levels (60.9 ug/L) during the May and July 2006 sampling events at concentrations of 90.6 and 73.8 ug/L respectively. The MCL for zinc is 5000 ug/L. Heptachlor epoxide was detected only for the October sampling event at a concentration of 0.038 ug/L. The MCL for this compound is 0.2 ug/L.

4.6.2 LL4mw-199

Arsenic was detected above the background level (11.7 ug/L) during the October 2005, March 2006, and May 2006 sampling events at concentrations of 12.2 and 12.7 ug/L. The MCL for arsenic is 10 ug/L. Barium was detected above the background level of 82.1 ug/L during all 2006 sampling events at concentrations ranging from 94.0 to 102 ug/L. The MCL for barium is 2000 ug/L.

4.7 LOAD LINE 11

4.7.1 LL11mw-007

Arsenic was detected above the background level (11.7 ug/L) during the March, May, and July 2006 sampling events at concentrations between 18 and 23.1 ug/L. The MCL for arsenic is 10 ug/L. Barium was detected above the background level of 82.1 ug/L during the March, May, and July 2006 sampling events at concentrations ranging from 83.9 to 86.0 ug/L. The MCL for barium is 2000 ug/L. Aluminum was detected above the reporting limit only for the October 2005 sampling event at a concentration of 228 ug/L.

4.8 LOAD LINE 12

4.8.1 LL12mw-153

Arsenic was detected above the background level (11.7 ug/L) for the October 2005, May 2006, and July 2006 sampling events at concentrations ranging from 19 and 23.3 ug/L. The MCL for arsenic is 10 ug/L. Barium was detected above the background level (background = 82.1 ug/L) for the May 2006 sampling event (85.0 ug/L). The MCL for barium is 2000 ug/L.

4.8.2 LL12mw-182

Arsenic was detected above the background level (11.7 ug/L) for all sampling events at concentrations ranging from 21.1 and 53 ug/L. The MCL for arsenic is 10 ug/L. Barium (MCL = 2000 ug/L) was detected above the background level of 82.1 ug/L during the October 2005 (84.5 ug/L) and July 2006 (85.2 ug/L) sampling events. Bis(2-ethylhexyl) phthalate was detected above reporting limit during the March 2006 sampling event at a concentration of 5.1 ug/L.

4.8.3 LL12mw-183

Arsenic was detected above the background level (11.7 ug/L) for all sampling events at concentrations ranging from 16 and 48.2 ug/L. The MCL for arsenic is 10 ug/L. Bis(2-ethylhexyl) phthalate was detected above reporting limit during the March 2006 sampling event at a concentration of 1.3 ug/L. Di-n-octyl phthalate was detected at 1.5 ug/L during the October 2005 sampling event.

4.8.4 LL12mw-186

The pesticide alpha chlordane was detected at a concentration of 0.047 ug/L for the May 2006 sampling event. Bis(2-ethylhexyl) phthalate was detected only for the May 2006 sampling event at a concentration of 1.1 ug/L. Heptachlor epoxide was detected for the October 2005 sampling event (0.053 ug/L) and the March 2006 sampling event (0.1 ug/L). The MCL for this compound is 0.2 ug/L. Dinoctyl phthalate was detected only during the October 2005 sampling event (2.1 ug/L).

4.9 CENTRAL BURN PITS

4.9.1 CBPmw-005

Arsenic was detected above the background level (11.7 ug/L) for all sampling events at concentrations ranging from 20 and 36.3 ug/L. The MCL for arsenic is 10 ug/L.

4.9.2 CBPmw-007

Arsenic was detected for all sampling events at concentrations ranging from 9.9 to 15.2 ug/L. The background level for arsenic is 11.7 ug/L and the MCL is 10 ug/L.

4.10 OPEN DEMOLITION AREA 2

4.10.1 DA2mw-107

Butyl benzyl phthalate was detected only during the October 2005 sampling event (1.5 ug/L).

4.10.2 DA2mw-Det4

The explosive HMX was detected during the October 2005 (0.64 ug/L) and July 2006 sampling events (1.3 ug/L). RDX was detected at 0.73 ug/L during the July 2006 sampling event.

4.11 RAMSDELL QUARRY LANDFILL

4.11.1 RQLmw-007

Arsenic was detected for all sampling events at concentrations ranging from 43.4 to 76.1 ug/L. The MCL for arsenic is 10 ug/L. Manganese (MCL = 50 ug/L) was detected above the background level of 1020 ug/L for all sampling events at concentrations ranging from 2010 to 2900 ug/L.

4.11.2 RQLmw-008

The explosive 1,3,5-trinitrobenzene was detected for the October 2005 (0.32 ug/L) and May 2006 (0.16 ug/L) sampling events. Arsenic was detected for both sampling events at concentrations ranging from 14.3 ug/L (October 2005) to 21.2 ug/L (May 2006). The MCL for arsenic is 10 ug/L. Manganese (MCL = 50 ug/L) was detected above the background level of 1340 ug/L for several sampling events in 1998 and 1999, and for the October 2005 sampling event.

4.11.3 RQLmw-009

Arsenic was detected for both sampling events at concentrations ranging from 19 ug/L (October 2005) to 21.5 ug/L (May 2006). The MCL for arsenic is 10 ug/L. Manganese (MCL = 50 ug/L) was detected above the background level of 1340 ug/L for several sampling events in 1998 and 1999, and for the October 2005 sampling event.

4.12 WINKLEPECK BURNING GROUNDS

4.12.1 WBGmw-006

The explosives HMX and RDX were detected for all sampling events. HMX was detected at concentrations ranging from 12 to 17 ug/L, and RDX was detected at concentrations ranging from 32 to 65 ug/L. The pesticide gamma-BHC (Lindane) was detected above reporting limits for the October 2005 sampling event at concentration of 0.049 ug/L. The MCL for this compound is 0.2 ug/L. Bis(2-ethylhexyl) phthalate was detected in March 2006 at a concentration of 4.5 ug/L.

4.12.2 WBGmw-007

Bis(2-ethylhexyl) phthalate was detected only for the March 2006 sampling event at a concentration of 1.6 ug/L.

4.12.3 WBGmw-009

The explosives HMX and RDX were detected for all sampling events. HMX was detected at concentrations ranging from 1.1 to 2.3 ug/L, and RDX was detected at concentrations ranging from 4.2 to 9.9 ug/L. Aluminum was detected above the reporting limit only for the October 2005 sampling event at a concentration of 274 ug/L. Arsenic was detected above the reporting limit only for the October 2005 sampling event at a concentration of 21.3 ug/L. The MCL for arsenic is 10 ug/L. Barium (MCL = 2000 ug/L) was detected above the background level (82.1 ug/L) only for the October 2005 sampling event at a concentration of 1.5 ug/L for the October 2005 sampling event. The pesticide Gamma-BHC was detected at 0.033 ug/L for the May 2006 sampling event. The MCL for this compound is 0.2 ug/L.

Area	Well Number	Monitoring Zone	Compound or Element Detected	Oct 2005 Level (ug/L)	Mar 2006 Level (ug/L)	May 2006 Level (ug/L)	July 2006 Level (ug/L)	MCL (ug/L)	Region 9 PRG (ug/L)	RVAAP Facilitywide Background (ug/L)
Background	BKGmw-004	Unconsolidated	alpha-Chordane	0.030 U	0.0075 J	0.030 U	0.030 U	NS	NS	*
Wells			Aluminum	200 U	200 U	200 U	231	NS	36000	0
			Barium	22.3	18.8	20.2	20.8	2000	2600	82.1
			Calcium	21500	18500	20500	20500 J	NS	NS	115000
			Copper	20 U	20 U	20 U	2.0 J	1300	1500	0
			Iron	1000 U	1000 U	1000 U	630 J	300	10000	279
			Magnesium	7240	6690	7200	7300	NS	NS	43300
			Manganese	0.40 J	1.9 UJ	1.1 J	4.9 J	50	880	1020
			Nickel	20 U	2.4 J	2.5 J	20 U	100	730	0
			Potassium	710 J	620 J	647 J	703 J	NS	NS	2890
			Sodium	13200	10400	9330	9870	NS	NS	45700
			Zinc	100 U	8.1 J	7.9 J	9.2 J	5000	11000	60.9
	BKGmw-005	Unconsolidated	4,4'-DDT	0.030 U	0.030 U	0.017 J	0.030 U	NS	0.2	*
			Barium	14.1	16.1	15.0	17.6	2000	2600	82.1
			Calcium	87400	94700	86800	97400	NS	NS	115000
			Cyanide (mg/L)	0.01 U	0.01 U	0.01 U	0.0032 J	200	730	0
			Magnesium	18900	22800	21600	22500	NS	NS	43300
			Manganese	0.45 J	0.024 UJ	1.2 UJ	1.7 J	50	880	1020
			Nitrocellulose	500 U	500 U	190 J	500 U	NS	NS	*
			Potassium	1170 J	567 J	364 J	503 J	NS	NS	2890
			Selenium	10 U	4.9 J	10 U	10 U	50	180	0
			Sodium	7880	5830	3430	4020	NS	NS	45700
			Zinc	100 U	7.4 J	100 U	100 U	5000	11000	60.9
	BKGmw-006	Bedrock	Acetone	1.0 J	10 U	10 U	10 U	NS	5500	*
			Barium	13.8	12.8	12.5	16.3	2000	2600	256
			bis(2-Ethylhexyl) phthalate	2.0 U	5.9	10 U	10 UJ	NS	4.8	*
			Calcium	78700	79600 J	75600	73200	NS	NS	53100
			Cobalt	1.4 J	2.3 J	20 U	20 U	NS	730	0
			Di-n-octyl phthalate	1.0 U	1.0 U	0.70 J	1.0 U	NS	1500	*
			Iron	36.5 J	1000 U	311 J	269 J	300	10000	1430
			Magnesium	26700	27200	24700	22600	NS	NS	15000
			Manganese	403 J	1070	515 J	275	50	880	1340

Area	Well Number	Monitoring Zone	Compound or Element Detected	Oct 2005 Level (ug/L)	Mar 2006 Level (ug/L)	May 2006 Level (ug/L)	July 2006 Level (ug/L)	MCL (ug/L)	Region 9 PRG (ug/L)	RVAAP Facilitywide Background (ug/L)
Background	BKGmw-006	Bedrock								
Wells - cont	ls - cont cont.		Nitrocellulose	500 U	660 J	500 U	500 U	NS	NS	*
			Potassium	1440 J	1460 J	1610 J	2930 J	NS	NS	5770
			Sodium	35300	41000	40400	37700	NS	NS	51400
			Zinc	100 U	100 U	100 U	9.4 J	5000	11000	52.3
	BKGmw-008	Bedrock	Acetone	1.0 J	10 U	10 U	10 U	NS	5500	*
		alpha-Chordane	0.030 U	0.0092 J	0.030 U	0.030 U	NS	NS	*	
			Antimony	100 U	100 U	12.9 J	100 U	6	15	0
			Barium	4.7 J	4.2 J	5.0 J	5.0 J	2000	2600	256
			beta-BHC	0.030 U	0.011 J	0.030 U	0.030 U	NS	0.032	*
			bis(2-Ethylhexyl) phthalate	2.5 U	2.0	10 UJ	10 UJ	NS	4.8	*
			Calcium	24200	28200	27600	28800 J	NS	NS	53100
			Chloromethane	1.0 U	1.0 U	1.0 U	0.29 J	NS	160	*
			Heptachlor	0.030 U	0.011 J	0.030 U	0.030 U	0.4	0.015	*
			Magnesium	9560	11600	11100	11700	NS	NS	15000
			Manganese	21.8 J	0.72 UJ	0.26 J	0.49 J	50	880	1340
			Methoxychlor	0.10 UJ	0.015 J	0.10 U	0.10 U	40	180	*
			Potassium	508 J	448 J	439 J	478 J	NS	NS	5770
			Sodium	8540	10100	9500	10500	NS	NS	51400
			Thallium	0.029 J	1.0 U	1.0 U	1.0 U	2	2.4	0
	BKGmw-010	Bedrock	4,4'-DDT	0.030 U	0.024 J	0.030 U	0.030 U	NS	0.2	*
			Aluminum	82.2 J	183 J	156 J	163 J	NS	36000	0
			Antimony	4.6 J	100 U	100 U	100 U	6	15	0
			Barium	14.3	19.5	18.4	18.7	2000	2600	256
			Benzoic acid	5.4 J	10 U	10 U	10 U	NS	150000	*
			bis(2-Ethylhexyl) phthalate	1.3 U	2.3	2.1 J	10 UJ	NS	4.8	*
			Calcium	11400	12000 J	11600	12100	NS	NS	53100
			Carbon disulfide	1.0 U	1.0 U	1.3	1.0 U	NS	1000	*
			Cyanide (mg/L) (mg/L)	0.010 U	0.0021 J	0.010 U	0.010 U	200	730	0
			Iron	36.6 J	1000 U	1000 U	1000 U	300	10000	1430
			Magnesium	13800	15300	14500	15300	NS	NS	15000
			Manganese	40.4 J	911	809	869	50	880	1340

Area	Well Number	Monitoring Zone	Compound or Element Detected	Oct 2005 Level (ug/L)	Mar 2006 Level (ug/L)	May 2006 Level (ug/L)	July 2006 Level (ug/L)	MCL (ug/L)	Region 9 PRG (ug/L)	RVAAP Facilitywide Background (ug/L)
Background	BKGmw-010	Bedrock	Nickel	10.7 J	84.1	80.7	81.3	100	730	83.4
Wells - cont	cont.		Potassium	754 J	575 J	639 J	709 J	NS	NS	5770
			Sodium	3720	3880	3580	3760	NS	NS	51400
			TETRYL	0.079 J	0.10 U	0.10 U	0.10 U	NS	360	*
			Zinc	100 U	13.3 UJ	9.2 J	15.4 J	5000	11000	52.3
	BKGmw-012	Bedrock	1,3,5-Trinitrobenzene	0.10 U	0.10 U	0.10 U	34R	NS	1100	*
			2,4,6-TNT	0.10 U	0.10 U	0.10 U	93 R	NS	2.2	*
			2-Amino-4,6-dinitrotoluene	0.10 U	0.10 U	0.10 U	15 R	NS	NS	*
			4-amino-2,6-dinitrotoluene	0.10 U	0.10 U	0.10 U	37 R	NS	NS	*
			4-Nitrotoluene	0.50 U	0.50 U	0.50 U	0.44 JR	NS	0.66	*
			alpha-Chordane	0.030 U	0.011 J	0.030 U	0.030 U	NS	NS	*
			Barium	315	333	268	296	2000	2600	256
			Benzene	1.0 U	0.29 J	1.0 U	1.0 U	5	0.35	*
			beta-BHC	0.030 U	0.0072 J	0.030 U	0.018 J	NS	0.032	*
			bis(2-Ethylhexyl) phthalate	14 U	1.2	2.2 J	10 U	NS	4.8	*
			Calcium	34100	35300	26800	32000 J	NS	NS	53100
			Carbon disulfide	0.59 J	1.9 U	0.87 J	1.2	NS	1000	*
			Di-n-octyl phthalate	1.8	1.0 U	1.0 U	1.0 U	NS	1500	*
			Gamma-BHC	0.030 U	0.030 U	0.030 U	0.0083 J	0.2	0.052	*
			HMX	0.10 U	0.10 U	0.10 U	1.4 R	NS	1800	*
			Iron	341 J	374 J	179 J	288 J	300	10000	1430
			Magnesium	11000	12000	9040	10900	NS	NS	15000
			Manganese	52.6 J	62.0 J	48.1 J	42.9 J	50	880	1340
			Nitrocellulose	160 J	500 U	0.50 U	500 U	NS	NS	*
			Potassium	5440	5530	5390	5160	NS	NS	5770
			RDX	0.10 U	0.10 U	0.10 U	5.7 R	NS	0.61	*
			Sodium	38900	40900	44700	38900	NS	NS	51400
	BKGmw-013	Unconsolidated	Arsenic	11.7	11.0	10.5	12.6	10	0.045	11.7
			Barium	78.7	83.5	80.5	81.8	2000	2600	82.1
			beta-BHC	0.030 U	0.030 U	0.030 U	0.012 J	NS	0.032	*
			bis(2-Ethylhexyl) phthalate	3.8 U	3.0 J	10 U	10 U	NS	4.8	*
			Calcium	74500	76200 J	71900	74300 J	NS	NS	115000

Table 4-1	Summary o	f Constituents	Detected in 2006

Area	Well Number	Monitoring Zone	Compound or Element Detected	Oct 2005 Level (ug/L)	Mar 2006 Level (ug/L)	May 2006 Level (ug/L)	July 2006 Level (ug/L)	MCL (ug/L)	Region 9 PRG (ug/L)	RVAAP Facilitywide Background (ug/L)
Background	BKGmw-013	Unconsolidated	Chloromethane	1.0 U	1.0 U	1.0 U	0.26 J	NS	160	*
Wells - cont	cont		Cyanide (mg/L)	0.010 U	0.0017 J	0.0021 J	0.010 U	200	730	0
			Di-n-butyl phthalate	1.0 U	1.0 U	1.0 U	0.76 J	NS	NS	*
			Iron	998 J	1030	922 J	1080	300	10000	279
			Magnesium	25100	26300	24700	25500	NS	NS	43300
			Manganese	394	435	413	390	50	880	1020
			Potassium	2030 J	2040 J	1930 J	2150 J	NS	NS	2890
			Sodium	11800	11800	10900	12000	NS	NS	45700
			Zinc	100 U	100 U	100 U	8.3 J	5000	11000	60.9
	BKGmw-015	Bedrock	Barium	262	236	252	277	2000	2600	256
			bis(2-Ethylhexyl) phthalate	1.9 U	5.2	10 UJ	10 UJ	NS	4.8	*
			Calcium	30200	30900 J	30000	31600	NS	NS	53100
			Cyanide (mg/L)	0.010 U	0.0035 J	0.010 U	0.0026 UJ	200	730	0
			Magnesium	12900	13100	12900	13500	NS	NS	15000
			Manganese	9.4 J	43.2 J	13.4 J	1.9 J	50	880	1340
			Nickel	3.4 J	3.4 J	2.5 J	20 U	100	730	83.4
			Potassium	5340	5030	5140	5420	NS	NS	5770
			Sodium	12400	13000	12800	13700	NS	NS	51400
			Zinc	100 U	100 U	100 U	13.3 J	5000	11000	52.3
	BKGmw-016	Unconsolidated	4,4'-DDT	0.030 U	0.030 U	0.023 J	0.030 U	NS	0.2	*
			Aluminum	200 U	200 U	58.1 J	200 U	NS	36000	0
			Barium	14.8	12.5	11.9	12.7	2000	2600	82.1
			Beryllium	10 U	10 U	10 U	0.45 J	4	NS	0
			bis(2-Ethylhexyl) phthalate	2.8 U	5.4	10 U	37 J	NS	4.8	*
			Calcium	9450	9500 J	8990	8870 J	NS	NS	115000
			Carbon disulfide	1.0 U	1.0 U	0.38 J	1.0 U	NS	1000	*
			Copper	20 U	20 U	20 U	2.6 J	1300	1500	0
			Diethyl phthalate	0.52 J	1.0 U	1.0 U	1.0 U	NS	NS	*
			Di-n-octyl phthalate	1.0 U	1.0 U	1.0 U	0.45 J	NS	1500	*
			Iron	1000 U	1000 U	207 J	1000 U	300	10000	279
			Magnesium	4760	4430	4130	4130	NS	NS	43300
			Manganese	20.0 J	8.2 J	22.3 J	6.7 J	50	880	1020

Area	Well Number	Monitoring Zone	Compound or Element Detected	Oct 2005 Level (ug/L)	Mar 2006 Level (ug/L)	May 2006 Level (ug/L)	July 2006 Level (ug/L)	MCL (ug/L)	Region 9 PRG (ug/L)	RVAAP Facilitywide Background (ug/L)
Background	BKGmw-016	Unconsolidated								
Wells - cont	cont.		Nickel	2.5 J	3.4 J	3.1 J	20 U	100	730	0
			Potassium	634 J	459 J	537 J	577 J	NS	NS	2890
			Sodium	3620	2850	2640	2860	NS	NS	45700
			Zinc	100 U	100 U	8.2 J	100 U	5000	11000	60.9
	BKGmw-017	Unconsolidated	Arsenic	18.6	19.3	17.6	16.3	10	0.045	11.7
			Barium	30.9	33.5	33.4	34.4	2000	2600	82.1
			Calcium	102000	101000	95500	105000	NS	NS	115000
			Diethyl phthalate	0.44 J	1.0 U	1.0 U	1.0 U	NS	NS	*
			Di-n-octyl phthalate	1.6	1.0 U	1.0 U	1.0 U	NS	1500	*
			Iron	1410	1440	1270	1090	300	10000	279
			Magnesium	43800	45200	43500	45000	NS	NS	43300
			Manganese	197	216 J	200	211	50	880	1020
			Potassium	2490 J	2570 J	3560 J	2660 J	NS	NS	2890
			Selenium	10 U	10 U	10 U	4.0 J	50	180	0
			Sodium	21800	22100	21700	22100	NS	NS	45700
	BKGmw-018	Bedrock	Barium	20.9	16.9	18.7	17.9	2000	2600	256
			Benzoic acid	5.3 J	10 U	10 U	10 U	NS	150000	*
			bis(2-Ethylhexyl) phthalate	2.5 U	1.6	10 U	10 U	NS	4.8	*
			Calcium	54000	43000 J	44100	43200	NS	NS	53100
			Cobalt	20 U	1.7 J	1.7 J	20 U	NS	730	0
			Cyanide (mg/L)	0.010 U	0.0014 J	0.010 U	0.010 U	200	730	0
			Iron	106 J	450 J	488 J	191 J	300	10000	1430
			Magnesium	5730	5300	5500	5030	NS	NS	15000
			Manganese	229	145	164 J	38.0 J	50	880	1340
			Methoxychlor	0.10 U	0.10 U	0.10 U	0.012 J	40	180	*
			Potassium	1190 J	904 J	1100 J	1100 J	NS	NS	5770
			Sodium	1930	2410	2110	1860	NS	NS	51400
			Zinc	100 U	100 U	8.2 J	100 U	5000	11000	52.3
	BKGmw-019	Unconsolidated	4,4'-DDT	0.030 U	0.030 U	0.020 J	0.030 U	NS	0.2	*
			Barium	45.0	37.3	39.2	39.6	2000	2600	82.1
			Calcium	110000	106000	108000	112000	NS	NS	115000

Area	Well Number	Monitoring Zone	Compound or Element Detected	Oct 2005 Level (ug/L)	Mar 2006 Level (ug/L)	May 2006 Level (ug/L)	July 2006 Level (ug/L)	MCL (ug/L)	Region 9 PRG (ug/L)	RVAAP Facilitywide Background (ug/L)
Background	BKGmw-019	Unconsolidated								
Wells - cont	cont.		Iron	78.8 J	1000 U	1000 U	1000 U	300	10000	279
			Magnesium	31600	31500	32300	32600	NS	NS	43300
			Manganese	202 J	74.6 J	70.9 J	69.2 J	50	880	1020
			Nitrocellulose	500 U	160 J	500 U	500 U	NS	NS	*
			Potassium	1440 J	1280 J	1480 J	1330 J	NS	NS	2890
			Sodium	9550	7550	7750	7750	NS	NS	45700
	BKGmw-020	Bedrock	Barium	135	151	165	121	2000	2600	256
			Benzene	0.23 J	1.0 U	1.0 U	1.0 U	5	0.35	*
			Benzoic acid	5.5 J	10 U	10 U	10 U	NS	150000	*
			bis(2-Ethylhexyl) phthalate	2.5 U	4.2	10 U	10 U	NS	4.8	*
			Calcium	47400	47100 J	48300	48400	NS	NS	53100
			Carbon disulfide	1.6	1.2	1.0 U	0.36 J	NS	1000	*
			Cyanide (mg/L)	0.010 U	0.0015 J	0.010 U	0.010 U	200	730	0
			Diethyl phthalate	0.75 J	1.0 U	1.0 U	1.0 U	NS	NS	*
			Heptachlor	0.030 U	0.030 U	0.030 U	0.0097 J	0.4	0.015	*
			Iron	2550	1170	1930	2570	300	10000	1430
			Magnesium	15100	15500	15800	15300	NS	NS	15000
			Manganese	695	373	844	688	50	880	1340
			Potassium	2920 J	3270 J	3190 J	2720 J	NS	NS	5770
			Sodium	7630	8070	7890	7130	NS	NS	51400
	BKGmw-021	Unconsolidated	alpha-Chordane	0.030 U	0.031	0.030 U	0.030 U	NS	NS	*
			Barium	38.9	42.2	44.4	39.8	2000	2600	82.1
			Calcium	77400	86400	93000	91300 J	NS	NS	115000
			Chloromethane	1.0 U	1.0 U	1.0 U	0.27 J	NS	160	*
			Cyanide (mg/L)	0.010 U	0.0015 J	0.010 U	0.010 U	200	730	0
			Heptachlor	0.030 U	0.19	0.030 U	0.030 U	0.4	0.015	*
			Magnesium	49400	58400	51900	47100	NS	NS	43300
			Manganese	100 U	100 U	100 U	0.35 J	50	880	1020
			Mercury	0.20 U	0.094 J	0.20 U	0.20 U	2	11	0
			Potassium	1070 J	1060 J	1150 J	989 J	NS	NS	2890
			Sodium	10200	12600	12000	14500	NS	NS	45700
			Zinc	100 U	8.5 J	100 U	9.6 J	5000	11000	60.9

Area	Well Number	Monitoring Zone	Compound or Element Detected	Oct 2005 Level (ug/L)	Mar 2006 Level (ug/L)	May 2006 Level (ug/L)	July 2006 Level (ug/L)	MCL (ug/L)	Region 9 PRG (ug/L)	RVAAP Facilitywide Background (ug/L)
Load Line 1	LL1mw-078	Bedrock	1,3,5-Trinitrobenzene	0.10 U	0.10 U	0.10 U	0.041 J	NS	1100	*
			alpha-Chordane	0.030 U	0.034	0.030 U	0.030 U	NS	NS	*
			Aluminum	200 U	68.8 J	51.3 J	200 U	NS	36000	0
			Barium	8.0 J	14.1	7.5 J	6.4 J	2000	2600	256
			Beryllium	10 U	10 U	10 U	0.44 J	4	NS	0
			bis(2-Ethylhexyl) phthalate	2.5 U	2.5 U	1.5 J	10 U	NS	4.8	*
			Butylbenzyl phthalate	1.5	1.0 U	1.0 U	1.0 U	NS	7300	*
			Calcium	57100	49400	49400	52700 J	NS	NS	53100
			Cobalt	20 U	2.2 J	1.5 J	20 U	NS	730	0
			Copper	20 U	20 U	20 U	3.2 J	1300	1500	0
			Cyanide (mg/L)	0.010 U	0.010 U	0.0016 J	0.010 U	200	730	0
			Heptachlor epoxide	0.030 U	0.066	0.030 U	0.23	0.2	0.0074	*
			Magnesium	8190	8730	7780	7980	NS	NS	15000
			Manganese	1.9 J	93.2 J	9.6 J	100 U	50	880	1340
			Nickel	20 U	3.8 J	2.1 J	20 U	100	730	83.4
			Potassium	2540 J	3660 J	2550 J	2290 J	NS	NS	5770
			RDX	0.17	0.10 U	0.10 U	0.10 U	NS	0.61	*
			Sodium	5260	5780	5880	5830	NS	NS	51400
			Thallium	0.053 J	0.27 J	0.11 J	0.034 J	2	2.4	0
	LL1mw-080	Bedrock	1,3,5-Trinitrobenzene	2.7	1.9	1.5	0.40	NS	1100	*
			1,3-Dinitrobenzene	0.91	0.10 U	0.10 U	0.10 U	NS	3.6	*
			2,4,6-TNT	2.2	0.68	0.10 U	0.29	NS	2.2	*
			2,4-Dinitrotoluene	0.65	0.1 U	0.1 U	0.067 J	NS	73	*
			2,6-Dinitrotoluene	0.68 J	5.0 U	5.0 U	5.0 U	NS	36	*
			2-Amino-4,6-dinitrotoluene	8.6	1.8	2.3	2.2	NS	NS	*
			4-amino-2,6-dinitrotoluene	11	3.3	4.4	4.2	NS	NS	*
			4-Nitrotoluene	0.50 U	0.50 U	0.50 U	0.16 J	NS	0.66	*
			alpha-Chordane	0.030 U	0.030 U	0.030 U	0.012 J	NS	NS	*
			Barium	17.9	4.6 J	3.7 J	3.8 J	2000	2600	256
			Beryllium	10 U	10 U	10 U	0.42 J	4	NS	0
			beta-BHC	0.030 U	0.026 J	0.044 J	0.035	NS	0.032	*
		Calcium	97000	47200	41200	52800 J	NS	NS	53100	
			Chloromethane	0.18 J	1.0 U	1.0 U	1.0 U	NS	160	*

Area	Well Number	Monitoring Zone	Compound or Element Detected	Oct 2005 Level (ug/L)	Mar 2006 Level (ug/L)	May 2006 Level (ug/L)	July 2006 Level (ug/L)	MCL (ug/L)	Region 9 PRG (ug/L)	RVAAP Facilitywide Background (ug/L)
Load Line 1 -	LL1mw-080	Bedrock								
cont	cont		Copper	20 U	20 U	20 U	2.5 J	1300	1500	0
			Diethyl phthalate	0.45 J	1.0 U	1.0 U	1.0 U	NS	NS	*
			Heptachlor epoxide	2.8	1.1	0.030 U	0.030 U	0.2	0.0074	*
			HMX	9.5	1.9	2.3	0.95	NS	1800	*
			Magnesium	4660	4350	3650	4460	NS	NS	15000
			Manganese	860	2.6 J	100 U	100 U	50	880	1340
			Nickel	3.3 J	20 U	20 U	20 U	100	730	83.4
			Potassium	3450 J	1470 J	1640 J	2090 J	NS	NS	5770
			RDX	58	14 J	15	3.8	NS	0.61	*
			Sodium	2440	1270	1200	1240	NS	NS	51400
			Thallium	0.39 J	1.0 U	1.0 U	1.0 U	2	2.4	0
	LL1mw-083	Bedrock	1,3,5-Trinitrobenzene	6.8	6.5	5.1	7.0	NS	1100	*
			1,3-Dinitrobenzene	0.10 U	0.28 J	0.21	0.10 U	NS	3.6	*
			2,4,6-TNT	6.8	6.9	6.5	8.0	NS	2.2	*
			2,4-Dinitrotoluene	3.1 J	3.4	3.2	2.3 J	NS	73	*
			2,6-Dinitrotoluene	2.4 J	1.9 J	1.3 J	1.3 J	NS	36	*
			2-Amino-4,6-dinitrotoluene	21	20	19	19	NS	NS	*
			4-amino-2,6-dinitrotoluene	23	28	28	33	NS	NS	*
			Aldrin	0.030 U	0.030 U	0.011 J	0.030 U	NS	0.003	*
			Aluminum	670	752	598	571	NS	36000	0
			Barium	15.0	17.4	15.5	14.4	2000	2600	256
			Beryllium	10 U	10 U	10 U	0.62 J	4	NS	0
			beta-BHC	0.030 U	0.052	0.030 U	0.053	NS	0.032	*
			bis(2-Ethylhexyl) phthalate	2.5 U	2.5 U	1.9 J	10 U	NS	4.8	*
			Cadmium	0.64 J	0.62 J	0.56 J	10 U	5	NS	0
			Calcium	12600	21200	18700	18200 J	NS	NS	53100
			Cobalt	9.8 J	9.3 J	6.4 J	6.4 J	NS	730	0
			Copper	2.5 J	3.1 J	20 U	4.2 J	1300	1500	0
			Cyanide (mg/L)	0.0033 J	0.010 U	0.0018 J	0.010 U	200	730	0
			Dieldrin	0.030 U	0.030 U	0.029 J	0.030 U	NS	0.0023	*
			Di-n-octyl phthalate	1.5	1.0 U	1.0 U	1.0 U	NS	1500	*
			Endosulfan II	0.030 U	0.030 U	0.016 J	0.030 U	NS	220	*

Area	Well Number	Monitoring Zone	Compound or Element Detected	Oct 2005 Level (ug/L)	Mar 2006 Level (ug/L)	May 2006 Level (ug/L)	July 2006 Level (ug/L)	MCL (ug/L)	Region 9 PRG (ug/L)	RVAAP Facilitywide Background (ug/L)
Load Line 1 -	LL1mw-083 -	Bedrock	Endrin aldehyde	0.030 U	0.030 U	0.011 J	0.030 U	NS	11	*
cont	cont		gamma-Chlordane	0.030 U	0.030 U	0.030 U	0.019 J	NS	NS	*
			Heptachlor epoxide	4.6	0.030 U	0.030 U	0.030 U	0.2	0.0074	*
			HMX	0.44 J	0.10 U	0.10 U	0.10 U	NS	1800	*
			Iron	62.9 J	1000 U	1000 U	1000 U	300	10000	1430
			Magnesium	3630	5190	4380	4730	NS	NS	15000
			Manganese	352	505 J	383	365 J	50	880	1340
			Nickel	26.5	34.4	25.8	21.3	100	730	83.4
			Nitrocellulose	210 J	500 U	500 U	500 U	NS	NS	*
			Potassium	2340 J	3140 J	2820 J	2730 J	NS	NS	5770
			RDX	0.32 J	0.20 J	0.13 J	0.10 U	NS	0.61	*
			Sodium	17000	17100	13300	12900	NS	NS	51400
			Thallium	0.059 J	0.072 J	0.036 J	1.0 U	2	2.4	0
			Toxaphene	2.0 U	0.34 J	2.0 U	2.0 U	3	0.061	*
			Zinc	31.4 J	44.8 J	38.4 J	100 U	5000	11000	52.3
Load Line 2	LL2mw-059	Bedrock	1,3,5-Trinitrobenzene	2.5	1.2	0.71	1.2	NS	1100	*
			1,3-Dinitrobenzene	0.089 J	0.10 U	0.10 U	0.10 U	NS	3.6	*
			2,4-Dinitrotoluene	0.47	0.25	0.13	0.22	NS	73	*
			2-Amino-4,6-dinitrotoluene	0.96	0.52	0.35	0.58	NS	NS	*
			4-amino-2,6-dinitrotoluene	0.91	0.47	0.38	0.59	NS	NS	*
			alpha-Chordane	0.030 U	0.030 U	0.023 J	0.014 J	NS	NS	*
			Barium	10.8	19.8	16.0	27.2	2000	2600	256
			beta-BHC	0.030 U	0.030 U	0.030 U	0.0071 J	NS	0.032	*
			bis(2-Ethylhexyl) phthalate	2.5 U	2.5 U	7.1 J	10 U	NS	4.8	*
			Calcium	22300	45200	51800	47900 J	NS	NS	53100
			Cobalt	2.9 J	6.5 J	20 U	6.3 J	NS	730	0
			Heptachlor epoxide	0.46 J	0.14	0.030 U	0.030 U	0.2	0.0074	*
			HMX	0.067 J	0.046 J	0.10 U	0.051 J	NS	1800	*
			Iron	42.8 J	299 J	1000 U	565 J	300	10000	1430
			Magnesium	8070	9720	8280	8820	NS	NS	15000
			Manganese	339	282 J	17.0 J	672 J	50	880	1340
			Nickel	5.1 J	3.7 J	20 U	4.8 J	100	730	83.4
			Phenol	1.0 U	1.0 U	1.0 U	1.1 J	NS	11000	*
			Potassium	805 J	424 J	329 J	395 J	NS	NS	5770
			RDX	0.10 U	0.10 U	0.042 J	0.10 U	NS	0.61	*
			Sodium	5250	5770	3870	5010	NS	NS	51400
			Thallium	0.034 J	1.0 U	1.0 U	1.0 U	2	2.4	0

Table 4-1	Summary	of Constituents	Detected in 2006

Area	Well Number	Monitoring Zone	Compound or Element Detected	Oct 2005 Level (ug/L)	Mar 2006 Level (ug/L)	May 2006 Level (ug/L)	July 2006 Level (ug/L)	MCL (ug/L)	Region 9 PRG (ug/L)	RVAAP Facilitywide Background (ug/L)
Load Line 2 -	LL2mw-262	Bedrock	Barium	20.7	21.3	17.1	17.1	2000	2600	256
cont			Beryllium	10 U	10 U	10 U	0.40 J	4	NS	0
			Calcium	65000	58200	47400	47900 J	NS	NS	53100
			Cobalt	23.5	3.0 J	1.9 J	1.5 J	NS	730	0
			Copper	20 U	20 U	20 U	2.4 J	1300	1500	0
			Diethyl phthalate	0.60 J	1.0 U	1.0 U	1.0 U	NS	NS	*
			Di-n-octyl phthalate	1.0 U	1.0 U	1.0 U	0.74 J	NS	1500	*
			Heptachlor	0.030 U	0.0065 J	0.030 U	0.030 U	0.4	0.015	*
			Heptachlor epoxide	0.030 U	0.12	0.030 U	0.030 U	0.2	0.0074	*
			Iron	2180	1000 U	1000 U	1000 U	300	10000	1430
			Magnesium	38500	37400	33000	33600	NS	NS	15000
			Manganese	1950	566 J	382	325 J	50	880	1340
			Nickel	25.8	19.7 J	16.5 J	12.7 J	100	730	83.4
			Nitrocellulose	500 U	200 J	500 U	500 U	NS	NS	*
			Potassium	2560 J	2280 J	2100 J	2150 J	NS	NS	5770
			Sodium	8590	9480	8400	8540	NS	NS	51400
	LL2mw-263	Bedrock	1,3,5-Trinitrobenzene	0.10 U	0.10 U	0.10 U	0.056 J	NS	1100	*
			Arsenic	17.0	14.9	13.5	15.2	10	0.045	0
			Barium	22.2	19.4	19.8	17.6	2000	2600	256
			Beryllium	10 U	10 U	10 U	0.38 J	4	NS	0
			bis(2-Ethylhexyl) phthalate	2.5 U	2.5 U	4.2 J	10 U	NS	4.8	*
			Calcium	31800	34000	29300	29300 J	NS	NS	53100
			Cobalt	2.3 J	3.1 J	2.8 J	2.9 J	NS	730	0
			Copper	20 U	20 U	20 U	2.2 J	1300	1500	0
			Iron	4560	4680	4230	4700	300	10000	1430
			Magnesium	14400	15200	13000	13100	NS	NS	15000
			Manganese	1200	1320 J	1310	1260 J	50	880	1340
			Nickel	4.8 J	6.3 J	5.3 J	4.4 J	100	730	83.4
			Potassium	810 J	756 J	634 J	603 J	NS	NS	5770
			Sodium	4600	5420	3970	4150	NS	NS	51400

Area	Well Number	Monitoring Zone	Compound or Element Detected	Oct 2005 Level (ug/L)	Mar 2006 Level (ug/L)	May 2006 Level (ug/L)	July 2006 Level (ug/L)	MCL (ug/L)	Region 9 PRG (ug/L)	RVAAP Facilitywide Background (ug/L)																										
Load Line 3	LL3mw-238	Bedrock	1,3,5-Trinitrobenzene	49	27	31 J	0.10 UR	NS	1100	*																										
			2,4,6-TNT	110	68	83 J	0.10 UR	NS	2.2	*																										
			2,6-Dinitrotoluene	1.8 J	5.0 U	5.0 U	5.0 U	NS	36	*																										
			2-Amino-4,6-dinitrotoluene	13	10	12 J	0.10 UR	NS	NS	*																										
			4,4'-DDE	0.030 U	0.026 J	0.030 U	0.021 J	NS	0.2	*																										
			4-amino-2,6-dinitrotoluene	41	28	31 J	0.10 UR	NS	NS	*																										
			Aluminum	200 U	200 U	59.8 J	200 U	NS	36000	0																										
			Barium	6.7 J	5.3 J	5.6 J	5.6 J	2000	2600	256																										
			beta-BHC	0.030 U	0.076 J	0.071 J	0.15	NS	0.032	*																										
			bis(2-Ethylhexyl) phthalate	21	2.5 U	3.0 J	10 U	NS	4.8	*																										
			Calcium	37800	36500	37200	37400 J	NS	NS	53100																										
			Copper	20 U	2.1 J	20 U	20 U	1300	1500	0																										
			Cyanide (mg/L)	0.010 U	0.010 U	0.0019 J	0.010 U	200	730	0																										
			Endrin aldehyde	0.030 U	0.075 J	0.030 U	0.0091 J	NS	11	*																										
			Heptachlor epoxide	13 J	0.030 U	0.030 U	0.030 U	0.2	0.0074	*																										
			HMX	2.2	1.1	0.10 U	0.10 UR	NS	1800	*																										
			Iron	1000 U	133 J	54.1 J	1000 U	300	10000	1430																										
			Magnesium	4080	4190	3970	3950	NS	NS	15000																										
																													Manganese	1.3 J	2.9 J	2.0 J	1.2 J	50	880	1340
																		Nickel	20 U	20 U	1.4 J	20 U	100	730	83.4											
			Potassium	2350 J	1710 J	1970 J	2060 J	NS	NS	5770																										
			RDX	8.2	4.7	5.2 J	0.10 UR	NS	0.61	*																										
			Selenium	10 U	2.5 J	10 U	4.5 J	50	180	0																										
			Sodium	2190	2150	2100	2220	NS	NS	51400																										
			Tetryl	1.5	0.10 U	0.10 U	0.10 U	NS	360	*																										
			Toxaphene	2.0 U	2.1 J	2.0 U	2.0 U	3	0.061	*																										
			Zinc	100 U	100 U	100 U	9.6 J	5000	11000	52.3																										
	LL3mw-242	Bedrock	alpha-Chordane	0.030 U	0.030 U	0.0073 J	0.030 U	NS	NS	*																										
			Aluminum	200 U	200 U	57.6 J	200 U	NS	36000	0																										
			Barium	5.2 J	10	9.3 J	9.4 J	2000	2600	256																										
			bis(2-Ethylhexyl) phthalate	2.5 U	3.9 J	3.0 J	10 U	NS	4.8	*																										
			Calcium	17300	12100 J	10800	11600 J	NS	NS	53100																										
			Chloromethane	1.0 U	1.0 U	1.0 U	0.49 J	NS	160	*																										
			Cyanide (mg/L)	0.010 U	0.0014 J	0.010 U	0.010 U	200	730	0																										
			Diethyl phthalate	0.58 J	1.0 U	1.0 U	1.0 U	NS	NS	*																										
			Heptachlor epoxide	0.038	0.030 U	0.030 U	0.030 U	0.2	0.0074	*																										
			Magnesium	7070	5930	5550	5840	NS	NS	15000																										

Table 4-1	Summar	v of Constituents Detected in	2006

Area	Well Number	Monitoring Zone	Compound or Element Detected	Oct 2005 Level (ug/L)	Mar 2006 Level (ug/L)	May 2006 Level (ug/L)	July 2006 Level (ug/L)	MCL (ug/L)	Region 9 PRG (ug/L)	RVAAP Facilitywide Background (ug/L) 1340
Cont	cont	Boarook	Nickel	521	551	521	471	100	730	83.4
Cont	com		Potassium	1180 I	795 I	746 1	829 1	NS	NS	5770
			Sodium	12300	10200	8600	10400	NS	NS	51400
			Zinc	100 U	100 []	70.1	131.1	5000	11000	52.3
Load Line 4	114mw-198	Unconsolidated	Antimony	100 U	100 U	8.9.J	100 U	6	15	0
Loud Line 1		onconconduced	Barium	12.3	11.3	11.3	12.0	2000	2600	82 1
			Benzoic acid	55.1	10 U	10 U	10 U	NS	150000	*
			Calcium	24800	27900	26600	26900	NS	NS	115000
			Cobalt	20 U	1.5 J	20 U	20 U	NS	730	0
			Cvanide (mg/L)	0.010 U	0.0013 J	0.010 U	0.010 U	200	730	0
			Heptachlor epoxide	0.069	0.030 U	0.030 U	0.030 U	0.2	0.0074	*
			Iron	4100	5960	4200	4730	300	10000	279
			Magnesium	11500	13900	13200	13000	NS	NS	43300
			Manganese	1070	1320 J	1140	1180	50	880	1020
			Nickel	19.0 J	20.4	29.2	25.5	100	730	0
			Potassium	1330 J	1100 J	1050 J	1170 J	NS	NS	2890
			Sodium	10900	9960	8640	9160	NS	NS	45700
			Zinc	56.7 J	60.2 J	90.6 J	73.8 J	5000	11000	60.9
	LL4mw-199	Unconsolidated	Arsenic	12.7	12.2	12.3	7.6 J	10	0.045	11.7
			Barium	95.7	94.0	102	97.4	2000	2600	82.1
			Beryllium	10 U	10 U	10 U	0.46 J	4	NS	0
			beta-BHC	0.030 U	0.030 U	0.026 J	0.030 U	NS	0.032	*
			bis(2-Ethylhexyl) phthalate	2.5 U	2.5	1.7 J	10 U	NS	4.8	*
			Calcium	77800	83200	78800	82800 J	NS	NS	115000
			Chromium	20 U	1.7 J	20 U	20 U	100	NS	*
			Copper	20 U	20 U	20 U	1.9 J	1300	1500	0
			Heptachlor epoxide	0.022 J	0.030 U	0.030 U	0.030 U	0.2	0.0074	*
			Iron	1190	1420	1100	1740	300	10000	279
			Magnesium	21000	22300	21200	21800	NS	NS	43300
			Manganese	457	377 J	424	449 J	50	880	1020
			Potassium	1440 J	1460 J	1370 J	1390 J	NS	NS	2890
			Sodium	9340	10000	9470	9740	NS	NS	45700
Load Line 11	LL11mw-002	Unconsolidated	1,3,5-Trinitrobenzene	0.10 U	0.040 J	0.10 U	0.10 U	NS	1100	*
			Barium	29.0	23.6	26.8	10 U	2000	2600	82.1
			Cadmium	10 U	0.63 J	6.7 J	10 U	5	NS	0
			Calcium	94000	85000	83900	1000 U	NS	NS	115000

Table 4-1	Summary	of Constituents Detected in 2006	
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Area	Well Number	Monitoring Zone	Compound or Element Detected	Oct 2005 Level (ug/L)	Mar 2006 Level (ug/L)	May 2006 Level (ug/L)	July 2006 Level (ug/L)	MCL (ug/L)	Region 9 PRG (ug/L)	RVAAP Facilitywide Background (ug/L)
Load Line 11 -	LL11mw-002 -	Unconsolidated	Heptachlor	0.030 U	0.030 U	0.024 J	0.030 U	0.4	0.015	*
cont	cont		Magnesium	30500	23300	25700	1000 U	NS	NS	43300
			Manganese	611 J	184 J	133	100 U	50	880	1020
			Nickel	20 U	20 U	1.5 J	20 U	100	730	0
			Nitrobenzene	1.0 U	0.056 J	1.0 U	1.0 U	NS	3.4	*
			Potassium	1990 J	1370 J	1940 J	5000 U	NS	NS	2890
			Sodium	9640	6470	8940	1000 U	NS	NS	45700
			Zinc	100 U	22.3 J	203	100 U	5000	11000	60.9
	LL11mw-007	Unconsolidated	Acetone	10 U	10 U	10 U	0.86 J	NS	5500	*
			Aluminum	228	200 U	200 U	200 U	NS	36000	0
			Arsenic	7.1 J	18.0	18.7	23.1	10	0.045	11.7
			Barium	34.7	85.0	83.9	86.0	2000	2600	82.1
			Calcium	81800	91300	86700	88800	NS	NS	115000
			Chloromethane	0.15 J	1.0 U	1.0 U	1.0 U	NS	160	*
			Copper	2.0 J	20 U	20 U	20 U	1300	1500	0
			Cyanide (mg/L)	0.010 U	0.0015 J	0.010 U	0.010 U	200	730	0
			Iron	1520	904 J	967 J	1250	300	10000	279
			Magnesium	26800	33800	32200	32200	NS	NS	43300
			Manganese	166 J	220 J	204	211	50	880	1020
			Potassium	2000 J	1520 J	1480 J	1520 J	NS	NS	2890
			Sodium	9230	13700	13500	13100	NS	NS	45700
Load Line 12	LL12mw-153	Unconsolidated	Acetone	10 U	10 U	10 U	1.0 J	NS	5500	*
			alpha-Chordane	0.030 U	0.0074 J	0.030 U	0.030 U	NS	NS	*
			Arsenic	19.0	4.5 J	19.7	23.3	10	0.045	11.7
			Barium	75.0	73.4	85.0	79.5	2000	2600	82.1
			bis(2-Ethylhexyl) phthalate	2.5 U	5.9	0.88 J	10 U	NS	4.8	*
			Calcium	134000	140000	143000	145000	NS	NS	115000
			Cobalt	20 U	20 U	1.3 J	20 U	NS	730	0
			Diethyl phthalate	0.74 J	1.0 U	1.0 U	1.0 U	NS	NS	*
			Iron	2520	2790	4250	3950	300	10000	279
			Magnesium	73200	79100	80800	80200	NS	NS	43300
			Manganese	175	197 J	212	197	50	880	1020
			Nickel	20 U	1.4 J	2.0 J	20 U	100	730	0
			Potassium	2910 J	2450 J	2730 J	2680 J	NS	NS	2890
			Sodium	24300	25300	25700	25700	NS	NS	45700
			Zinc	100 U	15.4 J	11.1 J	7.1 J	5000	11000	60.9

Area	Well Number	Monitoring Zone	Compound or Element Detected	Oct 2005 Level (ug/L)	Mar 2006 Level (ug/L)	May 2006 Level (ug/L)	July 2006 Level (ug/L)	MCL (ug/L)	Region 9 PRG (ug/L)	RVAAP Facilitywide Background (ug/L)
Load Line 12 -	LL12mw-182	Unconsolidated								
cont			1,3,5-I rinitrobenzene	0.031 J	0.033 J	0.10 U	0.10 U	NS	1100	*
			2,6-Dinitrotoluene	5.0 U	5.0 0	0.089 J	5.0 0	NS	36	*
			Acetone	0.93 J	10 0	0.99 J	10 0	NS	5500	^
			alpha-Chordane	0.030 U	0.0081 J	0.011 J	0.030 U	NS	NS	*
			Aluminum	200 U	200 U	200 U	92.8 J	NS	36000	0
			Arsenic	53.0	22.2	21.1	28.5	10	0.045	11.7
			Barium	84.5	63.2	61.4	85.2	2000	2600	82.1
			bis(2-Ethylhexyl) phthalate	2.5 U	5.1	3.4 J	10 U	NS	4.8	*
				90200	62000	56800	88600	NS	NS	115000
			Cyanide (mg/L)	0.010 U	0.010 U	0.0016 J	0.010 U	200	730	0
			Heptachlor epoxide	0.030 U	0.030 U	0.012 J	0.030 U	0.2	0.0074	*
			Iron	1410	1000 U	1000 U	719 J	300	10000	279
			Magnesium	72600	52200	46200	69000	NS	NS	43300
			Manganese	57.0 J	17.4 J	29.8 J	54.6 J	50	880	1020
			Nickel	20 U	3.1 J	2.9 J	20 U	100	730	0
			Potassium	4900 J	7530	6450	4940 J	NS	NS	2890
			Selenium	10 U	2.5 J	10 U	10 U	50	180	0
			Sodium	26800	30500	26600	27600	NS	NS	45700
	LL12mw-183	Unconsolidated	alpha-Chordane	0.030 U	0.0076 J	0.030 U	0.030 U	NS	NS	*
			Arsenic	48.2	20.6	16.0	40.0	10	0.045	11.7
			Barium	76.3	74.1	69.1	77.5	2000	2600	82.1
			bis(2-Ethylhexyl) phthalate	2.5 U	1.3	10 U	10 U	NS	4.8	*
			Calcium	120000	120000	108000	119000	NS	NS	115000
			Chloromethane	0.17 J	1.0 U	1.0 U	0.25 J	NS	160	*
			Cyanide (mg/L)	0.010 U	0.010 U	0.0013 J	0.010 U	200	730	0
			Di-n-octyl phthalate	1.5	1.0 U	1.0 U	1.0 U	NS	1500	*
			Iron	1930	379 J	148 J	1650	300	10000	279
			Magnesium	47900	49700	44400	47800	NS	NS	43300
			Manganese	72.9 J	76.0 J	67.5 J	81.8 J	50	880	1020
			Potassium	3720 J	4100 J	3910 J	3710 J	NS	NS	2890
			Sodium	16500	18900	16200	17700	NS	NS	45700
			Thallium	1.0 U	0.037 J	1.0 U	1.0 U	2	2.4	0
			Zinc	100 U	100 U	100 U	8.6 J	5000	11000	60.9
	LL12mw-186	Unconsolidated	Aldrin	0.030 U	0.016 J	0.030 U	0.030 U	NS	0.003	*
			alpha-Chordane	0.030 U	0.047	0.030 U	0.030 U	NS	NS	*
			Barium	44.1	46.4	45.9	47.4	2000	2600	82.1

Table 4-1 Su	ummary of C	constituents	Detected in 2006
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Area	Well Number	Monitoring Zone	Compound or Element Detected	Oct 2005 Level (ug/L)	Mar 2006 Level (ug/L)	May 2006 Level (ug/L)	July 2006 Level (ug/L)	MCL (ug/L)	Region 9 PRG (ug/L)	RVAAP Facilitywide Background (ug/L)
Load Line 12 -	LL12mw-186 -	Unconsolidated								
cont	cont		bis(2-Ethylhexyl) phthalate	2.5 U	1.1	10 U	10 U	NS	4.8	*
			Calcium	130000	144000	133000	135000	NS	NS	115000
			Chloromethane	0.15 J	1.0 U	1.0 U	1.0 U	NS	160	*
			Cobalt	1.5 J	1.7 J	2.2 J	20 U	NS	730	0
			Cyanide (mg/L)	0.010 U	0.010 U	0.010 U	0.0032 J	200	730	0
			Di-n-octyl phthalate	2.1	1.0 U	1.0 U	1.0 U	NS	1500	*
			Heptachlor	0.030 U	0.010 J	0.030 U	0.030 U	0.4	0.015	*
			Heptachlor epoxide	0.053 J	0.10	0.030 U	0.030 U	0.2	0.0074	*
			Iron	326 J	119 J	150 J	576 J	300	10000	279
			Magnesium	55500	69400	63200	61900	NS	NS	43300
			Manganese	220 J	303 J	369	304	50	880	1020
			Nickel	2.2 J	20 U	2.8 J	1.9 J	100	730	0
			Nitrate-Nitrite	0.03 J	0.1 U	0.1 U	0.1 U	10,000	1000	*
			Nitrocellulose	140 J	500 U	500 U	500 U	NS	NS	*
			Potassium	1600 J	1660 J	1740 J	1550 J	NS	NS	2890
			Selenium	10 U	3.2 J	10 U	10 U	50	180	0
			Sodium	13400	16600	14900	14600	NS	NS	45700
			Zinc	6.7 J	8.0 J	7.0 J	18.7 J	5000	11000	60.9
Central Burn	CBPmw-005	Unconsolidated	Arsenic	24.2	20.0	36.3	25.7	10	0.045	11.7
Pits			Barium	32.0	35.1	40.1	38.5	2000	2600	82.1
			Benzoic acid	5.4 J	10 U	10 U	10 U	NS	150000	*
			bis(2-Ethylhexyl) phthalate	2.5 U	2.5 U	3.6 J	10 U	NS	4.8	*
			Calcium	78000	78600	85600	83500 J	NS	NS	115000
			Carbon disulfide	0.62 J	0.28 J	1.0 U	1.0 U	NS	1000	*
			Cyanide (mg/L)	0.010 U	0.0018 J	0.010 U	0.010 U	200	730	0
			Iron	1100	887 J	1610	1510	300	10000	279
			Magnesium	37600	39400	47800	41200	NS	NS	43300
			Manganese	53.9 J	54.5 J	67.0 J	52.6 J	50	880	1020
			Nickel	20 U	20 U	1.4 J	20 U	100	730	0
			Nitrocellulose	160 J	120 J	500 U	500 U	NS	NS	*
			Potassium	3150 J	4350 J	5480	3250 J	NS	NS	2890
			Sodium	26000	27200	40500	28300	NS	NS	45700
			Zinc	100 U	100 U	100 U	7.2 J	5000	11000	60.9
	CBPmw-007	Unconsolidated	2,4,6-TNT	0.10 U	0.10 U	0.10 U	0.071 J	NS	2.2	*
			2.6-Dinitrotoluene	0.082 J	5.0 U	5.0 U	5.0 U	NS	36	*

Area	Well Number	Monitoring Zone	Compound or Element Detected	Oct 2005 Level (ug/L)	Mar 2006 Level (ug/L)	May 2006 Level (ug/L)	July 2006 Level (ug/L)	MCL (ug/L)	Region 9 PRG (ug/L)	RVAAP Facilitywide Background (ug/L)
Central Burn	CBPmw-007 -	Unconsolidated								
Pits - cont	cont		Arsenic	9.9 J	14.1	14.0	15.2	10	0.045	11.7
			Barium	13.3	12.8	12.7	11.6	2000	2600	82.1
			Beryllium	10 U	10 U	10 U	0.31 J	4	NS	0
			bis(2-Ethylhexyl) phthalate	2.5 U	2.5 U	2.2 J	10 U	NS	4.8	*
			Calcium	208000	198000	199000	236000 J	NS	NS	115000
			Carbon disulfide	1.0 U	0.62 J	1.0 U	1.0 U	NS	1000	*
			Cobalt	20 U	1.8 J	1.6 J	20 U	NS	730	0
			Iron	1270	1440	1430	1700	300	10000	279
			Magnesium	108000	108000	109000	125000	NS	NS	43300
			Manganese	65.4 J	111 J	73.9 J	79.5 J	50	880	1020
			Nickel	1.6 J	2.9 J	2.7 J	20 U	100	730	0
			Potassium	6330	6060	6070	5740	NS	NS	2890
			Sodium	143000	153000	128000	115000	NS	NS	45700
			Zinc	100 U	8.7 J	100 U	9.0 J	5000	11000	60.9
Demolition	DA2mw-107	Unconsolidated	Arochlor 1254	1.0 U	1.0 U	1.0 U	0.16 J	0.5	0.034	*
Area 2			Arsenic	6.3 J	10 U	10 U	5.7 J	10	0.045	11.7
			Barium	34.2	29.0	28.9	33.3	2000	2600	82.1
			Benzoic acid	5.2 J	10 U	10 U	10 U	NS	150000	*
			bis(2-Ethylhexyl) phthalate	2.5 U	0.97 J	10 U	10 U	NS	4.8	*
			Butylbenzyl phthalate	1.5	1.0 U	1.0 U	1.0 U	NS	7300	*
			Calcium	86500	86100 J	78200	87300	NS	NS	115000
			Chloromethane	0.18 J	1.0 U	1.0 U	1.0 U	NS	160	*
			Cyanide (mg/L)	0.010 U	0.0025 J	0.010 U	0.010 U	200	730	0
			Iron	1460	296 J	997 J	1660	300	10000	279
			Magnesium	28700	30100	27300	29400	NS	NS	43300
			Manganese	193 J	212	318 J	208	50	880	1020
			Potassium	2060 J	1670 J	1480 J	1850 J	NS	NS	2890
			Sodium	9760	9760	8300	9690	NS	NS	45700
			Zinc	100 U	100 U	100 U	35.4 J	5000	11000	60.9
	DA2mw-Det3	Unconsolidated	Arsenic	10.5	NT	8.4 J	NT	10	0.045	11.7
			Barium	47.2	NT	44.9	NT	2000	2600	82.1
			Calcium	84600	NT	80200	NT	NS	NS	115000
			Iron	1640	NT	1250	NT	300	10000	279
			Magnesium	30800	NT	30200	NT	NS	NS	43300
			Manganese	247 J	NT	258 J	NT	50	880	1020
			Nickel	20 U	NT	1.4 J	NT	100	730	0

Table 4-1 Summary of Constituents Detected in 2006
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Area	Well Number	Monitoring Zone	Compound or Element Detected	Oct 2005 Level (ug/L)	Mar 2006 Level (ug/L)	May 2006 Level (ug/L)	July 2006 Level (ug/L)	MCL (ug/L)	Region 9 PRG (ug/L)	RVAAP Facilitywide Background (ug/L)
Demolition	DA2mw-Det3 -	Unconsolidated								
Area 2 - cont	cont		Potassium	2030 J	NT	1750 J	NT	NS	NS	2890
			Sodium	11500	NT	11100	NT	NS	NS	45700
			Thallium	0.024 J	NT	1.0 U	NT	2	2.4	0
	DA2mw-Det4	Unconsolidated	Barium	41.7	NT	45.4	NT	2000	2600	82.1
			Benzoic acid	5.3 J	NT	10 U	NT	NS	150000	*
			Calcium	139000	NT	145000	NT	NS	NS	115000
			Chloromethane	0.16 J	NT	1.0 U	NT	NS	160	*
			Copper	20 U	NT	5.7 J	NT	1300	1500	0
			HMX	0.64	NT	1.3	NT	NS	1800	*
			Magnesium	28000	NT	31000	NT	NS	NS	43300
			Potassium	1810 J	NT	1610 J	NT	NS	NS	2890
			RDX	0.10 U	NT	0.73	NT	NS	0.61	*
			Sodium	5380	NT	3280	NT	NS	NS	45700
			Thallium	0.039 J	NT	1.0 U	NT	2	2.4	0
			Zinc	100 U	NT	11.9 J	NT	5000	11000	60.9
Ramsdell	RQLmw-007	Bedrock	1,2-Dichloroethene (total)	0.38 J	NT	1.0 U	NT	NS	NS	*
Quarry Landfill			1,3,5-Trinitrobenzene	0.10 U	NT	0.035 J	NT	NS	1100	*
			Arsenic	76.1	NT	43.4	NT	10	0.045	0
			Barium	53.0	NT	46.1	NT	2000	2600	256
			bis(2-Ethylhexyl) phthalate	2.5 U	NT	2.4 J	NT	NS	4.8	*
			Calcium	169000	NT	115000	NT	NS	NS	53100
			Cobalt	12.1 J	NT	10.2 J	NT	NS	730	0
			Iron	16300	NT	13800	NT	300	10000	1430
			Magnesium	90400	NT	131000	NT	NS	NS	15000
			Manganese	2900 J	NT	2010	NT	50	880	1340
			Nickel	18.9 J	NT	16.7 J	NT	100	730	83.4
			Nitrocellulose	150 J	NT	500 U	NT	NS	NS	*
			Potassium	12000	NT	8510	NT	NS	NS	5770
			RDX	0.10 U	NT	0.046 J	NT	NS	0.61	*
			Sodium	12100	NT	7460	NT	NS	NS	51400
			Thallium	0.039 J	NT	1.0 U	NT	2	2.4	0
			Zinc	10.6 J	NT	11.9 J	NT	5000	11000	52.3
	RQLmw-008	Bedrock	1,3,5-Trinitrobenzene	0.32	NT	0.16	NT	NS	1100	*
			1,3-Dinitrobenzene	0.10 U	NT	0.074 J	NT	NS	3.6	*
			4,4'-DDE	0.030 U	NT	0.015 J	NT	NS	0.2	*
			4-Nitrotoluene	0.096 J	NT	0.50 U	NT	NS	0.66	*

Area	Well Number	Monitoring Zone	Compound or Element Detected	Oct 2005 Level (ug/L)	Mar 2006 Level (ug/L)	May 2006 Level (ug/L)	July 2006 Level (ug/L)	MCL (ug/L)	Region 9 PRG (ug/L)	RVAAP Facilitywide Background (ug/L)
Ramsdell	RQLmw-008 -	Bedrock								
Quarry Landfill	cont									
cont			Acetone	1.0 J	NT	10 U	NT	NS	5500	*
			Arsenic	14.3	NT	21.2	NT	10	0.045	0
			Barium	160	NT	155	NT	2000	2600	256
			bis(2-Ethylhexyl) phthalate	2.5 U	NT	3.5 J	NT	NS	4.8	*
			Cadmium	0.58 J	NT	10 U	NT	5	NS	0
			Calcium	77900	NT	71700	NT	NS	NS	53100
			Cobalt	5.6 J	NT	2.7 J	NT	NS	730	0
			Iron	135000	NT	109000 J	NT	300	10000	1430
			Magnesium	59100	NT	59300	NT	NS	NS	15000
			Manganese	1390 J	NT	908	NT	50	880	1340
			Nickel	10.5 J	NT	5.5 J	NT	100	730	83.4
			Nitroguanidine	14 J	NT	20 U	NT	NS	NS	*
			Potassium	9150	NT	6220	NT	NS	NS	5770
			Sodium	25600	NT	7690	NT	NS	NS	51400
			Tetryl	0.093 J	NT	0.10 U	NT	NS	360	*
			Zinc	14.6 J	NT	7.3 J	NT	5000	11000	52.3
	RQLmw-009	Bedrock	Arsenic	19.0	NT	21.5	NT	10	0.045	0
			Barium	69.3	NT	40.3	NT	2000	2600	256
			bis(2-Ethylhexyl) phthalate	2.5 U	NT	3.4 J	NT	NS	4.8	*
			Calcium	49500	NT	32600	NT	NS	NS	53100
			Cobalt	5.5 J	NT	2.9 J	NT	NS	730	0
			Iron	16600	NT	9200	NT	300	10000	1430
			Magnesium	55000	NT	24300	NT	NS	NS	15000
			Manganese	3010 J	NT	1310	NT	50	880	1340
			Nickel	4.8 J	NT	4.6 J	NT	100	730	83.4
			Potassium	8560	NT	5430	NT	NS	NS	5770
			Sodium	2760	NT	3610	NT	NS	NS	51400
			Thallium	0.27 J	NT	0.14 J	NT	2	2.4	0
Winklepeck	WBGmw-006	Unconsolidated	1,3,5-Trinitrobenzene	0.10 U	0.33 J	0.10 U	0.10 U	NS	1100	*
Burning			Barium	26.2	24.9	26.4	27.2	2000	2600	82.1
Ground			Beryllium	10 U	10 U	10 U	0.38 J	4	NS	0
			bis(2-Ethylhexyl) phthalate	2.5 U	4.5	10 U	10 U	NS	4.8	*
			Calcium	66400	69100 J	68500	70100 J	NS	NS	115000
			Copper	20 U	20 U	20 U	2.6 J	1300	1500	0
			Cyanide (mg/L)	0.010 U	0.0019 J	0.0013 J	0.010 U	200	730	0

Area	Well Number	Monitoring Zone	Compound or Element Detected	Oct 2005 Level (ug/L)	Mar 2006 Level (ug/L)	May 2006 Level (ug/L)	July 2006 Level (ug/L)	MCL (ug/L)	Region 9 PRG (ug/L)	RVAAP Facilitywide Background (ug/L)
Winklepeck	WBGmw-006 -	Unconsolidated	Gamma-BHC	0.049	0.014 J	0.013 J	0.030 U	0.2	0.052	*
Burning	cont		HMX	17	14	12	13	NS	1800	*
Ground - cont			Magnesium	21900	23600	23200	23900	NS	NS	43300
			Manganese	68.0 J	51.1 J	57.3 J	69.3 J	50	880	1020
			Potassium	938 J	825 J	875 J	885 J	NS	NS	2890
			RDX	65	59	45	45	NS	0.61	*
			Sodium	6120	6150	6100	6150	NS	NS	45700
			Thallium	0.063 J	1.0 U	1.0 U	1.0 U	2	2.4	0
	WBGmw-007	Unconsolidated	Barium	39.0	17.1	18.3	12.8	2000	2600	82.1
			Beryllium	10 U	10 U	10 U	0.39 J	4	NS	0
			bis(2-Ethylhexyl) phthalate	2.5 U	1.6	10 U	10 U	NS	4.8	*
			Calcium	67300	62300 J	57200	59600 J	NS	NS	115000
			Copper	20 U	20 U	20 U	2.3 J	1300	1500	0
			Cyanide (mg/L)	0.010 U	0.0019 J	0.010 U	0.010 U	200	730	0
			Heptachlor	0.030 U	0.0063 J	0.030 U	0.030 U	0.4	0.015	*
			Iron	355 J	1000 U	43.0 J	37.2 J	300	10000	279
			Magnesium	18000	13900	12800	13000	NS	NS	43300
			Manganese	128 J	34.2 J	36.2 J	11.2 J	50	880	1020
			Methoxychlor	0.10 U	0.10 U	0.031 J	0.10 U	40	180	*
			Potassium	1350 J	1110 J	1040 J	1070 J	NS	NS	2890
			Sodium	5080	3270	2970	2690	NS	NS	45700
	WBGmw-009	Unconsolidated	alpha-Chordane	0.030 U	0.029 J	0.030 U	0.030 U	NS	NS	*
			Aluminum	274	200 U	200 U	200 U	NS	36000	0
			Arsenic	21.3	10 U	10 U	10 U	10	0.045	11.7
			Barium	89.6	8.9 J	8.4 J	8.3 J	2000	2600	82.1
			Beryllium	10 U	10 U	10 U	0.40 J	4	NS	0
			Butylbenzyl phthalate	1.5	1.0 U	1.0 U	1.0 U	NS	7300	*
			Calcium	97600	42100	36100	34300 J	NS	NS	115000
			Carbon disulfide	1.0 U	0.31 J	1.0 U	1.0 U	NS	1000	*
			Copper	20 U	20 U	20 U	2.5 J	1300	1500	0
			Cyanide (mg/L)	0.010 U	0.010 U	0.010 U	0.0047 J	200	730	0
			Gamma-BHC	0.030 U	0.030 U	0.033 J	0.030 U	0.2	0.052	*
			Heptachlor epoxide	0.030 U	0.0076 J	0.030 U	0.030 U	0.2	0.0074	*
			HMX	2.3	1.1	1.1	1.3	NS	1800	*
			Iron	1060	36.7 J	229 J	328 J	300	10000	279

Area	Well Number	Monitoring Zone	Compound or Element Detected	Oct 2005 Level (ug/L)	Mar 2006 Level (ug/L)	May 2006 Level (ug/L)	July 2006 Level (ug/L)	MCL (ug/L)	Region 9 PRG (ug/L)	RVAAP Facilitywide Background (ug/L)
Winklepeck WBGmw-009 - Unconso Burning cont Ground - cont	Unconsolidated	Magnesium	34500	13600	11600	11000	NS	NS	43300	
	cont		Manganese	210 J	47.0 J	39.5 J	34.1 J	50	880	1020
			Nickel	20 U	20 U	1.9 J	20 U	100	730	0
			Potassium	1760 J	409 J	403 J	468 J	NS	NS	2890
			RDX	9.9	4.5	4.9	4.2	NS	0.61	*
			Sodium	14400	3980	3660	4050	NS	NS	45700
			Tetryl	0.10 U	0.10 U	0.10 U	0.053 J	NS	360	*
			Zinc	100 U	7.5 J	100 U	100 U	5000	11000	60.9

Notes:

NS = no standard NT = not tested

All inorganics are filtered, all organics are not filtered

J = estimated result. Results have been qualified "J" for one or more of the following reasons:

- Result less than reporting limit.

- Result concentration exceeds calibration range.

- Method blank contamination

- reported amount is the higher of the two analyses

(original and confirmation) and the difference between the

two is > 40%.

- cannot confirm due to interference on cyano column

- low LCS - Surrogate recovery outside Lab QC limits

- Low MS/MSD percent recoveries
- Elevated MS/MSD percent recoveries
- Low internal standards
- Elevated LCS criteria

- LCS recovery outside QC limits

- MS/MSD recoveries outside QC limits

- Elevated RPD values reported in MS/MSD results

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 organic contituent detected above the reporting limit

* There are no background levels for organic constituents

A complete explanation of the data qualifiers is contained in Data Verification/Validation Reports in the FWGWMP Annual Report for 2005, and the March, May, and July 2006 Sampling Event Reports.

Media Units	Surface Soil mg/kg	Subsurface Soil mg/kg	Sediment mg/kg	Surface Water ug/L	Groundwater Bedrock Zone Filtered ug/L	Groundwater Bedrock Zone Unfiltered ug/L	Groundwater Unconsolidated Zone Filtered ug/L	Groundwater Unconsolidated Unfiltered ug/L
Analyte								
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 4-2 RVAAP Facility-wide Background Criteria, (SAIC, 2001b)

5.0 FWGWMP ANNUAL ASSESSMENTS

5.1 EVALUATION OF CONTAMINANT TRENDS IN GROUNDWATER

The majority of FWGWMP monitoring wells have been sampled only seven times; an initial sampling after installation, the three sampling events for 2005, and the first three sampling events for 2006. The contaminant trends in groundwater cannot be fully evaluated based on the limited data obtained from these wells to date. There may be some trends developing as is shown on the time-trend plots (Appendix D) and discussed in Section 4.0, but additional data is needed to further evaluate these trends for significance. Statistical analysis may be used to evaluate contaminant concentrations in groundwater at a later date.

As previously stated in Section 4-1, Table 4-1 presents a summary of constituents that were detected during the October 2005, March 2006, May 2006, and July 2006 sampling events. In Table 4-1, the organic constituents detected above reporting limits are depicted by a shaded box. Inorganic constituents that were detected, but are below facility wide background levels are in italics. Inorganic constituents detected above facility wide background levels are in bold. Table 5.1 presents those compounds and elements detected in any of the October 2005, March 2006, May 2006, or July 2006 sampling events that exceeded Region 9 PRGs, primary MCLs, or secondary MCLs.

A recommendation for further data collection is discussed in Section 6.2.

5.2 ASSESSMENT OF GROUNDWATER REMEDIAL ACTION EFFECTIVENESS

Groundwater remedial actions have not been performed to date at RVAAP and therefore will not be discussed in this report.

Table 5-1 2006 FWGWMP Region 9 PRG or MCL Exceedences

Area	Well Number	Monitoring Zone	Compound or Element Detected	Oct 2005 Level (ug/L)	Mar 2006 Level (ug/L)	May 2006 Level (ug/L)	July 2006 Level (ug/L)	MCL (ug/L)	Region 9 PRG (ug/L)
Background	BKGmw-004	Unconsolidated	Iron	1000 U	1000 U	1000 U	630 J	300	10000
Wells	BKGmw-006	Bedrock	Manganese	403 J	1070	515 J	275	50	880
			bis(2-Ethylhexyl)						
			phthalate	2.0 U	5.9	10 U	10 UJ	NS	4.8
			Iron	36.5 J	1000 U	311 J	269 J	300	10000
	BKGmw-008	Bedrock	Antimony	100 U	100 U	12.9 J	100 U	6	15
	BKGmw-010	Bedrock	4,4'-DDT	0.030 U	0.024 J	0.030 U	0.030 U	NS	0.2
			Manganese	40.4 J	911	809	869	50	880
	BKGmw-012	Bedrock	Iron	341 J	374 J	179 J	288 J	300	10000
			Manganese	52.6 J	62.0 J	48.1 J	42.9 J	50	880
	BKGmw-013	Unconsolidated	Arsenic	11.7	11.0	10.5	12.6	10	0.045
			Iron	998 J	1030	922 J	1080	300	10000
			Manganese	394	435	413	390	50	880
	BKGmw-015	Bedrock	bis(2-Ethylhexyl)						
			phthalate	1.9 U	5.2	10 UJ	10 UJ	NS	4.8
	BKGmw-016	Unconsolidated	bis(2-Ethylhexyl)						
			phthalate	2.8 U	5.4	10 U	37 J	NS	4.8
	BKGmw-017	Unconsolidated	Arsenic	18.6	19.3	17.6	16.3	10	0.045
			Iron	1410	1440	1270	1090	300	10000
			Manganese	197	216 J	200	211	50	880
	BKGmw-018	Bedrock	Iron	106 J	450 J	488 J	191 J	300	10000
			Manganese	229	145	164 J	38.0 J	50	880
	BKGmw-019	Unconsolidated	Manganese	202 J	74.6 J	70.9 J	69.2 J	50	880
	BKGmw-020	Bedrock	Iron	2550	1170	1930	2570	300	10000
			Manganese	695	373	844	688	50	880
	BKGmw-021	Unconsolidated	Heptachlor	0.030 U	0.19	0.030 U	0.030 U	0.4	0.015
Load Line 1	LL1mw-078	Bedrock							
			Heptachlor epoxide	0.030 U	0.066	0.030 U	0.23	0.2	0.0074
			Manganese	1.9 J	93.2 J	9.6 J	100 U	50	880
	LL1mw-080	Bedrock	beta-BHC	0.030 U	0.026 J	0.044 J	0.035	NS	0.032
			Heptachlor epoxide	2.8	1.1	0.030 U	0.030 U	0.2	0.0074
			Manganese	860	2.6 J	100 U	100 U	50	880
			RDX	58	14 J	15	3.8	NS	0.61
	LL1mw-083	Bedrock	2,4,6-TNT	6.8	6.9	6.5	8.0	NS	2.2
			Aldrin	0.030 U	0.030 U	0.011 J	0.030 U	NS	0.003
			beta-BHC	0.030 U	0.052	0.030 U	0.053	NS	0.032
			Dieldrin	0.030 U	0.030 U	0.029 J	0.030 U	NS	0.0023
				l				l	
			Heptachlor epoxide	4.6	0.030 U	0.030 U	0.030 U	0.2	0.0074
			Manganese	352	505 J	383	365 J	50	880
			Toxaphene	2.0 U	0.34 J	2.0 U	2.0 U	3	0.061

		Monitoring Zone	Compound or	Oct 2005	Mar 2006	May 2006	July 2006	MCI	Region 9
Area	Well Number		Element Detected	Level	Level	Level	Level		PRG
			Element Delected	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
Load Line 2	LL2mw-059	Bedrock	bis(2-Ethylhexyl)						
			phthalate	2.5 U	2.5 U	7.1 J	10 U	NS	4.8
			Heptachlor epoxide	0.46 J	0.14	0.030 U	0.030 U	0.2	0.0074
			Iron	42.8 J	299 J	1000 U	565 J	300	10000
			Manganese	339	282 J	17.0 J	672 J	50	880
	LL2mw-262	Bedrock	Heptachlor epoxide	0.030 U	0.12	0.030 U	0.030 U	0.2	0.0074
			Manganese	1950	566 J	382	325 J	50	880
	LL2mw-263	Bedrock	Arsenic	17.0	14.9	13.5	15.2	10	0.045
			Iron	4560	4680	4230	4700	300	10000
			Manganese	1200	1320 J	1310	1260 J	50	880
Load Line 3	LL3mw-238	Bedrock	2,4,6-TNT	110	68	83 J	0.10 UR	NS	2.2
			beta-BHC	0.030 U	0.076 J	0.071 J	0.15	NS	0.032
			bis(2-Ethylhexyl)						
			phthalate	21	2.5 U	3.0 J	10 U	NS	4.8
			-						
			Heptachlor epoxide	13 J	0.030 U	0.030 U	0.030 U	0.2	0.0074
			RDX	8.2	4.7	5.2 J	0.10 UR	NS	0.61
			Toxaphene	2.0 U	2.1 J	2.0 U	2.0 U	3	0.061
	LL3mw-242	Bedrock							
			Heptachlor epoxide	0.038	0.030 U	0.030 U	0.030 U	0.2	0.0074
		Bedrock	Manganese	157	14.8 J	4.5 J	5.4 J	50	880
Load Line 4	LL4mw-198	Unconsolidated	Antimony	100 U	100 U	8.9 J	100 U	6	15
			Heptachlor epoxide	0.069	0.030 U	0.030 U	0.030 U	0.2	0.0074
			Iron	4100	5960	4200	4730	300	10000
			Manganese	1070	1320 J	1140	1180	50	880
	LL4mw-199	Unconsolidated	Arsenic	12.7	12.2	12.3	7.6 J	10	0.045
			Heptachlor epoxide	0.022 J	0.030 U	0.030 U	0.030 U	0.2	0.0074
			Iron	1190	1420	1100	1740	300	10000
			Manganese	457	377 J	424	449 J	50	880
Load Line 11	LL11mw-002	Unconsolidated	Heptachlor	0.030 U	0.030 U	0.024 J	0.030 U	0.4	0.015
			Manganese	611 J	184 J	133	100 U	50	880
	LL11mw-007	Unconsolidated	Arsenic	7.1 J	18.0	18.7	23.1	10	0.045
			Iron	1520	904 J	967 J	1250	300	10000
			Manganese	166 J	220 J	204	211	50	880

Table 5-1 2006 FWGWMP Region 9 PRG or MCL Exceedences
Table 5-1 2006 FWGWMP Region 9 PRG or MCL Exceedence
--

Area	Well Number	Monitoring Zone	Compound or Element Detected	Oct 2005 Level (ug/L)	Mar 2006 Level (ug/L)	May 2006 Level (ug/L)	July 2006 Level (ug/L)	MCL (ug/L)	Region 9 PRG (ug/L)
Load Line 12	LL12mw-153	Unconsolidated	Arsenic	19.0	4.5 J	19.7	23.3	10	0.045
			bis(2-Ethylhexyl)						
			phthalate	2.5 U	5.9	0.88 J	10 U	NS	4.8
			Iron	2520	2790	4250	3950	300	10000
			Manganese	175	197 J	212	197	50	880
	LL12mw-182	Unconsolidated							
			Arsenic	53.0	22.2	21.1	28.5	10	0.045
			bis(2-Ethylhexyl)						
			phthalate	2.5 U	5.1	3.4 J	10 U	NS	4.8
			Heptachlor epoxide	0.030 U	0.030 U	0.012 J	0.030 U	0.2	0.0074
			Iron	1410	1000 U	1000 U	719 J	300	10000
	LL12mw-183	Unconsolidated	Arsenic	48.2	20.6	16.0	40.0	10	0.045
			Iron	1930	379 J	148 J	1650	300	10000
	LL12mw-186	Unconsolidated	Aldrin	0.030 U	0.016 J	0.030 U	0.030 U	NS	0.003
			Heptachlor epoxide	0.053 J	0.10	0.030 U	0.030 U	0.2	0.0074
			Iron	326 J	119 J	150 J	576 J	300	10000
			Manganese	220 J	303 J	369	304	50	880
Central Burn	CBPmw-005	Unconsolidated	Arsenic	24.2	20.0	36.3	25.7	10	0.045
Pits			Iron	1100	887 J	1610	1510	300	10000
	CBPmw-007	Unconsolidated	Arsenic	9.9 J	14.1	14.0	15.2	10	0.045
			Iron	1270	1440	1430	1700	300	10000
			Manganese	65.4 J	111 J	73.9 J	79.5 J	50	880
Demolition	DA2mw-107	Unconsolidated	Arochlor 1254	1.0 U	1.0 U	1.0 U	0.16 J	0.5	0.034
Area 2			Arsenic	6.3 J	10 U	10 U	5.7 J	10	0.045
			Cyanide (mg/L)	0.010 U	0.0025 J	0.010 U	0.010 U	200	730
			Iron	1460	296 J	997 J	1660	300	10000
			Manganese	193 J	212	318 J	208	50	880
	DA2mw-Det3	Unconsolidated	Arsenic	10.5	NT	8.4 J	NT	10	0.045
			Iron	1640	NT	1250	NT	300	10000
			Manganese	247 J	NT	258 J	NT	50	880
	DA2mw-Det4	Unconsolidated	RDX	0.10 U	NT	0.73	NT	NS	0.61
Ramsdell	RQLmw-007	Bedrock	Arsenic	76.1	NT	43.4	NT	10	0.045
Quarry			Iron	16300	NT	13800	NT	300	10000
Landfill			Manganese	2900 J	NT	2010	NT	50	880
	RQLmw-008	Bedrock	Arsenic	14.3	NT	21.2	NT	10	0.045
			Iron	135000	NT	109000 J	NT	300	10000
			Manganese	1390 J	NT	908	NT	50	880
	RQLmw-009	Bedrock	Arsenic	19.0	NT	21.5	NT	10	0.045
			Iron	16600	NT	9200	NT	300	10000
			Manganese	3010 J	NT	1310	NT	50	880

128 J

21.3

0.010 U

0.030 U

1060

210 J

9.9

34.2 J

0.010 U

0.0076 J

36.7 J

47.0 J

4.5

10 U

			Compound or	Oct 2005	Mar 2006	May 2006
Area	Well Number	Monitoring Zone	Compound of	Level	Level	Level
			Element Delected	(ug/L)	(ug/L)	(ug/L)
Winklepeck	WBGmw-006	Unconsolidated	Manganese	68.0 J	51.1 J	57.3 J
Burning			RDX	65	59	45
Ground	WBGmw-007	Unconsolidated	Iron	355 J	1000 U	43.0 J

Manganese

Cyanide (mg/L)

Heptachlor epoxide

Arsenic

Iron Manganese

RDX

Table 5-1 2006 FWGWMP Region 9 PRG or MCL Exceedences

Notes:

NS = no standard NT = not tested

All inorganics are filtered, all organics are not filtered

WBGmw-009

J = estimated result. Results have been qualified "J" for one or more of the following reasons:

Unconsolidated

- Result less than reporting limit.

- Result concentration exceeds calibration range.

- Method blank contamination

- reported amount is the higher of the two analyses (original and confirmation) and the

difference between the two is > 40%.

- cannot confirm due to interference on cyano column

- low LCS

- Surrogate recovery outside Lab QC limits

- Low MS/MSD percent recoveries

- Elevated MS/MSD percent recoveries

- Low internal standards

- Elevated LCS criteria

- LCS recovery outside QC limits

- MS/MSD recoveries outside QC limits

- Elevated RPD values reported in MS/MSD results

R = Rejected data

 $\ensuremath{\mathsf{U}}$ = analyzed but not detected at or above the reporting limit

Bold = result greater than Region 9 PRG or MCL

A complete explanation of the data qualifiers is contained in Data Verification/Validation Reports in the FWGWMP Annual Report for 2005, and the March, May, and July 2006 Sampling Event Reports.

July 2006

Level

(ug/L)

69.3 J

37.2 J

11.2 J

0.0047 J

0.030 U

328 J

34.1 J

4.2

10 U

45

36.2 J

0.010 U

0.030 U

229 J

39.5 J

4.9

10 U

Region 9

PRG

(ug/L)

880 0.61

880

730

10000

0.045

0.0074

10000

880

0.61

MCL

(ug/L)

50

NS

300

50

10

200

0.2

300

50

NS

6.0 FWGWMP ANNUAL RECOMMENDATIONS/REVIEW

6.1 ASSESSMENT OF PROGRAM EFFECTIVENESS

In order to assess the program effectiveness, additional sampling events are needed to build an adequate data base. As stated in Section 4.2 (Sampling Frequency) of the FWGWMPP, the FWGWMP wells will be sampled for three consecutive quarters during the initial monitoring period (2005), then annually afterwards. More frequent sampling is needed to build the data base for the FWGWMP wells in a timely manner. It is recommended that in order to continue building the database, the FWGWMP wells continue to be sampled on a quarterly basis for the upcoming annual sampling period. The exception to this is monitoring wells DA2-Det3, DA2-Det4, RQL-007, RQL-008, and RQL-009, which should continue to be sampled semi-annually.

It was apparent after the first sampling event in April 2005 that producing a groundwater potentiometric map based on groundwater elevations measured solely from the FWGWMP wells would not result in a meaningful map. It was recognized by the USACE and Ohio EPA that to produce a meaningful groundwater potentiometric map that all of the RVAAP wells would need to be measured. This was performed by SpecPro and SAIC in September 2005 for the FWGWMP Annual Report for 2005, and again by SpecPro in April 2006 for this report.

The program effectiveness as a whole will be addressed in a later annual report. Statistical analyses of laboratory data may be performed on the portions or all of the FWGWMP database in order to evaluate the program's effectiveness.

6.2 ADDITIONS TO THE FWGWMP

It is recommended to sample the FWGWMP wells for four consecutive quarters in 2007 in order to build the data base required for statistical analysis of the laboratory results.

It is also recommended that all RVAAP monitoring wells be measured for groundwater elevation annually in order to produce a meaningful groundwater potentiometric map. Previous facility-wide monitoring well measurements were performed in September 2005 (Fall) and April 2006 (Spring). It is recommended that the groundwater elevations at all RVAAP monitoring wells be measured in July 2007 (Summer) and January 2008 (Winter).

Perchlorate analysis has not been performed to date on groundwater samples collected for the FWGWMP. The USACE and Ohio EPA are currently working out the details to add perchlorate analysis to the FWGWMP.

6.3 DELETIONS TO THE FWGWMP

No deletions to the FWGWMP are recommended at this time.

7.0 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 the Ravenna Army Ammunition Plant, Ravenna, Ohio.

SAIC/REIMS, 2005, Table of Reported Construction Depths from REIMS Information and Groundwater Chemical Data.

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, Report on the Additional Groundwater Monitoring Well Installation and Groundwater Sampling at the Suspected Mustard Agent Burial Area of Concern, Ravenna Army Ammunition Plant, Ravenna, Ohio.

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

APPENDIX A

Amendment No. 1 to the Facility-Wide Groundwater Monitoring Program

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An 8(a) Certified Alaska Native Corporation (ANC)

Ravenna Army Ammunition Plant, Bldg. 1038 8451 State Route 5 Ravenna, OH 44266 330-358-1753 330-358-1754 Fax

30 August 2006

Ms. Eileen Mohr Ohio Environmental Protection Agency Division of Emergency and Remedial Response 2110 East Aurora Rd. Twinsburg, OH 44087

Reference: GSA Contract No. GS-10F-0448P: Facility Wide Groundwater Monitoring Program, Ravenna Army Ammunition Plant, Ravenna, OH.

Subject: Amendment No. 01 (revised) to the Facility Wide Groundwater Monitoring Program Plan

Dear Ms. Mohr:

On behalf of the US Army, SpecPro, Inc. is proposing this amendment to the reporting period for the Facility Wide Groundwater Monitoring Program (FWGWMP) Plan such that the annual report submitted by 15 December of each year covers the period of 01 October through 30 September.

In order to provide sufficient time for preparation of the Annual Report prior to the 15 December submittal date, it was proposed that the annual reporting period run from 01 October through 30 September. This need was identified in a meeting of the Ravenna AAP Environmental working group held at the installation on 18–19 July 2006.

Currently the fourth quarter sampling event must occur in October in order to provide sufficient time to allow for laboratory analysis along with the subsequent data verification, validation and report preparation by the December submittal date. Executing the program with this limitation does not allow sufficient flexibility in selecting sampling events such that a thorough understanding of seasonal variations in groundwater chemistry can be obtained. With the removal of this limitation, quarterly sampling events could be scheduled at any time during a given quarter and still meet the December annual report submittal date. Ms. Eileen Mohr, Ohio EPA August 30, 2006

Therefore, we are requesting approval of this amendment to the FWGWMP Plan, as agreed to in the July working group meeting, so that the 2006 Annual Report will include monitoring activities performed in the 4th quarter of 2005, and the 1st, 2^{nd} and 3^{rd} quarters of 2006. Subsequent annual monitoring periods would also follow this pattern, such as the 2007 annual report will cover the fourth quarter of 2006 and the first, second and third quarters of 2007.

Thank you for your consideration in this matter.

Respectfully submitted, SPECPRO, INC.

allan B Bulling.

L. Chantelle Carroll Program Manager

cc: Mr. Glen Beckham, USACE Ms. Vicki Deppisch, Ohio EPA Ms. Katie Elgin, OHARNG Mr. Todd Fisher, Ohio EPA Mr. Rick Hockett, USACE Mr. Kevin Tiemeier, USAEC Mr. Irv Venger, RVAAP Mr. Paul Zorko, USACE



State of Ohio Environmental Protection Agency

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TELE: (330) 963-1200 FAX: (330) 487-0769 www.epa.state.oh.us Bob Taft, Governor Bruce Johnson, Lieutenant Governor Joseph P. Koncelik, Director

August 30, 2006

RE: RAVENNA ARMY AMMUNITION PLANT PORTAGE/TRUMBULL COUNTIES FACILITY-WIDE GROUNDWATER

CERTIFIED MAIL

Ms. Chantelle Carroll SpecPro Ravenna Army Ammunition Plant 8451 State Route 5 Ravenna, OH 44266

Dear Ms. Carroll:

The Ohio Environmental Protection Agency (Ohio EPA), Northeast District Office (NEDO), Division of Emergency and Remedial Response (DERR) is in receipt of your correspondence, dated August 30, 2006, regarding the facility-wide groundwater sampling program. The August 30, 2006 letter basically mirrored the August 16, 2006 correspondence submitted to this office and, as a result, this letter will substantially mirror our August 21, 2006 response.

Specifically, your correspondence requests approval for changing the quarters reported in the annual groundwater report to consist of 01 October of the previous year through 30 September of the current year. These four quarters would be reported in the annual report, which has a milestone date (per the Directors Final Findings and Orders, journalized June 10, 2004) each year of 15 December. This approach, as discussed during the 18-19 July 2006 groundwater meetings held at the Ravenna Army Ammunition Plant (RVAAP), is acceptable (i.e., approved) to Ohio EPA. The 2006 annual report will cover the last quarter of calendar year 2005 and the first three quarters of 2006. Subsequent annual reports will follow the same pattern.

Additionally, the dates of all sampling activities conducted under the facility-wide groundwater monitoring program shall be coordinated with Ms. Vicki Deppisch of this office. Ohio EPA does not agree that the sampling events can be "scheduled at any time during a given quarter." Therefore, it is imperative that the schedule is approved in advance by Ms. Deppisch.

MS. CHANTELLE CARROLL SPECPRO AUGUST 30, 2006 PAGE 2

If you have any questions concerning this correspondence, please do not hesitate to contact me at (330) 963-1221.

Sincerely,

Eileen T. Mohr Project Manager Division of Emergency and Remedial Response

ETM/kss

- cc: Bonnie Buthker, Ohio EPA, SWDO, OFFO Vicki Deppisch, Ohio EPA, NEDO, DERR Conni McCambridge, Ohio EPA, NEDO, DDAGW Kevin Tiemeier, AEC Irv Venger, RVAAP LTC Tom Tadsen, OHARNG RTLS Katie Elgin, OHARNG RTLS Glen Beckham, USACE Louisville Paul Zorko, USACE Louisville Rick Hockett, USACE Louisville
- ec: Mike Eberle, Ohio EPA, NEDO, DERR Todd Fisher, Ohio EPA, NEDO, DERR

APPENDIX B

WELL LOGS AND CONSTRUCTION DIAGRAMS

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HTRW DRILLING LOG	DISTRICT:	HOLE NUMBER
1. COMPANY NAME:	2. DRILL SUBCONTRACTOR:	
SpecPro Inc.	TTL, Inc.	SHEET OF
3. PROJECT: Suspected MBS (RVAAP-28)	4. LOCATION: RVAAR-28	
5. NAME OF DRILLER: Chris White	6. MANUFACTURERS DESIGNATION OF DRILL: CM	E45 (ATV)
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT 4'14" HSA	8. HOLE LOCATION: MBS-005	,
Subsurface Instruments Borehole Gradiomet Used for UXO readings 0 to 12'. Drilling equ	(BHG-1) 9. SURFACE ELEVATION: 1080.50	
checked for CWA using M256 chemical detec	10. DATE STARTED: 1026/05 11. DATE CO	MPLETED: 10/27/05
12. OVERBURDEN THICKNESS	Pr change 15. DEPTH GROUNDWATER ENCOUNTERED:	
13. DEPTH DRILLED INTO ROCK	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILL	ING COMPLETED:
14. TOTAL DEPTH OF HOLE 28' bas.	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY):	
18. GEOTECHNICAL SAMPLES DISTURBED	Shelby type 19. TOTAL NUMBER OF CORE BOXES N	 /A
20. SAMPLES FOR CHEMICAL ANALYSIS VOC	ETALS OTHER (SPECIFY) OTHER (SPECIFY) OTHER (SPE	CIFY) 21. TOTAL CORE
22. DISPOSITION OF HOLE BACKFILLED MONI	Sative (See column G of boring los) SRING WELL OTHER (SPECIFY) 23. SIGNATURE OF INSPECTOR	RECOVERY %
	× Ul Bully	<u> </u>
LOCATION SKETCH/COMMENTS	SCALE: N.	.1.5
03		
MBS	MD -	
	ηια	
	MIL.	
ABS-		
l loot	MRSTO	

	HTRW DRII	LING LOG			HOLE NUMBER MBS-005
PROJECT: R	AAP AOC-28	INSPECTOR A	1 Brillinge	<u>.</u>	SHEET 2. OF 4
ELEV. DEP (A) (B	H DESCRIPTION OF MATERIALS (C)	SCREENING RESULTS	SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
1	Top 0.2- leaves, roots org. debris Nert 1.10- Brown and gray mottled silty CLAY WI f.m SAND (TILL)	0.0	2-2-4-6		Gradioneter = 0.7 c G.S 0.7 c 2'
2	REC= 1.8' (15:55) Brown & gray (mothed	0.0	2-5-6-7	,	Grad. = 0.7
3	SILTY CLAY W/ F-M SAND (TILL) damp REC= 1.6 (15:58)	*			
5	Brown: gray (mottled) Silty CLAY wi f.m SAND (till) REC= 1.7 (16:03)	0.0	4-5-8.10		Grad = 0.7
7	Brown : or. brown CLAY, some SILT Brown Silt layere 7.7 to 7.8' bgs	0.0	4-8-11-12		Grad=0.7
9	Brown clayey SILT, SILLY CLAY SOMP OR-br SILL'Seams	0.0	4-6-8.12		Grad = 1.3 BKG = 3.5 TIP (Spoon) wet CWA paper = neg no color change
Ар 10		4			

	HTRW DRIL	LING LOG			HOLE NUMBER MBS-00
PROJECT: RVA	AP Aoc-28	INSPECTOR	11 Brillin	ser	SHEET 3 OF 4
ELEV. DEPTH (A) (B)	DESCRIPTION OF MATERIALS (C)	RESULTS	AB SAMPLE OR-CORE BOX	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
11	(plastic)	0.0	2-3.4-6		Gradioneter = 0.2 milligauss
12	REC = 2.0 (16:35)		2-4-5-1		
	w/ silt		2-1-7-6		
13	Bottom 0.4. Groy wet SILT, some CLRY				
14	RECE 1.9 (16:50) Gray CLAYWI Silt, wet	0.0	2-3-4-5		finish for down 10-26-05 FIRST SAMPLE 10-27-05 depth to water in
15		and the second sec			borehole (0,2
16 17	REC: 2.0 (08:41) Gray, plastic CLAY, wet	0.0	2. WOH- 2-3	- <u> </u>	CWA paper = neg. read (no color chary)
	RE(= 2.0 (08:55)				
	Gray, plastic QAY		1-2.3.2	- ·	
19				la de la della d	
Appe 20	ndix B RELZZO (9:03)	5			

NVA

		HTRW DRILL	ING LOG			HOLE NUMBER MBS-COS
PROJEC	T: RVAF	AP AOC-28	NSPECTOR A	Brilling	21	SHEET 3 OF
ELEV. (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
	21	Gray plastic CLAY e tip of shelby tube REC=1.5' TOP 1' Gray plastic	0.0	Shelby tube- 2'C 450psi		Shelby-tube a 20-22' matil Heaving sand AD 3' into augers while augering to 20' CWA paper = neg.read (no color change)
	23	CLAY, wet Botton 0.2- Gray med.cse SAND (wet) REC= 1.2' (9:35)		Shallow		
	25	NO RELOVERY (9:45)		sheiby tube 5" push		CWA paper = neg. read (no color change)
	27	TOPI' = Gray f-cse SAND, some SILT wet, Bottom 0.2'= hand gray v. fine SAND/SILT (10:00)	0.0	5-12-14-12		GWA papers neg. read (no color change)
	28	REC= 1.2' (9:5%)AB E.O.B (28' AB E.O.B (28')	6			



HTRW DRILLING LOG	DISTRICT:	HOLE NUMBER
1. COMPANY NAME: Spec Pro, Inc.	2. DRILL SUBCONTRACTOR:	SHEET 1 OF 4
3. PROJECT: Suspected Mustand Agent B	rial 4. LOCATION: BVAAP-28	
5. NAME OF DRILLER: Chris White	6. MANUFACTURERS DESIGNATION OF DRILL: CMF	15 (ATV)
7. SIZES AND TYPES OF DRILLING 414 HSA 2"	Plit Spcort 8. HOLE LOCATION:	17 (1107
Subsurface Instruments Borehole Gediom	MIBS-006	
Used for uxo readings 0 to 12'. Drilling equi	merti checked	<u></u>
Hor CWA Using MESS Chimical actector KHICE +	sitive= 10. DATE STARTED: 11. DATE COMPLET	10/26/05
12. OVERBURDEN THICKNESS + or ac	15. DEPTH GROUNDWATER ENCOUNTERED: 17.7	/
13. DEPTH DRILLED INTO ROCK	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING C 10.2 bgs (15	OMPLETED:
14. TOTAL DEPTH OF HOLE	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY):	
18. GEOTECHNICAL SAMPLES DISTURBED	UNDISTURBED 19. TOTAL NUMBER OF CORE BOXES \mathcal{N}/\mathcal{A}	
20. SAMPLES FOR CHEMICAL ANALYSIS VOC All readings for UXO : CWA ware	NETALS OTHER (SPECIFY) OTHER (SPECIFY) OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %
22. DISPOSITION OF HOLE BACKFILLED MON	ORING WELL OTHER (SPECIFY) 23. SPONATURE OPTINSPECTOR	,
	SCALE. N.T.S	
┝╍┼╸┼╶┼╶┽╶┽╴┽		
M35003	MBS 002	
┝─┼┼┼┼┼╋┼┼┼╸		
	A MRB-005	
	MBS-001	
┝╌┟╌┟╶┟╶┟╶┟╶┟╶┟		
┝╶┼╶┼╶┼╶┼╴┽╺╋╶┼╶┼╌┥╸		
	171521006	
	╶┼╌┼╌┼╌┼╌┼╶┼╶┼	

		HTRW DRILL	ING LOG			HOLE NUMBER MBS-00
PROJEC	T: SUSP	ected MBS (RVAAP-28)	NSPECTOR	1 Brillin	izer	SHEET 2 OF 4
ELEV. (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	SCREENING AS RESULTS	SAMPLE SPI GR CORE BOX	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
		Brown : gray (mottled) Silty fine Sand to Silty Sandy CLAY (TILL)	0.0	1-1-2-7		Gradiometer rdg = neg (3.2 milliganss)
	2	Rec= 2.0'				
	3	Brown and gray (mottled) sifty CLAY, with v. fine Sand (Till)	0.0	3.4.59		(3.2)
	4	Brown : gray (mottled silty CLAY with very fine Sand (+ill)	0.0	3.4-6-10		Grad.= 0.6 (neg.)
	6	RECE20) Brown & gray (mottle CLAY, with orange. brown silty clay seams	0.0	4-8-10-15		Grad = 1.6
	* * * Appen	TOP 1.2': Brown : gray (mottled) CLAY, with orange-brown silty clay seams Bottom 0.8': Gray plastic CLAY, some silt CREC= 2.0' (14:25 hrs)	0.0	7-9-11-13		Grad. = 1.4/1.3

		HTRW DRILL	ING LOG				HOLE NUMBER MC	5-006
PROJEC	T:Suspe	ted MBS (RVAAP-28)	NSPECTOR	1 Brilling	er -		SHEET 2. OF 4	
ELEV. (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	SCREENING RESULTS	SAB OFOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO. (F)		REMARKS (G)	
		Gray CLAY, some Silt, trace V. fine Sand	0.0	SPT BIOW counts 2-4-5-6		Gr	rad. = 1.5	
		REC= 2.0'			ar alaan aanaa aaaaa			
		Gray CLAY, trace SiH	0.0	2.3.5.7				
	13							
	14	(REC= 2.0')	, an <u>a</u> , 600,000 , 600,0		-			~_L
		Gray CLAY, plastic, trace sitt	0.0	2-2-3-4				
		Clay becomes damp C 16.5'						
		(Rec = 2.0') (17:00 hrs)				End	drilling for th a (10/25) @ 17:00	has
		TOP 1.7': Gray CLAY, as above	0.0	WOH-WOH- 13-18		- ch Wl	eck drill pipe CWA paper:	
		Bottom 0.3: Brown, wet fine to coarse angular to subangular SAND, with gravel, some sitt				"Beg"	change - no ndication of CWA in drilling 0/26/05	
	18	(Rec= 2.0') (08:45 hrs)						
		TOP 0.8: Brown, wet fine to coarse SAND, with gravel	0.0	0-0-2-8				
	19	Bottom 0.7: Gray clayey Silt, silty CLAY with fine to medium SAND						
	Appen 20	(Kec=1.5') (08:55 hrs)	10					

		HTRW DRILL	ING LOG				HOLE NUMBER MBS	-006
PROJEC	T: Suspe	cted MBS (RVAAP-28)	NSPECTOR A	Brilling	er	*	SHEET 4 OF 4	
ELEV. (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	SCREENING RESULTS	GEOTECH SAMPLE AB	ANALYTICAL SAMPLE NO. (F)		REMARKS (G)	
	21	Brown, wet, fine to Medium SAND, fine Sand content increases with depth	0.0	397 Blow COUNTS 3-4-6-13		Cw 74 (n	IA paper = 2g.read co color change)	
	22	(Rec=2.0') (09:08 ms)	0.0		Shelby tube	Sh # 1	elby fube pusi	
	23	No Recovery		,		Cu	VA paper = g. read (no col change)	, , , , , , , , , , , , , , , , , , ,
	24	REC = NR	0.0	~~ ~ ~	Shelby tube	sh *	elby tube pus 18" e 1,000 psi	
	25 26	_Rec = 4"				CW (n (n	A paper= 29. read 0 color change)	
	27	Gray medium to very fine SAND, fine % increases with depth	0.0	8-8-18- 12				
	28	(Rec = 1.6') (09:44 mrs)				End 2	ofboring (8' bgs	
	29 Appe n 	dix B	11					



APPENDIX C

WELL INSPECTION SHEETS and GROUNDWATER COMPREHENSIVE WATER MEASUREMENTS

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	7:37
RAVENNA ARMY AMMU	INITION PLANT
WELL INSPECTION	CHECKLIST
WELL INFORMATION	
Well Location/Functional Area:	
Number: $15/7.6 \text{ mw} - 009$	Background wells
Casing Type: Steel Stainless Steel	PAC
Screened/Open-Hole Well	Monitor Interval
Type:	$_$ Length: $_/O$ ft
Flush-mount/Above-ground	
Completion: Abave	
Reported Constructed Depth: 21/27	ft BGS or BTOC (rircle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
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 demaged 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?	
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?	
heaving?	
Identification:	
Is the well labeled with the correct number?	
Describe labeling: <u>151955 400</u>	<u>CA PACI</u>
Does the well have a cap or lid?	14 [] [] Higher Bretze
Does the well have a weatherproof lock?	$[\Psi[1][1] \underline{cappiss}$
Does the lock secure the well?	
Does the inner casing have a water-tight cap?	
Is the well casing bent, corroded, or broken (at the	
surface?)	[] [4]]
Is the well casing loose (at the surface)?	
Is a measurement point marked at the top of the well	
Measured depth of the well from measurement point:	
Thickness of sediment accumulation (reported depth-present	measurement): DTB 22,2/0+,12=22,3-
Are there any obstructions in the well?	
Description of well bottom conditions (soft, hard, etc):	1464-61
1/2/	GALL
Inspection Date: $\frac{0}{1000}$ Inspected by:	Vanue
(1) Machie PUTC, P	ipe moves when you
	C PGD
Appendix C 3	FWGWMP 2006 Appual Report
	T WOWING 2000 Annual Report

RAVENNA ARMY AMMUNITION PLANT WELL INSPECTION CHECKLIST

WELL INSPECTION C	meent:	131		
WELL INFORMATION				
Well Location/Functional Area:				
Number: BKGrout-005	Back	arour	bd	
		<u></u>		and a second
Casing Type: Steel Stainless Steel		\times	P١	/C
Screened/Open-Hole Well	Μ	lonitor I	nterval	
Type: <u>Screened</u>	_ Le	ength:		<u>_/O</u> ft
Flush-mount/Above-ground				
Completion: <u>Above 9</u>				
Reported Constructed Dopthy 70.74	A BCS		C (circ	le one)
	- 11 005			
INSPECTION ITEMS	YES	NO	N/A	COMMENTS
	-			
Well-head Completion:				
Above-ground completion:				
Number of guard posts at well: 3				
Are the posts positioned to prevent collision damage to the				
well?	[X]	[]	[]	
Are any of the posts damaged or degraded?	[]	[K]	[]	
Is a concrete pad installed?	[*]	[]	[]	
Is the pad cracked or deteriorated? Frost heaving?	[]	[入]	[]	
Is steel protective casing installed?	[X]	[]	[]	
Does the protective casing have a weep hole?	[X]	[]	[]	ana ana amin'ny faritr'o ana amin'ny faritr'o ana amin'ny faritr'o amin'ny faritr'o amin'ny faritr'o amin'ny fa
Does vegetation around the well need clearing?	[]	[入]	[]	
Flush-mount completion:				
Is the traffic cover securely bolted to the flush-mount				
box?		[]	ίχι	
Does the well have a flush-mount box?			[×]	
Is the traffic cover cracked or broken?	l	[]	L x I	
Is the concrete apron cracked or deteriorated? Frost	, 1	r 1	r.a	
heaving?	[]	LI	Γ¥Ί	
Identification:	r 1	гı	r ı	
Is the well labeled with the correct number?	1 [*]	ĹĴ	L I	
Describe labeling: $+ \alpha \beta \omega \rho \rho \rho$	id			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Deep the well have a set of lid?	N /1	r ı	£ 1	
Does the well have a weatherproof lock?		[]	L J F 1	
Does the lock secure the well?	[/\] [x]	[]	11	
Does the inner casing have a water tight can?	[x]	[]	[]	
Does the mile casing have a water-tight cap: Down-hole Condition.		LJ	LJ	
Is the well casing bent corroded or broken (at the				
surface?)	[]	FX1	Г 1	st rust at base
Is the well casing loose (at the surface)?	[]	K1	ři	
Is a measurement point marked at the top of the well		6 - 7		and the second
casing?	[X]	[]	۲1	
Measured depth of the well from measurement point:	-, -	21.03		
Thickness of sediment accumulation (reported depth-present	measuren	nent):		
Are there any obstructions in the well?	[]	[^]	[]	and and a second se
Description of well bottom conditions (soft, hard, etc):		hard		
•				
Instruction Data, 4.25-04	$\bigcap \cap$	R.	00.	
inspection Date: <u>12000</u> inspected by:	<u> </u>	Sn	rung	5

	1210
RAVENNA ARMY AMMU WELL INSPECTION	INITION PLANT CHECKLIST
WELL INFORMATION	
Well O 1 / Location/Functional Area:	
Number: $\frac{1}{1000}$	Facility Wide Backy regret
Casing Type: Steel Stainless Steel	MCAItoHa SLEVC
Server d'Oren Hele Well	Monitor Interval
Type: <u>Scheln</u>	Length: _/O ft
Flush-mount/Above-ground Abave	
Reported Constructed Depth: <u>37,18</u>	ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
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?	
The steel protective casing instanted?	
Does the protective casing have a weep note?	
Does vegetation around the well need clearing?	
r usn-mount completion:	
how?	
Does the well have a flush-mount hox?	
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?	(4/1) []
Does the well have a weatherproof lock?	
Does the lock secure the well?	[4] [] []
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 the well	
casing?	
intersured depth of the well from measurement point: D_{1}^{T}	w 661.27 1 27 201 10 - 27 1
A re there any obstructions in the well?	$\frac{1}{1} = \frac{1}{1} = \frac{1}$
Are more any constructions in the well? Description of well bottom conditions (soft hard sto):	
Description of wen obtion conditions (soft, natu, etc):	
Inspection Date: <u>4117</u> Inspected by:	GAlanis
Appendix C 5	FWGWMP 2006 Annual Report

	3'00)
RAVENNA ARMY AMMU WELL INSPECTION O	NITION PLANT CHECKLIST
WELL INFORMATION	
Number: $H(0\gamma W - 00\%)$	Exply Wide Bachardere
Casing Type: Steel Stainless Steel	Munder Deres
Screened/Open-Hole Well Sco-Clare	Monitor Interval Length: _/Oft
Flush-mount/Above-ground Completion:	
Reported Constructed Depth: 27,20	tt BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
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?	[] [47 []
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? \wedge	
Describe labeling:	
Describe labeling.	
Does the well have a sen or lid?	
Does the well have a waatheman of look?	
Does the leaf and the mail of the second lock?	
Does the lock secure the 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 the well	
casing?	
Measured depth of the well from measurement point:	12122 17 17 17 17 11
Thickness of sediment accumulation (reported depth-present	measurement): U_1U_2 <u>CT. 764. 1 C = 1 F.</u> 7
Are there any obstructions in the well?	
Description of well bottom conditions (soft, hard, etc):	- Xticny
Inspection Date:	AL Brillinger
Khare Sond	
Appendix C 6	FWGWMP 2006 Annual Report
•	

	2107
RAVENNA ARMY AMMU	NITION PLANT
WELL INSPECTION O	CHECKLIST
WELL INFORMATION	FUDKD
Well Location/Functional Area:	FUBLD
Number: 15K6mw-010	Bickground Mandering
Casing Type: Steel Stainless Steel	well por
Screened/Open-Hole Well Screened	Monitor Interval Length:ft
Flush-mount/Above-ground Completion:	ravel
Reported Constructed Depth: 213	ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
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?	
Are any of the posts damaged of 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?	IN II I BRUSNARD
Flush-mount completion:	SJUNN RENGING
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: Sass tag	on Parl
Security:	
Does the well have a cap or lid?	
Does the well have a weatherproof lock?	
Does the lock secure the 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 the well	
casing?	
Measured depth of the well from measurement point:	17.66
i nickness of sediment accumulation (reported depth-present	measurement): $y_1 + 5 = C_1 + 16 + 12 - C_4 + C_4$
Are there any obstructions in the well?	
Description of well bottom conditions (soft, hard, etc):	TXNEY
Inspection Date: 425 • Inspected by:	Bartan
(Y)	1

	2110
RAVENNA ARMY AMMUI	NITION PLANT
WELL INSPECTION C	HECKLAST
WELL INFORMATION	
Well Location/Functional Area: Number: $B = C + C + C + C$	calle while Rectanged
	Montering wetg
Casing Type: Steel Stainless Steel	LOPVC
Screened/Open-Hole Well	Monitor Interval
Type: Screen	Length: <u>7</u> ft
Flush-mount/Above-ground	
Completion:	
$\frac{1}{2}$	# BCS are TOC (atala ana)
Reported Constructed Depth: $(\rho L_1 + 1)$	It BGS OF BTOC (chcle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
Above-ground completion: 7	
Number of guard posts at well:	<i>,</i>
Are the posts positioned to prevent collision damage to the	
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?	[] [] [J,
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:	<u>n 105</u>
Security: fainted e	n 1037
Does the well have a cap or lid?	
Does the look secure the well?	
Does the inner casing have a water tight can?	
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 the well	
casing?	
Measured depth of the well from measurement point:	7.41
Thickness of sediment accumulation (reported depth-present	measurement): $DTS_62.14 + 12.62.40$
Are there any obstructions in the well?	$\begin{bmatrix} 1 \\ 1 \end{bmatrix} \begin{bmatrix} \mathcal{U}_{\mathcal{L}} \\ 1 \end{bmatrix} \begin{bmatrix} 1 $
Description of well bottom conditions (soft, hard, etc):	STICKY 1, . HEEL
11/10	$\sim \mu^{\prime}$
Inspection Qate: $\frac{U + U}{U}$ Inspected by:	Grany
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Appendix C

8:42
RAVENNA ARMY AMMUNITION PLANT WELL INSPECTION CHECKLIST
WELL INFORMATION
Vell O Location/Functional Area:
Jumber: Br6 mu-013 Backgroune(well
Casing Type: Steel PVC
creened/Open-Hole Well <u>Screened</u> Monitor Interval Length: <u>10</u> ft
lush-mount/Above-ground Completion:
Reported Constructed Depth: $21,67$ ft BGS or BTOC (circle one)
NSPECTION ITEMS YES NO N/A COMMENTS
Vell-head Completion:
bove-ground completion: Number of guard posts at well:
Are the posts positioned to prevent collision damage to the
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?
'lush-mount completion
Is the traffic cover securely holted to the flush-mount
hor?
$\begin{bmatrix} 0 \\ 0 \end{bmatrix} \begin{bmatrix} 0 \\ 0 \end{bmatrix} \begin{bmatrix} 0 \\ 0 \end{bmatrix}$
Le the treffie cover creaked or broken?
Is the rearrant analysis of detarioreted? Front
howing?
In the well lebeled with the correct number?
Is the went tabeled with the correct number of the second se
Describe rabering. VIUSS Fug CITACT
Does the well have a cap or lid?
Does the well have a weatherproof lock?
Does the lock secure the well? $\begin{bmatrix} v \end{bmatrix} \begin{bmatrix} v \end{bmatrix} \begin{bmatrix} 1 \end{bmatrix} \begin{bmatrix} 1 \end{bmatrix}$
Does the inner casing have a water tight can? $\begin{bmatrix} u \end{bmatrix} \leftarrow \begin{bmatrix} 1 \end{bmatrix} \begin{bmatrix} 1 \end{bmatrix}$
town hale 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 the well
casing?
Measured depth of the well from measurement point:
Thickness of sediment accumulation (reported denth-present measurement): $\sqrt{-1}$ $\frac{17.94 \pm 12 \pm 27.91}{12 \pm 27.91}$
Are there any obstructions in the well? $\begin{bmatrix} 1 \\ 1 \end{bmatrix}$
Description of well bottom conditions (soft, hard, etc):
Ispection Date: 976 Inspected by: (CCU-SU
l l

RAVENNA ARMY AMMUI WELL INSPECTION C	NITION PLANT CHECKLIST
WELL INFORMATION Well Location/Functional Area: Number: BKGmw-015	Background
Casing Type: Steel Stainless Steel	<u>×</u> PVC
Screened/Open-Hole Well Type: Screened	Monitor Interval Length: <u>10</u> ft
Flush-mount/Above-ground Completion:	sur Q
Reported Constructed Depth: <u>52,60</u>	ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
Above-ground completion: 3 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? 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? Is the well labeled with the correct number?	$\begin{bmatrix} X \\ X \\ Y \\ X \\$
Describe labeling: +0.0 100 000	J
Security: Does the well have a cap or lid? Does the well have a weatherproof lock? Does the lock secure the well? Does the inner casing have a water-tight cap?	[X] [] [] [X] [] [] [X] [] [] [] [N] [] [] []
Down-hole Condition:	
Is the well casing bent, corroded, or broken (at the surface?) Is the well casing loose (at the surface)?	[x] [] [] <u>rusty hinge casing</u>
Is a measurement point marked at the top of the well casing?	
weasured depth of the well from measurement point:	53.VL
Are there any obstructions in the well?	
Description of well bottom conditions (soft hard etc):	
Inspection Date: $4 - 26 - 06$ Inspected by:	al Bully

RAVENNA ARMY AMMUNITION PLANT WELL INSPECTION CHECKLIST

WELL INSPECTION C	HEUKLISI
WELL INFORMATION	
Well Location/Functional Area:	
Number: BKGmu-Olb	Backaroundwell
	<u>, , , , , , , , , , , , , , , , , , , </u>
Casing Type: Steel Stainless Steel	× PVC
Screened/Open-Hole Well	Monitor Interval
Type: Screened	_ Length: ft
Flush-mount/Above-ground	1
Completion: <u>Above gro</u>	und
Perperted Constructed Dopthy 2095	A BCS anDTOC (sizela ana)
	It BGS or BTOQ (circle one)
INSPECTION ITEMS	VFS NO N/A COMMENTS
Well-head Completion:	
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] []
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: <u>Tag on Pad</u>)
Does the well have a con or lid?	F.,] F] F]
Does the well have a weather reaf lack?	
Does the lock secure the well?	
Does the inner casing have a water tight can?	
Down-hole Condition	
Is the well casing bent corroded or broken (at the	- and the second se
surface?)	
Is the well casing loose (at the surface)?	
Is a measurement point marked at the top of the well	
casing?	
Measured depth of the well from measurement point:	21.25
Thickness of sediment accumulation (reported depth-present m	neasurement):
Are there any obstructions in the well?	
Description of well bottom conditions (soft, hard, etc):	hard
Inspection Date: 4/25/04	DO RODO
Inspection Date. <u>1165106</u> Inspected by:	- Ult Ducanzi
	\cup

RAVENNA ARMY AMMUNITION PLANT WELL INSPECTION CHECKLIST

WELL INFORMATION	
Well Location/Functional Area:	
Number: Bi//	Background
	<u>Nac Egrosno</u>
Casing Type: Steel Stainless Steel	× PVC
Screened/Open-Hole Well	Monitor Interval
Type: Screened	Length: 10 ft
Flush-mount/Above-ground	
Completion: Abure group	<u>b</u>
Reported Constructed Depth: 35, 1875	_ ft BGS or (BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
wen-neau Completion.	
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?	[] [X] [] <u>SI. rust</u>
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] [] <u> </u>
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?	[] [] [¥]
Identification:	,
Is the well labeled with the correct number?	[⊀] [] []
Describe labeling: tag on po	ad
Security:	
Does the well have a cap or lid?	[x] [] [] hinge broken
Does the well have a weatherproof lock?	[X] [] []
Does the lock secure the well?	[N] [] []
Does the inner casing have a water-tight cap?	
Down-hole Condition:	
Is the well casing bent, corroded, or broken (at the	
surface?)	[x] [] [] hinge is broken
Is the well casing loose (at the surface)?	[] [X] [],
Is a measurement point marked at the top of the well	
casing?	[x] [] []
Measured depth of the well from measurement point:	342.08
Thickness of sediment accumulation (reported depth-present i	measurement):
Are there any obstructions in the well?	
Description of well bottom conditions (soft, hard, etc):	hard
•	
Langetting Data H 25 Ala	Q0 B. 00
Inspection Date: <u>1-15-010</u> Inspected by:	- Ull Munge
	U

17:40
RAVENNA ARMY AMMUNITION PLANT
WELL INFORMATION
Well Location/Functional Area:
Casing Type: Steel Stainless Steel PVC
Screened/Open-Hole Well Type:
Flush-mount/Above-ground Completion:
Reported Constructed Depth: 27.00 ft BGS or BTOC (circle one)
INSPECTION ITEMS YES NO N/A COMMENTS
Well-head Completion:
Above-ground completion:
Does the lock secure the well? [1] [1] [1]
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 the well
casing?
Thickness of sediment accumulation (reported depth-present measurement): p_{1} , p_{2} , p_{3} , p_{1} , p_{2} , p_{3} , p_{2} , p_{3} ,
Are there any obstructions in the well? $[], [\mathcal{U}] []$
Description of well bottom conditions (soft, hard, etc):
Inspection Date: 427 Inspected by: <u>GACuis</u>
WASP Nest

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WELL INFORMATION					
Well Location/Functional Area:					
Number: BK (han see 1916	Back	am	ad		
		<u></u>			
Casing Type: Steel Stainless Steel		×	PV	/C	
Screened/Open-Hole Well	М	onitor I	Interval		
Type: Screened	Le	ength:		/ <i>(</i>) ft	
Flush-mount/Above-ground					
Completion: Above 910.	und_				
AF FÁ					
Reported Constructed Depth: 53, 29	ft BGS	or BTO	C (circ	le one)	
	*****	NO	****	0010000000	
INSPECTION ITEMS	YES	NO	N/A	COMMENTS	
Well-head Completion:					
Above around completion.		•			
Number of guard posts at wall:					
Are the posts positioned to prevent collision damage to the					
well?	[x]	(1	۲ I		
Are any of the posts damaged or degraded?		[x]	[]		
Is a concrete had installed?	ر ۲ ا×۱	[]	F 1	******	
Is the nad cracked or deteriorated? Frost heaving?	[,"]	[¥]			
Is steel protective casing installed?	L J [vz·]	[]	[]	<u></u>	
Does the protective casing have a weep hole?	[~] [v]	[]	[]		
Does vegetation around the well need clearing?	[]	[x]	[]		
Flush-mount completion	LJ	0.41	LJ		
Is the traffic cover securely holted to the flush-mount					
hox?	[]	r 1	r X1		
Does the well have a flush-mount hox^{9}	[]	[]	[X]		
Is the traffic cover cracked or broken?	[]	[]			
Is the concrete apron cracked or deteriorated? Frost	. 1		. ~1		
heaving?	[]	[]	[×]		
Identification:			.,,		
Is the well labeled with the correct number?		[]	ſ 1		
Describe labeling:	2	. ,			
Security:	Warner and the second				
Does the well have a cap or lid?	[×]	[]	[]		
Does the well have a weatherproof lock?	[x]	r i	r i		
Does the lock secure the well?	[x]	î î	[]	and and a stand of the stand of	
Does the inner casing have a water-tight cap?	[*]	[]	ſ Ì		
Down-hole Condition:					
Is the well casing bent, corroded, or broken (at the					
surface?)	[]	[7]	[]	SI. rust	
Is the well casing loose (at the surface)?	[]	[×]	[]		
Is a measurement point marked at the top of the well					
casing?	[×]	[]	[]		
Measured depth of the well from measurement point:	35.8	30	-		
Thickness of sediment accumulation (reported depth-present measurement):					
Are there any obstructions in the well?	[]	[×]	[]		
Description of well bottom conditions (soft, hard, etc):	<u> </u>)ft			
Increation Data: 4.25-04. Increased here	\cap) R.	. 0 Ó.		
inspection Date. <u>1723 OB</u> inspected by:	<u> </u>			<u>ð</u>	

	9:05
RAVENNA ARMY AMMU WELL INSPECTION (INITION PLANT CHECKLIST
WELL INFORMATION	
Well Location/Functional Area: Number: $BK6mW - 020$ F	Eachty Wille Backgrow
Casing Type: Steel Stainless Steel	Monidering wells
Screened/Open-Hole Well Screened	Monitor Interval Length:ft
Flush-mount/Above-ground Above-	
Reported Constructed Depth: <u>33,00</u>	ft BGS of BTOC (eircle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head 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? Flush-mount completion:	[1 [] [] [] [1 [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] []
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:	[] [] [] [] [] [] [] [] [] [] [] [] [] [] [] Pad and None on Well Puck;
Security: Does the well have a cap or lid? Does the well have a weatherproof lock? Does the lock secure the 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 the well casing? Measured depth of the well from measurement point: Thickness of sediment accumulation (reported depth-present Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc): 	$\begin{bmatrix} 1 & [1 & [1 \\ 1 & [1 & [1 \\ 1 & [1 & [1 \\ 1 & \\ measurement): D, T, B, 35, 18 + = 33. 7 \\ H_{4}C/ \begin{bmatrix} 1 & [1 \\ 1 & \\ 1 & \\ H_{4}C/ \end{bmatrix}$
Inspection Date: 427 Inspected by:	6 Alario
Appendix C 15	FWGWMP 2006 Annual Report

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RAVENNA ARMY AMMUNITION PLANT WELL INSPECTION CHECKLIST WELL INFORMATION Well Dot Location/Functional Area:	
WELL INFORMATION Well Location/Functional Area:	
Well Location/Functional Area	
Number: BtCGMW-021 Backgrand Well	
Casing Type: Steel Stainless Steel PVC	
Screened/Open-Hole Well Type:	
Flush-mount/Above-ground Completion:	
Reported Constructed Depth: <u>70,27</u> ft BGS or BTOC (circle one)	
INSPECTION ITEMS YES NO N/A COMMENTS	
Well-head Completion:	
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?	
Flush-mount completion:	
Is the traffic cover securely bolted to the flush-mount	
Does the well have a flush-mount hox?	
Is the traffic cover cracked or broken?	
Is the concrete apron cracked or deteriorated? Frost	
heaving? [] [] []	
Identification:	
Describe labeling: $366554666666666666666666666666666666666$	
Does the well have a cap or lid?	
Does the well have a weatherproof lock?	
Does the lock secure the well?	
Does the inner casing have a water-tight cap?	
Down-hole Condition:	
Is the well casing bent, corroded, or broken (at the	
Surrace ?) [] [] [] []	
Is a measurement point marked at the top of the well	
casing? $(1) \vee [1] = [1]$	
Measured depth of the well from measurement point: 17.85	
Thickness of sediment accumulation (reported depth-present measurement): $\sqrt{21221122}$	1,41
Are there any obstructions in the well?	1º le
Description of well bottom conditions (soft, hard, etc): $H-CV-C$	-
Inspection Date: 4/24 Inspected by: GHaus	

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RAVENNA ARMY AMMU	NITION	PLAN	Г	
WELL INSPECTION C	CHECKL	IST		
WELL INFORMATION				
Well INFORMATION Location/Eurotional Area:				
Number: $1/1$ tota $-0/2$		LL)	
$\frac{1}{2} \frac{1}{2} \frac{1}$				
Casing Type: 46th Steel Stainless Steel		1.	/ PV	'n
Casing Type. V Steel Stanness Steel		$-\nu$	1 V	C
Screened/Open-Hole Well	Μ	[onitor]	Interval	
Type: Screphed	L	ength:		/6 f
		0		<u> </u>
Flush-mount/Above-ground	,			
Completion: above - gra	ind			
		\subset		
Reported Constructed Depth: <u>29.19</u>	ft BGS	orBTC)C)(circl	e one)
INSPECTION ITEMS	YES	NO	N/A	COMMENTS
Well-head Completion:				
Above-ground completion:		-		
Number of guard posts at well: 4				
Are the posts positioned to prevent collision damage to the				
well?	$[\times]$	[]	[]	
Are any of the posts damaged or degraded?	ſ Ì	M	r i	
Is a concrete pad installed?		ΓÎ	î î	<u>an an a</u>
Is the nad cracked or deteriorated? Frost heaving?	[]	N	r i	
Is steel protective casing installed?	M	[]	î î	
Does the protective casing have a weep hole?		r i	r i	
Does vegetation around the well need clearing?	[√]	[]	11	Alimer
Flush-mount completion.	[]	LJ		тррет
Is the traffic cover securely holted to the flush-mount				
hox?	[]	۲ I	[¥]	
Does the well have a flush-mount box?	[]	r 1	$[\mathbf{x}]$	
Is the traffic cover cracked or broken?	[]	[]	[x]	****
Is the concrete apron cracked or deteriorated? Frost	1 3	ι]	L /~1	
heaving?	[]	۲ I	٢v٦	
Identification.	LJ	ι ,	۲/J	ala an an an an Alaysia. In a dha an
Is the well labeled with the correct number?	[]	\sim	ſ٦	
Describe labeling:	Noder	Vch.	ال مأم م	Cide Contra Ital
Security:	MUN Fely	<u>107540</u>	Wite in	stae tastry nu
Does the well have a can or lid?	[x]	۲ I	۲1	
Does the well have a weatherproof lock?	N N	[]	[]	
Does the lock secure the well?	iλi	[]	[]	
Does the inner casing have a water tight can?	(<u>/</u>]	[]	r J	
Down-hole Condition.	17-1	11	ιj	
Is the well casing bent corroded or broken (at the				
surface?)	۲ I	[s_]	۲ I	
Is the well casing loose (at the surface)?	[]	κ.) [\]	[]	
Is a measurement noint marked at the top of the well	LJ	۲X1	LJ	
casing?	. Nist	BF 1	ſ٦	
Measured denth of the well from measurement point.	LAIDI	<u>, 1</u>	i i i i	= 20 32
Thickness of sediment accumulation (reported denth_present	measuren	<u>ent)-</u>	Bansa	<u> </u>
Are there any obstructions in the well?	[]	۲/۱ ۲/۱	[]	<u>vp</u>
Description of well bottom conditions (soft bard etc):	L J		ι J	
resemption of work contributions (soft, hard, cw).		Uar	<i>.</i>	
	ſ	-(
Inspection Date: $7 - 25 - 2006$ Inspected by:	-11-	Mar	<u>a's</u>	

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RAVENNA ARMY AMMUN	VITION PLANT
WELL INSPECTION C	HECKLIST
WELL INFORMATION	
Well INFURIMATION Location/Functional Area:	
Number: 1/ 1 hours 6/11	611
Casing Type: July Steel Stainless Steel	1/ PVC
Screened/Open-Hole Well	Monitor Interval
Type: <u>Screened</u>	Length:f
Flush-mount/Above-ground	1
Completion: <u>Uboue</u>	ground
Reported Constructed Depth: 20 S()	ft BGS on BTOC (circle one)
	in BOD of BTOC (chick one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
Above-ground completion:	
Number of guard posts at well:	
Are the posts positioned to prevent collision damage to the	
well?	[X] [] []
Are any of the posts damaged or degraded?	
Is a concrete pad installed?	
Is the pad cracked or deteriorated? Frost heaving?	[] [X] []
Is steel protective casing installed?	
Does the protective casing have a weep hole?	[x] [] _{c\t} []
Does vegetation around the well need clearing?	[X KI"[] <u>Olippers</u>
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?	[] [] [x]
Is the concrete apron cracked or deteriorated? Frost	
heaving?	
Identification:	
Is the well labeled with the correct number?	
Describe labeling: No Labelin	Marked inside W/sharpie 4-25-C
Security:	.)
Does the well have a cap or lid?	
Does the well have a weatherproof lock?	
Does the lock secure the well?	
Does the inner casing have a water-tight cap?	
Down-hole Condition:	
Is the well casing bent, corroded, or broken (at the	r 1 6 8 7 1
surface?)	
is the well casing loose (at the surface)?	LI KILI
is a measurement point marked at the top of the well	
Manufic GH	
Thickness of adjment accumulation (reported donth record	$U = \alpha_1 . U = \sigma_0 L = \alpha_1 . 1 L$
Are there any obstructions in the wall?	
Are more any obstructions in the well? Description of well bottom conditions (soft bard stol)	
Description of wen bottom continuous (soft, nard, etc):	<u> </u>
	1
nspection Date: $\frac{\gamma-25-06}{1000}$ Inspected by:	9 harris

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	10.	29
RAVENNA ARMY AMMUI WELL INSPECTION C	NITION PLANT HECKLIST	
WELL INFORMATION		
Well Location/Functional Area:		
Number: $LLIMW - 065$	641	
Casing Type: <u>~</u> G ^H Steel Stainless Steel	PVC	
Screened/Open-Hole Well Type: Screened	Monitor Interval Length: ft	t
Flush-mount/Above-ground Completion: <u>Gboure - A</u>	Pund	
Reported Constructed Depth: 23.08	ft BGS on BTOC (circle one)	
INSPECTION ITEMS	YES NO N/A COMMENTS	
Well-head Completion:		
Above-ground completion: 4 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: No Labeling Mark Security: Does the well have a cap or lid?	$ \begin{bmatrix} X & [&] & [&] \\ [& M & [& M & [&] \\ [& M & [& M & [& M \\ [& M & [& M & M \\ [& M & M & M \\ [$	
Does the well have a weatherproof lock?		
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 the well	ся с <mark>х</mark> я ся	
casing?	⊠nß[] []	
Measured depth of the well from measurement point: $\underline{G}^{*} \underline{A}$	0.36 23.05 + .12 = 23.17	<u> </u>
Are there any obstructions in the well?	$\begin{bmatrix} 1 & M & 1 \end{bmatrix}$	
Description of well bottom conditions (soft, hard, etc):	hard	
Inspection Date: $4-25-06$ Inspected by:	_ ghavris	

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RAVENNA ARMY AMMUNITION PLANT WELL INSPECTION CHECKLIST					
WELL INFORMATION					
Well Location/Functional Area:					
Number: $\frac{1}{10000000000000000000000000000000000$					
Casing Type: GH Steel Stainless Steel	PVC				
Screened/Open-Hole Well Screened	Monitor Interval Length: <u>/O</u> ft				
Flush-mount/Above-ground Completion:	round				
Reported Constructed Depth: 25.34	ft BGS or BTOC (circle one)				
INSPECTION ITEMS	YES NO N/A COMMENTS				
Well-head Completion:					
Above-ground completion:	х.				
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 of deteriorated? Frost neaving?					
Is steel protective casing installed?					
Does the protective casing have a weep hole?					
Does vegetation around the well need clearing?	[X] [] [] <u>Clipper/BIK Berry</u>				
Is the traffic cover securely helted to the fluch mount					
hov?					
Does the well have a flush-mount hox?					
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?	NOT [] [] WORN RINGTY / Cruit Read				
Describe labeling: A le luis cide freed labeling					
Security:					
Does the well have a cap or lid?					
Does the well have a weatherproof lock?					
Does the lock secure the well?	[X] [] []				
Does the inner casing have a water-tight cap?					
Down-hole Condition:					
Is the well casing bent, corroded, or broken (at the					
surface?)	[] [x] []				
Is the well casing loose (at the surface)?	[] [M] []				
Is a measurement point marked at the top of the well					
casing?					
Thickness of addiment accumulation (arrested doubt	$\rightarrow t$ $\rightarrow t. 64 + 12 = 27.81$				
Are there any obstructions in the wall?					
Description of well bottom conditions (soft hard etc):					
Description of went bottom continuous (soft, natu, cic):					
Inspection Date: $\frac{2}{-25-2006}$ Inspected by:	GHarris				
V Well outside of fence	I				

Appendix C

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	U : 10
RAVENNA ARMY AMIN WELL INSPECTION	AUNITION PLANT N CHECKLIST
WELL INFORMATION Well Number: Location/Functional Area:	LLI
Casing Type: Steel Stainless Stee	PVC
Screened/Open-Hole WellScreened	Monitor Interval Length: /O ft
Flush-mount/Above-ground Completion:	nund
Reported Constructed Depth: 40.64	ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
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? 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: Alum, flake	$\begin{bmatrix} M & [] & [] \\ M & $
Does the well have a cap or lid? Does the well have a weatherproof lock? Does the lock secure the well? Does the inner casing have a water-tight cap? Down-hole Condition:	[M] [] []
 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 the well casing? Measured depth of the well from measurement point: Thickness of sediment accumulation (reported depth-prese Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc): 	$\begin{bmatrix} 1 & [X] & [1] \\ [1] & [X] & [1] \\ [2] & [X] & [1] \\ [3] - 85 D^{2} H_{1,65} + .12 - 41.77 \\ ent measurement): 97B - 41.65 GH \\ [3] & [3] & [3] & [3] \\ [3] & [3] & [3] & [3] \\ [3] & [3] & [3] & [3] \\ [3] & [3] & [3] & [3] \\ [3] & [3] & [3] & [3] \\ [3] & [3] & [3] & [3] & [3] \\ [3] & [3] & [3] & [3] & [3] \\ [3] & [3] & [3] & [3] & [3] \\ [3] & [3] & [3] & [3] & [3] & [3] \\ [3] & [3] & [3] & [3] & [3] & [3] & [3] \\ [3] & [$
Inspection Date: $4 - 25 - 2006$ Inspected by	y: <u>GHarnis</u>

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		1:00
RAVENNA ARMY AMMUN	NITION PLANT	
WELL INSPECTION CI	HECKLIST	
WELL INFORMATION		
Well Location/Functional Area:	1 / (
Number: $\Delta L M - 0 P = -0$		
Casing Type: Gth Steel Stainless Steel	PVC	
Screened/Open-Hole Well	Monitor Interval	
Type:Screened	Length:	ft
Completion:)nun d	
Reported Constructed Depth: <u>41, 50</u>	ft BGS or BTOC (circle one)	
INSPECTION ITEMS	YES NO N/A COMMENTS	
Well-head Completion:		
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?	M [] []	
Does the protective casing have a weep hole?	[×] [] []	
Does vegetation around the well need clearing?	[] [X] []	
Flush-mount completion:		
Is the traffic cover securely bolted to the flush-mount	ri fi fMi	
Does the well have a flush-mount hox?		
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: <u>Alun. Plute on Cas</u>	sing lid	
Security:		
Does the well have a weatherproof lock?	M [] []	
Does the lock secure the well?	\times [] [] []	
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)?		
casing?		
Measured depth of the well from measurement point:	-12 42,15 +.12 = 42,27	
Thickness of sediment accumulation (reported depth-present n	neasurement): DTB=42.15-(?) GH	
Are there any obstructions in the well?	[] 🕅 []	
Description of well bottom conditions (soft, hard, etc):	Hand	
Inspection Date: <u>4-25-2006</u> Inspected by:	GHarris	

4	10:44
RAVENNA ARMY AMMUN	VITION PLANT
WELL INSPECTION CH	HECKLIST
WELL INFORMATION	
Number // Less 660	(1)
Number: <u>LL INW 9000</u>	
Cacing Type: L CH Steel Steel	1 PVC
Cashig Type Steel Stanness Steel	
Screened/Open-Hole Well	Monitor Interval
Type: Screened	Length: /O ft
Flush-mount/Above-ground	
Completion: Above g	round
Reported Constructed Depth:	ft BGS of BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well head Completion	
wen-nead Completion:	
Above-ground completion:	
Number of guard posts at well:	
Are the posts positioned to prevent collision damage to the	
WCII? Are any of the posts demograd or degraded?	
Are any of the posts damaged of degraded?	
is a concrete pau instance?	
Is the part cracked of deteriorated? Flost heaving?	NA [] []
Does the protective casing listance:	
Does vegetation around the well need clearing?	
Flush mount completion.	
Is the traffic cover securely holted to the flush-mount	
how?	
Does the well have a flush-mount hox?	
Is the traffic cover cracked or broken?	
Is the concrete anron cracked or deteriorated? Frost	
heaving?	
Identification:	
Is the well labeled with the correct number?	
Describe labeling: Alum, Plate on Lid	λ
Security:	
Does the well have a cap or lid?	
Does the well have a weatherproof lock?	
Does the lock secure the well?	[X] [] [] bottom of lock deteriora
Does the inner casing have a water-tight cap?	M [] []
Down-hole Condition:	
Is the well casing bent, corroded, or broken (at the	
surface?)	[] [] []
Is the well casing loose (at the surface)?	[] [M []
Is a measurement point marked at the top of the well	
casing?	
Measured depth of the well from measurement point: $G_{\underline{q}}$	$\frac{10}{22.33 + .12} = 22.45$
Thickness of sediment accumulation (reported depth-present m	neasurement): Vtp=22:33 GH
Are there any obstructions in the well?	
Description of well bottom conditions (soft, hard, etc):	hard
Inspection Date: 4-25-2006 Inspected by:	Gharris
- <u>Andrews</u> A and	

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		5-6
RAVENNA ARMY AMMU WELL INSPECTION (NITION PLANT THECKLIST	
WELL HIST ECTION		
WELL INFORMATION		
Well Location/Functional Area:	111	
Number: $LL I MW - 081$	<u> </u>	
Casing Type: Steel Stainless Steel	PVC	
Screened/Open-Hole Well	Monitor Interval	ft
Type		It
Flush-mount/Above-ground Completion:	und	
Reported Constructed Depth: <u>41,37</u>	ft BGS or BTOC circle one)	
INSPECTION ITEMS	YES NO N/A COMMENTS	
Well-head Completion:		
Above-ground completion:		
Number of guard posts at well:		
Are the posts positioned to prevent collision damage to the		
well?	[X] [] []	
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] [] [] [] [] [] [] [] [] [] [] [] [] []	NUM
Flush-mount completion.	the concernent of the second	0007
Is the traffic cover securely holted to the flush-mount	CA GINESS ESCA	i.
how?	[] [] [] []	/
Doos the well have a flush mount hav?		
Loes the well have a flush-mount box?		
is the traffic cover cracked of broken?		
is the concrete apron cracked or deteriorated? Prost		
heaving?	ιιιιγι	
Identification:		
Is the well labeled with the correct number?		*****
Describe labeling: <u>Hum Vlate on</u>	CLSI-, Lich	
Security:	/	
Does the well have a cap or lid?	[<code>\chi'] [] []</code>	
Does the well have a weatherproof lock?	[x] [] []	
Does the lock secure the 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?)	[] [] []	
Is the well casing loose (at the surface)?		
Is a measurement point marked at the top of the well		
casing?		
Measured depth of the well from measurement point:	30.84 41,98 + 12 = 42 AR- 6	12.10
Thickness of sediment accumulation (reported depth-present	measurement): MB 4198 GUL	<u> </u>
Are there any obstructions in the well?		
Description of well bottom conditions (soft, hard, etc):	Hard	
Inspection Date: <u>4-25-06</u> Inspected by:	GHarris	
(V) Tree down on Road		

Appendix C

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RAVENNA ARMY AMMU WELL INSPECTION	JNITION PLANT CHECKLIST
WELL INFORMATION Well Location/Functional Area: Number: <u>LL1nw-082</u>	LLI
Casing Type:GS Steel Stainless Steel	PVC
Screened/Open-Hole Well Type:	Monitor Interval Length: <u>40</u> ft
Flush-mount/Above-ground Completion:	ground
Reported Constructed Depth: <u>41.20</u>	_ ft BGS of BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
Above-ground completion: 3 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? 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: Alum, flate on Case Security: Does the well have a cap or lid? Does the well have a weatherproof lock? Does the inner casing have a water-tight cap? Does the inner casing have a water-tight cap? Down-hole Condition: Is the well casing bond, corroded, or broken (at the surface?) Is a measurement point marked at the top of the well casing? Measured depth of the well from measurement point: Thickness of	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
Inspection Date: $\frac{2}{-25 \cdot 66}$ Inspected by:	g harris
(\tilde{V})	

RAVEI	NNA ARMY AMMU ELL INSPECTION C	NITION CHECKL	PLAN'. IST	ſ	
WELLINEODMATION					
Well INFORMATION	n/Functional Area				
Number: $\frac{1}{(ml)-682}$	her unctional raca.		LL	[
<u>retrie oop</u>				<u> </u>	
Casing Type:Steel	Stainless Steel			P\	/C
Screened/Open-Hole Well	Screened	M	onitor l ength:	Interval	9.6 <u>-10</u> ft
Flush-mount/Above-ground Completion: _	above grou-	d		-	
Reported Constructed Depth:	41.02	ft BGS	or ETC	C(circ	le one)
INSPECTION ITEMS		YES	NO	N/A	COMMENTS
Well-head Completion:					
Above-ground completion:	7		-		
Number of guard posts at well:	<u> </u>				
Are the posts positioned to prevent coll	lision damage to the	6 4	ر ۲	, ,	
well?	4 - 10				
Are any of the posts damaged or degra	ded?				
Is a concrete pad installed?	-theory - O		[] 5 a	L J	<u></u>
Is the pad cracked or deteriorated? Fro	st heaving?				· · · · · · · · · · · · · · · · · · ·
Is steel protective casing installed?	1 1 0	[X]			· · · · · · · · · · · · · · · · · · ·
Does the protective casing have a weep	p hole?				
Does vegetation around the well need of	clearing?	Γ X Ι		[]	Brush-hog/Neederter
"lush-mount completion:					
Is the traffic cover securely bolted	to the flush-mount	г л	г л	г х ж	
box?					
Does the well have a flush-mount box?					
Is the traffic cover cracked or broken?		[]	[]	[X]	····
Is the concrete apron cracked or	deteriorated? Frost	6 3		<u>ь а</u>	
neaving?		L I	l	LX1	
dentification:	1 0	r 4		r •	
is the well labeled with the correct num	nber?			ll	
Describe labeling:	um. Plate on Ca	sin, Lic			
security:			r -		
Does the well have a cap or lid?		[Y]			
Does the well have a weatherproof loch	k?				
Does the lock secure the well?					
Does the inner casing have a water-tigh	nt cap?	[×]	[]	[]	
Jown-hole Condition: Is the well casing bent, corroded, or bro	ken (at the				
surface?)		[]	$[\times]$	[]	
Is the well casing loose (at the surface)	?	[]	[X]	[]	
Is a measurement point marked at the	he top of the well				
casing?	ct	$\boxtimes \mathfrak{V}$	rB[]	[]	
Measured depth of the well from measured	urement point: <u>3</u>	2.93 ~	41.5	1+.	12 = 41.66
Thickness of sediment accumulation (r	eported depth-present	measurem	ent) : b	18=41.	454 GH
Are there any obstructions in the well?		[]	$[\mathbf{X}]$	[]	
Description of well bottom conditions	(soft, hard, etc):		hard		
nspection Date: $(4-2) \leq -2$ AUG	Inspected by:	Qh	arris	2	

RAVENNA ARMY AMMU	NITION	PLAN	Г		
WELL INSPECTION C	HECKL	IST	_		
Well Location/Eurotional Aras					
Number: $1/1$ have ~ 6.00		LL	- 1		
ACTINO 067					
Casing Type: Steel Stainless Steel			/ PV	′C	
		k		01	
Screened/Open-Hole Well	М	lonitor	[nterval	9.6	
Type: Screened	L	ength:		-10-	ft ft
Flush-mount/Above-ground					
Completion: <u>Aboe - ground</u>	ι		-		
76	ADCO	. DTC			
Reported Constructed Depth: >8.61	πBGS	ofRIC	G(circi	le one)	
INSDECTION ITEMS	VFS	NO	NI/A	COMMENTS	
INSI ECTION ITEMIS	11.3	NO	1 V A	COMMENTS	
Well-head Completion:					
Above ground completion.					
Number of guard posts at well: 3					
Are the posts positioned to prevent collision damage to the					
well?	$[\times]$	[]	[]		
Are any of the posts damaged or degraded?	[]	[🗙]	[]		
Is a concrete pad installed?	$[\times]$	[]	[]		
Is the pad cracked or deteriorated? Frost heaving?	[]	[×]	[]		
Is steel protective casing installed?	$[\times]$	[]	[]		
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?	[]	[]	[×]	•	
Is the concrete apron cracked or deteriorated? Frost					
heaving?	[]	[]	[7]		
Identification:					
Is the well labeled with the correct number?	, IXI				
Describe labeling: <u>Hlum. Plate on lid</u>	/ Marte	<u>al insi</u>	de Ca		
Security:	۶.»1	r 1	r 1		
Does the well have a cap of lid?					
Does the well have a weatherproof lock?	[X]				
Does the inner againg have a water tight car?			L I F 1		
Does the inner casing have a water-tight cap?	[7]	ĹĴ	L J		
Lown-noie Condution:				VC-10-10-10-10-10-10-10-10-10-10-10-10-10-	
is the well casing beni, confided, of broken (at the	r 1		۲ I		
Is the well casing loose (at the surface)?			[]		
Is a measurement point marked at the top of the well	LJ	1.1	LJ		
casing?	$[\mathbf{M}]$	പര്]	[]		
Measured depth of the well from measurement point:	CA 13	9.04	+12 =	- 39.16	·
Thickness of sediment accumulation (reported depth-present t	neasuren	nent):	B-39.00	Falt	
Are there any obstructions in the well?	[]	[x1	[]	· · · · ·	
Description of well bottom conditions (soft. hard. etc.):	Hart	-11- <1	ides		
· · · · · · · · · · · · · · · · · · ·	11000	<u> </u>			
51 25-1000	<u> </u>	1			
Increases and Datas 7 () 5 (1) 8/a Increased by	1. 1	Tarri	(

(X) Strecth Appendix C

KAV. V	VELL INSPECTION (CHECKL	IST	•	
WELL INTEADMATION					
WELL INFORMATION	tion/Functional Area				
Number: 11 Luce 085	nois i unchonal Alca.		1	LI	
$\frac{-1}{1000}$	-			~ _	namin in the second second
Casing Type: C.* Steel	Stainless Steel		V	PV	C
Screened/Open-Hole Well Type:	Screened	M La	lonitor l ength:	Interval	9.5.10 ft
Flush-mount/Above-ground Completion:	above - gr	sund			
Reported Constructed Depth:	44.18	_ ft BGS	or BTC		e one)
INSPECTION ITEMS		YES	NO	N/A	COMMENTS
Well-head Completion:					
Above-ground completion:	~		-		
Number of guard posts at well:					
Are the posts positioned to prevent co	ollision damage to the				
well?	-	$[\times]$	[]	[]	*****
Are any of the posts damaged or deg	raded?	[]	[X]	[]	
Is a concrete pad installed?		[\]	[]	[]	
Is the pad cracked or deteriorated? Fi	rost heaving?	[]	[×]	[]	
Is steel protective casing installed?		[×]	[]	[]	
Does the protective casing have a we	ep hole?	$[\lambda]$	[]	[]	
Does vegetation around the well need	d clearing?	[]	[[]]	[]	
Flush-mount completion:			,		
Is the traffic cover securely bolted	l to the flush-mount		_		
box?		[]	[]	[X]	
Does the well have a flush-mount bo	x?	[]	[]	[X]	
Is the traffic cover cracked or broken	!?	[]	[]	[X]	
Is the concrete apron cracked or	deteriorated? Frost				
heaving?		IJ		[¥]	
Identification:					
Is the well labeled with the correct n	umber?	١X٦	IJ	l	Anna
Describe labeling: <u>Alum</u> .	Lidon Casing 1	cl			
Security:	2	Б. Л	г ч	гı	
Does the well have a cap or lid?	1 -9	[X]	ll		
Does the lock as weatherproof lo	JCK ?	[X]			
Does the incertaine have a material	aht can?		ן ן רי	L J r r	
Does up niner casing nave a water-the	gut cap:	[x]	ιΙ	ιJ	
Jown-now Condition: Is the well assing heat someded or h	rakan (at the				
is the went casing benc, conforded, of D	IUNEII (AL UIC	гı	[v]	[]	
Is the well casing loose (at the surface	e)?	L J []	い」 6月	L J []	
Is a measurement point marked at	the top of the well	LJ	ι×1	ιJ	and an and the second secon
casing?	are top of the well	. [V]~	ß	۲ I	
Measured depth of the well from me	asurement point. CK	SGA 5	ті і 157. 2 п		7 7 45 27
Thickness of sediment accumulation	(reported depth-present	measuren	$\frac{1}{1}$ ent): #	B=45.1	- <u>сулод</u>
Are there any obstructions in the wel	19	[]	[]	[]	φ-τ)
Description of well bottom condition	s (soft, hard, etc):	ιJ	Hard	ι]	
			<u></u>		
Inspection Date: $(/_{-}) \subseteq - \Im = \Im$	Inspected by:	ah	arris		
inspection Date. $\frac{7-2}{2000}$					

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RAVENNA ARMY AMMUNITION PLANT WELL INSPECTION CHECKLIST
WELL INFORMATION Well Location/Functional Area: Number: L-2 Location/Functional Area: L-2
Casing Type: $\underline{\times}^{GW}$ Steel Stainless Steel PVC
Screened/Open-Hole Well Type: <u>Screened</u> Monitor Interval Length: <u>9.8-to</u> ft
Flush-mount/Above-ground Completion: <u>above-ground</u>
Reported Constructed Depth: <u>21,48</u> ft BGS or BTOO (circle one)
INSPECTION ITEMS YES NO N/A COMMENTS
Well-head Completion:
Above-ground completion: Number of guard posts at well:
Security: Image: Indiced of (13) and 05 (20) (10) Does the well have a cap or lid? [X] [] [] Does the well have a weatherproof lock? [X] [] [] Does the lock secure the well? [X] [] [] Does the inner casing have a water-tight cap? [X] [] [] Does the inner casing have a water-tight cap? [X] [] [] Does 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 the well casing? [] [X] [] [] [] Measured depth of the well from measurement point: $\underline{H_{F} + M_{2}(98 +12 + 2210)$ Thickness of sediment accumulation (reported depth-present measurement): $\overline{H} = \frac{M_{A} \cdot M_{A}}{M_{A} \cdot M_{A}}$ Description of well bottom conditions (soft, hard, etc): [] [] [] []
Inspection Date: 4-24-2006 Inspected by: C Harris

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RAVENNA ARMY AMMUN WELL INSPECTION CE	ITION	PLAN IST	[
		10 I		
WELL INFORMATION				
Well Location/Functional Area:		11)	
Number: <u>NACKW -000</u>		nn	<u> </u>	
Casing Type: Steel Stainless Steel		V	PV	C
Screened/Open-Hole Well Type: <u>Screened</u>	M	lonitor l ength:	nterval	_ <u>_lO</u> _ft
Flush-mount/Above-ground Completion:	nd			
Reported Constructed Depth: 20,58	ft BGS	orBTO	Ccircl	le one)
INSPECTION ITEMS	YES	NO	N/A	COMMENTS
Well-head Completion:				
Above-ground completion: Number of guard posts at well: Are the posts positioned to prevent collision damage to the		-		
well?	$[\times]$	[]	[]	
Are any of the posts damaged or degraded?	[]	[\]	[]	and the second
Is a concrete pad installed?				
Is the pad cracked or deteriorated? Frost heaving?				and a second
Does the protective casing have a weep hole?	[X]	[] []		**************************************
Does vegetation around the well need clearing?				
Flush-mount completion:	ι ,	r Vi		<u></u>
Is the traffic cover securely bolted to the flush-mount			5 \17	
box?			LN N1	
Loes the well have a flush-mount box?	11		[%]	t
Is the concrete apron cracked or deteriorated? Frost	1 3	ιJ	[]]	
heaving?	[]	[]	۲¥۱	
Identification:			- / -	
Is the well labeled with the correct number?	$[\chi]$	[]	[]	
Describe labeling: Marked inside lid of Ce	Servi			
Security:	ر م			en anna ann ann ann ann ann ann ann ann
Does the well have a cap or lid?				
Does the well have a weatherproof lock?	[X]			
Does the inner casing have a water-tight can?	[x]	L J F J		
Does no mile casing nave a water trent cap: Down-hole Condition:	ιχı	ιı	L J	
Is the well casing bent, corroded, or broken (at the	۲ I	Б. А	r ı	<u></u>
Surface?) Is the well casing loose (at the surface)?			[]	<u></u>
Is a measurement point marked at the top of the well	LJ	ίχ)	LJ	
casing?	M	R[]	[]	
Measured depth of the well from measurement point: $\mathcal{L}_{\mathcal{F}}^{N}$	SY DI	20.79	+.1	2 = 20,91
Thickness of sediment accumulation (reported depth-present n	neasurem	nent): H	B=20.7	9 GH
Are there any obstructions in the well?	[]	[×]	[]	
Description of well bottom conditions (soft, hard, etc):	<u> </u>	ard		
Inspection Date: $4 - 24 - 2606$ Inspected by:	-g L	arril		

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RAVENNA ARMY AMMUN	ITION	PLANT	[
WELL INSPECTION C	HECKL	IST		
WELL INFORMATION				
Location/Functional Area:	1	12		
Number: <u>LLLMW-XU</u>		h dam		
Gilt Steel Steel		1/	DV	۲C
asing Type: Steel Stanness Steel		V	I V	C
Correspond/Open Hole Well	м	onitor I	nterval	
	Le	ength:	11101 700	10 f
Jush-mount/Above-ground				
Completion: Gbove - Gy	rund			
		-	5	
Reported Constructed Depth: 2.65	ft BGS	or(BTO)¢ (circl	le one)
	*****	~	B 714	COM (6 473)
NSPECTION ITEMS	YES	NO	N/A	COMMENTS
Well-head Completion.				
Ten-neau Completion.		-		
Above-ground completion:				
Number of guard posts at well:				
Are the posts positioned to prevent collision damage to the	K /1	۲ I	۲1	
Well?	[Y]	L] КЛ	L J F J	
Are any of the posts damaged or degraded?	1 1 6 41		11	
Is a concrete pad installed?				
is the pad cracked or deteriorated? Frost heaving?		[X] רי	L J r n	
is steel protective casing installed?	[X] 6.21	נן רי	L J F J	
Does the protective casing have a weep hole?		L J r 1	L J F J	A
Does vegetation around the well need clearing?	ιx I	LJ	ſ]	Clippers Lose
Flush-mount completion:				
is the traffic cover securely policed to the flush-mount	۲ I	۲ I	ועז	
UUX! Deep the well have a fluch mount hav?	11	נ ו ן ו	[v]	
Lots the well have a hush-mount box?	[] []	ι J Γ]	[v]	
is the concrete encoded or deteriorstad? Frost	11	ιΙ	[1]	
is the concrete apron cracked or deteriorated? Prost	٢٦	ſ٦	٢v٦	
licavilly: Identification:	ιJ	LJ	1/1	
acrugication: Is the well labeled with the correct number?	NA	[]	۲ I	
Is the well labeling $b = 0$ and $b = 0$	[¥]	ιj	ĹĴ	
Describe rabering. <u>(14</u>)	- (
Does the well have a cap or lid?	[~]	[]	ſ٦	
Does the well have a weather proof lock?	[~]	[]		And a second
Does the lock secure the well?	ري [ح]	[]		and and a second of a second
Does the inner casing have a water-tight can?		[]	[]	
Down-hole Condition.	1 (1)		ιJ	
Is the well casing bent corroded or broken (at the				
surface?)	[]	$[\mathbf{x}]$	[]	
Is the well casing loose (at the surface)?	[]	M	Î Î	
Is a measurement point marked at the top of the well				ويستعملون ومناور ويسترج المركب المتكليس والمركز والمركب والمتكليس والمركب والمتكل والمتكرين والمتكرين والمتكري
casing?	Γv]	[]	[]	
Measured depth of the well from measurement point:	22 22	2.42	+ 12	= 22,54
Thickness of sediment accumulation (reported depth-present	measuren	nent): ₽	F13-22	HE GH
Are there any obstructions in the well?	[]	M	[]	
Description of well bottom conditions (soft, hard, etc):		Ho	ird	
Description of their content content (orth man, eac).	******	<u>_</u>		
$a \rightarrow b$		j	Ŧ	
Inspection Date: $(J = J \times -1)$ to Inspected by:	C	NUI	10	

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RAVENNA ARMY AMMUN WELL INSPECTION C	NITION HECKL	PLAN'I IST	Γ	
WELL INFORMATION Well Location/Functional Area:		LLD	L	
Casing Type: $\rightarrow G^{H}$ Steel Stainless Steel		/C		
Screened/Open-Hole Well Screhed	M	onitor l ength:	Interval	ft
Flush-mount/Above-ground Completion:	ound		•	
Reported Constructed Depth: 22,12	ft BGS	or BTO	Circl	le one)
INSPECTION ITEMS	YES	NO	N/A	COMMENTS
Well-head Completion:				
Above-ground completion: Number of guard posts at well: <u>4</u> Are the posts positioned to prevent collision damage to the		~		
well? Are any of the posts damaged or degraded?	[X]	[] [\]]	[] []	
Is a concrete pad installed?			[]	
Is the pad cracked or deteriorated? Frost heaving?	[]		[]	
Is steel protective casing installed?	$[\times]$	[]	[]	
Does the protective casing have a weep hole?	$[\mathbf{X}]$	[]	[]	
Does vegetation around the well need clearing?	[]	$[\mathbf{M}]$	[]	
Flush-mount completion:				
Is the traffic cover securely bolted to the flush-mount				
box?	[]	[]	[\(]	
Does the well have a flush-mount box?	[]	[]	$[\gamma]$	
Is the traffic cover cracked or broken?	[]	[]	[水]	
Is the concrete apron cracked or deteriorated? Frost				
heaving?	[]	[]	[X]	
Identification:			·	
Is the well labeled with the correct number?	$[\mathbf{X}]$		[]	
Describe labeling: Brass Plute				
Security:				
Does the well have a cap or lid?				
Does the well have a weatherproof lock?				
Does the lock secure the well?				
Does the inner casing have a water-tight cap?	[X]	L J	Ĺ	
Down-hole Condition:				
is the well casing bent, corroded, or broken (at the	r 1	6 <i>4</i> 1	r 1	
Surface?)		LX I Fs ZI	L J T 1	
Is the well casing loose (at the surface)?	[]		L I	
is a measurement point marked at the top of the wen	K / IV	TPD 1	۲ I	
Casing: Massured depth of the well from measurement point:	(X) V	14]	11	
Thickness of sediment accumulation (reported depth_present r	neasurem	ent).AI	8277 6	ten
Are there any obstructions in the well?	f]	[]	- ~~ v	- <u>v</u> h
Description of well bottom conditions (soft, hard, etc):	L]	Hard	ι]	
Inspection Date: $4-25-2006$ Inspected by:	<u> </u>	Hari	-i.s	
· ·				

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RAVENNA ARMY AMMUN WELL INSPECTION C	HECKL	PLAN7 IST	ſ	
WELL INFORMATION Well Location/Functional Area: Number: $2\ell_2$		LL	2	
Casing Type: Steel Stainless Steel		V	_ pv	C
Screened/Open-Hole WellScreened/	M	onitor l ength:	Interval	_/Oft
Flush-mount/Above-ground Completion:	al			
Reported Constructed Depth: 22.85 28.85	ft BGS	orBTO	Ccircl	e one)
INSPECTION ITEMS	YES	NO	N/A	COMMENTS
Well-head Completion:				
 Above-ground completion: Number of guard posts at well: <u>4</u> 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? 	[X] [] [] []	[] [×] [×]	[] [] [] []	
Does the protective casing have a weep hole?	[x]	[]	[]	
Does vegetation around the well need clearing?	[]	[🔨]	[]	
Flush-mount completion:				
box?	[]	[]	٢XI	
Does the well have a flush-mount box?	[]	[]	[7]	
Is the traffic cover cracked or broken?	[]	[]	[7]	
Is the concrete apron cracked or deteriorated? Frost			r.\(1	
heaving?	ll		[]]	
Is the well labeled with the correct number?	671	۲1	۲ I	******
Describe labeling: Received with the context number?		1 1	1]	Q20072740301-974112442-000297
Security:				
Does the well have a cap or lid?	[\]	[]	[]	
Does the well have a weatherproof lock?	$[\times]$	[]	[]	
Does the lock secure the well?				
Does the inner casing have a water-tight cap?	ιγı	L I	L J	
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 the well				
casing?	[\chi]	[]	[]	
Measured depth of the well from measurement point:	39 CH	22	$\frac{.61+}{18-22}$	12 = 22.73
Are there any obstructions in the well?	neasuren	ющ): ⊅ [√]	יש-גג.4 []	<u>21</u>
Description of well bottom conditions (soft. hard. etc):	ĹJ	Hard	LJ	
Inspection Date: $4 - 25 - 2006$ Inspected by:	6-1Ja	rris		

WELL INFORMATIONWellLocation/Functional Area:Number: $\cancel{1200}$	<u> </u>
Casing Type: Steel Stainless Steel	PVC
Screened/Open-Hole Well Type: Screened	Monitor Interval Length: <u>/0</u> ft
Flush-mount/Above-ground Completion:	5 runnil
Reported Constructed Depth: 21,53	ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
Above-ground completion: $\angle /$ Number of guard posts at well: $\angle /$ Are the posts positioned to prevent collision damage to thewell?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-mountbox?Does the well have a flush-mount box?Is the traffic cover cracked or broken?Is the concrete apron cracked or deteriorated? Frostheaving?Identification:Is the well labeled with the correct number?Dees the well have a cap or lid?Does the well have a cap or lid?Does the well have a weatherproof lock?Does the inner casing have a water-tight cap?Down-hole Condition:Is the well casing bent, corroded, or broken (at thesurface?)	$\begin{bmatrix} X \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\$
Is the well casing loose (at the surface)? Is a measurement point marked at the top of the well casing? Measured depth of the well from measurement point: Thickness of sediment accumulation (reported depth-presen Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc):	$\begin{bmatrix} 1 \\ 1 \\ 1 \\ 2 \\ 3 \\ 4 \\ 4 \\ 4 \\ 4 \\ 2 \\ 2 \\ 3 \\ 6 \\ 4 \\ 1 \\ 2 \\ 2 \\ 3 \\ 6 \\ 4 \\ 1 \\ 2 \\ 2 \\ 2 \\ 3 \\ 6 \\ 1 \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \\ 2$
Inspection Date: $4 - 25 - 2i34$ Inspected by:	- gharris
) [scray medal beside well]	

WELL INFORMATION Well Location/Functional Area: Number: <u>LL2mw-algobics.org</u>	LL 2	
Casing Type: $\mathcal{L}^{\mathcal{C}^{\times}}$ Steel Stainless Stee	PVC	
Screened/Open-Hole Well Type: <u>Screened</u>	Monitor Interval Length: <u>/</u> O	
Flush-mount/Above-ground Completion:	ground	
Reported Constructed Depth: 23.59	ft BGS or BTOC (circle one)	
INSPECTION ITEMS	YES NO N/A COMMENTS	
Well-head Completion:		
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 the pad cracked or deteriorated? Frost heaving?		
Is steel protective casing installed?		
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?		
Does the well have a flush-mount box?		
Is the traffic cover cracked or broken?		<u> </u>
heaving?	ri ri rki	
Identification		
Is the well labeled with the correct number?		
Describe labeling: Brass Plate		
Security:		
Does the well have a cap or lid?	[X] [] []	
Does the well have a weatherproof lock?	[X] [] []	
Does the lock secure the 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?)		
suract:) Is the well casing loose (at the surface)?	[] [×] [] [] [×] []	
Is a measurement point marked at the top of the well casing?		
Measured depth of the well from measurement point	4 V24 40 + 12 = 24 =	
Thickness of sediment accumulation (reported depth-prese	nt measurement): DTB-24.46 CH	-
Are there any obstructions in the well?		
Description of well bottom conditions (soft, hard, etc):	hard	
Inspection Date: 4-24-2006 Inspected b	y: Gharris	

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RAVENNA ARMY AMMUI WELL INSPECTION C	INITION PLANT CHECKLIST	
WELL INFORMATION		
Well Location/Functional Area:	i i γ	
Number: <u>LLX MW - ZUU</u>	hh d	
Casing Type: # Steel Stainless Steel	V PVC	
Screened/Open-Hole Well	Monitor Interval	<i>c</i> .
Type: Scheened	$_$ Length: $_$ 20 I	ft
Flush-mount/Above-ground		
Completion: a bour	Ground	
	,	
Reported Constructed Depth: 21.99	_ ft BGS or (BTOC)(circle one)	
INSPECTION ITEMS	VES NO N/A COMMENTS	
INSI LOTION ITEMS		
Well-head Completion:		
Above-ground completion:	·	
Number of guard posts at well: 4		
Are the posts positioned to prevent collision damage to the		
Well?		<u> </u>
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?	[M] [] []	
Does vegetation around the well need clearing?	[] [X] []	
Flush-mount completion:		
is the traffic cover securely bolted to the flush-mount	ר אר די די די	
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?	IXI [] [] <u>Plate hard to Reac</u>	<u>A</u>
Security:	<u>Fe</u>	
Does the well have a cap or lid?		
Does the well have a weatherproof lock?		
Does the lock secure the well?		
Does the inner casing have a water-tight cap?	[X] [] []	
Down-hole Condition:		B00-0
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 the well		
casing?	[<code>x</code>] [·] [] []	
Measured depth of the well from measurement point: G^{W}	9.50 22.68 + 12 = 22.80	
Thickness of sediment accumulation (reported depth-present in	measurement): $VTB = 22.68$	
Are there any obstructions in the well? Description of well bottom conditions (soft hard etc):	L LX L L L L L L L L L L L L L L L L L	
Description of wen bottom conditions (sort, nard, etc).	STICKY TO MOU OF	
Inspection Data: 4-15-1006		
Inspection Date: $-7 - 2 - 2 - 0 - 0 = 0$ Inspected by:		
	-	

WELL INFORMATION Location/Functional Area: $\angle \angle \angle$ Number: $\angle \angle \angle \angle$ Casing Type: $\angle e^{CF}$ Steel Stainless Steel $\angle \angle \angle$ Casing Type: $\angle e^{CF}$ Steel Stainless Steel $\angle \angle \angle$ PVC Screened/Open-Hole Well Monitor Interval Length: $\angle O$ Type: $\angle e^{CF}$ Steel Another Steel $\angle e^{CF}$ PVC Screened/Open-Hole Well Monitor Interval Length: $\angle O$ Flush-mount/Above-ground $\triangle beve- errorent d$ Image: Correct d Image: Correct d Reported Constructed Depth: $\angle A e^{CF}$ $A e^{CF}$ Steel $A e^{CF}$ Stee	
Weil Location/Functional Area: $\angle \angle \angle$ Number: $\angle \angle \angle \angle$ Casing Type: $\rightarrow C^{++}$ Steel Stainless Steel $\angle \angle \angle$ Casing Type: $\rightarrow C^{++}$ Steel Stainless Steel $\angle \angle \angle$ PVC Screened/Open-Hole Well Monitor Interval Length: $\angle \bigcirc$ Type: $\triangle creened$ tength: $\angle \bigcirc$ Flush-mount/Above-ground $\triangle beve - crockn d$ Length: $\angle \bigcirc$ Reported Constructed Depth: $\bigcirc 1, & \otimes \bigcirc$ ft BGS or STOCkircle one) INSPECTION ITEMS YES NO N/A COMMENTS Well-head Completion: A A rete posts positioned to prevent collision damage to the well? \land	
Number: $1/2$ $2/4$ $2/2$ Casing Type: $4/2$ Yes VC Screened/Open-Hole Well Monitor Interval Length: $1/2$ PVC Screened/Open-Hole Well Monitor Interval Length: $1/2$ Processory $4/2$ Monitor Interval Length: $1/2$ Completion: $4/2$ $4/2$ $1/2$ $1/2$ Reported Constructed Depth: $2/2$ $1/2$ $1/2$ $1/2$ INSPECTION ITEMS YES NO N/A COMMENTS Well-head Completion: $4/2$ $1/2$ $1/2$ $1/2$ $1/2$ Number of guard posts at well: $4/2$ $1/2$	
Casing Type: $\rightarrow G^{+}$ Steel Stainless Steel \checkmark PVC Screened/Open-Hole Well Monitor Interval Length: $\land \land$ Type: $\land \bigcirc \lor \lor \lor \land$ Length: $\land \land$ Flush-mount/Above-ground $\land \bigcirc \lor \lor \lor \land$ ft BGS or BTOC circle one) Reported Constructed Depth: $\land \land \land \lor \circ$ ft BGS or BTOC circle one) INSPECTION ITEMS YES NO N/A COMMENTS Well-head Completion: $\land \land \lor \circ \lor \land \land \circ \lor \circ \lor \land \circ \lor \land \circ \lor \land \circ \lor \circ \lor$	
Screened/Open-Hole Well Screened Monitor Interval Length: /0 Screened/ Screened Length: /0 Flush-mount/Above-ground $\Delta bwe-ground$	
Screened/Open-Hole Well Monitor Interval Type: $S_{CYTERNA}$ Length: $I \land$ Flush-mount/Above-ground $\Delta_{bvee-Syroun} \land$ Image: Streene A Image: Streene A Reported Constructed Depth: $2 \mid S \circ$ ft BGS or STOC circle one) INSPECTION ITEMS YES NO N/A COMMENTS Well-head Completion: Above-ground completion: Image: Streene A Image: Streene A Are the posts positioned to prevent collision damage to the well? Image: Streene A Image: Streene A Image: Streene A Are any of the posts damaged or degraded? Image: Streene A Image: Streene A Image: Streene A Are any of the posts damaged or degraded? Image: Streene A Image: Streene A Image: Streene A Are any of the posts damaged or degraded? Image: Streene A Image: Streene A Image: Streene A Are any of the posts damaged or degraded? Image: Streene A Image: Streene A Image: Streene A Is the posts damaged or degraded? Image: Streene A Image: Streene A Image: Streene A Does the posts damaged or degrade? Image: Streene A Image: Streene A Image: Streene A Does the well have a flush-mount bo	
Flush-mount/Above-ground $above - ground$ Completion: $21, 80$ ft BGS or BTOC (circle one) INSPECTION ITEMS YES NO N/A COMMENTS Well-head Completion: Above-ground completion: YES NO N/A COMMENTS Mumber of guard posts at well:	
Completion: $21, 80$ ft BGS or BTOC circle one) Reported Constructed Depth: $21, 80$ ft BGS or BTOC circle one) INSPECTION ITEMS YES NO N/A COMMENTS Mumber of guard posts at well: 4	
Reported Constructed Depth: $21, 80$ ft BGS or BTOC circle one) INSPECTION ITEMS YES NO N/A COMMENTS Multiple of guard posts at well: 4 <	
INSPECTION ITEMS YES NO N/A COMMENTS Multiple of guard posts at well: $4/2$ <td></td>	
Well-head Completion: Above-ground completion: Number of guard posts at well:	
Above-ground completion: Number of guard posts at well:	
Number of guard posts at well: 4 Are the posts positioned to prevent collision damage to the well? $[X]$ $[I]$	
Are the posts positioned to prevent collision damage to the well? [X] [] <td></td>	
well? $[X]$ $[I]$ $[I]$ $[I]$ Are any of the posts damaged or degraded? $[I]$ $[X]$ $[I]$ $[I]$ Is a concrete pad installed? $[X]$ $[I]$ $[I]$ $[I]$ $[I]$ Is the pad cracked or deteriorated? Frost heaving? $[I]$ $[X]$ $[I]$ $[I]$ $[I]$ Does the protective casing have a weep hole? $[X]$ $[I]$ $[I]$ $[I]$ $[I]$ Does the protective casing have a weep hole? $[X]$ $[I]$	
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 the protective casing have a weep hole? []	
Is a concrete pad installed? $[N]$ $[]$ $[N]$ $[]$ Is the pad cracked or deteriorated? Frost heaving? $[]$ $[N]$ $[]$ $[N]$ $[]$ Is steel protective casing have a weep hole? $[N]$ $[]$ $[]$ $[]$ $[]$ Does the protective casing have a weep hole? $[N]$ $[]$ $[]$ $[]$ $[]$ Does the protective casing have a weep hole? $[N]$ $[]$	
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? Is the traffic cover securely bolted to the flush-mount box? Is the traffic cover cracked or broken? Is the concrete apron cracked or deteriorated? Frost heaving? Is the concrete apron cracked or deteriorated? Frost heaving? Is the well habeled with the correct number? Does the well habeled with the correct number? Does the well have a cap or lid? Does the well have a cap or lid? Does the well have a weatherproof lock? Does the inner casing have a water-tight cap? Does the well casing bone (at the surface?) Is the well casing loose (at the surface)? Is the well casing	
Is steel protective casing installed? [X] [] [] Does the protective casing have a weep hole? [X] [] [] [] Does the protective casing have a weep hole? [X] [] [] [] Does the protective casing have a weep hole? [X] [] [] [] [] Does the well have a flush-mount box? [X] [] [] [] [X] Does the well have a 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] Describe labeled with the correct number? [X] [] [] [] Does the well labeled with the correct number? [X] [] [] [] Does the well have a cap or lid? [X] [] [] [] Does the well have a cap or lid? [X] [] [] [] Does the lock secure the well? [X] [] [] [] Does the inner casing have a water-tight cap? [X] [] [] [] Down-hole Condition: Is the well casing bons (at the surface)? [] [X] [] [] [] Is the well casing loose (at the surface)? [] [X] [] [] Is the well casing loose (at the surface)? [] [] [X] [] [] Does the well casing have a water to the ten of the well	
Does the protective casing have a weep hole? $[X]$ $[I]$ $[I]$ Does vegetation around the well need clearing? $[X]$ $[I]$ $[I]$ $[V]$ Does the mount completion: $[X]$ $[I]$ $[I]$ $[V]$ <	
Does vegetation around the well need clearing? $[X]$ $[I]$ $[I]$ $[C]$ $CLipper, lose/lbk Flush-mount completion: I [I] $	
Flush-mount completion: Image: state	<u>K Ber</u>
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 traffic cover cracked or broken? [] [] [] [X] Is the concrete apron cracked or deteriorated? Frost [] [] [] [X] heaving? [] [] [] [X] Identification: [] [] [] [X] Is the well labeled with the correct number? [X] [] [] [] Describe labeling: $P/R ass P/A$ Security: [X] [] [] [] Does the well have a cap or lid? [X] [] [] [] Does the well have a weatherproof lock? [X] [] [] [] Does the lock secure the well? [X] [] [] [] Does the inner casing have a water-tight cap? [Y] [] [] [] Down-hole Condition: [X] [] [] Is the well casing bent, corroded, or broken (at the surface?) [] [X] [] [] Is the well casing loose (at the surface)? [] [X] [] []	
$box?$ $\begin{bmatrix} 1 & 1 & 1 & 1 \\ 1 & 1 & 1 \\ 2 & 1 \end{bmatrix}$ Does the well have a flush-mount box? $\begin{bmatrix} 1 & 1 & 1 & 1 \\ 2 & 1 \end{bmatrix}$ Is the traffic cover cracked or broken? $\begin{bmatrix} 1 & 1 & 1 & 1 \\ 2 & 1 \end{bmatrix}$ Is the concrete apron cracked or deteriorated? Frost heaving? $\begin{bmatrix} 1 & 1 & 1 & 1 \\ 2 & 1 \end{bmatrix}$ Is the concrete apron cracked or deteriorated? Frost heaving? $\begin{bmatrix} 1 & 1 & 1 & 1 \\ 2 & 1 \end{bmatrix}$ Identification: $\begin{bmatrix} 1 & 1 & 1 & 1 \\ 2 & 1 \end{bmatrix}$ Is the well labeled with the correct number? $\begin{bmatrix} 1 & 1 & 1 & 1 \\ 2 & 1 \end{bmatrix}$ Describe labeling: $\underbrace{P/P_{a} ays} P/A_{d}$ Security: $\begin{bmatrix} 1 & 1 & 1 & 1 \\ 2 & 1 \end{bmatrix}$ Does the well have a cap or lid? $\begin{bmatrix} 1 & 1 & 1 & 1 \\ 2 & 1 \end{bmatrix}$ Does the well have a weatherproof lock? $\begin{bmatrix} 1 & 1 & 1 & 1 \\ 2 & 1 \end{bmatrix}$ Does the lock secure the well? $\begin{bmatrix} 1 & 1 & 1 & 1 \\ 2 & 1 \end{bmatrix}$ Does the inner casing have a water-tight cap? $\begin{bmatrix} 1 & 1 & 1 & 1 \\ 2 & 1 \end{bmatrix}$ Down-hole Condition: $\begin{bmatrix} 1 & K & 1 \\ 2 & 1 \end{bmatrix}$ Is the well casing bent, corroded, or broken (at the surface?)? $\begin{bmatrix} 1 & K & 1 \\ 2 & 1 \end{bmatrix}$ Is the well casing loose (at the surface)? $\begin{bmatrix} 1 & K & 1 \\ 2 & 1 \end{bmatrix}$	
Does the well have a flush-mount box? $\begin{bmatrix} 1 & 1 & 1 & 1 & 1 \\ 1 & 1 & 1 & 1 & 1 \end{bmatrix}$ Is the traffic cover cracked or broken? $\begin{bmatrix} 1 & 1 & 1 & 1 & 1 \\ 1 & 1 & 1 & 1 & 1 \end{bmatrix}$ Is the traffic cover cracked or broken? $\begin{bmatrix} 1 & 1 & 1 & 1 & 1 & 1 \\ 1 & 1 & 1 & 1 &$	
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? Is the well labeling: Placass llade Security: Does the well have a cap or lid? Does the well have a cap or lid? Image: Does the well have a weatherproof lock? Image: Does the lock secure the well? Does the lock secure the well? Does the inner casing have a water-tight cap? Image: Down-hole Condition: Is the well casing bose (at the surface)? Is the well casing loose (at the surface)?	
Is the concrete apron cracked or deteriorated? Frost heaving? [] [] [] [] Identification: [] [] [] [] Is the well labeled with the correct number? [] [] [] [] Describe labeling: $p/p_{ass} p/q_{aff}$ Security: [] [] [] [] Does the well have a cap or lid? [X] [] [] Does the well have a weatherproof lock? [X] [] [] Does the lock secure the well? [X] [] [] Does the inner casing have a water-tight cap? [X] [] [] Down-hole Condition: [] [X] [] [] Is the well casing bent, corroded, or broken (at the surface?) [] [X] [] [] Is the well casing loose (at the surface)? [] [X] []	
heaving? $[] [] [] [] []]$ Identification:	
Identification: [x] [] [] Is the well labeled with the correct number? [x] [] [] Describe labeling: $p/p_c ass p/a + c$ [x] [] [] Security: [x] [] [] [] [] Does the well have a cap or lid? [x] [] [] [] Does the well have a weatherproof lock? [x] [] [] [] Does the lock secure the well? [x] [] [] [] Does the inner casing have a water-tight cap? [x] [] [] [] Down-hole Condition: [x] [] [] [] [] [] Is the well casing bent, corroded, or broken (at the surface?) [] [] [] [] [] Is the well casing loose (at the surface)? [] [] [] [] [] []	
Is the well labeled with the correct number? $[x]$	
Describe labeling: PARASS VIAH Security:	
Does the well have a cap or lid? [×] [] [] Does the well have a weatherproof lock? [×] [] [] Does the lock secure the 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)? [] [] []	
Does the well have a cap of hu? $[\times]$ $[1]$ $[1]$ $[1]$ Does the well have a weatherproof lock? $[\times]$ $[1]$ $[1]$ $[1]$ Does the lock secure the well? $[\times]$ $[1]$ $[1]$ $[1]$ Does the inner casing have a water-tight cap? $[\times]$ $[1]$ $[1]$ $[1]$ Down-hole Condition: $[\times]$ $[1]$ $[1]$ $[1]$ $[1]$ Down-hole Condition: $[\times]$ $[1]$ $[1]$ $[1]$ $[1]$ Is the well casing bent, corroded, or broken (at the surface?) $[1]$ $[\times]$ $[1]$ $[\times]$ Is the well casing loose (at the surface)? $[1]$ $[\times]$ $[1]$ $[\times]$ $[1]$	
Does the well have a weatherproof lock? [X]	
Does the nork secure the well? [X]	
Does nice niner casing have a water-tight cap: [x] [] [] Down-hole Condition:	
Is the well casing bone, corroded, or broken (at the surface?) Is the well casing loose (at the surface)? Is th	<u> </u>
surface?) [] [\times] [] Is the well casing loose (at the surface)? [] [\times] []	Darconyl
Is the well casing loose (at the surface)? [] $[X]$ []	
	C
is a measurement point marked at the top of the well	
casing?	
Measured depth of the well from measurement point: $4,22$ 21.08 + 12 = 21.20	
Thickness of sediment accumulation (reported depth-present measurement): bTB=21.08	
Are there any obstructions in the well? [] [X] []	
Description of well bottom conditions (soft, hard, etc):	
Inspection Date: 4-25 Inspected by: A WARE	
$\frac{1}{\alpha} = \frac{1}{\alpha} = \frac{1}$	
1) major ruts embandment	
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Appendix C

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RAVENNA ARMY AMMU	NITION PLANT
WELL INSPECTION C	ILUNLIS I
WELL INFORMATION	
Well Location/Functional Area:	117
Number: $1/2mu-268$	LLL
Casing Type: Steel Stainless Steel	PVC
Screened/Onen-Hole Well	Monitor Interval
Type:Screened	Length:ft
Flush-mount/Above-ground Completion:	round
Reported Constructed Depth: 29,12	ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
wen-nead Completion:	
Above-ground completion:	
Number of guard posts at well: 7	
well?	
Are any of the posts damaged or degraded?	$\sum_{i=1}^{n} \left[\frac{1}{2} \right] \left[\frac{1}{2} \left[\frac{1}{2} \right] \left[\frac{1}{2} \right] \left[\frac{1}{2} \left[\frac{1}{2} \right] \left[\frac{1}{2} \left[\frac$
Is a concrete pad installed?	\mathbb{N} [] []
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?	[] [] [X]
Does the well have a flush-mount box?	
Is the traffic cover cracked or broken?	[] [] [X]
Is the concrete apron cracked or deteriorated? Frost	
heaving?	L] [] [¥]
Identification:	·
Is the well labeled with the correct number?	
Describe labeling: Bruss Plate	
Deep the well have a context lid?	
Does the well have a weatherproof look?	
Does the lock secure the well?	
Does the inner casing have a water-tight can?	
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 the well	
casing?	F [X] [] []
Measured depth of the well from measurement point: $\frac{\partial V}{\partial H}$	3.42 29.88 +.12 = 30.00
Thickness of sediment accumulation (reported depth-present	measurement): DTB = 29,88
Are there any obstructions in the well?	[]_[×] []
Description of well bottom conditions (soft, hard, etc):	Hard
	1
Inspection Date: $4 - 25 - 2000$ Inspected by:	aharns
· ·	J
(1)	-

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RAVENNA ARMY AMM WELL INSPECTION	IUNITION PLANT I CHECKLIST
WELL INFORMATION Well Location/Eurotional Area:	
Number: $\frac{1+2mw-269}{2}$	<u></u>
Casing Type: $4 - 4 - 6 + 6 + 3 = 6 + 3 = 5 = 5 = 5 = 5 = 5 = 5 = 5 = 5 = 5 =$	PVC
Screened/Open-Hole Well Type: Screened	Monitor Interval Length: <u>10</u> ft
Flush-mount/Above-ground Completion: <u>Above-ground</u>	sund
Reported Constructed Depth: 29.23	ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
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?	[] [x] [] [] [x] [] [] [] [x] []
Does the protective casing installed? Does the protective casing have a weep hole? Does vegetation around the well need clearing? <i>Flush-mount completion:</i>	$\begin{bmatrix} X & [] & [] \\ \hline X & [] \\ \hline C \\ \hline Y & [] \\ \hline C \\ \hline Y & [] \\ \hline C \\ \hline Y & [] \\ \hline C \\ \hline Y & [] \hline Y & [] \\ \hline Y & [] \hline Y & [] \\ \hline Y & [] \hline Y & [] \\ \hline Y & [] \\ \hline Y & [] \hline Y & [Y & [Y \\ \hline Y & [Y & [Y \\ \hline Y & [Y & [Y \\ \hline Y & [Y & [Y \\ Y & [Y & [Y \\ Y & [$
Is the traffic cover securely bolted to the flush-mount box?	[] [] [X]
Is the concrete apron cracked or deteriorated? Frost	
heaving? Identification:	
Is the well labeled with the correct number? Describe labeling: $\underline{B}_{f \ll 5}$	
Security: Does the well have a cap or lid? Does the well have a weatherproof lock? Does the lock secure the well? Does the inner casing have a water-tight cap? Down-hole Condition:	[>] [] [] [X] [] []
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 the well	[] [X] []
Measured depth of the well from measurement point: Thickness of sediment accumulation (reported depth-prese Are there any obstructions in the well?	$+ \times \times$
Description of well bottom conditions (soft, hard, etc): Inspection Date: $4/-25-200$ (v Inspected by v	: Gharris

Appendix C

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R	AVENNA ARMY AMMU WELL INSPECTION (NITION CHECKL	PLAN JST	ľ		
WELL INTODMATION						
Well L	ocation/Functional Area:		11	٦		
Number: <u>42 mw - 2</u> 70	-		LL	2	·	
Casing Type: Steel	Stainless Steel		l	PV	C	
Screened/Open-Hole Well	Screen	N	Ionitor ength:	Interval	_10	ft
Flush-mount/Above-ground Completion:	above - g	round		••		
Reported Constructed Depth:	20.05	_ ft BGS	orBTC	C(circl	e one)	
NSPECTION ITEMS		YES	NO	N/A	COMMENTS	
Well-head Completion:						
Above-ground completion: Number of guard posts at well: Are the posts positioned to preven well? Are any of the posts damaged or Is a concrete pad installed? Is the pad cracked or deteriorated Is steel protective casing installed Does the protective casing have a Does vegetation around the well for	<i>L</i> / nt collision damage to the degraded? I? Frost heaving? I? I weep hole? need clearing?					
<i>Iush-mount completion:</i> Is the traffic cover securely bo box?	olted to the flush-mount	[]	[]	[\]		
Does the well have a flush-mount Is the traffic cover cracked or bro Is the concrete aprop cracked	t box? ken? or deteriorated? Frost	[]	[]	[¥] [¥]		
heaving?		[]	[]	[¥]		
lentification:		г . т	г 1	, , , .		
Describe labeling:	Brass Plate	[¥]				
Does the well have a cap or lid?			[]	[]		
Does the well have a weatherproc	of lock?	[X]	[]	[]		
Does the lock secure the well?		$[\times]$	[]	[]		
Does the inner casing have a wate	er-tight cap?	[X]	[]	[]		
Is the well casing bent, corroded	or broken (at the					
surface?)		[]	[×]	[]		
Is the well casing loose (at the sur	rface)?	[]	$[\times]$	[]]		
a measurement point marked casing?	i at the top of the well	ι κ.i	ſ٦	۲ I		
Measured depth of the well from	measurement point:	- X1	22,3	7+11	2 = 22,49	
Thickness of sediment accumulat	ion (reported depth-present	measuren	nent): 🕅	TB 22,	57	
Are there any obstructions in the Description of well bottom condi	well? tions (soft, hard, etc):	[]	[] 	[] lard		
		·		· · · · · · · · · · · · · · · · · · ·		
				a		

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Appendix	С
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WELL INSPECTION C	HEUKL	191		
WELL INFORMATION Well Location/Functional Area:		; ;	>	
Number: $\frac{1}{2}$ Number: $\frac{1}{2}$		<u></u>	<u>- </u>	
Casing Type: Steel Stainless Steel			PV	/C
Screened/Open-Hole Well Type: Screened	M	lonitor l ength:	Interval	_ <u></u> 6ft
Flush-mount/Above-ground Completion: Above-ground	~ J			
Reported Constructed Depth: 38.62	ft BGS	orBTO)(circ	le one)
INSPECTION ITEMS	YES	NO	N/A	COMMENTS
Well-head Completion:				
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?	$\widehat{\Box}$		[]	
Is steel protective casing installed?			[]	
Does the protective casing have a ween hole?		r 1	[]	
Does vegetation around the well need clearing?	[7] [5]	L J F I		
Eluch mount completion	נאַז	LJ	LJ	Chipper - Mise Bilchevily
Is the traffic cover securely helted to the fluch mount				
is the traffic cover securely bolied to the hush-mount	Г 1	r ı	۲V1	
UOX?	11	L J r r		
Loes the well have a flush-mount box?				
Is the trainic cover cracked or broken?	ll	[]	נאו	
is the concrete apron cracked or deteriorated? Prost	с 1	r 1	БЛ	
neaving?	ιı	t I	[7]	
Identification:	Ь / Т	гı	гı	
Is the well labeled with the correct number?	[X]		LJ	
Describe labeling: 13rhj Yl4+e				·
Security:	6 7			
Does the well have a cap or lid?	[X]			
Does the well have a weatherproof lock?	$[\times]$			
Does the lock secure the well?	[X]	[]	[]	
Does the inner casing have a water-tight cap?	[~]	[]	[]	
Down-hole Condition:				
Is the well casing bent, corroded, or broken (at the			_	
surface?)	[]	[义]	[]	
Is the well casing loose (at the surface)?	[]	$[\times]$	[]	
Is a measurement point marked at the top of the well				
casing?	- [X] ³	β[]	[]	
Measured depth of the well from measurement point: $\underline{\mathcal{H}}$	274V	40.10)+.1	2 = 40.22
Thickness of sediment accumulation (reported depth-present n	neasuren	nent): 87	B= 40.	GH
Are there any obstructions in the well?	[]	[X]	[]	
Description of well bottom conditions (soft, hard, etc):		Hard		
Inspection Date: $4 - 24 - 24 = 24$ Inspected by:	g h	grri'	Ś	
			-	
$\overline{\mathbb{V}}$				

RAVENNA ARMY AN WELL INSPECTI	MMUNITION PLANT ION CHECKLIST
WELL INFORMATION Well Location/Functional Ar Number: <u>L.3.mw-233</u>	rea:
Casing Type: Steel Stainless S	teel <u>V</u> PVC
Screened/Open-Hole Well Type: <u>Screened</u>	Monitor Interval Length: /O ft
Flush-mount/Above-ground Completion:	ground
Reported Constructed Depth: 32.02	ft BGS or BTOC (gircle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
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?	XI [] [] [] [] [] [] [] [] [] [] [] [] [] []
Is steel protective casing installed? Does the protective casing have a weep hole? Does vegetation around the well need clearing?	[X] [] [] [X] [] [] [] [X] []
Flush-mount completion: Is the traffic cover securely bolted to the flush-mound hor?	unt
Does the well have a flush-mount box? Is the traffic cover cracked or broken? Is the concrete arron cracked or deteriorated? Fr	
heaving? Identification:	[] [] []
Is the well labeled with the correct number? Describe labeling: $B_{0.55}$ $P_{12}+e$	[×] [] []
Security: Does the well have a cap or lid?	[>] [] []
Does the well have a weatherproof lock? Does the lock secure the 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)?	[] [x] []
Is a measurement point marked at the top of the w casing?	ell
Measured depth of the well from measurement point: Thickness of sediment accumulation (reported depth-pro	a44.84732.93+0.12=33.05 esent measurement): $y_{FB}=32.93$
Description of well bottom conditions (soft, hard, etc):	Hard Hard
Inspection Date: $4 - 24 - 2006$ Inspected	1 by:harris
$\langle \psi \rangle$	

WELL INSPECTION CI	HECKLIST
WELL INFORMATION	
Well Location/Functional Area:	
Number: $LL_3 m_{W} - 234$	423
Casing Type: Steel Stainless Steel	PVC
Screened/Open-Hole Well	Monitor Interval
Type: <u>Xpeneor</u>	$\underline{-}$ Length: $\underline{-}$ $\underline{-}$ It
Flush-mount/Above-ground	
Completion: Above - grand	
· · · · · · · · · · · · · · · · · · ·	
Reported Constructed Depth: 21.89	ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
A hove 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?	[] [X] []
Does vegetation around the well need clearing?	[] [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 trainic cover cracked or broken?	() () (<u>x</u>)
heaving?	
Identification:	
Is the well labeled with the correct number?	
Describe labeling: Bress plate	
Security:	
Does the well have a cap or lid?	[N] [] []
Does the well have a weatherproof lock?	[x] [] []
Does the lock secure the well?	[×] [] []
Does the inner casing have a water-tight cap?	[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 the well	
Measured denth of the well from measurement point:	$(X _{1}) (1 + 0) = 12.72$
Thickness of sediment accumulation (reported denth-present n	neasurement): $DTD = 22.61 \land u$
Are there any obstructions in the well?	
Description of well bottom conditions (soft, hard, etc):	Hard
• • • • •	
Inspection Data: $U = \gamma U = K L$	CHarris
Inspection Date: $7 - 27 - 0.6$ Inspected by:	GUARIZ

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RAVENNA ARMY AMMUL WELL INSPECTION C	NITION PLANT HECKLIST
WELL INFORMATION	
Well 6 th Location/Functional Area:	
Number: <u>LL3MIN-240</u> 235	LLS
Casing Type: Steel Stainless Steel	PVC
Screened/Open-Hole Well Type: <u>Screened</u>	Monitor Interval Length: 10 ft
Flush-mount/Above-ground Completion: Above - 9 No	m A
Reported Constructed Depth: 22.03	ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
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?	[X] [] []
Does vegetation around the well need clearing?	X [] [] Clipper
Flush-mount completion:	
Is the traffic cover securely bolted to the flush-mount	
box?	[] [] [X]
Does the well have a flush-mount box?	
Is the traffic cover cracked or broken?	[] [] [X]
Is the concrete apron cracked or deteriorated? Frost	
heaving?	[] [] [] []
Identification:	•
Is the well labeled with the correct number?	[x] [] []
Describe labeling: Brass Plate	
Security:	
Does the well have a cap or lid?	
Does the well have a weatherproof lock?	
Does the lock secure the well?	
Does the inner casing have a water-tight cap?	
Down-hole Condition:	
Is the well casing bent, corroded, or broken (at the	
Surrace?)	
Is a measurement point marked at the top of the well	
casing?	MIII
Measured depth of the well from measurement point.	
Thickness of sediment accumulation (renorted denth-present	measurement): DTB = 22.96
Are there any obstructions in the well?	
Description of well bottom conditions (soft. hard. etc):	Hard
• • • • • • • • • • • • • • • • • • • •	
Inspection Date: $4 - 24 - 24 = 2006$ Inspected by:	gharris
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- in which of old seway	

Appendix C

RAVENNA ARMY AMMUN WELL INSPECTION C	NITION PLANT HECKLIST
WELL INFORMATION	
Well Generation/Functional Area: Number: <u>16364-3</u> 6	443
Casing Type: Steel Stainless Steel	PVC
Screened/Open-Hole Well Screened	Monitor Interval Length: <u>/</u> O ft
Flush-mount/Above-ground Completion: Above-ground	n U
Reported Constructed Depth: <u>26.00</u>	ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
Above-ground completion: Number of guard posts at well: <u>4</u>	-
well?	[×] [] []
Are any of the posts damaged or degraded?	[] [X] []
Is a concrete pad installed?	
Is the pad cracked or deteriorated? Frost neaving?	
Does the protective casing have a ween hole?	
Does vegetation around the well need clearing?	
Flush-mount completion:	
Is the traffic cover securely bolted to the flush-mount	
box?	[] [] [X]
Does the well have a flush-mount box?	
Is the traffic cover cracked or broken?	
Is the concrete apron cracked or deteriorated? Prost	ר ז ר ז געז
Identification:	
Is the well labeled with the correct number?	
Describe labeling: Bruss Plate	
Security:	
Does the well have a cap or lid?	
Does the well have a weatherproof lock?	[λ] [] []
Does the lock secure the well?	[×] [] []
Does the inner casing have a water-tight cap?	[X] [] []
Down-hole Condition:	
is the well casing bent, corroded, or broken (at the	
Is the well casing loose (at the surface)?	
Is a measurement point marked at the top of the well	сэ қсэ сэ <u></u>
casing?	[X]_5B[] []
Measured depth of the well from measurement point:	5.54 0 26.20 +.12 = 26.82
Thickness of sediment accumulation (reported depth-present r	neasurement): D76=26.70
Are there any obstructions in the well?	
Description of well bottom conditions (soft, hard, etc):	nard
Inspection Date: $4 - 24 - 2006$ Inspected by:	CHarris
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Appendix C

WELL INSPECTION C	IIICAL	131		
WELL INFORMATION Well Location/Functional Area: Number: $\mathcal{H}_{3\mu\nu}$ - \mathcal{A}_{37}	L	13		
Casing Type: Steel Stainless Steel		V	_ PV	ΎC
Screened/Open-Hole Well Screened	M	onitor l ength:	(nterval	_ <i>[(</i>)ft
Flush-mount/Above-ground Completion:	nd		7	
Reported Constructed Depth: 24.73	ft BGS	orBTC	C(circl	le one)
INSPECTION ITEMS	YES	NO	N/A	COMMENTS
Well-head Completion:				
Above-ground completion: Number of guard posts at well: Are the posts positioned to prevent collision damage to the		۷		
 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? 	[X] [X] [X] [X] [X]	[] [X] [X] [] []	[] [] [] []	
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 		[]]	[X] [X] [X]	
Identification: Is the well labeled with the correct number?	[x]	[]	[]	
Describe labeling: Brass Plata				
Does the well have a cap or lid? Does the well have a weatherproof lock? Does the lock secure the well? Does the inner casing have a water-tight cap? Down-hole Condition:	[X] [X] [X]		[] [] []	
Is the well casing bent, corroded, or broken (at the surface?)	[]	[\v]	[]	
Is the well casing loose (at the surface)? Is a measurement point marked at the top of the well casing? Measured depth of the well from measurement point:	[] < [X] +3:50	IXI DIPS	[] 52+	12 = 25.64
Thickness of sediment accumulation (reported depth-present in Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc):	measurem	ient): b [X] ar-d	TB=25	52 GH
Inspection Date: $4 - 24 - 2006$ Inspected by:	g h	urris)	
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RAVENNA ARMY AMMUN WELL INSPECTION CE	ITION PLANT IECKLIST
WELL INFORMATION Well Location/Functional Area	
Number: 123 MW -238	LL 3
GH	· · · · · · · · · · · · · · · · · · ·
Casing Type: Steel Stainless Steel	PVC
Screened/Onen-Hole Well	Monitor Interval
Type: Screen.ed	Length: $/O$ ft
Flush-mount/Above-ground Completion:	<u> </u>
Reported Constructed Depth: 22.68	ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
Above-ground completion: Number of guard posts at well: <u>4</u> Are the posts positioned to prevent collision damage to the well?	[X] [] []
Are any of the posts damaged or degraded?	
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	LI LI LYJ
neaving?	
Is the well labeled with the correct number?	
Describe labeling: B_{FAU} $Plat$	
Security:	<u>.</u>
Does the well have a cap or lid?	[X] [] []
Does the well have a weatherproof lock?	[x] [] []
Does the lock secure the well?	[×] [] []
Does the inner casing have a water-tight cap?	[K] [] []
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 the well	
casing?	$[X]_{B}$
Thickness of sediment accumulation (reported depth present m	$7.05 \times 45.71 \pm 0.12 \times 25.56$
Are there any obstructions in the well?	
Description of well bottom conditions (soft, hard, etc):	Hard
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Inspection Date: <u>4-24-2006</u> Inspected by: _	CHArris

WELL INSPECTION CHECKLIST					
WELL INFORMATION					
Well Location/Functional Area:					
Number: $\lambda \lambda 3 \text{ mW} - \lambda 39$	443				
Casing Type: Steel Stainless Steel	PVC				
Screened/Open-Hole Well	Monitor Interval				
Type: Schenen	$_$ Length: $9.6 _ fb$ ft				
Flush-mount/Above-ground	1				
Reported Constructed Depth: 36 22	ft BGS or BTOC (circle one)				
	_				
INSPECTION ITEMS	YES NO N/A COMMENTS				
well-nead Completion:					
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					
Doos the well have a fluch mount how?					
Lots the traffic cover enalged on broken?					
Is the concrete encourse cracked of bloken?					
heaving?	rırır V i				
Identification.					
Is the well labeled with the correct number?					
Describe labeling: Real date					
Security:					
Does the well have a cap or lid?					
Does the well have a weatherproof lock?					
Does the lock secure the 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 the well					
casing?	* [x] [], []ρτβ				
Measured depth of the well from measurement point:	37- 23,78 6th 37.97+0,12 = 38.09				
Thickness of sediment accumulation (reported depth-present measurement): 387-331-97 GH					
Are there any obstructions in the well?	[] [X] []				
Description of well bottom conditions (soft, hard, etc):	Hard				
Inspection Date: $4 - \lambda 4 - 2006$ Inspected by:	GHarris				

WELL INSI ECTION C	III)(III)	101		
WELL INFORMATION				
Number: 1.1 3 Mart - 240	663			
Casing Type: Steel Stainless Steel	PVC			
Screened/Open-Hole Well Screened	Monitor Interval Length: <u>10</u> ft			lft
Flush-mount/Above-ground Completion:	~A		-	
Reported Constructed Depth: 24.63	ft BGS or BTOO (circle one)			
INSPECTION ITEMS	YES	NO	N/A	COMMENTS
Well-head Completion:				
Above-ground completion:				
Number of guard posts at well:				
Are the posts positioned to prevent collision damage to the	6.0		r 1	
well?				
Are any of the posts damaged or degraded?			l J r 1	filted and heaved tup
Is a concrete pad installed?		L] NJ	11	
Is the part clacker of deteriorated? Prost heaving:		[]	11	
Does the protective casing instance:			[]	
Does vegetation around the well need clearing?			[]	Alizand Riss / Rithan
Flush-mount completion:		ίJ	LJ	CHIPPEPer LESE/ DIE Deny
Is the traffic cover securely bolted to the flush-mount				
box?	[]	[]	ſXI	
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			1	
heaving?	[]	[]	[Y]	and a second
Identification:			,	
Is the well labeled with the correct number?	[[]	[]	
Describe labeling: Brass Plate				
Security:		r 1	, ,	
Does the well have a cap or lid?				
Does the well have a weatherproof lock?				
Does the lock secure the well?	[X]		11	
Does the little cashing have a water-tight cap?	(X)	[]	IJ	
Is the well casing bent corroded or broken (at the				anna a an ann an Mitherson ann an Anna Anna Anna Anna Anna Anna
surface?)	[]	$[\mathbf{X}]$	[]	
Is the well casing loose (at the surface)?		$[\times]$		
Is a measurement point marked at the top of the well				
casing?	Y X	n	[]	
Measured depth of the well from measurement point:	27-14-D	57,23	$3 + .1^{\prime}$	2 = 37,35
Thickness of sediment accumulation (reported depth-present	measuren	nent):矛	x ~37.2	5
Are there any obstructions in the well?	[]	[X]	[]	
Description of well bottom conditions (soft, hard, etc):	Hav	- d		
	/	(1 .		
Inspection Date: $4 - 24 - 06$ Inspected by:	<u>(-)</u>	darri	5	
RAVENNA ARMY AMMUN WELL INSPECTION C	VITION PLANT HECKLIST			
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WELL INFORMATION				
Well Location/Functional Area: Number: <u>LL3mu-24</u> /	LL3			
Casing Type: Steel Stainless Steel	PVC			
Screened/Open-Hole Well Type: Screened	Monitor Interval Length: <u>/ O</u> ft			
Flush-mount/Above-ground Completion:	ound			
Reported Constructed Depth: 24,95 -22,68	ft BGS or BTOC (circle one)			
INSPECTION ITEMS	YES NO N/A COMMENTS			
Well-head Completion:				
Above-ground completion:				
Number of guard posts at well: <u>7</u>				
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	гэ гэ г у д			
box?				
Does the well have a flush-mount box?				
Is the traffic cover cracked or broken?	[] [] [X]			
Is the concrete apron cracked or deteriorated? Frost				
heaving?	ιι ι ιχι			
Identification:				
Is the well labeled with the correct number?				
Describe labeling: Brass 114+ (Managana and a second and a second			
Security:				
Does the well have a cap of lid?				
Does the lock course the small?				
Does the inner engine have a water tight and?				
Does the inner casing have a water-tight cap?				
Lown-noile Condition:				
is the went casing beni, contoded, or broken (at the surface?)				
surface.) Is the well casing loose (at the surface.)?				
Is a measurement noint marked at the top of the well	LI LXI LI			
casing?				
Measured depth of the well from measurement point	24 0121.71 + 17 = 21 42			
Thickness of sediment accumulation (reported depth-present i	measurement): TB-21.77 CH			
Are there any obstructions in the well?				
Description of well bottom conditions (soft, hard, etc):	Sticky			
······································				
	ub			
Inspection Date: $4 - 24 - 2004$ Inspected by:	<u> </u>			
	5			
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RAVENNA ARMY AMMU WELL INSPECTION C	NITION PLANT CHECKLIST
WELL INFORMATION	
Well Location/Functional Area:	123
ALSMU-242	<u> </u>
Casing Type: Steel Stainless Steel	PVC
Screened/Open-Hole Well Type: <u>Screened</u>	Monitor Interval Length: <u>10</u> ft
Flush-mount/Above-ground Completion: <u>Above-ground</u>	nd
Reported Constructed Depth: <u>21.73</u>	ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
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 vegetation around the well need clearing?	$\begin{bmatrix} X \end{bmatrix} \begin{bmatrix} 1 \end{bmatrix} \begin{bmatrix} 1 \end{bmatrix} \begin{bmatrix} 0 \\ 0 \end{bmatrix} \begin{bmatrix} 1 \end{bmatrix} \begin{bmatrix} 0 \\ 0 \end{bmatrix} \begin{bmatrix} 1 \end{bmatrix} \begin{bmatrix} 0 \\ 0 \end{bmatrix} \begin{bmatrix} 0 $
Flush-mount completion:	
Is the traffic cover securely bolted to the flush-mount	
Does the well have a flush-mount hox?	
Is the traffic cover cracked or broken?	
Is the concrete apron cracked or deteriorated? Frost	· · · ·
heaving?	[] [] [/]
Is the well labeled with the correct number?	M [] []
Describe labeling: Brass Plate	
Security:	· · · · · · · · · · · · · · · · · · ·
Does the well have a weatherproof lock?	
Does the lock secure the 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 a measurement point marked at the top of the well	L J L A J L J
casing?	[×], B[] []
Measured depth of the well from measurement point:	3-29-11-22.52+,12=22.64
Thickness of sediment accumulation (reported depth-present in	measurement): DTB-42.52
Are mere any obstructions in the well? Description of well bottom conditions (soft hard etc):	$I \rightarrow Harch$
Description of wen bottom containons (soft, fiata, ctc).	
Inspection Date: $4 - 24 - 2104$ Inspected by:	gharris
Starte Inchar	

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RAVENNA ARMY AMMUN WELL INSPECTION C	NITION PLANT HECKLIST
WELL INFORMATION	
WellLocation/Functional Area:Number: $\lambda - 243$	LL3
Casing Type: Steel Stainless Steel	PVC
Screened/Open-Hole Well Type: <u>Screened</u>	Monitor Interval Length: _/Oft
Flush-mount/Above-ground Completion: <u>A bowe - G round</u>	c.A
Reported Constructed Depth: 25,60	ft BGS on BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
Above-ground completion: Number of guard posts at well: <u>///</u> Are the posts positioned to prevent collision damage to the	
well?	[x] [] []
Are any of the posts damaged or degraded?	[] [X] []
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	
Doos the well have a fluch mount her?	
Le the traffic cover crocked or broken?	
Is the concrete encourse encoursed or deteriorected? Erect	
is the concrete apron cracked or deteriorated? Prost	
Identification:	
Is the well labeled with the correct number?	
Describe labeling:	
Security:	
Does the well have a can or lid?	
Does the well have a weather proof lock?	
Does the lock secure the well?	
Does the inner casing have a water-tight cap?	
Down-hole Condition:	
Is the well casing bent, corroded, or broken (at the surface?)	
Surface:) Is the well easing loose (at the surface)?	
Is a measurement point marked at the top of the well	
asing?	
Measured depth of the well from measurement point:	$1 \times 12 \times 12 \times 12 \times 12 \times 11$
Thickness of sediment accumulation (reported denth_present n	neasurement): $bTb = 26.34$
Are there any obstructions in the well?	
Description of well bottom conditions (soft, hard, etc):	Hard
Inspection Date: $4 - 27 - 2004$ Inspected by:	- 9 navris
OIE dry	

RAVENNA ARI WELL INSI	MY AMMUN PECTION C	NITION HECKL	PLANI IST				
WELL INFORMATION Well Location/Function Number: $h \perp 4m \cup -193$	onal Area:	L	4				
Casing Type: Steel Stai	nless Steel			PV	Ċ		
Screened/Open-Hole Well Screened	1	M L	lonitor I ength:	nterval		10	ft
Flush-mount/Above-ground Completion:	- ground	۱		~			
Reported Constructed Depth: 23	. 36	ft BGS	orBTO	Circl	e one)		
INSPECTION ITEMS		YES	NO	N/A	COM	MENTS	
Well-head Completion:			-				
Above-ground completion: 4 Number of guard posts at well: 4 Are the posts positioned to prevent collision damwell?Are any of the posts damaged or degraded?Is a concrete pad installed?Is the pad cracked or deteriorated? Frost heavingIs steel protective casing installed?Does the protective casing have a weep hole?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 flu box?Does the well have a flush-mount box?Is the traffic cover cracked or broken?Is the concrete apron cracked or deteriorate heaving?Identification:Is the well labeled with the correct number?Describe labeling: $Does the well have a cap or lid?Does the well have a weatherproof lock?Does the well have a weatherproof lock?Does the lock secure the well?$	age to the ? sh-mount ed? Frost	XXX X III XXIXIX					
Does the inner casing have a water-tight cap?		$[\times]$	[]	[]	مى مەركى بالاردار. بەرجىر مىرىمى		
 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 casing? Measured depth of the well from measurement p Thickness of sediment accumulation (reported de Are there any obstructions in the well? Description of well bottom conditions (soft, hard) 	the well G oint: <u>7</u> - epth-present n	[] [] [] [] neasurem []	[×] [×] [] [,3] 1 [,3] 1 [] [] [] [] [] [] [] [] [] [] [] [] []	[] [] • 0.12 • 1-27/3 []	$L = \lambda^{2}$	-1,43	
Inspection Date: $\frac{2}{24-24}$ In	spected by:	GHa	rtis	. <u> </u>		<u></u>	
X							*

	WELL INSPECTION C	HECKL	IST		
WELL INFORMATION					
Well Loca	tion/Functional Area:	1	1 61		
Number: $\underline{\mu}\underline{\mu}\underline{\gamma}\underline{m}\underline{w}-\underline{1}\underline{\gamma}$		<u> </u>	_ 7		
Casing Type:G ^W Steel	Stainless Steel		V	_ PV	VC
Screened/Open-Hole Well Screened/Open-Hole Well	creened	M	onitor I ength:	Interval	_ <u>/O</u> ft
Flush-mount/Above-ground Completion:	Above-500	und			
Reported Constructed Depth:	22.08	ft BGS	or BTO	g (circ	ele one)
INSPECTION ITEMS		YES	NO	N/A	COMMENTS
Well-head Completion:					
Above-ground completion:					
Number of guard posts at well:	<u> </u>				
Are the posts positioned to prevent c	ollision damage to the		<u> </u>	, -	
well?	1.10		[]	[]	
Are any of the posts damaged or deg	graded?	[X]			Frost heave 4", one post
Is a concrete pad installed?					
Is the pad cracked or deteriorated? F	rost heaving?		ί×ι		
Is steel protective casing installed?					
Does the protective casing have a we	eep nole?	[×]			******
Does vegetation around the well nee	d clearing?	IXI	l]	[]	
Flusn-mount completion:	d to the fluch mount				
hor?	a to the nush-mount	r 1	r 1	ΓV1	
Does the well have a flush mount ha	vv?		L J F J	[X] [v]	
Loes the well have a hush-mount be)X.(L J C J			
Is the concrete aprop gracked of	1: r deteriorated? Fract	l J	[]	۱×۱	
heaving?	deteriorateu: riost	۲ I	r 1	ſЛ	
Identification.		LJ	1 3	ιŅ	
Is the well labeled with the correct n	umber?		[]	[]	
Describe labeling:	Real Plate	L AI		1 1	
Security:					
Does the well have a cap or lid?		[]	[]	[]	
Does the well have a weatherproof le	ock?	$[\mathbf{x}]$	[]	[]	
Does the lock secure the well?		۲¥	[]	[]	
Does the inner casing have a water-t	ight cap?	$[\mathbf{X}]$	[]	[]	
Down-hole Condition:					
Is the well casing bent, corroded, or b	oroken (at the		_		
surface?)		[]	[X]	[]	
Is the well casing loose (at the surface	xe)?	[]	[×]	[]	
Is a measurement point marked at	the top of the well	6 .3		. .	
casing?	CH	IXIP			22 (12 22 2
Measured depth of the well from me	asurement point:	-74 V 3	12.82	<u>s + 0.</u>	12 = 22.70 23.00
A ro there any obstructions in the most	(reported depth-present)	neasurem	iciii):≁} r~1	הא – וח ו ז	5708 GH
Description of well bottom condition	u: us (soft hard etc):	hand	\sim	LJ	
Description of wen bottom condition	15 (5011, 11a1u, 516).	Mara			
Inspection Date: $\underline{\gamma} - 24 - 06$	Inspected by:	Gr	lari	i.)	
(i)					

WELL HAST ECHON C	Include 1
WELL INFORMATION Well Location/Functional Area: Number: $LL4$ NW-194	LL4
Casing Type: Steel Stainless Steel	PVC
Screened/Open-Hole Well Screened	Monitor Interval Length: <u>/0</u> ft
Flush-mount/Above-ground Completion: <u>Above-groun</u>	n .L
Reported Constructed Depth: 23.21	ft BGS or BTOO (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
Above-ground completion:	
Are the posts positioned to prevent collision damage to the	
well?	[X] [] []
Are any of the posts damaged or degraded?	[] [x] []
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?	
Flush-mount completion:	
Is the traffic cover securely holted to the flush-mount	
box?	[] [] [y]
Does the well have a flush-mount box?	[] [] [X]
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: <u>Brass Plate</u>	
Security: Doos the well have a cap or lid?	
Does the well have a weatherproof lock?	
Does the lock secure the well?	
Does the inner casing have a water-tight cap?	
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 the well	
Casing: Gr Measured depth of the well from measurement point:	[X B] = 12
Thickness of sediment accumulation (reported denth-present)	measurement): $\frac{10 + 0.12 - 23.81}{64}$
Are there any obstructions in the well?	[] X] PET23.75 CH
Description of well bottom conditions (soft, hard, etc):	Soft+/Sticky
Inspection Date: $4 - 24 - 2006$ Inspected by:	GHarris
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RAVENNA ARMY AMMU WELL INSPECTION	JNITION PLANT CHECKLIST
WELL INFORMATION Well Location/Functional Area: Number: <u>LL4MW-196</u>	LL4
Casing Type: Steel Stainless Steel	PVC
Screened/Open-Hole Well Type: <u>Screened</u>	Monitor Interval Length: /O ft
Flush-mount/Above-ground Completion:	nel
Reported Constructed Depth: 21.18	_ ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
Above-ground completion: 4 Number of guard posts at well: 4 Are the posts positioned to prevent collision damage to thewell?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: $Berge la + e$ Security:Does the well have a cap or lid?Does the inner casing have a water-tight cap?Down-hole Condition:Is the well casing bent, corroded, or broken (at the surface?)Is a measurement point marked at the top of the well casing?Measured depth of the well from measurement point:	$ \begin{bmatrix} M & [1 & [1] \\ M & [1$
Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc):	[] [X] [] hard
Inspection Date: $4 - 24 - 64$ Inspected by:	Gltarris
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	WELL INSPECTION (CHECKL	IST	_			
WELL INFORMATION							
Well	ocation/Functional Area:),	//				
Number: $LL4 \text{ mw} - 197$		<u>hh</u>	9			_	
Casing Type: Steel	Stainless Steel		i	_ PV	′C		
Screened/Open-Hole Well Type:	Screened	M Le	onitor	Interval		10	
		_					
Flush-mount/Above-ground Completion:	Above gro	und		-			
Reported Constructed Depth:	22.47	ft BGS	orBTC))(circ	le one)		
INSPECTION ITEMS		YES	NO	N/A	COM	MENTS	
Well-head Completion:							
Above-ground completion:			•				
Number of guard posts at well:	4						
Are the posts positioned to preve	nt collision damage to the						
well?		[X]	[]	[]			
Are any of the posts damaged or	degraded?	[X]	[]	[]	one	Lilled	
Is a concrete pad installed?		[X]	[]	[]			
Is the pad cracked or deteriorated	1? Frost heaving?	. []	[X]	[]			
Is steel protective casing installed	1?	$[\mathbf{y}]$	[]	[]			
Does the protective casing have a	a weep hole?	$[\times]$	[]	[]			
Does vegetation around the well	need clearing?	M	[]	[]			
Flush-mount completion:	_						
Is the traffic cover securely bo box?	olted to the flush-mount	[]	[]	[X]			
Does the well have a flush-moun	t box?	[]	[]	[X]			
Is the traffic cover cracked or bro	oken?	[]	[]	[X]			
Is the concrete apron cracked	or deteriorated? Frost			•			
heaving?		[]	[]	[X]			
Identification:							
Is the well labeled with the corre	ct number?	[X]	[]	[]			
Describe labeling:	Brass Plate						
Security:							
Does the well have a cap or lid?		[×]	[]	[]			
Does the well have a weatherpro-	of lock?	[×]	[]	[]			
Does the lock secure the well?		[\]	[]	[]			
Does the inner casing have a wat	er-tight cap?	$[\times]$	[]	[]			
Down-hole Condition:							
Is the well casing bent, corroded, surface?)	or broken (at the	[]	$[\times]$	[]			
Is the well casing loose (at the su	rface)?						
Is a measurement point marked	1 at the top of the well		с. л				
casing?			.[]	[]			
Measured depth of the well from	measurement point:	14-2-20	123.	59 +.	12 =	23.71	
Thickness of sediment accumula	tion (reported depth-present	measuren	nent): t	TB = 23	5464		
Are there any obstructions in the	well?	[]	\bowtie	[]			
Description of well bottom condi	itions (soft, hard, etc):	Hard					MORE BALLING
11 - 11 - 11		CH.					

RAVENNA ARMY AMMUI WELL INSPECTION C	NITION PLANT HECKLIST
WELL INFORMATION Well Location/Functional Area: Number: LLY MW-198	LL 4
Casing Type:SteelStainless Steel	<u> </u>
Screened/Open-Hole Well Screened	Monitor Interval Length: <u>10</u> ft
Flush-mount/Above-ground Completion: <u>Above groun</u>	d
Reported Constructed Depth: 22.11	ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
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? 	[X] [] [] [] [X] [] [X] [] []
Does vegetation around the well need clearing? Flush-mount completion: Is the traffic cover securely bolted to the flush-mount hor?	[X] [] [] <u>Chain saw/medeater</u>
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: $P_{abc} = P_{abc} + \epsilon$	[M] [] []
Security: Does the well have a cap or lid? Does the well have a weatherproof lock? Does the lock secure the well? Does the inner casing have a water-tight cap?	X [] []
 Down-hole Condition: Is the well casing bent, corroded, or broken (at the surface?) Is the well casing loose (at the surface)? 	[] [Y] [] [] [Y4 []
Is a measurement point marked at the top of the well casing? Measured depth of the well from measurement point: Thickness of sediment accumulation (reported depth-present of Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc):	$\frac{X_{B}[][]}{-26} \frac{1}{21.52 \pm 0.12} = 21.64}$ neasurement): $\frac{37B-21.52}{52} \frac{CH}{C}$ [][X][]
Inspection Date: 4-24-2006 Inspected by:	CHarris

RAVENNA ARMY AMMUN WELL INSPECTION C	NITION PLANT HECKLIST
WELL INFORMATION	, ,
Well Location/Functional Area:	1 1 4
Number: $L \underline{C4} \underline{WW} - \underline{199} \underline{WW}$	LL 7
Casing Type: <u></u> G [®] Steel Stainless Steel	PVC
Screened/Open-Hole Well Type: Screened	Monitor Interval Length:/O ft
Flush-mount/Above-ground Completion:	1
Reported Constructed Depth: 22,38	ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
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 the pad cracked or deteriorated? Frost heaving?	
Is steel protective casing installed?	
Does the protective casing have a weep hole?	M [] []
Does vegetation around the well need clearing?	[X] [] []
Flush-mount completion:	· · · · · · · · · · · · · · · · · · ·
Is the traffic cover securely bolted to the flush-mount	
Door the well have a fluch mount hav?	
Is the traffic cover cracked or broken?	[] [] [v]
Is the concrete apron cracked or deteriorated? Frost	
heaving?	[] [] []
Identification:	
Is the well labeled with the correct number?	NI [] []
Describe labeling: Brass flate	
Security:	
Does the well have a cap of hu?	
Does the lock secure the well?	
Does the inner casing have a water-tight cap?	
Down-hole Condition:	
Is the well casing bent, corroded, or broken (at the surface?)	[] [x] []
Is the well casing loose (at the surface)?	[] [] []
Is a measurement point marked at the top of the well	
Casing? Measured depth of the well from measurement point:	49 0.03 29 10 12 = 22 41
Thickness of sediment accumulation (reported depth-present r	neasurement): $bF=23.24$ C IL
Are there any obstructions in the well?	
Description of well bottom conditions (soft, hard, etc):	Hard
Inspection Date: $4-24-2006$ Inspected by:	CH
(\mathbf{y})	

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RAVENNA ARMY AMMUN WELL INSPECTION C	ITION HECKL	PLAN'I IST	Γ	
WELL INFORMATIONWellLocation/Functional Area:	LL	. 4		
Number: $L \underline{L4} M \underline{V} \underline{260}$		I		
Casing Type: Steel Stainless Steel		γ	_ PV	C
Screened/Open-Hole Well Type: <u>Screened</u>	M _ Le	onitor l ength:	nterval	<u>] ()</u> ft
Flush-mount/Above-ground Completion: <u>Above-gro</u>	und			
Reported Constructed Depth: 24.56	ft BGS	orBTO	(circle	e one)
INSPECTION ITEMS	YES	NO	N/A	COMMENTS
Well-head Completion:				
Above-ground completion:		*		
Are the posts positioned to prevent collision damage to the				
well?	[X]	[]	[]	
Are any of the posts damaged or degraded?	[]	[X]	[]	
Is a concrete pad installed?	[🗙]	[]	[]_	
Is the pad cracked or deteriorated? Frost heaving?	[]	$[\times]$	[]	
Is steel protective casing installed?	[X]	[]	[]	THE FORME STREET
Does the protective casing have a weep hole?	[X]	[]	[]	(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Does vegetation around the well need clearing?	[]	$[\times]$	[]_	
Flush-mount completion:			-	
Is the traffic cover securely bolted to the flush-mount				
box?			ι×.	
Does the well have a flush-mount box?	[]	[]	[\[v]_	
Is the traffic cover cracked or broken?	[]	[]	[X]	
Is the concrete apron cracked or deteriorated? Frost				
heaving?		[]	lγI -	
Identification:	r. 3	r 1	, , -	
Is the well labeled with the correct number?		[]		
Describe labeling: Brass plate				арада — с сама су, — у - с со с
Deep the well have a con or lid?	Б.J	F 1	- ر ا	and a second
Does the well have a wasthemera flack?	[X] Na	L] Г 1	[]	
Does the lock secure the well?	ואַן			
Does the inner casing have a water tight can?			L] _	
Does the filler casing have a water-tight cap:		LJ	L] _	ne na manina ina mai mana manjarana ang karangan na karangan na karangan na karangan na karangan na karangan na
Is the well casing bent corroded or broken (at the			-	
surface?)	r 1		[]	
Is the well casing loose (at the surface)?	[]		[].	
Is a measurement point marked at the top of the well	ιJ	101	L J _	
casing?	[√]	11	211	
Measured depth of the well from measurement point:	+ia	405		+012=2527
Thickness of sediment accumulation (reported denth-present r	neasuren	ient):	Janu	NTR = 25.25 CH
Are there any obstructions in the well?	[]	M	[]	
Description of well bottom conditions (soft, hard, etc.):	Stu	K V	L J	
(out of the output of the of the of out of				
Inspection Date: $4 - 24 - 06$ Inspected by:	C	Herr	í.	
(\mathfrak{Y})				

RAVENNA ARMY AMMUNITION PLANT WELL INSPECTION CHECKLIST
WELL INFORMATION
Well Number: 125 MW -00 Location/Functional Area: LoadLine 5
Casing Type: Steel Stainless Steel PVC
Screened/Open-Hole Well Screened Monitor Interval Length: 10 ft
Flush-mount/Above-ground Completion:
Reported Constructed Depth: <u>40197</u> ft BGS or BTOC (circle one)
INSPECTION ITEMS YES NO N/A COMMENTS
Well-head Completion:
Above-ground completion:
Is the well labeled with the correct number?
Security:
Does the well have a cap or lid? [4] [] [] Does the well have a weatherproof lock? [4] [] [] Does the lock secure the well? [4] [] [] Does the inner casing have a water-tight cap? [] [] []
Down-hole Condition:
Is the well casing bent, corroded, or broken (at the
Surface?) $[] [] [] [] [] [] [] [] [] [$
Is a measurement point marked at the top of the well
casing?
Measured depth of the well from measurement point: $DIS 27$
Are there any obstructions in the well?
Description of well bottom conditions (soft, hard, etc):
Inspection Date: 4/24 Inspected by: 6 Amis

WELL INSPECTION CHECKLIST
WELL INFORMATION
Well Location/Functional Area:) (1
Number: USMW-002 Load Lives
Casing Type: Steel Stainless Steel PVC
Screened/Open-Hole Well Type: Monitor Interval Length: ft
Flush-mount/Above-ground Completion:
Reported Constructed Depth: <u>7.88</u> ft BGS of BTOC (circle one)
INSPECTION ITEMS YES NO N/A COMMENTS
Well-head Completion:
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 the protective casing have a weep hole? Does the protection: 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 deteriorated? Frost heaving? Is the traffic cover cracked or deteriorated? Frost heaving? Is the concrete apron cracked or deteriorated? Frost heaving? Is the well labeled with the correct number? Is the well labeled with the correct number? Does the labeled with the correct number? Is the well labeled with the correct number? Does the labeled with the correct number? Is the well labeled with the correct number? Number of protection: Is the well labeled with the correct number? Number of protection: Is the well labeled with the correct number? Is the well labeled with the correct number? Is the well
Describe labeling: 1) 1 Up > T UC C 1 C C 1 C C 1 Security: Does the well have a cap or lid? Does the well have a weatherproof lock? [1] [] Does the lock secure the well? [4] [] [] Does the lock secure the well? [4] [] [] Does the inner casing have a water-tight cap? [4] [] [] 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 the well [] [] [] [] []
casing? Measured depth of the well from measurement point: \overrightarrow{DTB} $\overrightarrow{27.58}$ \overrightarrow{DTB} $\overrightarrow{-DTB}$
Inspection Date: <u>4</u> M Inspected by: <u>6QBACay</u>

WELL INFORMATION			
Well Location/Functional Area:			
Number: $LSMW^{-}003$ $L000$			
Casing Type: Steel Stainless Steel PVC			
Screened/Open-Hole Well Screened Monitor Interval Length: ft			
Flush-mount/Above-ground Completion:			
Reported Constructed Depth: <u>79,00</u> ft BGS of BTOC (circle one)			
INSPECTION ITEMS YES NO N/A COMMENTS			
Well-head Completion:			
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?			
Flush-mount completion:			
is the traffic cover securely bolted to the flush-mount			
$\begin{bmatrix} 1 \\ 1 \end{bmatrix} \begin{bmatrix} 1 \\ 1 \end{bmatrix} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$			
Is the traffic cover crecked or broken?			
Is the concrete apron cracked or deteriorated? Frost			
heaving?			
Identification:			
Is the well labeled with the correct number? $\int \left(\frac{4}{100000000000000000000000000000000000$			
Describe labeling: Brass Jag on LIC			
Security:			
Does the well have a cap or lid?			
Does the well have a weatherproof lock?			
Does the lock secure the well?			
Does the inner casing have a water-tight cap? []] [] []			
Down-hole Condition:			
Is the well casing bent, corroded, or broken (at the			
Is the well casing loose (at the surface)?			
is a measurement point marked at the top of the well $[/J]$			
Casing! Measured depth of the well from measurement point: TSTR 7/1 /17			
Thickness of sediment accumulation (reported depth-present measurement):			
Are there any obstructions in the well?			
Description of well bottom conditions (soft, hard, etc): $\mathcal{M}\mathcal{M}$			
Inspection Date: 4114 Inspected by: (10 R. 00			
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RAVENNA ARMY AMMUNITION PLANT WELL INSPECTION CHECKLIST
WELL INFORMATION Well Location/Functional Area: Number: <u>LL5MW-009</u> Locat Line 5
Casing Type: Steel Stainless Steel PVC
Screened/Open-Hole Well Type: <u>Screecec</u> Monitor Interval Length: <u>10</u> ft
Flush-mount/Above-ground Completion:
Reported Constructed Depth: <u>24,9</u> ft BGS or BTOC (eircle one)
INSPECTION ITEMS YES NO N/A COMMENTS
Well-head Completion:
Above-ground completion: Number of guard posts at well: Are the posts positioned to prevent collision damage to the well? I I I I I I I I I I I I I I I I I I I
Inspection Date: <u>424</u> Inspected by: <u>5424</u>

WELL INSPECTION CHECKLIST
WELL INFORMATION
Well Location/Functional Area: 0 (1 c C
Number: USMW-005 Land Line
Casing Type: Steel Stainless Steel PVC
Semanod/Open Hele Well C // Meniter Interval
Type: <u>Creere</u> Length: <u>16</u> ft
Flush-mount/Above-ground Completion:
Reported Constructed Depth: <u>79,92</u> ft BGS or BTOC (bircle one)
INSPECTION ITEMS YES NO N/A COMMENTS
Well-head Completion:
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 clacked of deteriorated? Frost heaving?
Does the protective casing instance:
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:
Describe labeling:
Security
Does the well have a cap or lid?
Does the well have a weatherproof lock?
Does the lock secure the well? $[4]$
Does the inner casing have a water-tight cap? [4/[] []
Down-hole Condition:
Is the well casing bent, corroded, or broken (at the
surface?)
Is the well casing loose (at the surface)?
casing?
Measured depth of the well from measurement point: DTR 19182
Thickness of sediment accumulation (reported depth-present measurement):
Are there any obstructions in the well?
Description of well bottom conditions (soft, hard, etc):
1 20
Inspection Date: $M V $ Inspected by: $M R A O Q$
\bigcirc

RAVENNA ARMY AMMUNITION PLANT WELL INSPECTION CHECKLIST
WELL INFORMATION Well Location/Functional Area: Number: <u>LIS mw</u> -006
Casing Type: Steel Stainless Steel PVC
Screened/Open-Hole Well Type: <u>Screened</u> Monitor Interval Length: <u>10</u> ft
Flush-mount/Above-ground Completion:
Reported Constructed Depth: $26,90$ ft BGS or BTOC (circle one)
INSPECTION ITEMS YES NO N/A COMMENTS
Well-head Completion:
Above-ground completion:
Is the concrete apron cracked or deteriorated? Frost
Identification:
Is the well labeled with the correct number? [[] [] Describe labeling:
Does the well have a cap or lid? [1] [1] [1] Does the well have a weatherproof lock? [1] [1] [1] Does the lock secure the well? [1] [1] [1] Does the inner casing have a water-tight cap? [1] [1] [1] Down-hole Condition: [1] [1] [1] Is the well casing bent, corroded, or broken (at the surface?) [1] [1] [1] [1] Is the well casing loose (at the surface)? [1] [1] [1] [1]
Is a measurement point marked at the top of the well casing? Measured depth of the well from measurement point: Thickness of sediment accumulation (reported depth-present measurement): Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc):
Inspection Date: <u>424</u> Inspected by: <u>GRands</u>

WELL INFORMATION Well Location/Functional Area: Number: <u>////mw</u> -00	Load Line 6		
Casing Type: Steel Stainless Steel	L PVC		
Screened/Open-Hole Well Screen	Monitor Interval Length:ft		
Flush-mount/Above-ground Completion: $Hush-max$	ten		
Reported Constructed Depth: <u>17.00</u>	ft BGS or BTOC (circle one)		
INSPECTION ITEMS	YES NO N/A COMMENTS		
Well-head Completion:			
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?			
<i>I</i> lush-mount completion: Is the traffic cover securely holted to the flush-mount			
box?	(4 [] []		
Does the well have a flush-mount box?			
Is the traffic cover cracked or broken?			
heaving?	[4] $[1]$ $[1]$		
Identification:			
Is the well labeled with the correct number? Describe labeling:			
Security:			
Does the well have a cap or lid?	[4] []		
Does the well have a weatherproof lock?	[] [] [] []		
Does the lock secure the well?			
Does the inner casing nave a water-tight cap?			
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 the well			
casing?			
Measured depth of the well from measurement point: $DTB_{17.65}$			
Thickness of sediment accumulation (reported depth-present measurement):			
Are there any obstructions in the well? $\begin{bmatrix} 1 \\ 1 \end{bmatrix} \begin{bmatrix} 1 \\ 1 \end{bmatrix} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$			
Description of well bottom conditions (soft, hard, etc):	<u> </u>		
Inspection Date: 424 Inspected by:	De Bulk		
~ ($\tilde{}$		

WELL INSI ECTION	CHECKEIST		
WELL INFORMATION			
Well (20) Location/Functional Area:			
Number: ///amul-	Load Ling 6		
Cooing Tunai	PVC		
Casing Type: Steel Stanness Steel	rvc		
Screened/Open-Hole Well	Monitor Interval		
Type: <u>Screeneq</u>	Length: ft		
Flush-mount/Above-ground			
Completion: $AYOO$			
Reported Constructed Depth: 22,50	ft BGS or BTOC circle one)		
TRACE AND AND A STATE OF			
INSPECTION ITEMS	YES NO N/A COMMENTS		
Well-head Completion:			
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?	[] II [] Some KUST		
Is a concrete pad installed?	[4 [] _ []]		
Is the pad cracked or deteriorated? Frost heaving?			
Is steel protective casing installed?			
Does the protective casing have a weep hole?	[] [4/[]		
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:			
Describe labeling: Pantel on POST			
Security:			
Does the well have a cap or lid?	(ΥI) []		
Does the well have a weatherproof lock?	[4] [] []		
Does the lock secure the 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 the well			
casing?			
Measured depth of the well from measurement point: DT13 24.45			
Thickness of sediment accumulation (reported depth-present measurement):			
Are there any obstructions in the well? [] [γ] []			
Description of well bottom conditions (soft, hard, etc):			
11/11	\wedge		
Inspection Date: 4/124 Inspected by	: Wel Brillin		
	\sim		

RAVENNA ARMY AMMU WELL INSPECTION C	NITION PLANT CHECKLIST
WELL INFORMATIONWellLocation/Functional Area:Number: $\mathcal{LL}(\mathcal{L} \cap \mathcal{W})^{-} \subset \mathcal{O}^{-}$	Load Line 6
Casing Type: Steel Stainless Steel	L PVC
Screened/Open-Hole Well Type: <u>Screened</u>	Monitor Interval Length: ft
Flush-mount/Above-ground Completion:	
Reported Constructed Depth: <u>25,85</u>	ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
Above-ground completion:	
Security: Does the well have a cap or lid? Does the well have a weatherproof lock? Does the lock secure the 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 the well casing? Measured depth of the well from measurement point: DTB Thickness of sediment accumulation (reported depth-present Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc):	$\begin{bmatrix} 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 $
Inspection Date: <u>4124</u> Inspected by:	Ul Brilly

WELL INSPECTION C	HECKLIST
WELL INFORMATION	
Well Location/Functional Area:	
Number: <u>LL6 M.w-602</u>	Load Ling 6
Casing Type: Steel Stainless Steel	PVC
Screened/Open-Hole Well Screened	Monitor Interval Length: _/Oft
Flush-mount/Above-ground Above	
Reported Constructed Depth: 25,08	ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
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?	[4][]
Does the protective casing have a weep hole?	[4-[] []
Does vegetation around the well need clearing?	[] [4-[]
Flush-mount completion:	
Is the traffic cover securely bolted to the flush-mount	
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: On Guard 1057 - pain	Hea
Security:	
Does the well have a cap of lid?	
Does the lock secure the 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 the well	
casing?	
Measured depth of the well from measurement point:	3 14,62
Thickness of sediment accumulation (reported depth-present n	neasurement):
Are there any obstructions in the well?	[] [4 []
Description of well bottom conditions (soft, hard, etc):	
Inspection Date: 4/24 Inspected by:	Q0 R. 00.
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RA	VENNA	ARMY	AMM	UNITION	PLANT
	WELL	INSPEC	CTION	CHECKL	IST

WELL INSFECTION C.	HEUKLISI
WELL INFORMATION	
Number: $\underline{LL6MW-005}$	Load Line 6
Casing Type: Steel Stainless Steel	PVC
Screened/Open-Hole Well Screened	Monitor Interval Length: ft
Flush-mount/Above-ground Completion:	
Reported Constructed Depth: 22,46	ft BGS of BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
Above-ground completion:	$\begin{bmatrix} 1 & \begin{bmatrix} 1 & \begin{bmatrix} 1 & \\ 1 & \begin{bmatrix} 1 & \\ 1 & \end{bmatrix} \\ \begin{bmatrix} 1 & \begin{bmatrix} 1 & \\ 1 & \end{bmatrix} \\ \begin{bmatrix} 1 & \begin{bmatrix} 1 & \\ 1 & \end{bmatrix} \\ \begin{bmatrix} 1 & \begin{bmatrix} 1 & \\ 1 & \end{bmatrix} \\ \begin{bmatrix} 1 & \begin{bmatrix} 1 & \\ 1 & \end{bmatrix} \\ \begin{bmatrix} 1 & \begin{bmatrix} 1 & \\ 1 & \end{bmatrix} \\ \begin{bmatrix} 1 & \begin{bmatrix} 1 & \end{bmatrix} \\ \begin{bmatrix} 1 & \begin{bmatrix} 1 & \\ 1 & \end{bmatrix} \\ \begin{bmatrix} 1 & \begin{bmatrix} 1 & \end{bmatrix} \\ \begin{bmatrix} 1 & \begin{bmatrix} 1 & \\ 1 & \end{bmatrix} \\ \begin{bmatrix} 1 & \begin{bmatrix} 1 & \end{bmatrix} \\ \begin{bmatrix} 1 & \begin{bmatrix} 1 & \\ 1 & \end{bmatrix} \\ \begin{bmatrix} 1 & \begin{bmatrix} 1 & \end{bmatrix} \\ \begin{bmatrix} 1 & \begin{bmatrix} 1 & \\ 1 & \end{bmatrix} \\ \begin{bmatrix} 1 & \begin{bmatrix} 1 & \end{bmatrix} \\ \begin{bmatrix} 1 & \end{bmatrix} \\ \begin{bmatrix} 1 & \begin{bmatrix} 1 & \\ 1 & \end{bmatrix} \\ \begin{bmatrix} 1 & \begin{bmatrix} 1 & \end{bmatrix} \\ \begin{bmatrix} 1 & \end{bmatrix} \\ \begin{bmatrix} 1 & \end{bmatrix} \\ \begin{bmatrix} 1 & \begin{bmatrix} 1 & \end{bmatrix} \\ \begin{bmatrix} 1 & \end{bmatrix} \\ \begin{bmatrix} 1 & \end{bmatrix} \\ \begin{bmatrix} 1 & \begin{bmatrix} 1 & \\ 1 & \end{bmatrix} \\ \begin{bmatrix} 1 & \end{bmatrix} \\ \begin{bmatrix} 1 & \begin{bmatrix} 1 & \\ 1 & \end{bmatrix} \\ \end{bmatrix} \\ \begin{bmatrix} 1 & \begin{bmatrix} 1 & \begin{bmatrix} 1 & \\ 1 & \end{bmatrix} \\ \begin{bmatrix} 1 & \end{bmatrix} \\ \end{bmatrix} \\ \begin{bmatrix} 1 & \begin{bmatrix} 1 & \begin{bmatrix} 1 & \\ 1 & \end{bmatrix} \\ \end{bmatrix} \\ \begin{bmatrix} 1 & \begin{bmatrix} 1 & \begin{bmatrix} 1 & \\ 1 & \end{bmatrix} \\ \end{bmatrix} \\ \end{bmatrix} \\ \begin{bmatrix} 1 & \begin{bmatrix} 1 & \begin{bmatrix} 1 & \\ 1 & \end{bmatrix} \\ \end{bmatrix} \\ \end{bmatrix} \\ \begin{bmatrix} 1 & \begin{bmatrix} 1 & \begin{bmatrix} 1 & \\ 1 & \end{bmatrix} \\ \end{bmatrix} \\ \end{bmatrix} \\ \begin{bmatrix} 1 & \begin{bmatrix} 1 & \begin{bmatrix} 1 & \\ 1 & \end{bmatrix} \\ \end{bmatrix} \\ \end{bmatrix} \\ \begin{bmatrix} 1 & \begin{bmatrix} 1 & \begin{bmatrix} 1 & \\ 1 & \end{bmatrix} \\ \end{bmatrix} \\ \end{bmatrix} \\ \end{bmatrix} \\ \begin{bmatrix} 1 & \begin{bmatrix} 1 & \begin{bmatrix} 1 & \\ 1 & \end{bmatrix} \\ \end{bmatrix} \\ \end{bmatrix} \\ \end{bmatrix} \\ \begin{bmatrix} 1 & \begin{bmatrix} 1 & \begin{bmatrix} 1 & \\ 1 & \end{bmatrix} \\ \end{bmatrix} \\ \end{bmatrix} \\ \end{bmatrix} \\ \begin{bmatrix} 1 & \begin{bmatrix} 1 & \begin{bmatrix} 1 & \\ 1 & \end{bmatrix} \\ \end{bmatrix} \\ \end{bmatrix} \\ \end{bmatrix} \\ \end{bmatrix} \\ \end{bmatrix} \\ \begin{bmatrix} 1 & \begin{bmatrix} 1 & \begin{bmatrix} 1 & \\ 1 & \end{bmatrix} \\ \end{bmatrix} \\ \end{bmatrix} \\ \end{bmatrix} \\ \end{bmatrix} \\ \begin{bmatrix} 1 & \begin{bmatrix} 1 & \begin{bmatrix} 1 & \\ 1 & \end{bmatrix} \\ \end{bmatrix}$
Describe labeling: <u>Xanneageneral well and a cap or lid?</u> Does the well have a cap or lid? Does the well have a weatherproof lock? Does the lock secure the 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 the well casing? Measured depth of the well from measurement point: <u>DI</u> Thickness of sediment accumulation (reported depth-present reported depth dept	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
Inspection Date: 24 Inspected by:	al Bully

WELL INSPECTION CRECKLIST
WELL INFORMATION Well Location/Functional Area: Number: <u>LLGMW-006</u> Locad Line <u>Locad Line</u>
Casing Type: Steel Stainless SteelPVC
Screened/Open-Hole Well <u>Screened(</u> Monitor Interval Length: <u>10</u> ft
Flush-mount/Above-ground Completion: <u>Flush-Mand</u>
Reported Constructed Depth: 17,00 ft BGS or BTOC (circle one)
INSPECTION ITEMS YES NO N/A COMMENTS
Well-head Completion:
Above-ground completion:
Security: Does the well have a cap or lid? Does the well have a weatherproof lock? Does the lock secure the well? Does the lock secure the well? Does the inner casing have a water-tight cap? Down-hole Condition: Image: Condition: Is the well casing bent, corroded, or broken (at the surface?) Image: Condition: Is the well casing loose (at the surface)? Image: Condition: Is a measurement point marked at the top of the well casing? Image: Condition: Measured depth of the well from measurement point: DTB Thickness of sediment accumulation (reported depth-present measurement): Image: Condition: Are there any obstructions in the well? Image: Condition:
Description of well bottom conditions (soft, hard, etc):
Inspection Date: <u>4</u> 22 Inspected by: <u>ABALL</u>

WELL INSPECTION CHECKLIST		
WELL INFORMATION		
Well Location/Functional Area:		
Number: 140MW-007 Jaak Ling 6		
Casing Type: Steel Stainless SteelPVC		
Type: Screened/Open-Hole Well Screened Length: 10 ft		
Flush-mount/Above-ground Completion: Flush-Moval		
Reported Constructed Depth: <u>M150</u> ft BGS or BTOC (circle one)		
INSPECTION ITEMS YES NO N/A COMMENTS		
Well-head Completion:		
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 understation around the well need clearing?		
Elush-mount completion:		
Is the traffic cover securely holted to the flush-mount		
hox?		
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? $O_{1} \sim [U_{1}]$		
Describe labeling: Vaintea Con Vast		
Security:		
Does the well have a cap or lid?		
Does the well have a weatherproof lock?		
Does the lock secure the well?		
Does the inner casing nave a water-tight cap?		
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 the well		
casing?		
Measured depth of the well from measurement point: DTB 19.39		
Thickness of sediment accumulation (reported depth-present measurement):		
Are there any obstructions in the well?		
Description of well bottom conditions (soft, hard, etc):		
Inspection Date: 4124 Inspected by: Ul Bullen		

WELL INSPECTION CHECKLIST		
WELL INFORMATION Well Number: <u>LLTmw-</u> 	Load Line >	
Casing Type: Steel Stainless Steel	BVC	
Screened/Open-Hole Well Screened	Monitor Interval Length: _/Oft	
Flush-mount/Above-ground Completion:		
Reported Constructed Depth: <u><u>36,29</u></u>	ft BGS or BTOC (circle one)	
INSPECTION ITEMS	YES NO N/A COMMENTS	
Well-head Completion:		
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? 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? Is the well labeled with the correct number? Describe labeling:	$\begin{bmatrix} 1 & [1 & [1 &] \\ 1 $	
Security: Does the well have a cap or lid? Does the well have a weatherproof lock? Does the lock secure the 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 the well casing? Measured depth of the well from measurement point: Thickness of sediment accumulation (reported depth-present r Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc): With the surface of	$ \begin{bmatrix} 1 & 1 & 1 & 1 \\ 1 & 1 & 1$	
Inspection Date: 412 Inspected by:	Ul Brilling.	

RAVENNA ARMY AMMUNITION PLANT WELL INSPECTION CHECKLIST		
WELL INFORMATION Well Number: <u>227nw</u> -CCZ	ad Line 7	
Casing Type: Steel Stainless Steel	LPVC	
Screened/Open-Hole Well Screened	Monitor Interval Length:ft	
Flush-mount/Above-ground Completion:		
Reported Constructed Depth: 27,85 f	ft BGS or BTOC (dircle one)	
INSPECTION ITEMS	YES NO N/A COMMENTS	
Well-head Completion:		
Above-ground completion: Yes 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 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 traffic cover cracked or broken? Is the concrete apron cracked or deteriorated? Frost heaving? Identification: Is the well labeled with the oprect number? Does the well have a cap or lid? Does the well have a cap or lid? Does the well have a weatherproof lock? Does the well have a weatherproof lock? Does the inner casing have a water-tight cap? Down-hole Condition: Is the well casing loose (at the surface)? Is a measurement point marked at the top of the well casing? Measured depth of the well from measurement point: DTM Measured depth of the well from measurement point: DTM DTM TM Thickness of sediment accumulation (reported depth-pr	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	

WELL INSPECTION CHECKLIST		
WELL INFORMATION Well Location/Functional Area: Number: 127mw-003	Load Line 7	
Casing Type: Steel Stainless Steel	LPVC	
Screened/Open-Hole Well Screened	Monitor Interval Length:ft	
Flush-mount/Above-ground Above-		
Reported Constructed Depth: <u>75.6</u>	ft BGS or BTOC (orcle one)	
INSPECTION ITEMS	YES NO N/A COMMENTS	
Well-head Completion:		
Above-ground completion: 3 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 concrete apron cracked or deteriorated? Frost heaving? Is the concrete apron cracked or deteriorated? Frost heaving? Is the well labeled with the carrect number? Describe labeling: Security: Does the well have a cap or lid? Does the well have a weatherproof lock? Does the lock secure the well?	$ \begin{bmatrix} 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\$	
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 the well casing? Measured depth of the well from measurement point: DTB_ Thickness of sediment accumulation (reported depth-present m Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc):	$ \begin{bmatrix} 4 & [] & [] \\ $	
Inspection Date: Inspected by:	Ull Dulling.	

WELL INSPECTION CHECKLIST			
WELL INFORMATION Well Location/Functional Area: Number: <u>1770</u> 004	bad Line 7		
Casing Type: Steel Stainless Steel	PVC		
Screened/Open-Hole Well Screenecl	Monitor Interval Length:ft		
Flush-mount/Above-ground Completion:			
Reported Constructed Depth: _//152	ft BGS of BTOC (circle one)		
INSPECTION ITEMS	YES NO N/A COMMENTS		
Well-head Completion:			
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?			
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			
Identification:			
Is the well labeled with the correct number? To be abeling:			
Security:			
Does the well have a weatherproof lock? Does the lock secure the well?			
Does the inner casing have a water-tight cap?			
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 the well casing?			
Measured depth of the well from measurement point:	77: "32		
Are there any obstructions in the well?			
Description of well bottom conditions (soft, hard, etc):	Herel		
Inspection Date: 122 Inspected by:	Ql Brilli		

WELL INSPECTION CHECKLIST		
WELL INFORMATION Well Location/Functional Area: Number: 127 MW - 005	dline 7	
Casing Type: Steel Stainless Steel	PVC	
Screened/Open-Hole Well Screenee C	Monitor Interval Length:ft	
Flush-mount/Above-ground Completion:		
Reported Constructed Depth: $\underline{50.57}$ ft Bo	GS or BTOC (circle one)	
INSPECTION ITEMS YE	CS NO N/A COMMENTS	
Well-head Completion:		
Above-ground completion:		
Security: [] Does the well have a cap or lid? [] Does the well have a weatherproof lock? [] Does the lock secure the 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 the well casing? [] Measured depth of the well from measurement point: [] Thickness of sediment accumulation (reported depth-present measurement measu	+ []	
Are there any obstructions in the well? [Description of well bottom conditions (soft, hard, etc): Inspection Date: <u>22</u> Inspected by: <u>6</u>	Harch Harch Haris	

WELL INSPECTION CHECKLIST			
WELL INFORMATION			
Well Location/Functional Area:			
Number: UT/NW-006 Loca Lvel			
Casing Type: Steel Stainless Steel PVC			
Screened/Open-Hole Well Screened(Monitor Interval Length: 10 ft			
Flush-mount/Above-ground Above			
Reported Constructed Depth: 30,36 ft BGS or BTOC (circle one)			
INSPECTION ITEMS YES NO N/A COMMENTS			
Well-head Completion:			
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?			
Fush-mount completion:			
how?			
Does the well have a fluch-mount hox?			
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: 150955 JGG CO Aid			
Security:			
Does the well have a cap or lid?			
Does the well have a weatherproof lock?			
Does the lock secure the 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 the well			
Measured depth of the well from measurement point: $DID = 70.4$ Z			
I hickness of sediment accumulation (reported depth-present measurement):			
Are there any obstructions in the well? $\begin{bmatrix} 1 \\ -4 \end{bmatrix}$			
Description of wen boltom containons (soft, nard, etc): $\frac{1}{\sqrt{2}}$			
Inspection Date: 9/20 Inspected by: Status			

RAVENNA	ARMY	AMM	UNITION	PLANT
WELL	INSPEC	TION	CHECKL	IST

		ucu	101		
WELL INFORMATION Well Location/Func	tional Area:		-		
Number: LL8mw-001	L	-020 L	-ine 8		
Casing Type: Steel St	tainless Steel		X	P\	/C
Seronad/Opan Hala Wall		3.4	Conitor I	ntorriol	
Type: <u>Screen</u>	ed	. Le	ength:	ntervai	_/ <u>/</u> ft
Flush-mount/Above-ground Completion:	powe growind	2,			
Reported Constructed Depth:	0.77_	ft BGS	OCBTO	C (circ	le one)
INSPECTION ITEMS		YES	NO	N/A	COMMENTS
Well-head Completion:					
Above-ground completion:			~		
Number of guard posts at well: <u>3</u>	mage to the				
well?	unage to the	[X]	۲ I	۲ I	
Are any of the posts damaged or degraded?			[]	[]	
Is a concrete pad installed?		[X]	[]	ſ 1	
Is the pad cracked or deteriorated? Frost heavi	ng?	[]	[x]	[]	
Is steel protective casing installed?			12 TAB	[]	
Does the protective casing have a weep hole?		[*]	[]	[]	,
Does vegetation around the well need clearing	?	[]	[x]	[]	
Flush-mount completion:					······································
Is the traffic cover securely bolted to the box?	flush-mount	[]	[]	[\/]	
Does the well have a flush-mount hox?		ſ]		[X]	
Is the traffic cover cracked or broken?		[]		[x]	
Is the concrete apron cracked or deterior	ated? Frost			נאז	
heaving?		[]	[]	[¥]	
Identification:				- 1-	
Is the well labeled with the correct number?		[×]	[]	[]	
Describe labeling: brass tag	on protective	cup			
Security:		1			
Does the well have a cap or lid?		[X]	[]	[]	
Does the well have a weatherproof lock?		[\]	[]	[]	
Does the lock secure the well?		[×]			
Does the inner casing have a water-tight cap?		[]	ĹĴ	[]	
Down-hole Condition:	41				
Is the well casing bent, corroded, or broken (at surface?)	ine	r 1	[~]	L J	
Surface?) Is the well casing loose (at the surface)?			[%]	L J	
Is a measurement point marked at the top	of the well	LJ	[~]	LI	
casing?		. [X]	[]	[]	
Measured depth of the well from measurement	t point: ITB 27	.62		. 1	
Thickness of sediment accumulation (reported	depth-present m	easuren	nent):		No
Are there any obstructions in the well?		[]	[]	[]	
Description of well bottom conditions (soft, ha	ard, etc):		-5	Ht.	Sitty.
			RI	3000	r Ø
Inspection Date: <u>4-24-04</u>	Inspected by:	A	Bhili	nhe	<i></i>
	-			5-	

RAVENNA ARMY AMMUNITION PLANT WELL INSPECTION CHECKLIST		
WELL INFORMATION Well Location/Functional Area: Number: <u>LISMW-007</u> Locat Line & <u>Load Line & Marketon</u>		
Casing Type: Steel Stainless Steel PVC		
Screened/Open-Hole Well Schelen Monitor Interval Length:	t	
Flush-mount/Above-ground Completion: Abave-graved		
Reported Constructed Depth: <u>32, 89</u> ft BGS or BTOC (circle one)		
INSPECTION ITEMS YES NO N/A COMMENTS		
Well-head Completion:		
Above-ground 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: [] [] [] [] [] [] [] Describe labeling: Difference [] [] [] [] [] []		
Security: Image: Construct of the secure		
Inspection Date: 4/24 Inspected by: ABulk	Access	

WELL INSPECTION CHECKLIST		
WELL INFORMATION Well Location/Functional Area: Number: 」」Gハルーロンフ	Load Lins 8	
Casing Type: Steel Stainless Steel	<u> </u>	
Screened/Open-Hole Well Screened	Monitor Interval Length:ft	
Flush-mount/Above-ground Completion:		
Reported Constructed Depth: 23,25	ft BGS or BTOC circle one)	
INSPECTION ITEMS	YES NO N/A COMMENTS	
Well-head Completion:		
Above-ground completion:	$\begin{bmatrix} 4 & [1 & [1 \\ 1 & [1 & [1 \\ 1 & [1 & [1 \\ 1 & [1 & [1 \\ 1 & [1 & [1 \\ 1 & [1 & [1 \\ 1 & [1 & [1 \\ 1 & [1 & [1 \\ 1 & [1 & [1 \\ 1 & [1 & [1 & [1 \\ 1 & [1 & [1 & [1 \\ 1 & [1 & [1 & [1 \\ 1 & [1 & [1 & [1 \\ 1 & [1 & [1 & [1 \\ 1 & [1 & [1 & [1 \\ 1 & [1 & [1 & [1 \\ 1 & [1 & [1 & [1 \\ 1 & [1 & [1 & [1 \\ 1 & [1 & [1 & [1 \\ 1 & [1 & [1 & [1 \\ 1 & [1 & [1 & [1 \\ 1 & [1 & [1 & [1 \\ 1 & [1 & [1 & [1 \\ 1 & [1 & [1 & [1 & [1 \\ 1 & [1 $	
Security: Does the well have a cap or lid? Does the well have a weatherproof lock? Does the lock secure the 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 the well casing? Measured depth of the well from measurement point: DTB_ Thickness of sediment accumulation (reported depth-present Are there any obstructions in the well?	$\begin{bmatrix} 1 & \begin{bmatrix} 1 & \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\$	
Inspection Date: $\frac{2}{24}$ Inspected by:	Al Brilling	

RAVENNA ARMY AMMUNITION PLANT WELL INSPECTION CHECKLIST		
WELL INFORMATION Well Location/Functional Area:	load Line 8	
Casing Type: Steel Stainless Steel	PVC	
Screened/Open-Hole Well Type: <u>Screened</u>	Monitor Interval Length:ft	
Flush-mount/Above-ground Completion:	nel	
Reported Constructed Depth: 23.02	ft BGS or BTOC (circle one)	
INSPECTION ITEMS	YES NO N/A COMMENTS	
Well-head Completion:		
 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 have a weep hole? 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 concrete apron cracked or deteriorated? Frost heaving? Identification: Is the well labeled with the correct number? Describe labeling: <u>1665</u> <u>365</u> <u>366</u> <u>976</u> <u>966</u> Does the well have a cap or lid? Does the well have a cap or lid? 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 the well casing? Measured depth of the well from measurement point: Thickness of sediment accumulation (reported depth-present r Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc): 	$\begin{bmatrix} 1 & \begin{bmatrix} 1 & 1 & \\ 1 & 1 & 1 & \\ 1 & \begin{bmatrix} 1 & 1 & \\ 1 & 1 & \\ 1 & \begin{bmatrix} 1 & 1 & \\ 1 & 1 & \\ 1 & \begin{bmatrix} 1 & 1 & \\ 1 & \\ 1 & \begin{bmatrix} 1 & 1 & \\ 1 & \\ 1 & 1 & \\ 1 & \begin{bmatrix} 1 & 1 & \\ 1 & \\ 1 & 1 & \\ 1 & 1 & \\ 1 & 1 &$	
Inspection Date: $\frac{2}{2}$ Inspected by:	VCanll	

RAVENNA ARMY AMMUNITION PLANT WELL INSPECTION CHECKLIST	
WELL INFORMATION Well Number: UL Kmw-605	Load Line 8
Casing Type: Steel Stainless Steel	PVC
Screened/Open-Hole Well Type:	Monitor Interval Length: <u>10</u> ft
Flush-mount/Above-ground Completion:	
Reported Constructed Depth: 27.22	ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
 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? 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 traffic cover cracked or deteriorated? Frost heaving? Identification: Is the well labeled with the correct number? Describe labeling: Does the well have a cap or lid? Does the well have a cap or lid? 	$ \begin{bmatrix} $
Does the well have a weatherproof lock? Does the lock secure the 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 the well casing? Measured depth of the well from measurement point: DTB Thickness of sediment accumulation (reported depth-present	[] [Y [] [] [Y [] [Y [] [] 1 measurement):
Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc):	
Inspection Date: <u>A</u> 20 Inspected by:	al Bully

RAVENNA ARMY AMMUNITION PLANT WELL INSPECTION CHECKLIST	
WELL INFORMATION Well Location/Functional Area: Number: UKmw-cold	Load Ling 8
Casing Type: Steel Stainless Steel	2 pvc
Screened/Open-Hole Well Type: <u>Screened</u>	Monitor Interval Length:ft
Flush-mount/Above-ground Completion:	wel
Reported Constructed Depth: 26,84	ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
Above-ground completion:	$\begin{bmatrix} 1 & [1] & [1] \\ [1] & [1] & [1] \\ [1] & [1] & [1] \\ [1] & [1] & [1] \\ [1] & [1] & [1] \\ [1] & [1] & [1] \\ [1] & [1] & [1] \\ [1] & [1] & [X] \\ [X] & [X] & [X] & [X] & [X] & [X] \\ [X] & [X] $
Does the well have a cap or lid? Does the well have a weatherproof lock? Does the lock secure the 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 the well casing? Measured depth of the well from measurement point: DTB Thickness of sediment accumulation (reported depth-present in Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc): Inspection Date: Inspected by:	$\begin{bmatrix} 1 & [1 & [1 &] \\ 1 & [1 & [1 & [1 &] \\ 1 & [1 & [1 & [1 &] \\ 1 & [1 & [1 & [1 &] \\ 1 & [1 & [1 & [1 &] \\ 1 & [1 & [1 & [1 &] \\ 1 & [1 & [1 & [1 &] \\ 1 & [1 & [1 & [1 &] \\ 1 & [1 & [1 & [1 & [1 &] \\ 1 & [1 & [1 & [1 & [1 & [1 &] \\ 1 & [1 & [1 & [1 & [1 & [1 &] \\ 1 & [1 & [1 & [1 & [1 & [1 &] \\ 1 & [1 & [1 & [1 & [1 & [1 & [1 & [1 & [1 &] \\ 1 & [1 $
WELL INSPECTION CHECKLIST	
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Well Location/Functional Area: Locad Line 9 Number: <u>LL9nw-001</u>	
Casing Type: Steel Stainless Steel PVC	
Screened/Open-Hole Well Screened Monitor Interval Length:ft	
Flush-mount/Above-ground Completion:	
Reported Constructed Depth: <u>23, 28</u> ft BGS or BTOC (circle one)	
INSPECTION ITEMS YES NO N/A COMMENTS	
Well-head Completion:	
Above-ground completion:	
Does the well have a cap or lid? [Y [] [] Does the well have a weatherproof lock? [Y [] [] Does the lock secure the well? [Y [] [] Does the inner casing have a water-tight cap? [U [] []	
Down-hole Condition: Is the well casing bent, corroded, or broken (at the surface?) $[]$	
Inspection Date: $1/2^{-1}$ Inspected by: $1/$	

WELL INSPECTION CHECKLIS I	
WELL INFORMATION Well Number: <u>LIGNW-CCC</u> Location/Functional Area: <u>LOCICLINE</u>	
Casing Type: Steel Stainless Steel PVC	
Screened/Open-Hole Well Screened Monitor Interval Length: 10 ft	
Flush-mount/Above-ground Completion:	
Reported Constructed Depth: <u>22.42</u> ft BGS or BTOC (circle one)	
INSPECTION ITEMS YES NO N/A COMMENTS	
Well-head Completion:	
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? U Image: Does vegetation around the well need clearing?	^c SC
Flush-mount completion:	
Identification: Is the well labeled with the correct number? Describe labeling:	
Security:	
Is the well casing loose (at the surface)? Is a measurement point marked at the top of the well casing? Measured depth of the well from measurement point: Thickness of sediment accumulation (reported depth-present measurement): Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc):	
Inspection Date: 4/24 Inspected by: 6 Hanie	

WELL INSPECTION CHECKLIST
WELL INFORMATION Well Location/Functional Area: Number: <u>119mw-003</u> <u>Locad Line</u>
Casing Type: Steel Stainless Steel PVC
Screened/Open-Hole Well Type: <u>Screened</u> Monitor Interval Length: <u>10</u> ft
Flush-mount/Above-ground Completion:
Reported Constructed Depth: 23_i (ft BGS or BTOC (circle one)
INSPECTION ITEMS YES NO N/A COMMENTS
Well-head Completion:
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? Is steel protective casing have a weep hole? Does the protective casing have a weep hole? Image: the traffic cover securely bolted to the flush-mount box? Does the well have a flush-mount box? Is the traffic cover cracked or deteriorated? Frost heaving? Is the concrete apron cracked or deteriorated? Frost heaving? Is the vell labeled with the correct number? Is the well labeled with the correct number?
Describe labeling: Yainded on NOST Security: Does the well have a cap or lid? [Y [] [] [] Does the well have a weatherproof lock? [Y [] [] [] Does the lock secure the well? [Y [] [] [] Does the inner casing have a water-tight cap? [Y [] [] [] Does the inner casing have a water-tight cap? [Y [] [] [] Does the inner casing have a water-tight cap? [Y [] [] [] Down-hale Condition:
* NO Sand

WELL INSTECTION CHECKLIST
WELL INFORMATION
Well Location/Functional Area:
Number: 119 MW-009 Load Line
Casing Type: Steel Stainless SteelPVC
Screened/Open Hole Well Monitor Interval
Type: CCNODOCI Length: ID ft
$\frac{1}{1} \frac{1}{1} \frac{1}$
Flush-mount/Above-ground
Completion: Above
Reported Constructed Depth: $(43)^{1/2}$ ft BGS or BTOC (arcle one)
INSPECTION ITEMS YES NO N/A COMMENTS
Well-head Completion:
Above-ground completion:
Are the posts applicated to provent colligion demoge to the
Well?
Are any of the posts damaged or degraded?
Is a concrete nad 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: 19 med CA 10 xr
Security:
Does the well have a cap or lid?
Does the well have a weatherproof lock?
Does the lock secure the well?
Does the inner cashig have a water-ught cap?
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 the well
casing?
Measured depth of the well from measurement point: DTR 34,74
Thickness of sediment accumulation (reported depth-present measurement):
Are there any obstructions in the well?
Description of well bottom conditions (soft, hard, etc):
Inspection Date: 0/79 Inspected by: (Agw -
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A NO. S GACI -LIVE
Appendix C / バレン - 89 c かん FWGWMP 2006 Annual Report
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WELL INFORMATION Well Location/Functional Area: Number: <u>L19mw</u> 605	load Line 9
Casing Type: Steel Stainless Steel	PVC
Screened/Open-Hole Well Screened	Monitor Interval Length:ft
Flush-mount/Above-ground Abcve	
Reported Constructed Depth: <u>13.30</u>	ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
Above-ground completion:	
Securary: Does the well have a cap or lid? Does the well have a weatherproof lock? Does the lock secure the 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 the well casing? Measured depth of the well from measurement point: Diff Thickness of sediment accumulation (reported depth-present m Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc):	$\begin{bmatrix} 1 & [1 & [1 &] \\ 1 & [1 & [1 & [1 &] \\ 1 & [1 & [1 &] \\ 1 & [1 & [1 & [1 &] \\ 1 & [1 & [1 & [1 &] \\ 1 & [1 & [1 & [1 &] \\ 1 & [1 & [1 & [1 &] \\ 1 & [1 & [1 & [1 &] \\ 1 & [1 & [1 & [1 &] \\ 1 & [1 & [1 & [1 &] \\ 1 & [1 & [1 & [1 &] \\ 1 & [1 & [1 & [1 & [1 &] \\ 1 & [1 & [1 & [1 & [1 &] \\ 1 & [1 & [1 & [1 & [1 & [1 &] \\ 1 & [1 & [1 & [1 & [1 & [1 &] \\ 1 & [1 & [1 & [1 & [1 & [1 & [1 & [1 &] \\ 1 & [1 $
Inspection Date: 4129 Inspected by:	(Hang

WELL INFORMATION Location/Functional Area: Locat (1) ref 9 Number: L9 ML - WC Locat (1) ref 9 Casing Type: Steel Stainless Steel LPVC Screened/Open-Hole Well Screened(Open-Hole Well Monitor Interval Length: 40 ft Fush-mount/Above-ground Completion: Above Monitor Interval Length: 40 ft Reported Constructed Depth: 28.90/L ft BGS or pTOC Gricle one) INSPECTION ITEMS YES NO N/A COMMENTS Well-head Completion: Above-ground completion: Above-ground completion: Number of guard posts at well: Steen protective casing installed? 1 <th>RAVENNA ARMY AMMU WELL INSPECTION (</th> <th>NITION PLANT CHECKLIST</th>	RAVENNA ARMY AMMU WELL INSPECTION (NITION PLANT CHECKLIST
Casing Type: Steel Stainless Steel UPVC Screened/Open-Hole Well Screenell Length: 10 ft Flush-mount/Above-ground Above Above 100 ft Reported Constructed Depth: 28.91 ft BGS or BTOC (circle one) INSPECTION ITEMS YES N/A COMMENTS Well-head Completion: Above-ground completion: YES N/A COMMENTS Mumber of guard posts at well: YES N/A COMMENTS Well-head Completion: Above-ground completion: YES N/A COMMENTS Mumber of guard posts at well: YES N/A COMMENTS Well-head Completion: Above-ground completion: YES N/A COMMENTS Are the posts of anaged or degraded? [Y [] [] [] [Y [] [] [] [Y [] [] [] [Y [] [WELL INFORMATION Well Location/Functional Area: Number: <u>129Mw</u> -006	Load line 9
Screened/Open-Hole Well Screened (Monitor Interval Length:	Casing Type: Steel Stainless Steel	L PVC
Flush-mount/Above-ground Completion: Above Reported Constructed Depth: 28.90 ft BGS or BTOC (circle one) INSPECTION ITEMS YES NO N/A COMMENTS Well-head Completion: Number of guard posts at well: YES NO N/A COMMENTS Are the posts positioned to prevent collision damage to the well? YES NO N/A COMMENTS Are any of the posts damaged or degraded? [Y]	Screened/Open-Hole Well Screenec(Monitor Interval Length:ft
Reported Constructed Depth: 28,44 ft BGS or BTOC (circle one) INSPECTION ITEMS YES NO N/A COMMENTS Well-head Completion: Are the posts positioned to prevent collision damage to the well? YES NO N/A COMMENTS Are any of the posts damaged or degraded? I <th>Flush-mount/Above-ground Completion:</th> <td></td>	Flush-mount/Above-ground Completion:	
INSPECTION ITEMS YES NO N/A COMMENTS Well-head Completion: Above-ground completion:	Reported Constructed Depth: 28,90	ft BGS or BTOC (circle one)
Well-head Completion: 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 post of deteriorated? Frost heaving? Is the post casing installed? Is steel protective casing have a weep hole? Does the protective casing have a weep hole? Is the traffic cover securely bolted to the flush-mount box? Is the traffic cover securely bolted to the flush-mount box? Is the traffic cover cracked or broken? Is the concrete apron cracked or deteriorated? Frost heaving? Is the concrete apron cracked or deteriorated? Frost heaving? Is the well have a flush-mount box? Is the concrete apron cracked or deteriorated? Frost heaving? Is the vell labeled with the correct number? Does the well have a cap or lid? Does the well have a watter-right cap? Does the well have a watter-right cap? Does the well casing bont, corroded, or broken (at the surface?)? Is the well casing loose (at the surface)?	INSPECTION ITEMS	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? [Y] Is a concrete pad installed? [Y] Is the pad cracked or deteriorated? Frost heaving? [Y] Is the pad cracked or deteriorated? Frost heaving? [Y] Is steel protective casing installed? [Y] Does the protective casing have a weep hole? [Y] Does the protective casing have a weep hole? [Y] Does the protective casing have a weep hole? [Y] Does the protective casing have a weep hole? [Y] Does the protective casing have a weep hole? [Y] Does the well have a flush-mount box? [Y] Is the traffic cover securely bolted to the flush-mount box? [Y] Is the traffic cover cracked or broken? [Y] Is the concrete apron cracked or deteriorated? Frost heaving? [Y] Is the well labeled with the correct number? [Y] Does the well have a cap or lid? [Y] Does the well have a cap or lid? [Y] Does the well have a watherproof lock? [Y] Does the lock secure the well? [Y]<	Well-head Completion:	-
Is the well habeled with the confect planabeled of the total of total of the total of total of the total of total of the total of tot	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? 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:	
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)? []]	Describe labeling: Describe labeling: Does the well have a cap or lid? Does the well have a weatherproof lock? Does the lock secure the well?	
Down-hole Condition:	Does the inner casing have a water-tight cap?	
Is a measurement point marked at the top of the well casing? Measured depth of the well from measurement point: DTB 28.60 Thickness of sediment accumulation (reported depth-present measurement): Are there any obstructions in the well?	 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 the well casing? Measured depth of the well from measurement point: https://www.istance.com Measured depth of the well from measurement point: https://www.istance.com Dascription of well bottom conditions (coff hard cto); 	$\begin{bmatrix} 1 & \begin{bmatrix} 1 & \\ 1 & \end{bmatrix} \\ \begin{bmatrix} 1 & \begin{bmatrix} 1 & \\ 1 & \end{bmatrix} \\ \end{bmatrix}$ $\begin{bmatrix} 1 & \begin{bmatrix} 1 & \\ 1 & \end{bmatrix} \\ \end{bmatrix}$ $\begin{bmatrix} 1 & \begin{bmatrix} 1 & \\ 2 & \end{bmatrix} \\ \end{bmatrix}$ $\begin{bmatrix} 2 & \begin{bmatrix} 3 & \\ 0 & \end{bmatrix}$ measurement): $\begin{bmatrix} 1 & \begin{bmatrix} 1 & \\ 1 & \end{bmatrix} \\ \end{bmatrix}$
Inspection Date: 4/24 Inspected by: 6 Aleria	Inspection Date: <u>4124</u> Inspected by:	6 Aloris

WELL INFORMATION Well Location/Functional Area: Number: <u>UMAW</u> -007 –	Lord Lin 9
Casing Type: Steel Stainless Steel	PVC
Screened/Open-Hole Well Screened	Monitor Interval Length: <u>1</u> () ft
Flush-mount/Above-ground Flush-mount/Above-ground	Mount
Reported Constructed Depth: 18,50	ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
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 of 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 appropriate or deteriorated? Frost	
heaving?	
Identification:	
Is the well labeled with the correct number? Describe labeling:	
Security:	
Does the well have a cap or lid?	l'appertent
Does the lock secure the well?	
Does the inner casing have a water-tight can?	
Down-hole Condition:	
Is the well casing bent, corroded, or broken (at the	
surface?)	
Is the well casing loose (at the surface)?	[] [Y []
Is a measurement point marked at the top of the well	
casing?	
Measured depth of the well from measurement point: \underline{J}	MB 18. LL
A re there any obstructions in the well?	
Description of well bottom conditions (soft, hard, etc.)	$L = \frac{1}{\sqrt{2}} \frac{1}{$
Inspection Date: <u>424</u> Inspected by:	GRan
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WELL INSPECTION C	HECKLIST
WELL INFORMATION	
Well Location/Functional Area:	
Number: $110 \text{ MW} - 000$	rad Line 10
Casing Type: Steel Stainless Steel	PVC
Screened/Open-Hole Well Screened/	Monitor Interval Length: <u>10</u> ft
Flush-mount/Above-ground Completion:	
Reported Constructed Depth: 29,77	ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
Above-ground completion:	
Describe labeling: Security: Does the well have a cap or lid? Does the well have a weatherproof lock? Does the lock secure the 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 the well	
casing?	[4] [] []
Measured depth of the well from measurement point:	TB 29,65/
Thickness of sediment accumulation (reported depth-present	measurement):
Are there any obstructions in the well?	$\begin{bmatrix} 1 \\ 1 \end{bmatrix} \begin{bmatrix} 1 \\ 2 \end{bmatrix} \begin{bmatrix} 1 \end{bmatrix}$
Description of well bottom conditions (soft, hard, etc):	Hury
Inspection Date: Inspected by:	al Bully.
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WELL INSPECTION CHECKLIST
WELL INFORMATION
Well Location/Functional Area:
Number: 110AW-002 LocaltrelO
Casing Type: Steel Stainless Steel PVC
Screened/Open-Hole Well
Type: $\underline{Screeneen}$ Length: $\underline{10}$ ft
Flush-mount/Above-ground Completion:
Reported Constructed Depth: 21.73 ft BGS or BTOC circle one)
INSPECTION ITEMS YES NO N/A COMMENTS
Well-head Completion:
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? [4][]
Does the protective casing have a weep hole? [1] [1]
Does vegetation around the well need clearing? [] [4/[]
Flush-mount completion:
Is the traffic cover securely bolted to the flush-mount
box? [] [] [/]
Does the well have a flush-mount box? [] [] [1]
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?
Security
Does the well have a cap or lid?
Does the well have a weather proof lock? $\frac{1}{2}$
Does the lock secure the well?
Does the inner casing have a water-tight can?
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 the well
casing?
Measured depth of the well from measurement point: $\frac{29.87}{29.87}$
Thickness of sediment accumulation (reported depth-present measurement):
Are there any obstructions in the well? $\left\{ \sqrt{1}, \left[\right] \right\}$
Description of well bottom conditions (soft, hard, etc):
Inspection Date: <u>4124</u> Inspected by: <u>Ghamis / al Bullinger</u>

RAVENNA ARMY AMMUNITION PLANT WELL INSPECTION CHECKLIST		
WELL INFORMATION Well Location/Functional Area: Number: <u>[10mw-003]</u>	oad Line 10	
Casing Type: Steel Stainless Steel	PVC	
Screened/Open-Hole Well Type: <u>Screened</u>	Monitor Interval Length:	
Flush-mount/Above-ground Completion:		
Reported Constructed Depth: 28,88	ft BGS of BTOC (dircle one)	
INSPECTION ITEMS	YES NO N/A COMMENTS	
Well-head Completion:		
Above-ground completion:	[Y] [] [] [] [Y] [] [] [Y] [] [] [Y] [] [] [Y] [] [] [] []<	
 Security: Does the well have a cap or lid? Does the well have a weatherproof lock? Does the lock secure the 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 the well casing? 		
Measured depth of the well from measurement point: DTB_{2} Thickness of sediment accumulation (reported depth-present m Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc):	$\begin{array}{c} 28, (b2) \\ \text{easurement}): \\ [] \\ 146, cd \\ \end{array}$	
Inspection Date: <u> </u>	U alen o	

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WELL INSPECTION C.	
WELL INFORMATION	
Well Location/Functional Area:	
Number: $L_{10}m\omega - \alpha \delta^4$	sed Line 10
Casing Type: Steel Stainless Steel	PVC
	b f i do m T - do mon I
Screened/Open-Hole Well	Longth:
Type.	
Flush-mount/Above-ground	
Completion:	
$\frac{1}{2}$	\sim
Reported Constructed Depth: <u>57.0</u>	ft BGS or BTOC (eircle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
Above-ground completion:	
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?	[]_[4 []
Is steel protective casing installed?	
Does the protective casing have a weep hole?	
Does vegetation around the well need clearing?	
Flush-mount completion:	
hox?	
Does the well have a flush-mount hox?	
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 lock secure the well?	
Does the inner casing have a water-tight can?	
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 the well	
casing?	
Measured depth of the well from measurement point: $D \prod_{i=1}^{n}$	5 77.61
Thickness of sediment accumulation (reported depth-present r	neasurement):
Are there any obstructions in the well? Description of well bottom conditions (soft bard etc.)	
b b b b b b b b b b	
1170	OOR DO
Inspection Date: <u>U</u> Inspected by:	Ul Dulling
	()

RAVENNA ARMY AMMUNITION PLANT WELL INSPECTION CHECKLIST		
WELL INFORMATION		
Number: $110 \text{ mW} - 005$ 1000	Jac Line 10	
Casing Type: Steel Stainless Steel	<u> </u>	
Screened/Open-Hole Well Screenee	Monitor Interval Length:ft	
Flush-mount/Above-ground Above-		
Reported Constructed Depth: 29, 27	ft BGS or BTOC (circle one)	
INSPECTION ITEMS	YES NO N/A COMMENTS	
Well-head Completion:		
Above-ground completion: Number of guard posts at well: Are the posts positioned to prevent collision damage to the		
well?		
Is a concrete pad installed?		
Is the pad cracked or deteriorated? Frost heaving?	[] [4] []	
Is steel protective casing installed?		
Does the protective casing have a weep hole?		
Does vegetation around the well need clearing?	[] [4 []	
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: $1704 > 5$ $0 = c_1 (1)$		
Dese the well have a see or lid?		
Does the well have a weather proof look?		
Does the lock secure the well?		
Does the inner casing have a water tight can?		
Down-hole Condition:		
Is the well casing bent corroded or broken (at the		
surface?)	$\begin{bmatrix} 1 \end{bmatrix} \begin{bmatrix} 1 \\ 1 \end{bmatrix} \begin{bmatrix} 1 \\ 1 \end{bmatrix} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	
Is the well casing loose (at the surface)?		
Is a measurement point marked at the top of the well		
casing?		
Measured depth of the well from measurement point: $\frac{1}{2}$	1, 34	
Thickness of sediment accumulation (reported depth-present n	neasurement):	
Are there any obstructions in the well?		
Description of well bottom conditions (soft, hard, etc):	Harel	
Λ		
Inspection Date: 4124 Inspected by:	Glamis/Ul Brillinger	

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RAVENNA ARMY AMIN WELL INSPECTION	AUNITION PLANT N CHECKLIST
WELL INFORMATION Well Location/Functional Area: Number: <u>LLIOMW</u> -OCC	Load Line 10
Casing Type: Steel Stainless Stee	PVC
Screened/Open-Hole Well Screened	Monitor Interval Length:ft
Flush-mount/Above-ground Completion:	e
Reported Constructed Depth:	ft BGS of BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head 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 the protective casing have a weep hole? Does vegetation around the well need clearing? <i>Flush-mount completion:</i> 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? <i>Identification:</i> Is the well labeled with the correct number? Describe labeling: <i>Security:</i>	$ \begin{array}{c} $
Does the well have a cap or lid? Does the well have a weatherproof lock? Does the lock secure the 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 the well casing? Measured depth of the well from measurement point: DT	
Thickness of sediment accumulation (reported depth-prese Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc):	ent measurement): $\left[\begin{array}{c} 1\\ 1\\ 1\\ 1\\ 1\\ 1\\ 1\\ 1\\ 1\\ 1\\ 1\\ 1\\ 1\\ $
Inspection Date: Inspected by	y

RAVENNA ARMY AMMUN WELL INSPECTION CI	ITTION PLANT HECKLIST
WELL INFORMATION Well Location/Functional Area: Number: LIIMW - OC L	cackin 11
Casing Type: Steel Stainless Steel	<u>2Pvc</u>
Screened/Open-Hole Well	Monitor Interval Length: <u>10</u> ft
Flush-mount Above-ground Above-	
Reported Constructed Depth: 24,07-	ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
Above-ground completion: Are the posts positioned to prevent collision damage to the 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 the protective casing have a weep hole? 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 inner casing have a water-tight cap? Down-hole Condition: Is the well casing loose (at the surface)? Is a measurement point marked at the top of the well casing? Measured depth of the well from measurement point: Thickne	$ \begin{array}{c} $
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Appendix C	FWGWMP 2006 Annual Report

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	RAVENNA AR WELL INS	MY AMMUN PECTION CH	ITION P IECKLI	LANT ST		
	WELL INFORMATION Well Location/Function Number: <u>LLIMW</u> のつ	onal Area:	Load	<u>lin</u>	(e)	<u> </u>
	Casing Type: Steel Sta	inless Steel		\leq	PV	с
\langle	Screened/Open-Hole Well	n	Mo Lei	nitor Ir ngth:	nterval	<u>\</u> ft
\langle	Flush-mount/Above-ground	ush				
	Reported Constructed Depth:	0.01	ft BGS o	вто	ç (circl	e one)
	INSPECTION ITEMS		YES	NO	N/A	COMMENTS
	Well-head Completion:	٨				
	Above-ground completion: 2 Number of guard posts at well: Are the posts positioned to prevent collision dam	nage to the				
	well? Are any of the posts damaged or degraded? Is a concrete pad installed?		[4 [] [7]		[]. []. []	
	Is the pad cracked or deteriorated? Frost heaving Is steel protective casing installed? Does the protective casing have a weep hole?	g?	[] [] []			
	Does vegetation around the well need clearing? Flush-mount completion:		[]	14	[]	
	Is the traffic cover securely bolted to the flubox?	ush-mount	14	[]	[]	
	Does the well have a flush-mount box? Is the traffic cover cracked or broken?		[4]	[] [J]	[]	
	Is the concrete apron cracked or deteriorat heaving?	ed? Frost	[]	[4	[]	
	Identification: Is the well labeled with the correct number?		[4	[]	[]	
	Describe labeling: Parist	ed on po				
	Does the well have a cap or lid?		[4	[]	[]	
	Does the well have a weatherproof lock? Does the lock secure the well?		M			ann a chuir an
	Does the inner casing have a water-tight cap?		iy	[]	[]	
	Down-hole Condition: Is the well casing bent, corroded, or broken (at th	e			-	and the second second and the second seco
	surface?)		[]	M	[].	2019-2019-2019-2019-2019-2019-2019-2019-
	Is a measurement point marked at the top of	f the well		[-]	 	yn ar fernan yw ar y
	casing? Measured depth of the well from measurement r	ooint: 16	0.53	[]		
	Thickness of sediment accumulation (reported d	lepth-present m	easureme	ent):	· , -	
	Are there any obstructions in the well? Description of well bottom conditions (soft, hard	d, etc):	har	1 <u>_1</u>		
	Inspection Date: 4/25 In	nspected by: _		àn	l	2

WELL INSPECTION CO	IEURLIST
WELL INFORMATION	
Well Location/Functional Area:	
Number: $1/1/M_{\rm H}$ -003	Scalor II
Casing Type: Steel Stainless Steel	Bve
Screened/Open-Hole Well Type: SCreened/	Monitor Interval Length: ft
Flush-mount/Above-ground	
Completion:	
Provented Company 15 97	t PCS of PTOC (birala ana)
	It BOS OF BTOC (clicke one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
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?	[] [] [4
Is steel protective casing installed?	
Does the protective casing have a weep hole?	[] [] [] []
Does vegetation around the well need clearing?	[] [4 []
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	
neaving?	
In 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? 23%	
Does the lock secure the 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 the well	
casing?	
Measured depth of the well from measurement point:	16.14
I nickness of sediment accumulation (reported depth-present me	easurement):
Are there any obstructions in the well?	
Description of well bottom conditions (soft, nard, etc):	THELL
イロビ	AD R AD
Inspection Date: <u>4</u> 4 5 Inspected by: _	all Dully

RAVENNA ARMY AMM WELL INSPECTION	IUNITION PLANT N CHECKLIST
WELL INFORMATION Well Location/Functional Area:	
Number: $2211 \text{mw} - 004$	LoadLinell
Casing Type: Steel Stainless Steel	I PVC
Screened/Open-Hole Well Screened	Monitor Interval Length:ft
Flush-mount/Above-ground Completion: Flush-r	Namt
Reported Constructed Depth: $l(a_1) \neq d_2$	ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
Above-ground completion: 4 Number of guard posts at well: 4 Are the posts positioned to prevent collision damage to the well? 4 Are any of the posts damaged or degraded? 1s a concrete pad installed? Is the pad cracked or deteriorated? Frost heaving? 1s steel protective casing installed? Does the protective casing have a weep hole? 10 Does vegetation around the well need clearing? 10 Flush-mount completion: 1s the traffic cover securely bolted to the flush-mount box? Does the well have a flush-mount box? 1s the traffic cover cracked or broken? Is the concrete apron cracked or deteriorated? Frost heaving? Identification: 1s the well labeled with the correct number? Describe labeling: 10	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
Security: Does the well have a cap or lid? Does the well have a weatherproof lock? Does the lock secure the 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 the well casing? Measured depth of the well from measurement point:	[V [] [] <u>Hread lug Brote</u> [] [V [] <u>Hread lug Brote</u> [V [] [] <u>16,26</u>
Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc):	$\frac{[V[]] [V]}{Herc}$
Inspection Date: $4/25$ Inspected by	GHann
Appendix C * Water Abo	FWGWMP 2006 Annual Report

	CHONCEMENT	
WELL INFORMATION Well Location/Functional Number: LLI/mw-005	I Area: Load Line 11	
Casing Type: Steel Stainles	ss Steel PVC	
Screened Open-Hole Well	Monitor Interval Length:	ft
Flush-mount/Above-ground Flush- Completion:	öh	
Reported Constructed Depth: 15.97	ft BGS or BTOO (circle one)	
INSPECTION ITEMS	YES NO N/A COMMENTS	
Well-head Completion:		
Above-ground completion: Image: Completion: Number of guard posts at well: Image: Completion: Are the posts positioned to prevent collision damage 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 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-mbox? Does the well have a flush-mount box? Is the traffic cover cracked or broken? Is the concrete apron cracked or deteriorated? heaving? Identification: Is the concrete apron cracked or deteriorated?	$ \begin{array}{c} \hline e \ to \ the \\ \begin{bmatrix} 1 & \begin{bmatrix} 1 & \begin{bmatrix} 1 & \\ 1 & \begin{bmatrix} 1 & \\ 1 & \begin{bmatrix} 1 & \\ 1 & \end{bmatrix} \\ \begin{bmatrix} 1 & \begin{bmatrix} 1 & \\ 1 & \\ 1 & \begin{bmatrix} 1 & \\ 1 & \\ 1 & \begin{bmatrix} 1 & \\ 1 & \\ 1 & \\ 1 & \begin{bmatrix} 1 & \\$	
Is the well labeled with the correct number?		
Describe labeling: Painted or	m post	
Security: Does the well have a cap or lid? Does the well have a weatherproof lock? Does the lock secure the 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 the casing? Measured depth of the well from measurement point: Thickness of sediment accumulation (reported depth- Are there any obstructions in the well?	$\begin{bmatrix} 1 & [&] & [&] & \\ [& 1 & [&] & \\ [& 1 & [&] & \\ [& 1 & [&] & \\ [& 1 & [&] & \\ [& 1 & [&] & \\ [& 1 & [&] & \\ \end{bmatrix} \end{bmatrix}$ e well $\begin{bmatrix} 1 & [& 1 & \\ [& 1 & [&] & \\ [& 1 & [& 1 & \\ \end{bmatrix} \end{bmatrix}$ e well t: $\begin{bmatrix} 1 & [& 1 & \\ [& 1 &] & \\ [& 1 & [& 1 & \\ \end{bmatrix} \end{bmatrix}$	
Description of well bottom conditions (soft, hard, etc	c): hard	
Inspection Date: 4-25-06 Inspect	cted by: <u>C'Canall</u>	

WELL INSPECTION CH	ECKLIST
WELL INFORMATION Well Location/Functional Area: Number: LUND-000	Load Line 11
Casing Type: Steel Stainless Steel	PVC
Screened/Open-Hole Well Screenec(Monitor Interval Length: <u>10</u> ft
Flush-mount/Above-ground Completion: <u>Flush-mac</u>	<u>~</u> ↓
Reported Constructed Depth: 15,44	ft BGS or BTOC circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head 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? <i>Flush-mount completion:</i> 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? <i>Identification:</i> Is the well labeled with the correct number?	[4] [1] [1] [1] [1] [1] [1] [1] [1] [1] [1] [1] [1] [1] [1] [1] [1] [1] [1] [1] [1] [1] [1] [1] [1] [1] [1] [1] [1] [1] [1] [1] [1] [1] [1] [1] [1] [1] [1] [1] [1] [1] [1] [1] [1]
Describe labeling: <u>Arche C C A VOSS</u> Security: Does the well have a cap or lid? Does the well have a weatherproof lock? Does the lock secure the 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 the well casing? Measured depth of the well from measurement point: Thickness of sediment accumulation (reported depth-present me	[1] [1] [1] [1] [1] [1] [1] [1] [1] [1] [1] [1] [1] [1] [1] [1] [1] [1] [1] [1] [1] [1] [1] [1] [2] [3] [4] [3] [4] [4] [5] [4] [5] [5]
Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc): Inspection Date:	Hard II SA an is

WELL INSPECTION C	HECKLIST
WELL INFORMATION	
Number: $\underline{LLIM} - \partial D \gamma = -$	- Landling 1
Casing Type: Steel Stainless Steel	Pvc
Screened/Open-Hole WellScreened	Monitor Interval Length: <u>10</u> ft
Flush-mount/Above-ground Completion: <u>Abcve (orce</u>	mel
Reported Constructed Depth: 25,13	ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
Above-ground completion: 4 Number of guard posts at well: 4 Are the posts positioned to prevent collision damage to the well? 4 Are any of the posts damaged or degraded? 1s a concrete pad installed? Is the pad cracked or deteriorated? Frost heaving? 1s steel protective casing installed? Does the protective casing have a weep hole? 10 Does vegetation around the well need clearing? 1 Flush-mount completion: 1s the traffic cover securely bolted to the flush-mount box? Does the well have a flush-mount box? 1s the traffic cover cracked or broken? Is the concrete apron cracked or deteriorated? Frost heaving? 1 Is the well labeled with the correct number? 1 Is the well labeled with the correct number? 1	
Describe labeling: <u>Van Lect can Nost and M</u> Security: Does the well have a cap or lid? Does the well have a weatherproof lock? Does the lock secure the 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 the well casing? Measured depth of the well from measurement point: Thickness of sediment accumulation (reported depth-present Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc):	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
Inspection Date: <u>l 25</u> Inspected by:	GHonis

RAVENNA ARMY AMMU WELL INSPECTION C	NITION PLANT CHECKLIST
WELL INFORMATION Well Location/Functional Area: Number: 221 Mu -005	Load Line 1
Casing Type: Steel Stainless Steel	L PVC
Screened/Open-Hole Well Schelled	Monitor Interval Length: _/Oft
Flush-mount/Above-ground Completion:	Thus
Reported Constructed Depth: 15,39	ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
Above-ground completion: 4 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: Security:	[Y [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] []
Does the well have a cap or lid? Does the well have a weatherproof lock? Does the lock secure the 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 the well casing? Measured depth of the well from measurement point: Thickness of sediment accumulation (reported depth-present) Are there any obstructions in the well? Description of well bottom conditions (soft hard etc);	$\begin{bmatrix} 1 & [4 & f] \\ 1 & [4 & [1] \\ 1 & [4 & [1] \\ 1 & [5 & 78 \end{bmatrix}$ measurement): $\begin{bmatrix} 1 & [4 & [1] \\ 1 & [5 & 78 \end{bmatrix}$
Inspection Date: $\frac{4125}{1125}$ Inspected by:	Balania

WELL INSPECTION CHECKLIST
WELL INFORMATION Well Location/Functional Area:
Number: UIMW-CON LOGALING
Casing Type: Steel Stainless SteelPVC
Screened/Open-Hole Well Type: Monitor Interval Length:
Flush-mount/Above-ground Completion: Flush-Mount
Reported Constructed Depth: 16.55 ft BGS or BTOC (circle one)
INSPECTION ITEMS YES NO N/A COMMENTS
Well-head Completion:
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? [Y] [] [] 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? [] [] []
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? [] [[[]]
heaving?
Is the well labeled with the correct number? Describe labeling: <u>Xannecl on Post</u> [] []
Security: Does the well have a cap or lid? Does the well have a weatherproof lock? Does the lock secure the well? Does the inner casing have a water-tight cap?
Down-hole Condition:
surface?) Is the well casing loose (at the surface)? [] [4 []
Is a measurement point marked at the top of the well casing? Measured depth of the well from measurement point:
Thickness of sediment accumulation (reported depth-present measurement): Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc):
Inspection Date: 1/25 Inspected by: QR Bulling
Water Pressure papped well capaff.

WELL INSPECTION C	CHECKLIST
WELL INFORMATION Well Location/Functional Area: Number: LLIMW-010	LoadLight
Casing Type: Steel Stainless Steel	PVC
Screened/Open-Hole Well Type:	Monitor Interval Length:
Flush-mount/Above-ground Completion:	C.
Reported Constructed Depth: 23.3	_ ft BGS of BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
Above-ground completion: Image: Completion image: Comple	
Security: Does the well have a cap or lid? Does the well have a weatherproof lock? Does the lock secure the 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 the well casing? Measured depth of the well from measurement point: Thickness of sediment accumulation (reported depth-present Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc): Inspection Date:	$\begin{bmatrix} 4 & 1 & 1 \\ 1 & 1 & 1 \\ 1 & 1 & 1 \\ 1 & 1 &$

RAV	ENNA ARMY AMMU WELL INSPECTION C	NITION HECKL	PLAN' IST	Г	
WELL INFORMATION Well Loca Number: <u>1212 nw-688</u>	tion/Functional Area: –	221	2		
Casing Type: Steel	Stainless Steel		<u> </u>	PV	с
Screened/Open-Hole Well	reged	M	lonitor angth:	Interval	_ <u>/0</u> _ft
Flush-mount/Above-ground Completion:	Above - Spon	nd		-	
Reported Constructed Depth:	26.92	ft BGS	orBTC	Ccircl	e one)
INSPECTION ITEMS		YES	NO	N/A	COMMENTS
Well-head Completion:			~		
Are any of the posts damaged or deg Is a concrete pad installed? Is the pad cracked or deteriorated? F Is steel protective casing installed? Does the protective casing have a we Does vegetation around the well need Flush-mount completion: Is the traffic cover securely bolted box? Does the well have a flush-mount bonder Is the traffic cover cracked or brokend Is the traffic cover cracked or brokend Is the concrete apron cracked or heaving? Identification: Is the well labeled with the correct of Does the well have a cap or lid? Does the well have a weatherproof led Does the lock secure the well? Does the inner casing have a water-to Down-hole Condition: Is the well casing bont, corroded, or bo surface?) Is the well casing loose (at the surface	graded? rost heaving? eep hole? d clearing? d to the flush-mount x? r deteriorated? Frost umber? flube & faube pock? ight cap? roken (at the xe)?				
Is a measurement point marked at casing? Measured depth of the well from me Thickness of sediment accumulation Are there any obstructions in the well Description of well bottom condition	the top of the well asurement point: (reported depth-present ll? as (soft, hard, etc):	[] [] [] []	5[] <u>27.5</u> nent): ⁰ [X]	[] 0+0; 67-27-5 []	12=27.62 6H
Inspection Date: $4 - 24 - 20\%$	Inspected by:	6.1	tarr	ĩ (
(V?					
Appendix C	109		F	WGWN	MP 2006 Annual Report

RAVENNA ARMY AMMUN WELL INSPECTION C	VITION PLANT HECKLIST
WELL INFORMATION Well Location/Functional Area: Number: $\angle \angle /2 = w \cdot 107$	LL 12
Casing Type: $ \overset{GW}{\longrightarrow}$ Steel Stainless Steel	PVC
Screened/Open-Hole Well Screened	Monitor Interval Length: <u>l</u> O ft
Flush-mount/Above-ground Completion:	n.J
Reported Constructed Depth: 32.82	ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
Above-ground completion: 4 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? Is the well labeled with the correct number? Describe labeling: Brass glate g	M [] [] [] M [] [] M [] [] M [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] []
Security: Does the well have a cap or lid? Does the well have a weatherproof lock? Does the lock secure the 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 the well casing? Measured depth of the well from measurement point: Thickness of sediment accumulation (reported depth-present model) Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc):	$\begin{bmatrix} M & [] & [] \\ M & [$
Inspection Date: $4 - 24 - 06$ Inspected by:	GHarris
$V_{e}^{2} = \mathcal{B} \circ \mathcal{F} + / wet$	

RAVENNA ARMY AMMU WELL INSPECTION (NITION PLANT CHECKLIST
WELL INFORMATION Well Location/Functional Area:	
Number: 12 mw - 113	LL 12
Casing Type: Steel Stainless Steel	PVC
Screened/Open-Hole Well	Monitor Interval Length: <u>/O</u> ft
Flush-mount/Above-ground Completion:	٨
Reported Constructed Depth: 24.81	_ ft BGS or BTOC circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
Above-ground completion:	
Are the posts positioned to prevent collision damage to the	
well?	[X] [] []
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? Prost	
heaving?	сі сі ся
Identification:	Б.Л. Г.]
Is the well labeled with the correct number?	
Describe labeling: Briss Plate & Painty Cash	<u>in</u>
Deep the well have a cap or lid?	
Does the well have a weather proof look?	
Does the lock secure the well?	
Does the lock secure the well?	
Does the inner casing have a water-tight cap?	
Is the well casing bent corroded or broken (at the	
is the went casing bent, confided, of broken (at the surface?)	
Surface:) Is the well casing loose (at the surface)?	
Is a measurement point marked at the top of the well	
casing?	
Measured depth of the well from measurement point. 4	$\frac{1}{99} 20 50 + 12 = 20 102$
Thickness of sediment accumulation (renorted denth-present	measurement) Not 201 112 20,00
Are there any obstructions in the well?	
Description of well bottom conditions (soft_bard_etc)	Set 1
Inspection Date: $4 - 24 - 04$ Inspected by:	CHArris
\mathcal{V}	

RAVENNA ARMY AMMUN WELL INSPECTION CH	ITION PLAN IECKLIST	T	
WELL INFORMATION			
Well Location/Functional Area:			
Number: <u>LL 12 mw-128</u>	261	2	~
att		/	
Casing Type: Steel Stainless Steel		V PVC	
Screened/Open-Hole Well	Monitor	Interval	
Type:	Length:		<u>/ð</u> ft
Flush-mount/Above-ground			
Completion: Above - S round	<u> </u>		
		3	
Reported Constructed Depth: <u>33.13</u>	ft BGS on BT	OO (circle one)	
INSPECTION ITEMS	YES NO	N/A COM	MENTS
Well-head Completion:			
Above-ground completion:	-		
Number of guard posts at well: 4/			
Are the posts positioned to prevent collision damage to the			
well?	[x] []	[]	
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		rà / a	
box?		[X]	
Does the well have a flush-mount box?			
Is the traffic cover cracked or broken?		[7]	
Is the concrete apron cracked or deteriorated? Frost		c) (a	
heaving?		[Y]	
Identification:		· · · · · · · · · · · · · · · · · · ·	
Is the well labeled with the correct number?	KI []	[]	
Describe labeling: Brass Plate			
Security:		г. Э	
Does the well have a cap or lid?			
Does the well have a weatherproof lock?		[]	
Does the lock secure the well?		[]	
Does the inner casing have a water-tight cap?	1×1 []	[]	
Down-hole Condition:			
is the well casing bent, corroded, or broken (at the		r 1	
surface?)			
Is the well casing loose (at the surface)?			
is a measurement point marked at the top of the well	KINTBE 1	F 1	
Vasility: Ch Management depth of the well from management point:			(1 111
Thickness of sediment accumulation (reported donth research	$\frac{44}{54.5}$		7.76
A re there any obstructions in the wall?		[]	
Are more any obstructions in the well? Description of well bottom conditions (soft hard sto):			
Description of wen bottom continuous (soft, nard, etc):	J044-90->	+ICKY	
	o il		
Inspection Date: $4-24-2014$ Inspected by:	6 Harri	5	

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WELL INFORMATION Well Loo Number: <u>LL12 mw-15</u> 3	cation/Functional Area:		LL 1	2		
Casing Type: CX Steel	Stainless Steel		$_{\nu}$	_ PV	ΥĊ	
Screened/Open-Hole Well Type:	Scheened	M Le	onitor I ength:	Interval		ft
Flush-mount/Above-ground Completion:	above - gpu	nd				
Reported Constructed Depth:	24.81	ft BGS	orBTO	Ccircl	le one)	
INSPECTION ITEMS		YES	NO	N/A	COMMENTS	
Well-head Completion:						
Above-ground completion:			-			
Number of guard posts at well:	4					
Are the posts positioned to prevent	collision damage to the					
well?	1 10				••••••••••••••••••••••••••••••••••••••	A CONTRACTOR OF CONTRACTOR
Are any of the posts damaged or de	egraded?					
Is a concrete pad installed?	T . 1 . 0					
Is the pad cracked or deteriorated?	Frost heaving?	[]				
Is steel protective casing installed?						
Does the protective casing have a v	weep note?					
Does vegetation around the well he	ed clearing?	l		Ĺ		
Flush-mount completion:	and to the fluch mount					
hor?	ed to the hush-mount	r 1	r ı	[V]		
Does the well have a flush-mount h	2029			[X]		_
Is the traffic cover cracked or brok	on?					
Is the concrete aprop cracked	or deteriorated? Frost	ι 1	LJ	L X, J		
heaving?	of acteriorated. 110st	[]	[]	۲ V 1		
Identification:		ι .	ι,	·/ ·	•	
Is the well labeled with the correct	number?		[]	[]		--
Describe labeling: Rras	s Plate and Painted	Casin				
Security:		<u> </u>				
Does the well have a cap or lid?		[X]	[]	[]		
Does the well have a weatherproof	lock?	[×·]	[]	[]		
Does the lock secure the well?		$[\times]$	[]	[]		
Does the inner casing have a water	-tight cap?	[X]	[]	[]		
Down-hole Condition:						
Is the well casing bent, corroded, or	broken (at the					
surface?)						
Is the well casing loose (at the surf	ace)?		[×]	LI		
Is a measurement point marked	at the top of the well	ج 1 م ا	r Br I	гз		
Cashig: Maasurad danth of the well from m	alt assurement point:		いろ し い しい	11	$\frac{1}{2}$	
Thickness of sediment accumulation	neasurement point.	measurer	$\frac{2}{2}$	1 + U.1	$\mathcal{L} = \mathcal{L} \ge .16$	
Are there any obstructions in the w	all?	f 1	iciii). 01 f⊠1	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	<u>- </u>	
Description of well bottom condition	ons (soft, hard_etc)	Have	וריש	ιΙ		
Description of went bottom condition	ono (over, mad, oto).	<u> </u>	<u>``</u>			·····
Inspection Date: $4 - 24 - 06$	Inspected by:	G Alar	ris			

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RAVENNA ARMY AMMUN WELL INSPECTION CE	JITION PLANT HECKLIST
WELL INFORMATION Well Location/Functional Area:	6612
Casing Type: Steel Stainless Steel	PVC
Screened/Open-Hole Well Screened	Monitor Interval Length: <u>10</u> ft
Flush-mount/Above-ground Completion: <u>above-ground</u>	
Reported Constructed Depth: 28.41	ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
Above-ground completion: Number of guard posts at well:	$ \begin{bmatrix} X & [&] & [&] \\ [&]$
Is the concrete apron cracked or deteriorated? Frost	
heaving?	[] [] [Y]
Identification:	· · · · · · · · · · · · · · · · · · ·
Is the well labeled with the correct number?	
Security:	
Does the well have a cap or lid? Does the well have a weatherproof lock? Does the lock secure the well? Does the inner casing have a water-tight cap?	[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 the well casing?	[X] [] []
Thickness of sediment accumulation (reported denth-present m	$\frac{5+}{2} \frac{2}{2} 2$
Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc):	[] [X] [] Sticky
Inspection Date: <u>4-24- 2606</u> Inspected by:	atarnis

WELL INSPECTION C	HECKLIST
WELL INFORMATION Well Location/Functional Area: Number: <u>人人ノ2 nいー</u> パン	4212
Casing Type: GW Steel Stainless Steel	V PVC
Screened/Open-Hole Well Screened	Monitor Interval Length: <u>10</u> ft
Flush-mount/Above-ground Completion:	und
Reported Constructed Depth: 37.42	ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
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?	[x] [x] [x] [] [x] [x] [] [x] [x] [] [x] [x]
Is steel protective casing installed? Does the protective casing have a weep hole? Does vegetation around the well need clearing?	M [] [] M [] [] [] M []
Is the traffic cover securely bolted to the flush-mount box?	
Is the traffic cover cracked or broken?	
is the concrete apron cracked or deteriorated? Prost heaving?	[] [] []
Is the well labeled with the correct number? Describe labeling Parce United Casing and	
Security:	
Does the well have a cap or lid? Does the well have a weatherproof lock? Does the lock secure the well? Does the inner casing have a water-tight cap?	[X] [] [] [X] [] [] [X] [] [] [X] [] [] [X] [] []
Is the well casing bent, corroded, or broken (at the surface?)	[] M] []
Is the well casing loose (at the surface)? Is a measurement point marked at the top of the well	
casing? Measured depth of the well from measurement point: Thickness of sediment accumulation (reported depth-present Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc):	$[X]_{B}[1][]_{,44} = 38.14$ measurement): $DBF = 38.14$ [] [X] [] [Axd]
Inspection Date: $4 - 24 - 2006$ Inspected by:	G.Harris

Well Number: <u>L112 mw -183</u>	Location/Functional Area:	hh	12		
Casing Type: $\underline{}$	Stainless Steel		<u>}</u>	_ PVC	
Screened/Open-Hole Well Type:	Screaned	M Le	onitor l ength:	Interval	
Flush-mount/Above-ground Completion:	Above -grow	n d		-	
Reported Constructed Depth:	35.69	ft BGS of	or BTC	C(circle on	e)
INSPECTION ITEMS		YES	NO	N/A CO	OMMENTS
Well-head Completion:					
Number of guard posts at well: Are the posts positioned to prev well? Are any of the posts damaged of Is a concrete pad installed? Is the pad cracked or deteriorate Is steel protective casing install Does the protective casing have Does vegetation around the wel <i>Flush-mount completion:</i> Is the traffic cover securely box? Does the well have a flush-mou Is the traffic cover cracked or b Is the concrete apron cracked heaving? <i>Identification:</i> Is the well labeled with the corr	yent collision damage to the or degraded? ed? Frost heaving? ed? e a weep hole? I need clearing? bolted to the flush-mount ant box? roken? ed or deteriorated? Frost				
Security: Does the well have a cap or lid? Does the well have a weatherpr Does the lock secure the well? Does the inner casing have a wa Down-hole Condition: Is the well casing bent, corroded surface?) Is the well casing loose (at the solution) Is a measurement point mark casing? Measured depth of the well from Thickness of sediment accumul Are there any obstructions in th	y in the surface)? ater-tight cap? I, or broken (at the surface)? ed at the top of the well n measurement point: ation (reported depth-present e well?	[X] [X] [X] [X] [] [] [] [] [] [] []	$[] \\ [] \\ [] \\ [] \\ [] \\ [X] $	[] [] [] [] [] [] [] + 0. 12 = 3 36-36-36 0 0 1	<u>36.38</u>
Description of well bottom con	ditions (soft, hard, etc):	Hard	<u> </u>		, 110, 10 LV0201588

WELL INSI ECTION C.	moun			
WELL INFORMATION				
Well Location/Functional Area:	,			
Number: $\lambda L_{12} MW = 189$	LL	12		10047
Casing Type:Steel Stainless Steel		<i>l</i>	_ PV	/C
Screened/Open-Hole Well Type: <u>Screened</u>	M	Ionitor I ength:	Interval	ft
Flush-mount/Above-ground Completion: Above - group	und			
Reported Constructed Depth: 31.00	ft BGS	orBTC		le one)
INSPECTION ITEMS	YES	NO	N/A	COMMENTS
Well-head Completion:				
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?	$[\mathbf{N}]$	[]	[]	
Is the pad cracked or deteriorated? Frost heaving?	[]	[ܐ]	[]	
Is steel protective casing installed?	$[\mathbf{N}]$	[]	[]	
Does the protective casing have a weep hole?	[×]	[]	[]	
Does vegetation around the well need clearing?	$[\times]$	[]	[]	Costinily, Willows Ewet]
Flush-mount completion:				
Is the traffic cover securely bolted to the flush-mount	г т	r 1	т Л	
box?				······································
Does the well have a flush-mount box?				
Is the traffic cover cracked or broken?		[]	L/I	
Is the concrete apron cracked or deteriorated? Frost	1 1	r 1	r 1	
neaving?	[]		11	
Identification:	\sim	гı	۲ T	·
Describe labeling: $P_{1} \leftarrow P_{2}$	17	LJ	11	
Security:	/			
Does the well have a cap or lid?	м	г т	r 1	
Does the well have a weatherproof lock?		[]	[]	
Does the lock secure the well?	[∧]			
Does the inner casing have a water-tight cap?		r i	[]	
Down-hole Condition:	e 🖓			
Is the well casing bent, corroded, or broken (at the				<u> </u>
surface?)	[]	[×]	[]	
Is the well casing loose (at the surface)?	[]	[×]	[]	
Is a measurement point marked at the top of the well				
casing?		3[]	[]	
Measured depth of the well from measurement point: 4	1-22	31.34	+0.	12 = 31.46
Thickness of sediment accumulation (reported depth-present r	neasuren	nent): 🕅	11-31-3	4 GH
Are there any obstructions in the well?	[]	[X]	[]	
Description of well bottom conditions (soft, hard, etc):	Hard	<u> </u>		
Inspection Date: 4-24-25-06 Inspected by:	GH	Arril		
$\overline{\mathbb{N}}$				
\mathbb{U}				

WELL INSPECTION	
WELL INFORMATION Well Location/Functional Area: Number: LL12 mw-1455	LL 12
Casing Type: $\underbrace{\times}^{GH}$ Steel Stainless Steel	PVC
Screened/Open-Hole Well Screened	Monitor Interval Length: <u>10</u> ft
Flush-mount/Above-ground A bove - 9	round
Reported Constructed Depth: 23.02	ft BGS or BTOC circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
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?	IXI I I I [] XI [] I
Flush-mount completion:	
Is the traffic cover securely bolted to the hush-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: <u>Brass flate & Paula</u>	[X] [] []
Does the well have a cap or lid? Does the well have a weatherproof lock? Does the lock secure the well? Does the inner casing have a water-tight cap? Down-hole Condition:	M [] [] [M] [] []
Is the well casing bent, corroded, or broken (at the surface?) Is the well casing loose (at the surface)?	[] [X] []
A measurement point marked at the top of the well casing? Measured depth of the well from measurement point: Thickness of sediment accumulation (reported depth-preser	$(X = [X]_{B} = [X]_{C} = [X]_{C} = \frac{1}{23, 2^{3} + 0.12} = 23.35^{-1}$ and measurement): $\frac{1}{847 + 23.35} = 23.35^{-1}$
Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc):	[] [X] [] Hard
Inspection Date: <u>4-24-2w6</u> Inspected by	: gharns
V? if dw = 8054	

Appendix C

RAVENNA ARMY AMMUN WELL INSPECTION C	NITION HECKL	PLAN' IST	Г	
WELL INFORMATION				
Well Location/Functional Area:				
Number: $\frac{12 \text{ mW} - 186}{186}$	LLIC	<u></u>		
GH		1		
Casing Type: Steel Stainless Steel			PVC	
Screened/Open_Hole Well	м	Innitor]	Interval	
Type: Screened	L	ength:		/0 ft
		Ũ		
Flush-mount/Above-ground				
Completion: Above-ground	<u>,</u>		-	
Reported Constructed Depth: <u>20. '77</u>	ft BGS	orBTC	C(circle one)	
INSPECTION ITEMS	YES	NO	N/A COM	IMENTS
		-		
vven-nead Completion:		-		
Above-ground completion:				
Are the posts positioned to prevent collision damage to the				
well?	$[\mathbf{v}]$	[]	[]	
Are any of the posts damaged or degraded?	SH IN		[]	
Is a concrete pad installed?	$[\times]$	[]	[]	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Is the pad cracked or deteriorated? Frost heaving?	[]	\bowtie	[]	
Is steel protective casing installed?	\bowtie	[]	[]	
Does the protective casing have a weep hole?	$[\times]$	[]	[]	
Does vegetation around the well need clearing?	[]	[X]	[]	
Flush-mount completion:				
Is the traffic cover securely bolted to the flush-mount	r 1	6 1	L/A	
Does the well have a flush-mount hoy?	[] []	[]		
Is the traffic cover cracked or broken?		[]		······································
Is the concrete apron cracked or deteriorated? Frost				
heaving?	[]	[]	[%]	
Identification:			•	1045 - 1046 - 1046 - 1046 - 1046 - 1046 - 1046 - 1046 - 1046 - 1046 - 1046 - 1046 - 1046 - 1046 - 1046 - 1046 -
Is the well labeled with the correct number?	[\]	[]	[]	an ann aite an
Describe labeling: Brass Plate & Painted Casi	n)			
Security:	5.0	r ı	r 1	
Does the well have a weatherproof lock?	[×] [⁄]		[] []	
Does the lock secure the well?				
Does the inner casing have a water-tight cap?		[]		
Down-hole Condition:			<u> </u>	
Is the well casing bent, corroded, or broken (at the				
surface?)	[]	$[\times]$	[]	<u></u>
Is the well casing loose (at the surface)?	[]	$[\times]$	[]	
is a measurement point marked at the top of the well	٢ ⁄1~~	r Pa	F J	
лаэшд: Measured denth of the well from measurement point. 5	יעניא <u>ז</u> זעניאן	199.	+012 -2	1.11
Thickness of sediment accumulation (reported depth-present r	neasuren	nent): H	3F-20.94 GH	• (11
Are there any obstructions in the well?	[]		[]	
Description of well bottom conditions (soft, hard, etc):	Hard	-/ *		
Inspection Date: $4 - 14 - 2 \approx 6$ Inspected by	CH	tarris		
A more than the more than the second by.	<u> </u>	<u>~\''()</u>		<u></u>
\mathbb{V}				

RAVENNA ARMY AMMUNITI WELL INSPECTION CHE	ION PLANT CKLIST
WELL INFORMATION	
Well Location/Functional Area: Number: $\underline{\zeta_{L/2_mm}}$ -187	LL 12
Casing Type: <u>+</u> G [*] Steel Stainless Steel	PVC
Screened/Open-Hole WellScreened	Monitor Interval Length: <u>10</u> ft
Flush-mount/Above-ground Completion:	м
Reported Constructed Depth: 29.29 ft I	BGS or BTOC circle one)
INSPECTION ITEMS Y	TES NO N/A COMMENTS
Well-head Completion:	
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 the and gracked or deteriorated? Frost beauing?	
Is steel protective casing installed?	
Does the protective casing have a ween hole?	×] [] []
Does vegetation around the well need clearing?	
Flush-mount completion	
Is the traffic cover securely bolted to the flush-mount	1 [] []
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: Bruss flate y	
Security:	
Does the well have a cap or lid?	×] [] []
Does the well have a weatherproof lock?	X] [] [] bottom cover missing
Does the lock secure the well?	×1 [] []/
Does the inner casing have a water-tight cap?	<] [] []
Down-hole Condition:	
Is the well casing bent, corroded, or broken (at the	1 6.1 7 1
Surface ?) [
Is the well casing loose (at the surface)?] [×] []
is a measurement point marked at the top of the well casino?	
Measured depth of the well from measurement point:	29 88 + 0.12 = 29 30 00
Thickness of sediment accumulation (renorted depth-present measured	surement): \81-24.48 (24
Are there any obstructions in the well?	
Description of well bottom conditions (soft, hard, etc):	лгл
Inspection Date: <u>4-24-20-36</u> Inspected by:	attarris

Appendix C

RAVENNA ARMY AMMUN	ITION PLANT
WELL INSPECTION CF	decklis i
WELL INFORMATION	
Well Location/Functional Area:	11.0
Number: $\lambda 212 \text{ m} - 188$	LL 12
Casing Type: Steel Stainless Steel	PVC
Screened/Open-Hole Well	Monitor Interval
Type: <u>Scheched</u>	Length: <u>10</u> ft
Flush-mount/Above-ground Completion: <u>Above - Groun</u>	<u>~ J</u>
Reported Constructed Depth: 21,97	ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
Above-ground completion:	-
Number of guard posts at well:	
Are the posts positioned to prevent collision damage to the	
Are any of the posts damaged or degraded?	
Is a concrete nad 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?	[] [] [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?	
Identification:	ъл га га ————————————————————————————————
Is the well labeled with the correct number?	
Describe labeling: Brass ylate & fainted Cast	£
Does the well have a cap or lid?	
Does the well have a weather proof lock?	
Does the lock secure the 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 the well	A BELLER
casing?	
Measured depth of the well from measurement point:	$\frac{77}{22} - \frac{22}{28} + \frac{22}{28} + \frac{12}{28} + \frac{22}{28} + 22$
A re there any obstructions in the well?	
Description of well bottom conditions (soft hard etc)	LI W LI Hand the soft
Description of wen bottom conditions (soft, nata, ca).	1 1 4 1 9 1 9 0 9 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Inspection Date: <u>4-24-2006</u> Inspected by:	GHarris
\odot	
RAVENNA ARMY AMMUN WELL INSPECTION CH	ITTION PLANT IECKLIST
---	--
WELL INFORMATIONWellLocation/Functional Area:Number:189	LL 12
Casing Type: Steel Stainless Steel	PVC
Screened/Open-Hole Well Screened	Monitor Interval Length: <u>10</u> ft
Flush-mount/Above-ground Completion:	А
Reported Constructed Depth: 19.3)	ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
 Above-ground completion: Number of guard posts at well: <u>4</u> 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: <u>Brast flute & fainted Casing</u> Security: 	$ \begin{bmatrix} M \\ I \\ M \\ I \\ M \\ I \\ I \\ M \\ I \\ I \\$
Security: Does the well have a cap or lid? Does the well have a weatherproof lock? Does the lock secure the 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 the well casing? Measured depth of the well from measurement point: Thickness of sediment accumulation (reported depth-present m Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc):	$\begin{bmatrix} & & & & & \\ & & & & & & \\ & & & & & \\ & & & & & & \\ $
Inspection Date: 4-24-06 Inspected by	G-Harris
$\frac{1}{(v)} + ree \circ \wedge top$	0-1141110

WELL INSPECTION C	HECKLIST
WELL INFORMATION Well Location/Functional Area: Number: <u>L12 MW -242</u>	LL 12
Casing Type: Steel Stainless Steel	PVC
Screened/Open-Hole Well Type: Screened	Monitor Interval Length:ft
Flush-mount/Above-ground Completion:	
Reported Constructed Depth: 28.30	ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
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 of deteriorated? Frost heaving?	
Is steel protective casing installed?	IXI I I I <u>preeds sand</u>
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: Brass Plate on hid	
Security:	са са са са
Does the well have a cap or lid?	
Does the well have a weatherproof lock?	
Does the lock secure the well?	
Does the inner casing have a water-tight cap?	
Down-hole Condition:	
is the well casing bent, corroded, or broken (at the	
Surface?)	$\begin{bmatrix} I \\ I \end{bmatrix} \begin{bmatrix} X \\ Z \end{bmatrix} \begin{bmatrix} I \\ I \end{bmatrix} \begin{bmatrix} I $
Is the well cashing loose (at the surface):	[] N] [] NO SANDE OF SADE IN COSTA
casing?	MUSPER ET
Measured denth of the well from measurement point:	$\frac{1}{44}$ $2931 + 12 = 29.42$
Thickness of sediment accumulation (reported denth-present n	neasurement): PBT=29.31
Are there any obstructions in the well?	
Description of well bottom conditions (soft, hard, etc.)	Hard
Inspection Date: <u>4-24-2006</u> Inspected by:	C Harris
(V) IF Dry No Sand	

WELL INFORMATION				
Number: $\frac{LL12mW-243}{2}$	Ļ.	L12	·	
Casing Type: Steel Stainless Steel		L	_ PV	/C
Screened/Open-Hole Well Type: Screened	Mo Ler	onitor I ngth:	Interval	ft
Flush-mount/Above-ground Completion:	1			
Reported Constructed Depth: 25.69	ft BGS o	rBTO	G(circ	le one)
INSPECTION ITEMS	YES	NO	N/A	COMMENTS
Well-head Completion:				
Above-ground completion:		~		
Are the posts positioned to prevent collision damage to the				
well?	\mathbb{N}^{1}	ſ 1	[]	
Are any of the posts damaged or degraded?	[]		[]	
Is a concrete pad installed?			[]	
Is the pad cracked or deteriorated? Frost heaving?		ст Г/Л		
Is the part tracked of deteriorated? Those heaving:	[] []	[]	[] []	
The steel protective casing instance:	l×1	11		
Does the protective casing have a weep hole?			l l	
Does vegetation around the well need clearing?	ιı	(X)		
Flush-mount completion:				
Is the traffic cover securely bolted to the flush-mount				
box?	[]	[]	ĮχJ	
Does the well have a flush-mount box?	[]	[]	[X]	
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]	[]	[]	California and a second
Describe labeling: Rear/Lid				
Security:				
Does the well have a cap or lid?		[]	[]	
Does the well have a weatherproof lock?	$[\mathbf{v}]$			······
Does the lock secure the well?	[v]	[]	[]	
Does the inner casing have a water tight can?	[X]	[]	[] []	
Does the finite casing have a water-tight cap:	LX J	LJ	L J	
Lown-hole Condition.				
is the well casing bent, confided, of bloken (at the	r 1	NJ	۲ I	
Surface?)		1×1 [5]	[] []	
Is the well casing loose (at the surface)?	ĹJ		LJ	
is a measurement point marked at the top of the wen	<u>د</u> ا	.r ı	Г Т .	
Casing?	IX DI	SL J	- L '	
Interstreet depth of the well from measurement point: $\frac{1}{2}$	-0440	22	15 +	12-25.85
Inickness of sediment accumulation (reported depth-present r	neasureme		51 ~ ≪ 3×/	2
Are there any obstructions in the well?		[X]	LI	
Description of well bottom conditions (soft, hard, etc):	Hard.	to St	icky	
Inspection Date: $4 - 24 - 2006$ Inspected by:	GHa	r1i)	· · · · · · · · · · · · · · · · · · ·	
(\tilde{V})				

WELL INSPECTION C	CHECKL	151		
WELL INFORMATION				
Well Location/Functional Area: Number: $LL12mw-244$	22	12		
Casing Type:GH Steel Stainless Steel		V	PV	Ϋ́C
Screened/Open-Hole Well Type: <u>Screened</u>	M	lonitor l ength:	Interval	<u>10</u> ft
Flush-mount/Above-ground Completion:			-	
Reported Constructed Depth: 32.05	ft BGS	orBTC	(circ	le one)
INSPECTION ITEMS	YES	NO	N/A	COMMENTS
Well-head Completion:				
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?	[X]	[] [X]	[]	
Is a concrete pad installed?	[]	[]	[]	
Is the pad cracked or deteriorated? Frost heaving?	[]	[x]	[]	
Is steel protective casing installed?	$[\times]$	[]	[]	
Does the protective casing have a weep hole?	$[\mathbf{X}]$	[]	[]	
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:	6.4	г л	с 1	
Is the well labeled with the correct number?		L I		
Describe labeling: Brass Plate on hid				
Security:	5.61	r 1	гı	
Does the well have a waether proof look?				
Does the lock secure the well?	[X] [X]	L J T T		
Does the inner casing have a water tight can?	[X]	[] []	1 I F 1	<u>, , ,',, , ,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>
Does the filler casing have a water-tight cap:	[*]	LJ	L J	
Is the well casing bent corroded or broken (at the				
surface?)	[]	№ 1	[]	
Is the well casing loose (at the surface)?	[]	\mathbb{N}^1	[]	<u></u>
Is a measurement point marked at the top of the well	L]	1, 1	LI	
casing?	A KID	B[]	[]	
Measured depth of the well from measurement point: -8	F-61 3	1.47	+ .12	= 31,59
Thickness of sediment accumulation (reported depth-present	measuren	nent): M	5-31-4	⁹ GH
Are there any obstructions in the well?	[]	[×]	[]	
Description of well bottom conditions (soft, hard, etc):	5047			and a second and a second and a second and a second second and a second s
Inspection Date: $4 - 24 - 2606$ Inspected by:	GH	arris		· · · · · · · · · · · · · · · · · · ·

WELL INSPECTION C.	HECKLIST	
WELL INFORMATION		
Well Location/Functional Area:		
Number: $1/12$ mul- 345	LL 12	
Casing Type: Steel Stainless Steel	PVC	
Screened/Open-Hole Well Type: <u>Screene</u> d	Monitor Interval Length:/O	ft
Flush-mount/Above-ground Completion:above-ground		
Reported Constructed Depth: 30,54	ft BGS or BTOC circle one)	
INSPECTION ITEMS	YES NO N/A COMMENTS	
Well-head Completion:		
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?	[x] [] []	
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?	[] [] [X]	
Does the well have a flush-mount box?		
Is the traffic cover cracked or broken?		
Is the concrete apron cracked or deteriorated? Frost		
heaving?	[] [] [y]	
Identification:	,	
Is the well labeled with the correct number?	[X] [] []	
Describe labeling: Brass Plate on Lid		
Security:		
Does the well have a cap or lid?	[X] [] []	
Does the well have a weatherproof lock?	[X] [] []	
Does the lock secure the well?	[x] [] []	
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)?	[] [X] []	
Is a measurement point marked at the top of the well	0	
casing?	[×] DTB(] []·	
Measured depth of the well from measurement point: $\frac{7\pi}{7}$	79 30.26+.12 = 30.38	
Thickness of sediment accumulation (reported depth-present r	neasurement): bb7 = 30.26 <u>G'</u> }	
Are there any obstructions in the well?	[] [×] []	
Description of well bottom conditions (soft, hard, etc):	Hard	
	C House's	
Inspection Date: $\frac{\gamma}{2}\frac{\gamma}{2}\frac{\gamma}{-}\frac{\psi}{\psi}$ Inspected by:	6794113	

WELL INSPECTION C	IECKLIST
WELL INFORMATION Well Location/Functional Area: Number: L/2 mw-24/2	LL12
Casing Type: Steel Stainless Steel	PVC
Screened/Open-Hole Well Type: Screened	Monitor Interval Length: <u>/O</u> ft
Flush-mount/Above-ground Completion: <u>above-ground</u>	L
Reported Constructed Depth: 34.33	ft BGS of BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
Above-ground completion: Number of guard posts at well: <u>3</u> Are the posts positioned to prevent collision damage to the	
well? Are any of the posts damaged or degraded? Is a concrete pad installed?	[X] [] [] [] [X] []
Is the pad cracked or deteriorated? Frost heaving? Is steel protective casing installed? Does the protective casing have a weep hole?	[] [] [] [X] [] [] [X] [] []
Flush-mount completion:	
Is the traffic cover securely bolted to the flush-mount hox?	
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?	[×] [] []
Security:	
Does the well have a cap or lid? Does the well have a weatherproof lock? Does the lock secure the well? Does the inner casing have a water-tight cap?	[X] [] [] [X] [] [] [X] [] []
<i>Down-hole Condition:</i> Is the well casing bent, corroded, or broken (at the surface?)	[] [X] []
Is the well casing loose (at the surface)? Is a measurement point marked at the top of the well casing?	
Measured depth of the well from measurement point: <u>14</u> Thickness of sediment accumulation (reported depth-present m Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc):	$\frac{76}{12} = 35.06$ neasurement): $\frac{77}{28} = 34.99$ GH [] [X] [] Hard
Inspection Date: $4 - 24 - 2 \times 646$ Inspected by:	CHarris
VIF Corner passable	

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RAVENNA ARMY AMMU WELL INSPECTION (INITION PLANT CHECKLIST
WELL INFORMATION	
Well Location/Functional Area:	Atlas Scrap Javel
Casing Type: Steel Stainless Steel	Lpvc
Screened/Open-Hole Well Screened	Monitor Interval Length: <u>10</u> ft
Flush-mount/Above-ground Completion:	
Reported Constructed Depth: 23,73	_ ft BGS or BTOC (eircle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
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?	[] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] []
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?	[4 [] []
Security: Does the well have a cap or lid? Does the well have a weatherproof lock? Does the lock secure the 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 the well casing? Measured depth of the well from measurement point: Thickness of sediment accumulation (reported depth-present Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc):	$[V [] [] \\ Ho, SS \\ measurement): D, T, S \\ 23, 09 \\ F, [2] \\ 23, 29 \\ F, [2] \\ 23$
Inspection Date: $\frac{126}{2}$ Inspected by:	GHanss

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RAVENNA ARMY AMMU	NITION PLANT
WELL INSPECTION (CHECKLIST
NUEL L INTEODNA ATION	
Well Location/Eurotional Area:	
Number: $A \subseteq M_{11} = O O 2$	Atles Series Yord
Number. 15-4100 CCC -	ATTES ALLEY TONES
Casing Type: Steel Stainless Steel	PVC
Screened/Open-Hole Well	Monitor Interval
Type: <u>Screered</u>	Length: 9.5 ft
Flush-mount/Above-ground Completion:	
Reported Constructed Depth: 22,74	ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
Above-ground completion	·
Number of guard posts at well:	
Are the posts positioned to prevent collision damage to the	and the second se
well?	[4] [] []
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?	[] [4] []]
Flush-mount completion:	
Is the traffic cover securely bolted to the flush-mount	
box?	[] [] [孑]
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?	[Ÿ [] []
Describe labeling: $\frac{1}{10000000000000000000000000000000000$	
Security:	
Does the well have a cap or lid?	
Does the well have a weatherproof lock?	
Does the lock secure the 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 the well	
casing?	
This reason of addiment account lating (maggirgmont) 1 1 77 477+ 12=77
Are there any obstructions in the wall?	
Description of well bottom conditions (soft bard stal)	Ship La Hard
	. 27+1012 · 0 · · · · ·
Inspection Date: <u>2126</u> Inspected by:	6 Hours
V) crossine by	I
t' inn	
Appendix C War 129	FWGWMP 2006 Annual Report

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RAVENNA ARMY AMMUN	NITION PLANT
WELL INSPECTION C	HEUKLIS I
WELL INFORMATION	
Well $\bigwedge \bigvee \bigvee \bigvee \bigvee \bigvee \bigvee$	Mar Com Varl
Number: $M > M = C $	thas scraptare
Casing Type: Steel Stainless Steel	PVC
Screened/Open-Hole Well Screenec	Monitor Interval Length: _/Oft
Flush-mount/Above-ground Completion:	
Reported Constructed Depth: 2-3,5	ft BGS or BTOC (ercle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
Above-ground completion:	•
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?	[[1]]]
Does vegetation around the well need clearing?	
Flush-mount completion:	
Is the traffic cover securely bolted to the flush-mount	. , , , , , , , , , , , , , , , , , , ,
DOX!	
LUCE LIE WEIL HAVE A HUSH-MOUNT DOX?	
is the concrete anran analysis of deteriorated? Front	
heaving?	
Identification	() () (']
Is the well labeled with the correct number?	
Describe labeling: REASS AGA MAL	
Security:	
Does the well have a cap or lid?	
Does the well have a weatherproof lock?	
Does the lock secure the well?	
Does the inner casing have a water-tight cap?	[4 [] []
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 the well	
vasuig: Measured denth of the well from measurement noint:	11/1 L L
Thickness of sediment accumulation (reported depth-present r	11360 Deasurement): 1), T.R. 72 /11/1 12-71.
Are there any obstructions in the well?	$\begin{bmatrix} 1 & \begin{bmatrix} 1 \\ 1 \end{bmatrix} \end{bmatrix} \begin{bmatrix} 1 \\ 2 \end{bmatrix} \begin{bmatrix} 1 \\ 2 \end{bmatrix}$
Description of well bottom conditions (soft, hard, etc):	Harch
nspection Date: $\frac{9/26}{126}$ Inspected by:	GHans
Annendix C. 130	EWGWMP 2006 Annual Report

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~	RAVENNA ARMY AMMUNITION PLANT WELL INSPECTION CHECKLIST
WELL INFORMATION	
Well Number: ASYMW-(Location/Functional Area:
Casing Type: Stee	Stainless SteelPVC
Screened/Open-Hole Well Type:	Screered Monitor Interval Length: 10 ft
Flush-mount/Above-ground Completion:	Abare
Reported Constructed Depth:	19,56 ft BGS or BTOC (dircle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
 Above-ground completion: Number of guard posts at well Are the posts positioned to prewell? Are any of the posts damaged Is a concrete pad installed? Is the pad cracked or deteriors Is steel protective casing insta Does the protective casing ha Does vegetation around the w Flush-mount completion: Is the traffic cover securely box? Does the well have a flush-model is the traffic cover cracked or is the concrete apron cracked or is the concrete apron cracked or is the well labeled with the concrete labeling: 	1: 3 event collision damage to the $\begin{bmatrix} 1 & \begin{bmatrix} 1 & \\ 1 & \begin{bmatrix} 1 & \\ 1 & \\ 1 & \end{bmatrix} \end{bmatrix}$ or degraded? $\begin{bmatrix} 1 & \begin{bmatrix} 1 & \\ $
Security: Does the well have a cap or li Does the well have a weather Does the lock secure the well Does the inner casing have a v Down-hole Condition: Is the well casing bent, corrodo surface?) Is the well casing loose (at the	d? [4 [] [] proof lock? [4 [] [] ? [4 [] [] water-tight cap? [4 [] [] ed, or broken (at the
Is a measurement point mar casing? Measured depth of the well fr Thickness of sediment accum Are there any obstructions in Description of well bottom co	ked at the top of the well $\begin{bmatrix} 1 & [&] & \\ 0 & m \text{ measurement point:} & \hline 7.77 \\ \text{ulation (reported depth-present measurement):} & \hline 7.7.5 & \underline{291,751,12=291,8} \\ \text{the well?} & [& [&] & \\ \text{inditions (soft, hard, etc):} & \hline 1467-C \\ \hline & \hline$
Inspection Date: 472	<u>b</u> Inspected by: <u>Stanio</u> * When dimy
Appendix C	131 FWGWMP 2006 Annual Report

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	10:150
RAVENNA ARMY AI WELL INSPECT	MMUNITION PLANT ION CHECKLIST
WELL INFORMATION	
Well Location/Functional Ar Number: $ASYmw-0005$	rea: Attors Scrap Yord
Casing Type: Steel Stainless S	SteelPVC
Screened/Open-Hole Well Screene	Monitor Interval Length: _/O ft
Flush-mount/Above-ground Above-ground	e ground
Reported Constructed Depth: 26,2	ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
Above-ground completion:	the
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)?	
 a measurement point marked at the top of the v casing? Measured depth of the well from measurement point: Thickness of sediment accumulation (reported depth-pi Are there any obstructions in the well? Description of well bottom conditions (soft hard etc); 	resent measurement): $DTB 27, TS 7, 12=27, 20$
Inspection Date:	d by: Shara
Appendix C 1:	32 FWGWMP 2006 Annual Report

	<u>\\:06</u>
RAVENNA ARMY AMMI WELL INSPECTION	UNITION PLANT
WELL INSPECTION	CHECKLIST
VELL INFORMATION	
Location/Functional Area:	Attac Saco Vard
aumber: 12/1006	ATTAS ECCE MICH
Casing Type: Steel Stainless Steel	PVC
creaned/Open Hole Well	Monitor Interval
ype:Screened	Length: <u>10</u> ft
luch mount/Above ground	
Completion: Above-ground	
Leported Constructed Depth: <u>28,81</u>	ft BGS or BTOC (circle one)
NSPECTION ITEMS	YES NO N/A COMMENTS
Vell-head Completion:	
bove-ground completion:	
Number of guard posts at well:	
Are the posts positioned to prevent collision damage to the	
well? Are any of the poste demograd or degraded?	
Are any of the posts damaged or degraded? Is a concrete had installed?	
Is the pad cracked or deteriorated? Frost heaving?	
Is steel protective casing installed?	1-11Bbi
Does the protective casing have a weep hole?	
Does vegetation around the well need clearing?	
lush-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	
neaving?	
Is the well labeled with the correct number?	
Describe labeling:	
ecurity:	
Does the well have a cap or lid?	
Does the well have a weatherproof lock?	
Does the lock secure the well?	[⁴ /t] []
Does the inner casing have a water-tight cap?	[4 [] []
own-hole Condition:	
Is the well casing bent, corroded, or broken (at the	
surface?)	
Is the well casing loose (at the surface)?	
as a measurement point marked at the top of the well casing?	
Measured depth of the well from measurement point:	13.10
Thickness of sediment accumulation (reported depth-presen	t measurement): D.J.B. 28, 85, 1. 12 = 78, 97
Are there any obstructions in the well?	
Description of well bottom conditions (soft, hard, etc):	Harel
1/11	
Ispection Date: $4/1/6$ Inspected by:	GHang
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RAVENNA ARMY AMMU WELL INSPECTION (NITION PLANT CHECKLIST
Well Location/Functional Areas	
Number: $ASYMW - CO7$	Has Scrap Xcral
Casing Type: Steel Stainless Steel	PVC
Screened/Open-Hole Well Screened	Monitor Interval Length: ft
Flush-mount/Above-ground Completion:	avel
Reported Constructed Depth: <u>28,76</u>	ft BGS of BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
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?	
Flush-mount completion:	
Is the traffic cover securely bolted to the flush-mount	
box?	
Let the traffic cover crecked or broken?	
Is the concrete annon cracked or deteriorated? Frost	
heaving?	
Identification:	
Is the well labeled with the correct number?	
Describe labeling: BG455 TCm COL	
Security:	
Does the well have a cap or lid?	
Does the well have a weatherproof lock?	
Does the lock secure the well?	
Does the inner casing have a water-tight cap?	
Down-hole Condition:	/
Is the well casing bent, corroded, or broken (at the	
surrate:) Is the well casing loose (at the surface)?	
Is a measurement point marked at the top of the well	
casing?	II IT II MURHA (1126/2010)
Measured depth of the well from measurement point:	14:42
Thickness of sediment accumulation (reported depth-present	measurement): D.F.B. 78, 86+, 12=28
Are there any obstructions in the well?	
Description of well bottom conditions (soft, hard, etc):	Hard
Inspection Date: <u>0120</u> Inspected by:	GHaria
(\mathcal{V})	

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RAVENNA ARMY AMMUNITIC WELL INSPECTION CHEC	ON PLANT KLIST
Well Location/Functional Area: Number: ASAMW -008	is Screp Yarch
Casing Type: Steel Stainless Steel	PVC
Screened/Open-Hole Well Screeneel	Monitor Interval Length:ft
Flush-mount/Above-ground Completion:	rel
Reported Constructed Depth: 27.65 ft B	GS of BTOC (orcle one)
INSPECTION ITEMS YI	ES NO N/A COMMENTS
Well-head Completion:	
Number of guard posts at well:	$ \begin{array}{c} 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\$
Is the well labeled with the correct number? Describe labeling: <u>Shass Jac Co Lic</u>	Y [] []
Does the well have a cap or lid? [Does the well have a weatherproof lock? [Does the lock secure the 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 the well casing? Measured depth of the well from measurement point: $\mathcal{D}^{TW} \xrightarrow{\mathcal{U}} \underbrace{\mathcal{U}}_{s \leq s}$ Thickness of sediment accumulation (reported depth-present measurement measurement point) [Description of well bottom conditions (soft hard, etc.)]	$\begin{array}{c} 1 & 1 \\$
Inspection Date: <u>122</u> Inspected by:	Stanio
With Dong	
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RAVENNA ARMY AMMU WELL INSPECTION	INITION PLANT CHECKLIST
WELL INCODMATION	
WELL INFORMATION Well A Location/Functional Area	
Number: AS YMIN -009	Atlas Schap Yard
<u></u>	
Casing Type: Steel Stainless Steel	PVC
Screened/Open-Hole Well	Monitor Interval
Type: <u>Screen</u>	Length: ft
Flush-mount/Above-ground	
Completion:	
Reported Constructed Depth: 24,30	ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
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 no protective casing nave a weep hole?	
Fluch mount completion:	
rusn-mount completion: Is the traffic cover securely holted to the fluch mount	
hox?	
Does the well have a flush-mount hox?	
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: Kass Jac	onlid
Security:)
Does the well have a cap or lid?	[[] []
Does the well have a weatherproof lock?	[4] [] []
Does the lock secure the well?	
Does the inner casing have a water-tight cap?	[4 [] []
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 the well	
vasured denth of the well from measurement point.	
Thickness of sediment accumulation (reported depth present	measurement): DTB 70 521 12-70.6
Are there any obstructions in the well?	$\begin{bmatrix} 1 & \begin{bmatrix} V & \begin{bmatrix} 1 \end{bmatrix} \end{bmatrix}$
Description of well bottom conditions (soft, hard, etc.)	Harch
1/1/21.	(Ani-
Inspection Date: $-\frac{1}{1}\frac{1}{2}\frac{1}{2}$ Inspected by:	() Machino
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$\langle \chi \rangle$	
Appendix C 136	FWGWMP 2006 Annual Report

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RAVENNA ARMY AMMU WELL INSPECTION (INITION PLANT CHECKLIST
WELL INFORMATION	
Well Location/Functional Area: Number: $M_{MW} = O I O$	Atlas Stepturd
Casing Type: Steel Stainless Steel	PVC
Screened/Open-Hole Well Screened	Monitor Interval Length: _// ft
Flush-mount/Above-ground Completion:	wel
Reported Constructed Depth: 29,85	_ ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
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?	[4] [1]
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 basying?	
<i>Identification:</i> 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 the 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 the well casing? Measured depth of the well from measurement point: Thickness of sediment accumulation (reported depth present	[1] [] [] <u>marked 4/26/200</u> 11,38
Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc):	$\begin{bmatrix} 1 & \begin{bmatrix} 1 & 1 \end{bmatrix} \end{bmatrix}$
Inspection Date: <u>426</u> Inspected by:	5 terris
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RAVEN WE	INA ARMY AMMU LL INSPECTION C	NITION PLANT HECKLIST	r <u>, , , , , , , , , , , , , , , , , , ,</u>
WELL INFORMATION			
Well Location	n/Functional Area:	a 1 (
Number: $BIZMW-OIC$)	Building	1200
Casing Type: Steel	Stainless Steel		<u>PVC</u>
Screened/Open-Hole Well Type:	reened	Monitor I Length:	Interval
Flush-mount/Above-ground Completion:	Above		
Reported Constructed Depth:	23.20) ft BGS or BTO	C circle one)
INSPECTION ITEMS		YES NO	N/A COMMENTS
Well-head Completion:		14	
Above-ground completion:	2		
Are the posts positioned to prevent colli	sion damage to the	/	
well?		[Y]	
Are any of the posts damaged or degrad	ed?		
Is a concrete pad installed?			
Is the pad cracked or deteriorated? Fros	t heaving?	[] [4	
Is steel protective casing installed?		[4][]	[]
Does the protective casing have a weep	hole?	[4]	
Does vegetation around the well need cl	earing?	[] [4	
Flush-mount completion:			
Is the traffic cover securely bolted to	the flush-mount		
box?		[] []	[UY
Does the well have a flush-mount box?		[] []	[4]
Is the traffic cover cracked or broken?		[] []	[4
Is the concrete apron cracked or d	eteriorated? Frost		
heaving?			
Identification:			
Is the well labeled with the correct num	ber?	$[\Psi_{\lambda}]]_{c}$	
Describe labeling:	rass Tac	on Pall	
Security:	\bigcirc		
Does the well have a cap or lid?		[亻[]	
Does the well have a weatherproof lock	?	[勹_ []	
Does the lock secure the well?		$[\Upsilon]$	[]
Does the inner casing have a water-tight	t cap?	[Ψ[]	
Down-hole Condition:			
Is the well casing bent, corroded, or brok	en (at the		
surface?)			_[]
Is the well casing loose (at the surface)?		[][4	[]
Is a measurement point marked at the	e top of the well	/	
casing?		[4]	[]
Measured depth of the well from measured	rement point:	15,42	
Thickness of sediment accumulation (re	ported depth-present	neasurement): \mathcal{D}	12 14,187,16 = 12.9 (
Are there any obstructions in the well?	- C t h = -1 - t = \	1114	LJ
Description of well bottom conditions (s	sort, nard, etc):	HARU	
1105		12-11	~
Inspection Date: $2/2$	Inspected by:	O Alam	
	- •		
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/ ~ /			
Appendix C	138		FWGWMP 2006 Annual Report
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RAVENNA ARMY AMM	UNITION PLANT
WELL INSPECTION	CHECKLIST
WELL INFORMATION	
Well Location/Functional Area:	
Number: $B \left[\frac{2}{3} \right] = 0$	(Suidine, 1700)
Casing Type: Steel Stainless Steel	PVC
Screened/Open-Hole Well	Monitor Interval
Type:	$_$ Length: $_/\bigcirc$ ft
Flush mount/Above ground	
Completion:	
Reported Constructed Depth: 2(0, 94	ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
Above-ground completion:	
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?	[] [4 []
Is steel protective casing installed?	[* J] []
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	
Does the well have a flush mount hox?	
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?	[4] [], []
Describe labeling: <u>SPUSS</u> Tag	co Lich
Security:	
Does the well have a cap or lid?	
Does the well have a weatherproof lock?	
Does the inner casing have a water tight can?	
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 the well	
casing?	
Measured depth of the well from measurement point:	M122
I nickness of sediment accumulation (reported depth-present	t measurement): $U U \\ C u a \\ d \\$
Are more any obstructions in the well? Description of well bottom conditions (soft bard etc):	
Description of wen bottom continuous (soft, natu, cuc).	
ALAC .	H-TATA.
Inspection Date: $\frac{\mu}{\mu}$ Inspected by:	Juaiman
NUM CRACE	LARDA
A KWI screitschol	WESPS
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Appendix C 139	FWGWMP 2006 Annual Report

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RAVENNA ARMY AMMU WELL INSPECTION	JNITION PLANT CHECKLIST
WELL INFORMATION	
Well Location/Functional Area:	
Number: $1512 \text{ mw} - 012$	BLDG 1200
Casing Type: Steel Stainless Steel	PVC
Screened/Open-Hole Well	Monitor Interval Length: _/_() ft
Flush-mount/Above-ground Completion:	
Reported Constructed Depth: 24,89	ft BGS or BTOC circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
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? Flush-mount completion: Is the traffic cover securely bolted to the flush-mount box? Does the well have a flush-mount box? Is the concrete apron cracked or deteriorated? Frost heaving? Is the concrete apron cracked or deteriorated? Frost heaving? Identification: Is the well labeled with the correct number? Describe labeling: Mach S Jack Security: Does the well have a cap or lid? Does the well have a weatherproof lock? Does the lock secure the well? Does the inner casing have a water-tight cap?	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
 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 the well casing? Measured depth of the well from measurement point: Thickness of sediment accumulation (reported depth-present Are there any obstructions in the well? 	$\begin{bmatrix} 1 & [Y & [] \\ 1 & [Y & [] \\ 1 & [Y & [] \\ 20.36 \\ \hline measurement): DTB 24.40 + 12 = 24.4 \\ \begin{bmatrix} 1 & [Y & [] \\ 1 & [Y & [Y & [] \\ 1 & [Y & $
Inspection Date: $\frac{1}{25}$ Inspected by:	GALando

Appendix C

WELL INSI ECTION C		101		
WELL INFORMATION				
Well Location/Functional Area:				
Number: (Bland-G))	CBlock	Co	CCA	
		<u> </u>	-0	
Casing Type: Steel Stainless Steel		x	PV	VC
			0.000 di di di di	
Screened/Open-Hole Well	Μ	lonitor 1	Interval	
Type: Screened	L	ength:		_/ <u>/</u> ft
Flush-mount/Above-ground				
Completion: <u>Abuse grave</u>	<u>rd</u>		-	
		6		
Reported Constructed Depth: $\bigcirc 1, \bigcirc 6$	ff BGS	or	C (circ	le one)
TRICIDD COTIONI INTERIO	VEC	NO	BJ/A	COMBERTS
INSPECTION ITEMS	IES	NO	IN/A	COMMENTS
Well-head Completion:				
		~		
Above-ground completion:				
Are the posts positioned to prevent colligion demogra to the				
well?	[×]	гı	r 1	
Are any of the posts damaged or degraded?	[~]	[] []	F 1	
Is a concrete nad installed?	L] [v]	[~]	[]	
Is the pad cracked or deteriorated? Frost heaving?	[]	fy]	[] []	
Is steel protective casing installed?	[x]	[1]	[]	
Does the protective casing have a ween hole?	[x]	[]	r 1	
Does vegetation around the well need clearing?	[]	N I	[]	
Flush-mount completion:	1 1	L- 1	LJ	
Is the traffic cover securely holted to the flush-mount				and a second
box?	[]	[]	[X]	
Does the well have a flush-mount box?	ÌÌ	Î Î	[X]	
Is the traffic cover cracked or broken?	[]	[]	[x]	· · ·
Is the concrete apron cracked or deteriorated? Frost				
heaving?	[]	[]	[]]	
Identification:				
Is the well labeled with the correct number?	[×]	[]	[]	
Describe labeling: <u>tag un lid</u>				- 16 A 10 OT 10
Security:				
Does the well have a cap or lid?	[×]	[]	[]	
Does the well have a weatherproof lock?	[*]	[]	[]	
Does the lock secure the well?	[×]		[]	
Does the inner casing have a water-tight cap?	[x]	ll		
Down-hole Condition:				
Is the well casing bent, corroded, or broken (at the	r 1	ſ., 3	ر م	
surface?)		[×]		
Is the well casing loose (at the surface)?	ll	[*]	IJ	
is a measurement point marked at the top of the well	[5]	r 1	r 1	
vasured denth of the well from measurement point.	171	11	ιJ	<u>ย</u> ส V.,
Thickness of sediment accumulation (reported denth-present	measuren	ient).		-11.01
Are there any obstructions in the well?	[]	[x]	[]	
Description of well bottom conditions (soft, hard, etc.):	ιJ	Ţ."	M I	
		<u></u>		<u></u>
· · · · · · · · · · · ·	Δc	R	0 C.	
Inspection Date: 1726-00 Inspected by:			<u>ncc</u>	<u>~~~</u>
				5 J

WELL INFORMATION	
Well Location/Functional Area:	
Number: <u>CBLmw-c</u> uZ	C-Block Quarry
Casing Type: Steel Stainless Steel	Ú X PVC
Casing Type Steel Stanness Steel	
Screened/Open-Hole Well Screened	Monitor Interval Length: <u>10</u> ft
Flush-mount/Above-ground Completion:	round
Reported Constructed Depth: <u>47.24</u>	ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
Above-ground completion:	
Number of guard posts at well: 3	
Are the posts positioned to prevent collision damage to the	
well?	[术] []
Are any of the posts damaged or degraded?	[] [X] []
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 heed clearing?	
Is the traffic cover securely holted to the flush mount	
hox?	וא ו ו וא
Does the well have a flush-mount hox?	
Is the traffic cover cracked or broken?	
Is the concrete apron cracked or deteriorated? Frost	
heaving?	[] [] [X
Identification:	,
Is the well labeled with the correct number?	[%] [] []
Describe labeling: <u>+aq on lid</u>	
Security:	
Does the well have a cap or lid?	
Does the well have a weatherproof lock?	
Does the lock secure the well?	
Does the inner casing have a water-tight cap?	
Lethe well easing bent corrected or broken (at the	
surface?)	
Is the well casing loose (at the surface)?	
Is a measurement point marked at the top of the well	
casing?	[X] [] []
Measured depth of the well from measurement point:	47.44
Thickness of sediment accumulation (reported depth-present	measurement):
Are there any obstructions in the well?	
Description of well bottom conditions (soft, hard, etc):	HI.H hard
Inspection Date: <u>4-26-06</u> Inspected by:	al Bullingin

RAVENNA ARMY AMMUNITION PLANT WELL INSPECTION CHECKLIST			
WELL INFORMATION Well Location/Functional Area: Number: CBLmw-003	C-Block Guarry		
Casing Type: Steel Stainless Steel	<u>×</u> pvc		
Screened/Open-Hole Well Type: Screened	Monitor Interval Length: <u>1()</u> ft		
Flush-mount/Above-ground Completion: <u>Abare groun</u>	6		
Reported Constructed Depth: <u>45,84</u>	ft BGS or BTOC (circle one)		
INSPECTION ITEMS	YES NO N/A COMMENTS		
Well-head Completion:			
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? Flush-mount completion: Is the traffic cover securely bolted to the flush-mount box? Does the well have a flush-mount box? Is the concrete apron cracked or deteriorated? Frost heaving? Is the well have a flush-mount box? Is the well labeled with the correct number? Describe labeling:	[X] [] [] [] [X] [] [X] [] []		
Security: Does the well have a cap or lid? Does the well have a weatherproof lock? Does the lock secure the 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 the well casing? Measured depth of the well from measurement point: Thickness of sediment accumulation (reported depth-present in Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc):	$\begin{bmatrix} x \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\$		
Inspection Date: <u>4.26-06</u> Inspected by:	Al Bullingin		

WELL INSI ECTION CHECKLIST				
WELL INFORMATION				
Well Location/Functional Area				
Number: CBLmut-204	C-Block Quarry			
Casing Type: Steel Stainless Steel	X PVC			
Screened/Open-Hole Well	Monitor Interval			
Type: <u>Screened</u>	$\underline{\qquad \text{Length:}} \qquad \underline{10} \qquad \text{ft}$			
Flush-mount/Above-ground	1			
Completion: <u>Above groun</u>	vd			
Reported Constructed Donth:	ft BGS of BTOO (circle one)			
Reported Constructed Depth. -90.70				
INSPECTION ITEMS	VES NO N/A COMMENTS			
Well-head Completion:				
Above-ground completion.				
Number of guard posts at well: 3				
Are the posts positioned to prevent collision damage to the				
well?	[X] [] []			
Are any of the posts damaged or degraded?				
Is a concrete pad installed?				
Is the pad cracked or deteriorated? Frost heaving?	[x] [] [] Shi spalling a edges			
Is steel protective casing installed?				
Does the protective casing have a weep hole?	[x] [] []			
Does vegetation around the well need clearing?	[] [×] []			
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?	[] [] [¥]			
Identification:				
Is the well labeled with the correct number?				
Describe labeling: <u>tag on</u>	lid			
Security:				
Does the well have a cap or lid?				
Does the well have a weatherproof lock?				
Does the lock secure the well?				
Does the finite casing have a water-tight cap?				
Lown-noie Conduion:				
is the well casing bell, confided, or broken (at the surface?)	רו האלו רו			
Is the well casing loose (at the surface)?				
Is a measurement point marked at the top of the well				
casing?				
Measured depth of the well from measurement point.	47.13			
Thickness of sediment accumulation (reported depth-present	measurement):			
Are there any obstructions in the well?				
Description of well bottom conditions (soft, hard, etc):	hand			
Instruction Data, 11 21 internet 11	NOB. DR.			
Inspection Date: <u>4-6606</u> Inspected by:	- LAX percent			
	U			

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RAVENNA ARMY AMM WELL INSPECTION	IUNITION PLANT CHECKLIST
WELL INFORMATION Well Location/Functional Area:	
Number: <u>CPrnw-CCl</u>	cobs tonel
Casing Type: Steel Stainless Steel	PVC
Screened/Open-Hole Well Screened	Monitor Interval Length: <u>10</u> ft
Flush-mount/Above-ground Completion:	Maunt
Reported Constructed Depth: 15.30	ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
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? <i>Flush-mount completion:</i> 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?	
Security:	
Does the well have a cap or lid? Does the well have a weatherproof lock? Does the lock secure the well? Does the inner casing have a water-tight cap?	
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 the well casing? Measured depth of the well from measurement point: Thickness of sediment accumulation (reported depth-prese Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc):	$\begin{bmatrix} 1 & [1 & [1 \\ 1 & [1 & [1 \\ - & - & - \\ - & - & - \\ - & - & - \\ - & - &$
Inspection Date: <u>426</u> Inspected by	: Oftamis
Appendix C 145	FWGWMP 2006 Annual Report

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RAV	ENNA ARMY AMMU	NITION PLANT		
WELL INSPECTION CHECKLIST				
WELL INFORMATION				
Well Loca	ation/Functional Area:		(
Number: <u>CPMW-002</u>		Cobbs to	and	
Casing Type: Steel	Stainless Steel	P	vC	
Screened/Open-Hole Well Type:	Screened	Monitor Interva Length:	10ft	
Fluck manuf(Abase and a	·			
Completion:	Fluch /	nunt		
Reported Constructed Depth:	15,09	ft BGS or BTOC feir	cle one)	
INSPECTION ITEMS		YES NO N/A	COMMENTS	
Well-head Completion:				
Above-ground completion:	~			
Number of guard posts at well:	<u> </u>	/		
Are the posts positioned to prevent c	collision damage to the			
Are any of the posts damaged or deg	maded?			
Is a concrete nad installed?	graded:			
Is the pad cracked or deteriorated? F	Frost heaving?			
Is steel protective casing installed?	0		~ <u></u>	
Does the protective casing have a w	eep hole?			
Does vegetation around the well need clearing?		[1]	Priche Bush	
Flush-mount completion:				
Is the traffic cover securely bolte	d to the flush-mount			
Does the well have a flush-mount hox?				
Is the traffic cover cracked or broke	n?			
Is the concrete apron cracked of	r deteriorated? Frost			
heaving?				
Identification:				
Is the well labeled with the correct n	umber?	NY [] []		
Describe labeling:	Painted cr	tost		
Security:				
Does the well have a cap or lid?	a al-9		/	
Does the well have a weatherproof lock?				
Does the inner casing have a water-t	ight can?			
Down-hole Condition:	- <u></u> p.			
Is the well casing bent, corroded, or b	oroken (at the	-		
surface?)		[] [Y]		
Is the well casing loose (at the surface)?				
Is a measurement point marked at	Is a measurement point marked at the top of the well			
casing? Measured depth of the well from measurement point:		IN II II	torisof	
Thickness of sediment accumulation	(reported denth-present)	neasurement). DITIT	15.001.12 =15 1	
Are there any obstructions in the we	ll?			
Description of well bottom condition	ns (soft, hard, etc):	Have		
-	·	<u> </u>		
Inspection Date: $4/26$	Inspected by:	Ottanis		
(V) rai	Vaci Spur-		I	

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RAVENNA ARMY AMMU	INITION PLANT
WELL INSPECTION	CHECKLIST
WELL INFORMATION	,
Well Location/Functional Area:	alphic Paral
Number: <u></u>	CODDS VIEL
Casing Type: Steel Stainless Steel	L PVC
Screened/Open-Hole Well Type: <u>Screened()</u>	Monitor Interval Length: _/ft
Flush-mount/Above-ground Completion:	Mount
Reported Constructed Depth: 17,6,5	ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
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?	
Flush-mount completion:	
is the traffic cover securely bolted to the flush-mount	
Does the well have a fluch mount hav?	
Lots the traffic cover creaked or braker?	
Is the concrete approx creaked or deteriorated? Front	
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 the well?	
Does the inner casing have a water-tight cap?	
Down-hole Condition:	
Is the well casing bent, corroded, or broken (at the	
surface?)	[] [Y] []
Is the well casing loose (at the surface)?	[] [4 []
Is a measurement point marked at the top of the well	
casing?	
Measured depth of the well from measurement point: Thickness of sediment accumulation (reported depth-present	measurement): $\mathcal{D}_{T} \mathcal{B} = 17 \times 14 \times 12 = 17 \times 12$
Are there any obstructions in the well?	
Description of well bottom conditions (soft, hard, etc):	Harch
Inspection Date: <u>1/26</u> Inspected by:	Ettario
$\left(\right) \right)^{\prime}$	

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RAVENNA ARMY AMMU	JNITION PLANT CHECKLIST
WELL HIST ECTION	
WELL INFORMATION	
Well Location/Functional Area:	e(1) = 0
Number: <u>CPMW-004</u>	Cobs Pana
Casing Type: Steel Stainless Steel	PVC
Screened/Open-Hole Well Type:	Monitor Interval Length: _/O ft
Flush-mount/Above-ground Completion:	
Reported Constructed Depth: 22.19	_ ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
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 of deteriorated? Frost heaving?	
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	
Does the well have a flush-mount hox?	
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: Yandel Ca	YOSF
Security:	
Does the well have a cap or lid?	
Does the lock secure the wall?	
Does the inner casing have a water tight can?	
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 the well	
casing?	
Measured depth of the well from measurement point:	4.18
Inickness of sediment accumulation (reported depth-present	measurement): $V_{15} = \frac{12}{12} + \frac{12}$
Are there any obstructions in the well? Description of well bottom conditions (soft hard stal)	
$x = \frac{1}{x}$	
Inspection Date: Inspected by:	(tarol
(\mathbf{V})	

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RAVI V	ENNA ARMY AMMU VELL INSPECTION C	NITION PLANT CHECKLIST	13
WELL INFORMATION			
Well Locat	tion/Functional Area:	Colabia Para	~ (
Number: <u>CIMW</u> -005		CODDS FOR	
Casing Type: Steel	Stainless Steel	PVC	
Screened/Open-Hole Well	creened	Monitor Interval Length:	<u> </u>
Flush-mount/Above-ground Completion:	Abore		
Reported Constructed Depth:	42.37	ft BGS of BTOC (dircle one)	
INSPECTION ITEMS		YES NO N/A COMME	ENTS
Well-head Completion:			
 Above-ground completion: Number of guard posts at well: Are the posts positioned to prevent cowell? Are any of the posts damaged or deg Is a concrete pad installed? Is the pad cracked or deteriorated? For Is steel protective casing installed? Does the protective casing have a we Does vegetation around the well need Flush-mount completion: Is the traffic cover securely bolted box? 	bollision damage to the raded? rost heaving? rep hole? d clearing?	$\begin{bmatrix} 4 & [&] & [&] \\ 1 & [& 1 & [&] \\ 1 & [& 1 & [&] \\ 1 & [& 1 & [&] \\ 1 & [& 1 & [&] \\ 1 & [& 1 & [&] \\ 1 & [& 1 & [&] \\ 1 & [& 1 & [&] \\ 1 & [& 1 & [&] \\ 1 & [& 1 & [&] \\ 1 & [& 1 &] \\ 1 $	
Does the well have a flush-mount bo Is the traffic cover cracked or broken Is the concrete apron cracked or	x? ? deteriorated? Frost		
heaving?			
Is the well labeled with the correct nu Describe labeling:	Painted co	PC 57[] []	
Does the well have a cap or lid? Does the well have a weatherproof lo Does the lock secure the well? Does the inner casing have a water-ti Down-hole Condition:	ock? ght cap?		
Is the well casing bent, corroded, or be surface?) Is the well casing loose (at the surfac Is a measurement point marked at casing? Measured depth of the well from mea Thickness of sediment accumulation Are there any obstructions in the wel	roken (at the e)? the top of the well asurement point: (reported depth-present 1?	$\begin{bmatrix} 1 & [\ Y & f \] \\ 1 & [\ Y & f \] \\ 1 & [\ 1 & [\ 1 & [\ 1 \] \\ 1 & [\ 1 & [\ 1 \] \\ 1 & [\ 1 & [\ 1 \] \\ 1 & [\ 1 & [\ 1 \] \\ 1 & [\ 1 & [\ 1 \] \\ 1 & [\ 1 & [\ 1 \] \\ 1 & [\ 1 & [\ 1 \] \\ 1 & [\ 1 & [\ 1 \] \\ 1 & [\ 1 & [\ 1 \] \\ 1 & [\ 1 & [\ 1 \] \\ 1 & [\ 1 & [\ 1 \] \\ 1 & [\ 1 & [\ 1 \] \\ 1 & [\ 1 & [\ 1 \] \\ 1 & [\ 1 & [\ 1 \] \\ 1 & [\ 1 & [\ 1 \] \\ 1 & [\ 1 & [\ 1 \] \\ 1 & [\ 1 & [\ 1 \] \ 1 & [\ 1 & [\ 1 \] \ 1 \\ 1 & [\ 1 & [\ 1 & [\ 1 \] \ 1 & [\ 1 & [\ 1 & [\ 1 \] \ 1 & [$	<u>5 7,12=43</u> ,2;
Inspection Date: $\frac{1/25}{1}$	Inspected by:	Sail Harris	
Appendix C	149	FWGWMP 2006	Annual Report

DAVENNA ADATV AMAT	NITION PLANT
WELL INSPECTION (CHECKLIST
WELL INFORMATION Well Location/Functional Area: Number: <u>CPmw</u> -006	Cobbs Parcí
Casing Type: Steel Stainless Steel	PVC
Screened/Open-Hole Well Screened	Monitor Interval Length: <u>1</u> ft
Flush-mount/Above-ground Completion:	
Reported Constructed Depth: 20,16	_ ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
 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? Flush-mount completion: Is the traffic cover securely bolted to the flush-mount hox? 	$\begin{bmatrix} 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 $
box? Does the well have a flush-mount box? Is the traffic cover cracked or broken? Is the concrete apron cracked or deteriorated? Frost	
Identification: Is the well labeled with the correct number? Describe labeling:	$\begin{bmatrix} 1 & \begin{bmatrix} 1 & \begin{bmatrix} 1 \\ 1 & \end{bmatrix} \end{bmatrix}$
Does the well have a cap or lid? Does the well have a weatherproof lock? Does the lock secure the 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 the well casing?	
Measured depth of the well from measurement point: Thickness of sediment accumulation (reported depth-present Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc):	$\frac{6,63}{\text{measurement}} \xrightarrow{\text{PTB}} 20,62 + 12 = 20,7$ $\begin{bmatrix} 1 & [4] & [4] \\ -1,62 \end{bmatrix}$
inspection Date: $\frac{4/2.5}{1}$ Inspected by:	Sal Hang

RAVENNA ARMY AMMUN WELL INSPECTION C	NITION PLANT
WELL INFORMATION Well Location/Functional Area:	ntel Burning Pott
Casing Type: Steel Stainless Steel	PVC
Screened/Open-Hole Well Screened/ec	Monitor Interval Length: _/ ft
Flush-mount/Above-ground Completion:	nd
Reported Constructed Depth:	ft BGS of BTOC (dircle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
 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? 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: MACC CACCH 	
Security: Does the well have a cap or lid? Does the well have a weatherproof lock? Does the lock secure the 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 the well casing? Measured depth of the well from measurement point: Thickness of sediment accumulation (reported depth-present m Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc): 24 24 24 24 25 26 27 27 27 27 27 27 27 27 27 27	$\begin{bmatrix} 4 & [] & [] \\ 1 & [$
Inspection Date: Inspected by:	Ottamis
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WELL INFORMATION Well Location/Functional Area: Number: CBPmw-002	Central Burn Pit
Casing Type: Steel Stainless Steel	X PVC
Screened/Open-Hole Well Type: Screened	Monitor Interval Length: 10 ft
Flush-mount/Above-ground Completion:	round
Reported Constructed Depth: <u>32.2</u>	ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
Above-ground completion: 3 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?	[X] [] [] [X] [] [X] [] [X] [] [] [] [X] [] [] []
Does vegetation around the well need clearing?	[] [x] []
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? <i>Identification:</i>	[] [] [X] [] [] [X] [] [] [X] [] [] [X]
Is the well labeled with the correct number?	
Security: Does the well have a cap or lid? Does the well have a weatherproof lock? Does the lock secure the well? Does the inner casing have a water-tight cap?	[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 the well casing? Measured depth of the well from measurement point: Thickness of sediment accumulation (reported depth-present m Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc): 	$\begin{bmatrix} 1 & [X] & [] \\ [] & [X] & [] \\ 32.02 + 0.12 = 32.14 \\ easurement): \\ \begin{bmatrix} 1 & [X] & [] \\ 50ft - firm \\ 0 & 0 \end{bmatrix}$
Inspection Date: $4/27/06$ Inspected by: Appendix C D: TW = 7.46 152	FWGWMP 2006 Annual Report

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RAVENNA ARMY AMMUNITION PLANT WELL INSPECTION CHECKLIST	<u> </u>
WELL INFORMATION Well Location/Functional Area:	
Casing Type: Steel Stainless Steel PVC	
Screened/Open-Hole Well Screen Monitor Interval Length: 10	_ ft
Flush-mount/Above-ground Above	
Reported Constructed Depth: <u>27,13</u> ft BGS of BTOC (circle one)	
INSPECTION ITEMS YES NO N/A COMMENTS	
Well-head Completion:	
Number of guard posts at well:	
Security:	
Is a measurement point marked at the top of the well casing? Measured depth of the well from measurement point: Thickness of sediment accumulation (reported depth-present measurement): Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc):	<u>), T</u>
Inspection Date: <u>426</u> Inspected by: <u>GHanis/Buttland</u> NO Sanct	
Appendix C 153 FWGWMP 2006 Annual F	Report

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RAVENNA ARMY AMMUN WELL INSPECTION C	NITION PLANT HECKLIST
WELL INFORMATION Well Location/Functional Area:	to I Russia Rit
Number: $\underline{COIMW} = OOQ$	eronal Doming 1 13
Casing Type: Steel Stainless Steel	PVC
Screened/Open-Hole Well Screened	Monitor Interval Length:ft
Flush-mount/Above-ground Above	
Reported Constructed Depth: 29,55	ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
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? 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?	
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 the well? Does the inner casing have a water-tight cap?	
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 the well casing?	
Measured depth of the well from measurement point: Thickness of sediment accumulation (reported depth-present r Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc):	$\begin{array}{c c} \hline & & \\ \hline & & \\ \hline \\ measurement): \\ \hline & & \\ \hline \\ \hline \\ \hline \\ \\ \hline \\ \\ \\ Stickay \end{array} \end{array} \xrightarrow{(1)} \begin{array}{c} \hline \\ \hline \\ \hline \\ \\ \hline \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ $
Inspection Date: <u>9/26</u> Inspected by: XNU Sand in C4SE	GAanis

		·		1?	30
RAVE	INNA ARMY AMM TELL INSPECTION	UNITION CHECKL	PLAN' IST	Т /	
WELL INFORMATION					
Well Locati Number: CBPMW -CXCS	on/Functional Area:	ientral	Bu	rnin	G Pite
Casing Type: Steel	Stainless Steel			LPV	T J
Screened/Open-Hole Well Type:	rees of	M Le	onitor l ength:	Interval	_ <i>10</i> ft
Flush-mount/Above-ground Completion:	share				
Reported Constructed Depth:	27.26	_ ft BGS (r BTO	C (c)rcl	e one)
INSPECTION ITEMS		YES	NO	N/A	COMMENTS
Well-head Completion:					
Above-ground completion: Number of guard posts at well: Are the posts positioned to prevent coll well? Are any of the posts damaged or degrad	lision damage to the	[}	[]		
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 t	o the flush-mount			-	
Does the well have a flush-mount box? Is the traffic cover cracked or broken? Is the concrete apron cracked or d	leteriorated? Frost	[]	[] []		
heaving?		[]	[]	[1]	
Identification: Is the well labeled with the correct num Describe labeling:	ber?	[4	[]		
Does the well have a cap or lid? Does the well have a weatherproof lock	?		[]	[]_	
Does the lock secure the well?			[]		
Down-hole Condition:	· vap.	1	L J	L]	
Is the well casing bent, corroded, or brok surface?)	en (at the	[]	14	/ -	
Is the well casing loose (at the surface)? Is a measurement point marked at the top of the well		[]			
casing? [9] [9] [9] [9] [9] [9]					
Thickness of sediment accumulation (res	ported denth-present r	neasuramo	at). NT	R 17-	1/17 - 12-17-00
Are there any obstructions in the well? Description of well bottom conditions (s	oft, hard, etc):	Harc			1464.164.29
Inspection Date: <u><u><u>A</u></u><u><u>A</u></u></u>	Inspected by:	GA	an	~5	
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Appendix C

WELL HASE ECTION	
WELL INFORMATION Well Location/Functional Area:	
Number: <u>CBPmw-006</u>	Central Burn Pit
Casing Type: Steel Stainless Steel	PVC
Screened/Open-Hole Well Type: Screened	Monitor Interval Length:ft
Flush-mount/Above-ground Completion:	zround
Reported Constructed Depth: 25.13	_ ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
Above-ground completion:	
Number of guard posts at well: <u>3</u>	
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? Prost heaving?	
is steel protective casing installed?	
Does the protective casing have a weep note?	
Does vegetation around the well need clearing?	[x] [] [] minor
rusn-mount completion:	
is the traine cover securely bolied to the mush-mount	
Does the well have a flush mount box?	
Lots the traffic cover creaked or broken?	
Is the concrete appropriate or deteriorated? Frost	
heaving?	() () (<u>)</u>
Identification.	
Is the well labeled with the correct number?	
Describe labeling:	aunad post
Security:	for the post
Does the well have a cap or lid?	
Does the well have a weatherproof lock?	
Does the lock secure the well?	
Does the inner casing have a water-tight cap?	
Down-hole Condition:	
Is the well casing bent, corroded, or broken (at the	
surface?)	[X] [] [] *Kinked near surface
Is the well casing loose (at the surface)?	[] [X] []
Is a measurement point marked at the top of the well	
casing?	
Measured depth of the well from measurement point:	23.00 + 0.12= 25.12
Thickness of sediment accumulation (reported depth-presen	t measurement):
Are there any obstructions in the well?	[X] [] [] #see above
Description of well bottom conditions (soft, hard, etc):	tim - silt @ Dotton
Inspection Date: $\frac{4/27/06}{1000}$ Inspected by:	al Bully.

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RAVENNA ARMY AMMUN WELL INSPECTION C	NITION PLANT HECKLIST
WELL INFORMATION	
Well Location/Functional Area: Number: CBPMW-007	Entrel Burning Pits
Casing Type: Steel Stainless Steel	PVC
Screened/Open-Hole Well Screened	Monitor Interval Length: <u>/</u> O ft
Flush-mount/Above-ground Abar Completion:	
Reported Constructed Depth: 32,40	ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head 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? 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?	
Security: Does the well have a cap or lid? Does the well have a weatherproof lock? Does the lock secure the well? Does the inner casing have a water-tight cap? Down-hole Condition:	[4] [] [4] [] [4] [] [4] [] [4] [] [4] []
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 the well casing? Measured depth of the well from measurement point:	[] [] [] [] [] [] M[] [] []
Thickness of sediment accumulation (reported depth-present in Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc): (inspection Date:	(Harris
Needs Schels	EWGWMP 2006 Annual Report
WELL INSPECTION C	HECKLIST
---	---
WELL INFORMATIONWellLocation/Functional Area:Number:CBPmw-00%	Central Burn Pit
Casing Type: Steel Stainless Steel	× PVC
Screened/Open-Hole Well Type: Screened	Monitor Interval Length: <u>10</u> ft
Flush-mount/Above-ground Completion: <u>Above ground</u>	round
Reported Constructed Depth: 27.62	ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
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?	[X] [] [] <u>concrete caps-frost</u> damage
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?	[] [] [x]
Is the traffic cover cracked or broken?	[] [] [x]
Is the concrete apron cracked or deteriorated? Frost	
heaving?	[] [] [¥]
Identification:	*
Is the well labeled with the correct number?	[x] [] []
Describe labeling: Painted or	1 guard post
Security:	
Does the well have a cap or lid?	
Does the well have a weatherproof lock?	[X] [] []
Does the lock secure the 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)?	[] [<] []
Is a measurement point marked at the top of the well casing?	
Measured depth of the well from measurement point:	27.90 + 0.12 = 28.02
Thickness of sediment accumulation (reported depth-present r	neasurement):
Are there any obstructions in the well?	
Description of well bottom conditions (soft, hard, etc):	hard
, i 1	
Inspection Date: <u>4/27/06</u> Inspected by:	De Breez.
	\sim
D.7.W= 14.75	

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RAVENNA ARMY AMMU WELL INSPECTION (INITION PLANT IO:CO
WELL INFORMATION	
Well Location/Functional Area:	Danilitica Asona
Number: $DET 1.55 \omega$	remolition Area 2
Casing Type: Steel Stainless Steel	PVC
Screened/Open-Hole Well Screened	Monitor Interval Length:ft
Flush-mount/Above-ground Completion:	
Reported Constructed Depth: <u>40,50</u>	ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
Above-ground completion: Image: Above-ground completion: Number of guard posts at well: Image: Above-ground completion does a complete complete complete complete complete complete complete complete completion: 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:	[4] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] []
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 the 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 the well	
Measured depth of the well from measurement point:	21,34 maggirgment): 056 24 AQ 1 12 - 38
Are there any obstructions in the well?	[] [7 []
Description of well bottom conditions (soft, hard, etc):	Hud
Inspection Date: <u>4127</u> Inspected by:	G Nomis
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RAVENNA ARMY AMMU WELL INSPECTION (NITION PLANT CHECKLIST
WELL INFORMATION Well Location/Functional Area: Number: DET-2	Dendition Area 2
Casing Type: Steel Stainless Steel	PVC
Screened/Open-Hole Well Screen	Monitor Interval Length:ft
Flush-mount/Above-ground Completion:	
Reported Constructed Depth: <u>40.00</u>	_ ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
 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? 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? <i>Identification:</i>	
Is the well labeled with the correct number? Describe labeling: <u>NO Labeling</u>	[] [] []
Security: Does the well have a cap or lid? Does the well have a weatherproof lock? Does the lock secure the well? Does the inner casing have a water-tight cap? Down-hole Condition:	[1] [] [1] [] [1] [] [4] []
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 the well casing? Measured depth of the well from measurement point:	
Thickness of sediment accumulation (reported depth-present Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc):	$\frac{1}{2} = \frac{1}{2} = \frac{1}$
Inspection Date: <u>4127</u> Inspected by:	Gatanis
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RAVENNA ARMY AMMUN	NITION PLANT
WELL INSPECTION C	HECKLIST
WELL INFORMATION	
Well Location/Functional Area:	
Number: DET-3	Lenvition Area L
Casing Type: Steel Steel	PNC
casing Type Steel Stanless Steel	
Screened/Open-Hole Well Screen	A Monitor Interval Length: <u>5</u> ft
Flush-mount/Above-ground Completion:	
Reported Constructed Depth:	ft BGS or BTOC (circle one)
INSPECTION ITEMS GHUDDO	YES NO N/A COMMENTS
Well-head Completion:	
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?	
Flush-mount completion:	
Is the traffic cover securely bolted to the flush-mount	r i r i r x
DOX?	
Is the traffic cover cracked or broken?	
Is the concrete apron cracked or deteriorated? Frost	
heaving?	
dentification:	
Is the well labeled with the correct number?	[] [] []
Describe labeling: No libelin	
Security:	
Does the well have a cap of lid?	
Does the lock secure the well?	
Does the inner casing have a water-tight can?	
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 the well	
Casing? Mansurad dapth of the well from measurement point. NTw	
Thickness of sediment accumulation (reported depth_present r	neasurement): $DTIS 15.99 \pm 17 \equiv 1/1/1$
Are there any obstructions in the well?	$\begin{bmatrix} 1 & \begin{bmatrix} 1 & \\ 1 \end{bmatrix} \begin{bmatrix} 1 & \begin{bmatrix} 1 \\ 1 \end{bmatrix} \end{bmatrix}$
Description of well bottom conditions (soft, hard, etc):	Sticken
1)	Cil
nspection Date: <u>4127</u> Inspected by:	(Han's
1) Ling 25 Soul	1
V Nue	

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RAVENNA ARMY AMMU WELL INSPECTION C	NITION PLANT
WELL INFORMATION	
Well Location/Functional Area: Number:	Dendition Area 2
Casing Type: Steel Stainless Steel	PVC
Screened/Open-Hole Well Screened	Monitor Interval Length:
Flush-mount/Above-ground Above-Completion:	
Reported Constructed Depth: 12,00	ft BGS of BTOO (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
Above-ground completion: 4 Number of guard posts at well: 4 Are the posts positioned to prevent collision damage to the well? 4 Are any of the posts damaged or degraded? 1s a concrete pad installed? Is the pad cracked or deteriorated? Frost heaving? 1s steel protective casing installed? Does the protective casing have a weep hole? 10 Does vegetation around the well need clearing? 10 Flush-mount completion: 10	[4] []
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?	[] [] [M [] [] [M [] [] [M
Is the well labeled with the correct number? Describe labeling: <u>NO</u>	
Security: Does the well have a cap or lid? Does the well have a weatherproof lock? Does the lock secure the well? Does the inner casing have a water-tight cap?	
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 the well casing? Measured depth of the well from measurement point	
Thickness of sediment accumulation (reported depth-present in Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc):	$\frac{1}{1} = \frac{1}{1} = \frac{1}$
Appendix $ACISP$ $MeSr$ 162 MeSanci	* dedicated bailer in well FWGWMP 2006 Annual Report

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RAVENNA ARMY AMMU WELL INSPECTION C	NITION PLANT CHECKLIST
WELL INFORMATION	
Well Location/Functional Area: Number: DAZMW-109	Demolition Area 2
Casing Type: Steel Stainless Steel	PVC
Screened/Open-Hole Well Screened	Monitor Interval Length: _/O ft
Flush-mount/Above-ground Completion:	
Reported Constructed Depth: 29.37	ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
Above-ground completion: 4 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 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 concrete apron cracked or deteriorated? Frost heaving? Identification: Is the well labeled with the correct number? Describe labeling: Stars S Say Correct Security: Does the well have a cap or lid? Does the well have a weatherproof lock? 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 the well casing? Measured depth of the well from measurement point: Thickness of sediment accumulation (reported depth-present Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc): 	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
Inspection Date: Inspected by:	GHanis

		MITTAN DI AN	i m	10:29
KA	WELL INSPECTION (CHECKLIST	1	,
WELL INFORMATION				
Well Lo	cation/Functional Area:	· 141.		
Number: <u>DAZMUN</u> OS	Į	Jene 110-11	S Area	
Casing Type: Steel	Stainless Steel	**************************************	Pvc	
Screened/Open Hole Well		Monitor	Interval	
Туре:	Screered	Length:	inter var	ft
Flush-mount/Above-ground				
Completion:	-A-DOM	<u></u>		
Reported Constructed Depth:	15,98	_ ft BGS or BT	OC (eircle one)
INSPECTION ITEMS	-	YES NO	N/A CO	MMENTS
Well-head Completion:				
Above-ground completion:	á	та."		
Number of guard posts at well:	4			
Are the posts positioned to prevent	t collision damage to the			
well?		[4 []	<pre>/[]</pre>	
Are any of the posts damaged or d	egraded?			
Is a concrete pad installed?			1 50	e frest reave
Is the pad cracked or deteriorated?	'Frost heaving?	11/14		
Is steel protective casing installed	/		[] H	nge work?
Does the protective casing have a	weep hole?			
Does vegetation around the well no	eed clearing?	141		
Flush-mount completion:	and the three floors to second			
is the traffic cover securely bol	ted to the nush-mount	сл сл	г. 7	
Door the wall have a fluch mount?	houl			
Lots the traffic course creaked on brail	DOX ?			
Is the traffic cover cracked of brok	en deterioreted? Freet			
is the concrete apron cracked	or deteriorated? Prost	1 1 1	1.1	
licavilig:			[И	
Is the well labeled with the correct	number?		Г] <u></u>	
Describe labeling:	Stisk tra co Ph		L 1	
Socurity.	1412 146 011 101	4		
Does the well have a cap or lid?		I'V II	[]	
Does the well have a weatherproof	flock?		[]	Missimilation was a second and a second s
Does the lock secure the well?				
Does the inner casing have a water	r-tight can?			
Down-hole Condition	-ugut oup.		L J	
Is the well casing bent corroded or	r broken (at the			
surface?)				
Is the well casing loose (at the surf	face)?			
Is a measurement point marked	at the top of the well		· · ·	
casing?	······································	LY []	[]	
Measured depth of the well from n	neasurement point: DT	w 3:24		
Thickness of sediment accumulation	on (reported depth-present	measurement):	DITIB /1	0.20 F. 12 =16.3
Are there any obstructions in the w	vell?	[] [9	,[] <i>i</i>	
Description of well bottom conditi	ons (soft, hard, etc):		Harl	
4121		$ \sim 1 $	٣	

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RAVENNA ARMY AMMU WELL INSPECTION	INITION PLANT CHECKLIST
WELL INFORMATION	
Well Location/Functional Area: Number: $DAZ m W - 106$	Demolitics Area 2
Casing Type: Steel Stainless Steel	PVC
Screened/Open-Hole Well Type: <u>Screened</u>	Monitor Interval Length: ft
Flush-mount/Above-ground Completion:	2
Reported Constructed Depth: 17.90	ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
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? Flush-mount completion: Is the traffic cover securely bolted to the flush-mount hor?	[Y] [] [] [] [Y] [] [] [] []
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? <i>Identification:</i> 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 the 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 the well casing? Measured depth of the well from measurement point: Thickness of sediment accumulation (reported depth-present	$\begin{bmatrix} 1 & 1 & 1 \\ 1 & 1 & 1 \\ 1 & 1 & 1 \\ 1 & 1 &$
Are there any obstructions in the well?	
Description of well bottom conditions (soft, hard, etc):	Harch
Inspection Date: <u>427</u> Inspected by:	C Norris

Appendix C

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I	RAVENNA ARMY AMMU	NITION I	PLAN	Γ				
	WELL INSPECTION C	HECKLI	51					
WELL INFORMATION		_						
Well Number: DAZMW-	Location/Functional Area:	De	∞	utic	2	Arec	12	
Casing Type: Steel	Stainless Steel		1	<u>PV</u>	rC			
Screened/Open-Hole Well Type:	Screened	Mo	onitor I ngth:	nterval			/-' ft	
Flush-mount/Above-ground Completion:	Abare	/		_				
Reported Constructed Depth:	16,25	ft BGS of	or BTO	Ceircl	e one)			
INSPECTION ITEMS		YES	NO	N/A	CON	MENT	S	
Well-head Completion:								
Are the posts positioned to preve well? Are any of the posts damaged on Is a concrete pad installed? Is the pad cracked or deteriorate Is steel protective casing installe Does the protective casing have Does vegetation around the well <i>Flush-mount completion:</i>	ent collision damage to the r degraded? d? Frost heaving? ed? a weep hole? need clearing?							-
Is the traffic cover securely b box? Does the well have a flush-mour Is the traffic cover cracked or br Is the concrete apron cracked heaving?	olted to the flush-mount nt box? oken? d or deteriorated? Frost	[] [] []	[] [] []	[] [] [] []				
Is the well labeled with the correct Describe labeling:	ect number? 151655 tag c	nPac		[]				-
Security: Does the well have a cap or lid? Does the well have a weatherpro Does the lock secure the well? Does the inner casing have a wa Down-hole Condition:	oof lock? ter-tight cap?		[] [] []	[] [] []	<u>C</u> cr B	Um 0+tun	SIN NOF AU	, <i>О</i> И 2010
Is the well casing bent, corroded, surface?) Is the well casing loose (at the su Is a measurement point marke casing?	or broken (at the urface)? d at the top of the well	[]						•
Measured depth of the well from Thickness of sediment accumula Are there any obstructions in the Description of well bottom cond	n measurement point:	0,95 measurem []+a	ent): [[4 _ C]	л <u>С</u> []	Hoi	82+	,12=,	16.9
Inspection Date: <u>42</u>	7 Inspected by:	Gl	Her	mb			en 10 10 10 10 10 10 10 10 10 10 10 10 10	
V								

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RAVENNA ARMY AMMUNITION PLANT
WELL INSPECTION CHECKLIST
WELL INFORMATION
Well Location/Functional Area:
Number: DATAMW-108 Demarkten NHCG 2
Casing Type: Steel Stainless Steel PVC
Screened/Open-Hole Well Screened Monitor Interval Length: ft
Flush-mount/Above-ground
Completion: 1bave
Reported Constructed Depth: $16i 14$ ft BGS or BTOC (circle one)
INSPECTION ITEMS YES NO N/A COMMENTS
Well-head Completion:
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?
Flush-mount completion:
Is the traffic cover securely holted to the flush-mount
Does the well have a flush-mount box? $\begin{bmatrix} 1 \\ 1 \end{bmatrix} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$
Is the traffic cover cracked or broken? $\begin{bmatrix} 1 \\ 1 \end{bmatrix} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$
Is the concrete apron cracked or deteriorated? Frost
heaving?
Identification
Is the well labeled with the correct number?
Describe labeling: $Brass Jagan Rech$
Security:
Does the well have a cap or lid? $[\mathcal{Y}, []]$
Does the well have a weatherproof lock?
Does the lock secure the well? $\begin{bmatrix} y \\ z \end{bmatrix}$
Does the inner casing have a water-tight cap?
Down-hole Condition:
Is the well casing bent, corroded, or broken (at the
surface?) [] [4]/[]
Is the well casing loose (at the surface)?
Is a measurement point marked at the top of the well
casing? [/[]]
Measured depth of the well from measurement point: $D T W = 5.63$
Thickness of sediment accumulation (reported depth-present measurement): D. 115 713 + 12 = 7.2
Are there any obstructions in the well?
Description of well bottom conditions (soft, hard, etc):
\sim
Inspection Data: AVI, K Inspected by: G Aquis

RAVENNA ARMY AMMU WELL INSPECTION (NITION PLANT THECKLIST
WELL INFORMATION	
Well Location/Functional Area:	
Number: DAZMW-109	Demolition Area #2
Casing Type: Steel Stainless Steel	PVC
Screened/Open-Hole Well Screen	Monitor Interval Length: <u>)</u> ft
Flush-mount/Above-ground Completion:	>
Reported Constructed Depth: 2393	ft BGS of BTOC (ercle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
Above-ground completion: 4 Number of guard posts at well: 4 Are the posts positioned to prevent collision damage to the well? 4 Are any of the posts damaged or degraded? 1 Is a concrete pad installed? 1 Is the pad cracked or deteriorated? Frost heaving? 1 Is steel protective casing installed? 1 Does the protective casing have a weep hole? 1 Does vegetation around the well need clearing? 1 Flush-mount completion: 1 Is the traffic cover securely bolted to the flush-mount 1	[1 [1 [] [1 [4 [] [1 [4 [] [1 [1 [] [1 [1 [] [1 [1 [] [1 [] [] [1 [] [] [1 [] [] [4 [] []
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: <u><u>)</u></u>	en rad
Does the well have a cap or lid? Does the well have a weatherproof lock? Does the lock secure the well? Does the inner casing have a water-tight cap? Down-hole Condition: Is the well casing bent corroded or broken (at the	$ \begin{bmatrix} 4 \\ 1 \\ 1 \end{bmatrix} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$
 surface?) Is the well casing loose (at the surface)? Is a measurement point marked at the top of the well casing? Measured depth of the well from measurement point: Thickness of sediment accumulation (reported depth-present Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc): 	$\begin{bmatrix} 1 & [4] & [1] \\ [1] & [1] & [1] \\ \hline \\ $
Inspection Date: <u>4127</u> Inspected by:	6 Alanis

	11:27
RAVENNA ARMY AMMU WELL INSPECTION C	NITION PLANT CHECKLIST
WELL INFORMATION	
Well Location/Functional Area: Number: DAZMW - 110	Devetition Area 2
Casing Type: Steel Stainless Steel	LPVC
Screened/Open-Hole Well Screened	Monitor Interval Length: 10 ft
Flush-mount/Above-ground Completion:	
Reported Constructed Depth: 21.69	ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
Above-ground completion: Image: Completion: Number of guard posts at well: Image: Completion: 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? Description:	
Is the traffic cover cracked or broken?	
is the concrete apron cracked or deteriorated? Prost heaving?	[] [] [V
Identification:	
Describe labeling: <u>1725</u> <u>29</u> <u>chrad</u>	end an Lich
Security: Does the well have a cap or lid? Does the well have a weatherproof lock? Does the lock secure the well? Does the inner casing have a water-tight cap? Down-hole Condition:	[4 [] [] [4 [] [] [] [4 [] [] [4 [] [] [] [] [4 [] [] [] [] [4 []
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 the well casing?	
Measured depth of the well from measurement point:	measurement): $0.7.522.32+.12=22.4$
Description of well bottom conditions (soft, hard, etc):	He-el
Inspection Date: 127 Inspected by:	GHanis

[0:4]
RAVENNA ARMY AMMUNITION PLANT
WELL INSPECTION CHECKLIST
Well Information/Functional Area: N /
Number: DAZMY1-111 Location and and Demoliticy Area Z.
Casing Type: Steel Stainless Steel PVC
Screened/Open-Hole Well
Type: $\underline{>Crevee}$ Length: $\underline{-}$ h
Flush-mount/Above-ground
Completion:
11 -0
Reported Constructed Depth: <u>1915</u> ft BGS or BTOC (eircle one)
INSPECTION ITEMS YES NO N/A COMMENTS
Well-head Completion:
Above-ground completion:
Are the posts positioned to prevent collision damage to the
well?
Are any of the posts damaged or degraded?
Is a concrete pad installed? [V/ [] []
Is the pad cracked or deteriorated? Frost heaving?
Is steel protective casing installed? [4/[] []
Does the protective casing have a weep hole? [1] []
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: 15135446 an 1461
Security:
Does the well have a cap or lid?
Does the well have a weatherproof lock?
Does the lock secure the well?
Does the inner casing nave a water-tight cap?
Down-noie Condition:
surface?)
Is the well casing loose (at the surface)?
Is a measurement point marked at the top of the well
casing?
Measured depth of the well from measurement point: 497
Thickness of sediment accumulation (reported depth-present measurement): Ditil) 14.77.4.12:19.80
Are there any obstructions in the well?
Description of well bottom conditions (soft, hard, etc):
Inspection Data: 412/ Inspected by: (-HelMin
l l

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9'74
RAVENNA ARMY AMMUNITION PLANT WELL INSPECTION CHECKLIST
WELL INFORMATION
Well Number: DAZMW-112 Demolition Area #2
Casing Type: Steel Stainless Steel PVC
Screened/Open-Hole Well <u>Screenec</u> Monitor Interval Length: <u>5</u> ft
Flush-mount/Above-ground Completion:
Reported Constructed Depth: 16.37 ft BGS of BTOC (dircle one)
INSPECTION ITEMS YES NO N/A COMMENTS
Well-head Completion:
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:
Security: Does the well have a cap or lid? Does the well have a weatherproof lock? [1] [] Does the lock secure the well? [4] [] [] Does the inner casing have a water-tight cap? [4] [] [] Down-hole Condition: [4] [] [] Is the well casing bent corroded or broken (at the [4] []
Is the well casing bond, conformed at the surface?) []<
Inspection Date: <u>4/27</u> Inspected by: <u>GHanis</u>
Appendix C UASK J 171 FWGWMP 2006 Annual Report

RAVENA ARMY AMMUNITION PLANT WELL INFORMATION WELL INFORMATION Well Location/Functional Area:		9:3
WELL INSPECTION CHECKLIST WELL INSPECTION CHECKLIST Well Location/Functional Area: Number: DA2_MULLS Steel Steel Seing Type: Steel Steened/Open-Hole Well Science/Length: Type: Science/Length: Aush-mount/Above-ground Appendix Ompletion: Appendix Mumber of guard posts at well: Appendix Number of guard posts at well: Appendix Are the posts positioned to prevent collision damage to the well? If I	RAVENNA ARMY AMM	UNITION PLANT
WELL INFORMATION Location/Functional Area: Dervalidation Area Area A Well Development Area Dervalidation Area Area A Casing Type: Steel PVC Screened/Open-Bole Well Screened Monitor Interval Length: 5 Screened/Open-Bole Well Screened Monitor Interval Length: 5 ft Mush-mount/Above-ground Abcatc Free 5 ft Sompletion: Abcatc Free Screened/Open-Bole Well Screened/Open-Bole Well Above-ground Completion: Screened/Open-Bole Well Above-ground Completion: Monitor Interval Screened/Open-Bole Well Completion:	WELL INSPECTION	CHECKLIST
Well Location/Functional Area: Derochidra Area 2 Daing Type: $DA2_yW/13$ Derochidra Area 2 Daing Type: Steel Stainless Steel PVC Screened/Open-Hole Well Screened/Open-Hole Well Monitor Interval Length: 5 ft Streened/Open-Hole Well Screened/Open-Hole Well Monitor Interval Length: 5 ft With-mount/Above-ground Above- Screened/Open-Hole Well Screened/Open-Hole Well Monitor Interval Length: 5 ft With-sed Completion: Above- Screened/Open-Hole Well YES NO N/A COMMENTS NA COMMENTS Well-head Completion: House of the posts damaged or degraded? 1 1 1 1 Are any of the posts damaged or degraded? I 1 </th <th>WELL INFORMATION</th> <th></th>	WELL INFORMATION	
Number: Description Dasing Type: Steel Stainless Steel PVC Screened/Open-Hole Well Screened Length: 5 ft Push-mount/Above-ground Omnitor Interval 5 ft Screened/Open-Hole Well Screened Monitor Interval 5 ft Push-mount/Above-ground About - 5 ft ft Screened/Open-Hole Well Screened Length: 5 ft Push-mount/Above-ground Screened Length: 5 ft State protection Homoitor Interval 5 ft ft Velbhead Completion: 4 4 4 ft	Well Location/Functional Area:	
Casing Type:	Number: DAZMW113	Demolitics Area 2
Zasing Type:		
Screened/Open-Hole Well Screened Monitor Interval Length: 5 ft Hush-mount/Above-ground Screened Monitor Interval Length: 5 ft Screened/Open-Hole Well Screened Monitor Interval Length: 5 ft Reported Constructed Depth: Screened/Open-Folde Screened/Open-Folde 5 ft NSPECTION ITEMS YES NO NA COMMENTS Well-ead Completion: 4 15 Screened/Open-Folde 15 Screened/Open-Folde 15 Screened/Open-Folde Screened/Open-Folde </td <td>Casing Type: Steel Stainless Steel</td> <td> PVC</td>	Casing Type: Steel Stainless Steel	PVC
Accenced performed with the correct number? Describe labeled with the correct number? Is the well have a cap or lid? Describe labeling: Describe labeling: Descri	Screened/Open Hole Well	Monitor Interval
Jush-mount/Above-ground About function of the second s	Type: $S(t-20)p(t)$	Length G ft
Rush-mount/Above-ground Completion: Are ported Constructed Depth: 15, G() Reported Constructed Depth: 15, G() Rush-reduction: Number of guard posts at well: Are any of the posts damaged or degraded? 11, 11, 11, 11, 11, 11, 11, 11, 11, 11,		
Completion:	Flush-mount/Above-ground	
Reported Constructed Depth: 15, 60 ft BGS or BrOC garcle one) NSPECTION ITEMS VES NO N/A COMMENTS Nell-bead Completion: Number of guard posts at well: 4 Are the posts positioned to prevent collision damage to the well? 1 Are the posts damaged or degraded? 1 Is a concrete pad installed? 1 Does the raffic cover securely bolted to the flush-mount box? 1 Is the traffic cover securely bolted to the flush-mount box? 1 Is the traffic cover securely bolted to the flush-mount box? 1 Is the traffic cover securely bolted to the flush-mount box? 1 Is the traffic cover cracked or deteriorated? Frost heaving? 1 Is the traffic cover cracked or deteriorated? Frost heaving? 1 Is the traffic cover cracked or deteriorated? Frost heaving? 1 Is the traffic cover acked or deteriorated? Frost heaving? 1 Is the use as a cop or lid? 1 Does the well have a cap or lid? 1 Does the well have a cap or lid? 1 Does the well have a cap or lid? 1 Does the well have a cap or lid? 1 Is the well casing bent, corroded, or broken (at the surface?) 1 Is the well casing bent, corroded deth-present measurement): DTS 1(a, 22 + 1)2 = 1/a. See the constructions in the well? Is the well casing boxe (at the surface?) 1 Is the well casing boxe (at the surface)? 1 Is the well casing boxe (at the surface)? 1 Is the well casing boxe (at the surface)?	Completion:	C
NSPECTION ITEMS YES NO N/A COMMENTS Number of guard posts at well:	Barartad Constructed Donth	t PCS or PTOC (orrela and)
NSPECTION ITEMS YES NO N/A COMMENTS Well-head Completion:		
Well-bead Completion: Image of guard posts at well: Are the posts positioned to prevent collision damage to the well? Image of the posts damage of degraded? Are the posts positioned to prevent collision damage to the well? Image of the posts damage of degraded? Are any of the posts damage of degraded? Image of the posts damage of degraded? Is a concrete pad installed? Image of the post damage of degraded? Is the pad cracked or deteriorated? Frost heaving? Image of the posts damage of degrade? Is the pad cracked or deteriorated? Frost heaving? Image of the posts damage of degrade? Does the protective casing have a weep hole? Image of the posts damage of degrade? Is the traffic cover securely bolted to the flush-mount box? Image of the posts damage of degrade? Is the traffic cover cracked or broken? Image of the post degrade? Is the vell have a flush-mount box? Image of the post degrade? Is the vell have a cap or lid? Image of the post degrade? Does the well have a cap or lid? Image of the post degrade? Does the well have a watherproof lock? Image of the post degrade? Is the well casing bent, corroded, or broken (at the surface?) Image of the post degrade? Is the well casing bent, corroded, or broken (at the surface?) Image of the post degrade of	INSPECTION ITEMS	YES NO N/A COMMENTS
Howe-ground completion:	Well-head Completion:	
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well? Image: Construction of the posts damaged or degraded? Image: Construction of the posts damaged or degraded? Is a concrete pad installed? Image: Construction of the posts damaged or degraded? Image: Construction of the posts damaged or degraded? Is step and cracked or deteriorated? Frost heaving? Image: Construction of the posts damaged or degraded? Image: Construction of the posts damaged or degraded? Does the protective casing have a weep hole? Image: Construction of the post	Are the posts positioned to prevent collision damage to the	
Are any of the posts damaged or degraded?	well?	
Is a concrete pad installed? $\begin{bmatrix} I & I & I & I \\ I & I & I & I & I \\ I & I &$	Are any of the posts damaged or degraded?	
Is the pad cracked or deteriorated? Frost heaving? Is steel protective casing installed? Does the protective casing have a weep hole? If I I I I I I I Does the protective casing have a weep hole? If I I I I I I I Does the protective casing have a weep hole? If I I I I I I I I Does the protective casing have a weep hole? If I I I I I I I I Does the well have a flush-mount box? 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? If I I I I I I I Describe labeling: Does the well have a cap or lid? Does the well have a cap or lid? Does the well have a cap or lid? Does the well have a weatherproof lock? If I I I I I I Does the lock secure the well? Does the lock secure the well? Is the well casing have a water-tight cap? Is the well casing bone, corroded, or broken (at the surface?) Is the well casing loose (at the surface)? Is the well casing loose (at the surface)? Is the well casing loose (at the surface)? If I I I I I I I Measured depth of the well from measurement point: Thickness of sediment accumulation (reported depth-present measurement): DTB IGA 27 + 1/2 = IL. Sepection Date: HAVAN Inspected by: C HAWAN	Is a concrete pad installed?	
Is steel protective casing have a weep hole? Does the protective casing have a weep hole? If $[1 \ [1 \ [1 \ [1 \ [1 \ [1 \ [1 \ [1 $	Is the pad cracked or deteriorated? Frost heaving?	
Does vegetation around the well need clearing? I I I I I Jush-mount completion: I I I I I I Is the traffic cover securely bolted to the flush-mount I I I I I II Does vegetation around the well need clearing? I I I I I II Jush-mount completion: I I I I I II Is the traffic cover securely bolted to the flush-mount I I I I I III Does vegetation around the well need clearing? I I I I I IIIIIIIIIIIIIIIIIIIIIIIIIII	Is steel protective casing installed?	
Tush-mount completion: If I I I I I I I I I I I I I I I I I I	Does vegetation around the well need clearing?	
Is the traffic cover securely bolted to the flush-mount box? $\begin{bmatrix} 1 & [1] & [4] \\ 1 & [4] & [4] \\ 1 & [4] & [4] & [4] \\ 1 & [4] & [4] & [4] \\ 1 & [4] & [4] & [4] & [4] \\ 1 & [4] & [4] & [4] & [4] & [4] \\ 1 & [4] & $	Flush-mount completion:	
box? []	Is the traffic cover securely bolted to the flush-mount	
Does the well have a flush-mount box? [] <td< td=""><td>box?</td><td>[] [] [J'</td></td<>	box?	[] [] [J'
Is the traffic cover cracked or broken? [1] [1] [2] Is the concrete apron cracked or deteriorated? Frost heaving? [1] [1] [2] dentification: Is the well labeled with the correct number? [2] [2] [2] [2] Describe labeling: $b6(SS) + c_{S}$ [2] [2] [2] [2] Describe labeling: $b6(SS) + c_{S}$ [2] [2] [2] [2] Does the well have a cap or lid? [2] [2] [2] [2] Does the well have a cap or lid? [2] [2] [2] [2] [2] Does the well have a weatherproof lock? [2] [2] [2] [2] [2] Does the well have a weatherproof lock? [2] [2] [2] [2] [2] [2] Does the well casing have a water-tight cap? [2] [2] [2] [2] [2] [2] [2] [2] [2] [2]	Does the well have a flush-mount box?	
Is the Concrete april cracked of deteriorated? Frost heaving? dentification: Is the well labeled with the correct number? Describe labeling: $663 \le 1 \le 60$, $66 \le 1 \le 60$, $66 \le 1 \le 60$, $1 \le 1 \le 10$ ceurity: Does the well have a cap or lid? Does the well have a weatherproof lock? Does the lock secure the well? Does the inner casing have a water-tight cap? I I I I I I I Does the inner casing bart, corroded, or broken (at the surface?) Is the well casing loose (at the surface)? Is a measurement point marked at the top of the well casing? Measured depth of the well from measurement point: Thickness of sediment accumulation (reported depth-present measurement): DTB $1(0, 27 + 1/2 = 1/6, 1/2)$ Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc): spection Date: 4427 Inspected by: 644444	Is the traffic cover cracked or broken?	
Interview If I I I I I I I I I I I I I I I I I I	heaving?	
Is the well labeled with the correct number? Describe labeling: 66455 $4c_{3}$ c_{3} c_{4} c_{4} c_{6} $4c_{4}$ c_{6} $4c_{4}$ <i>becurity:</i> Does the well have a cap or lid? Does the well have a watherproof lock? Does the well have a watherproof lock? Does the inner casing have a water-tight cap? Does the inner casing have a water-tight cap? <i>bown-hole Condition:</i> 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 the well casing? Measured depth of the well from measurement point: Thickness of sediment accumulation (reported depth-present measurement): DTS Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc): Ispection Date: H I I I I I I I I I I I I I I I I I I I	Identification:	
Describe labeling: $6635545667666666666666666666666666666666$	Is the well labeled with the correct number?	
<i>ecurity:</i> $\begin{bmatrix} 1 & \begin{bmatrix} 1 & \begin{bmatrix} 1 & \\ 1 & \begin{bmatrix} 1 & \\$	Describe labeling:	n lad on Lic
Does the well have a cap or lid? Does the well have a weatherproof lock? Does the lock secure the well? Does the lock secure the well? Does the inner casing have a water-tight cap? If $[1] [1] [1] [1] [1] [1] [1] [1] [1] [1] $	Security:	
Does the Well have a weatherproof lock? $\begin{bmatrix} 1 & \begin{bmatrix} 1 & 1 & 1 \\ 1 & \begin{bmatrix} 1 & 1 & 1 \\ 1 & \begin{bmatrix} 1 & 1 & 1 \\ 1 & \begin{bmatrix} 1 & 1 & 1 \\ 1 & \begin{bmatrix} 1 & 1 & 1 \\ 1 & \begin{bmatrix} 1 & 1 & 1 \\ 1 & \begin{bmatrix} 1 & 1 & 1 \\ 1 & \begin{bmatrix} 1 & 1 & 1 \\ 1 & \begin{bmatrix} 1 & 1 & 1 \\ 1 & \begin{bmatrix} 1 & 1 & 1 \\ 1 & \begin{bmatrix} 1 & 1 & 1 \\ 1 & \begin{bmatrix} 1 & 1 & 1 \\ 1 & \begin{bmatrix} 1 & 1 & 1 \\ 1 & \begin{bmatrix} 1 & 1 & 1 \\ 1 & \begin{bmatrix} 1 & 1 & 1 \\ 1 & \begin{bmatrix} 1 & 1 & 1 \\ 1 & \begin{bmatrix} 1 & 1 & 1 \\ 1 & \begin{bmatrix} 1 & 1 & 1 \\ 1 & \begin{bmatrix} 1 & 1 & 1 \\ 1 & \begin{bmatrix} 1 & 1 & 1 & 1 \\ 1 & \begin{bmatrix} 1 & 1 & 1 & 1 \\ 1 & \begin{bmatrix} 1 & 1 & 1 & 1 \\ 1 & \begin{bmatrix} 1 & 1 & 1 & 1 & 1 \\ 1 & \begin{bmatrix} 1 & 1 & 1 & 1 & 1 \\ 1 & \begin{bmatrix} 1 & 1 & 1 & 1 & 1 & 1 \\ 1 & \begin{bmatrix} 1 & 1 & 1 & 1 & 1 & 1 & 1 \\ 1 & \begin{bmatrix} 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \\ 1 & \begin{bmatrix} 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \\ 1 & \begin{bmatrix} 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \\ 1 & \begin{bmatrix} 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1$	Does the well have a cap or lid?	
boos the lock section the well: Does the inner casing have a water-tight cap? I I I I I I I I I I bown-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 the well casing? Measured depth of the well from measurement point: Thickness of sediment accumulation (reported depth-present measurement): $DTS = 1(o, 27 + 1/2 = 1/6, 27 + 1/2 = 1/$	Does the lock secure the well?	
<i>bown-hole Condition:</i> If I I I I I I I I I I I I I I I I I I	Does the inner casing have a water-tight cap?	
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 the well casing? Measured depth of the well from measurement point: Thickness of sediment accumulation (reported depth-present measurement): DTB $1(a, 27 + 1/2 = 1/b, 3/c)$ Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc): Ispection Date: Measured by: GHAMMA	Down-hole Condition:	
surface?) Is the well casing loose (at the surface)? Is a measurement point marked at the top of the well casing? Measured depth of the well from measurement point: Thickness of sediment accumulation (reported depth-present measurement): $DTB = \frac{16.27 + 12 = 16}{16.27 + 12 = 16}$. Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc): Ispection Date: Measured by: Measured depth of the surface)? Inspected by: Measured depth of the surface)? Measured depth of the well from measurement point: Thickness of sediment accumulation (reported depth-present measurement): $DTB = \frac{16.27 + 12 = 16}{16.27 + 12 = 16}$.	Is the well casing bent, corroded, or broken (at the	
Is the well casing loose (at the surface)? Is a measurement point marked at the top of the well casing? Measured depth of the well from measurement point: Thickness of sediment accumulation (reported depth-present measurement): $DTB = \frac{1}{0} \frac{1}{0$	surface?)	
Is a measurement point marked at the top of the well casing? Measured depth of the well from measurement point: Thickness of sediment accumulation (reported depth-present measurement): $DTB = \frac{16.27 + 12 = 16}{16.27 + 12 = 16}$. Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc): Ispection Date: $H = \frac{1}{16}$ Inspected by: $G = \frac{1}{16}$ Harts	Is the well casing loose (at the surface)?	[] [1] []
Casing? Image: Casing? Measured depth of the well from measurement point: 7_1OS Thickness of sediment accumulation (reported depth-present measurement): $DTB_1 = 16.27 + 12 = 16.5$ Are there any obstructions in the well? Image: Casing? Description of well bottom conditions (soft, hard, etc): Image: Casing? Image: Casing? Image:	Is a measurement point marked at the top of the well	
Thickness of sediment accumulation (reported depth-present measurement): DTB $16.27 + 12 = 16.3^{\circ}$ Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc): Ispection Date: 4277 Inspected by: 6427	Casing: Measured depth of the well from measurement point:	1.04
Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc): Inspection Date: 417 Inspected by: 64	Thickness of sediment accumulation (reported depth-presen	it measurement): DTB $1(0, 27 + 12 = 16 \pm 6)$
Description of well bottom conditions (soft, hard, etc): Ispection Date: WHI Inspected by: G Hanto	Are there any obstructions in the well?	
Inspection Date: 64127 Inspected by: 6Haus	Description of well bottom conditions (soft, hard, etc):	- Www.cl
Inspection Date: UUUU Inspected by: Otau	1-11/2-	$O_{4}i =$
	Inspection Date: $-\frac{\sqrt{2}}{\sqrt{2}}$ Inspected by	O Mans
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(\vee)	$(\langle \chi \rangle)$	
	(V)	
Appendix C 172 FWGWMP 2006 Annual Report	Appendix C 172	FWGWMP 2006 Annual Report

RAVENNA ARMY AM	MUNITION PLANT
WELL INSPECTIC	JN UTEUKLIST
Well Location (Function)	
Number: <u>EB6m</u> w-123	Erie Burning Ground
Casing Type: Steel Stainless Ste	elPVC
Screened/Open-Hole Well Type:	Monitor Interval Length:ft
Flush-mount/Above-ground Completion:	wс
Reported Constructed Depth: <u>33.23</u>	ft BGS of BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head 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? 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 the 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 the well casing?	
Measured depth of the well from measurement point: Thickness of sediment accumulation (reported depth-presen Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc): spection Date: $4/26$ Inspected by:	$\frac{6}{6} \frac{6}{6} \frac{1}{100} \frac{1}{1000} \frac{1}{10000000000000000000000000000000000$

	3:46
RAVENNA ARMY AMMU WELL INSPECTION C	NITION PLANT CHECKLIST
WELL INFORMATION	
Well Location/Functional Area:	
Number: $\underline{EDGMW} = 24$	In e Vurning brandy
Casing Type: Steel Stainless Steel	PVC
Screened/Open-Hole Well Type: <u>Screen</u>	Monitor Interval Length: <u>10</u> ft
Flush-mount/Above-ground Above_	
Reported Constructed Depth: 32,37	ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
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? Elush mount completion:	[4] []
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: Vas S da	1 an raci
Does the well have a cap or lid? Does the well have a weatherproof lock? Does the lock secure the well? Does the inner casing have a water-tight cap?	[Y [] []
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 the well casing?	
Measured depth of the well from measurement point:	$\frac{7.40}{\text{measurement}} = \frac{7.40}{72} = $
Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc):	[] [] [] Stick te Herel
inspection Date: $\frac{4}{100}$ Inspected by:	Glanis
* Nestox Ants	
Appendix C 🕥 174	FWGWMP 2006 Annual Report

3'.34
RAVENNA ARMY AMMUNITION PLANT
WELL INSPECTION CHECKLIST
WELL INFORMATION
Well Location/Functional Area:
Number: ED6MW-125 ECEDUITING OROUNDS
Casing Type: Steel Stainless Steel PVC
Screened/Open-Hole Well Screened Monitor Interval Length: 10 ft
Flush-mount/Above-ground Completion:
Reported Constructed Depth: <u>76, 74</u> ft BGS of BTOC (circle one)
INSPECTION ITEMS YES NO N/A COMMENTS
Well-head Completion:
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 the pad cracked of deteriorated? Frost heaving?
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
Does the well have a flush-mount hox? $\begin{bmatrix} 1 \\ 1 \end{bmatrix} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$
Is the traffic cover cracked or broken?
Is the concrete apron cracked or deteriorated? Frost
heaving? [] [] [U
Identification:
Describe labeling: $\gamma(q) > \gamma(q) > \gamma(q)$
Security:
Does the well have a cap or lid?
Does the well have a weatherproof lock?
Does the inper casing have a water-tight can?
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 the well
casing?
Thickness of sediment accumulation (reported depth-present measurement): $1/2/2$ $7142+12=77$
Are there any obstructions in the well? $\begin{bmatrix} 1 \\ 1 \end{bmatrix}$
Description of well bottom conditions (soft, hard, etc): $\int \frac{1}{4c\sqrt{c^2}} dt$
Inspection Date: <u>4126</u> Inspected by: <u>GHarris</u>

5'69	
RAVENNA ARMY AMMUNITION PLANT WELL INSPECTION CHECKLIST	
Well Location/Eunctional Area:	
Number: EBGMW-126 Erie Burning Grounes	
Casing Type: Steel Stainless Steel PVC	
Screened/Open-Hole Well Screened/ Monitor Interval Length: 10 ft	-
Flush-mount/Above-ground Completion:	
Reported Constructed Depth: 27,58 ft BGS of BTOC circle one)	
INSPECTION ITEMS YES NO N/A COMMENTS	
Well-head Completion:	
Above-ground completion:	
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 the well casing? [] [] [] [] [] Measured depth of the well from measurement point: 2.23 Thickness of addiment accumulation (constant depth present measurement): D. T. D.	- - - - 7
Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc):	
Inspection Date: <u>1</u> Up Inspected by: <u>AH Ballinger</u>	

Appendix C

	419
RAVENNA ARMY AMMU WELL INSPECTION (INITION PLANT CHECKLIST
WELL INFORMATION Well Location/Functional Area:	En Augoing (-Conno 2)
Casing Type: Steel Stainless Steel	L PVC
Screened/Open-Hole Well Type: Sc. Certec	Monitor Interval Length: ft
Flush-mount/Above-ground Completion:	
Reported Constructed Depth: 31.86	ft BGS or BTOC (eircle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
Above-ground completion: 4 Number of guard posts at well: 4 Are the posts positioned to prevent collision damage to the well? 4 Are any of the posts damaged or degraded? 4 Is a concrete pad installed? 4 Is the pad cracked or deteriorated? Frost heaving? 5 Is steel protective casing installed? 5 Does the protective casing have a weep hole? 5 Does vegetation around the well need clearing? 6 Flush-mount completion: 1 Is the traffic cover securely bolted to the flush-mount box? 1 Does the well have a flush-mount box? 1 Is the concrete apron cracked or deteriorated? Frost heaving? 1 Is the concrete apron cracked or deteriorated? Frost heaving? 1 Is the well labeled with the correct number? 1 Describe labeling: 5 5 Security: 5 5 6 Does the well have a cap or lid? 1 1	$\begin{bmatrix} V & [1 & [1 \\ 1 & [1 & [1 & [1 \\ 1 & [1 & [1 & [1 \\ 1 & [1 & [1 & [1 \\ 1 & [1 & [1 & [1 \\ 1 & [1 & [1 & [1 & [1 \\ 1 & [1 $
Does the well have a weatherproof lock? Does the lock secure the 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 the well casing? Measured depth of the well from measurement point: <u>C</u> Thickness of sediment accumulation (reported depth-present Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc): <u>A</u> <u>A</u> <u>A</u> <u>A</u> <u>A</u> <u>A</u> <u>A</u> <u>A</u>	$\begin{bmatrix} 1 & [Y & [] \\ 1 & [Y & [] \\ 1 & [] $

4.14	
RAVENNA ARMY AMMUNITION PLANT	
WELL INSPECTION CRECKLIST	
WELL INFORMATION	
Well Location/Functional Area:	
Number: LOGMW-128 Ene Duming Glower	
Casing Type: Steel Stainless Steel	
Screened/Open-Hole Well Monitor Interval	
Type: $\underline{\qquad}$ Length: $\underline{\qquad}$ I	
Flush-mount/Above-ground	
Completion: Above	
Provide Construction 11 / day the DCS on PTOC (simple and)	
Reported Constructed Depth: It BGS of BTOC (circle one)	
INSPECTION ITEMS YES NO N/A COMMENTS	
well-nead Completion:	
Above-ground completion:	
Number of guard posts at well: <u><i>l</i></u>	
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? [1] []	_
Does the protective casing have a weep hole?	_
Does vegetation around the well need clearing?	-
Is the traffic cover securely holted to the flush mount	-
hox?	
Does the well have a flush-mount box?	-
Is the traffic cover cracked or broken?	
Is the concrete apron cracked or deteriorated? Frost	
heaving? [] [] \mathcal{U}	-
dentification:	-
Is the well labeled with the correct number?	-
Security:	-
Does the well have a cap or lid?	-
Does the well have a weatherproof lock?	-
Does the lock secure the well? $[\mathcal{V}]$	
Does the inner casing have a water-tight cap?	_
Down-hole Condition:	-
Is the well casing bent, corroded, or broken (at the	
Surface: $[] [] [] [] [] [] [] [] [] [$	-
Is a measurement point marked at the top of the well	-
casing?	
Measured depth of the well from measurement point: $v^{\tau} \notin i \notin 5$	
Thickness of sediment accumulation (reported depth-present measurement): $D_1 D_2 Z_{-8, 20+, 12} = 2$	8.13
Are there any obstructions in the well?	-
Description of well bottom conditions (soft, hard, etc):	-
1171.	
nspection Date: <u>110</u> Inspected by: <u>(3) Haus</u>	_
(\mathbf{N})	

	3.24
RAVENNA ARMY AMM	UNITION PLANT
WELL INSPECTION	CHECKLIST
Well Location/Functional Area:	
Number: $EB/2m(L) = 12G$	Enje Burning Graver
Casing Type: Steel Stainless Steel	PVC
Screened/Open-Hole Well	Monitor Interval
	$\underline{\qquad}$ Length. $\underline{\qquad}$ It
Flush-mount/Above-ground	
Completion: //bove	
DG at	
Reported Constructed Depth:	ft BGS or BTOC (circle one)
INSPECTION ITEMS	VES NO N/A COMMENTS
Well-head Completion:	
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 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?	[] [4 []
Flush-mount completion:	
Is the traffic cover securely bolted to the flush-mount	ri ri rat
DOX?	
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 weatherproof lock?	
Does the lock secure the 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)?	
casing?	
Measured depth of the well from measurement point:	4,94
Thickness of sediment accumulation (reported depth-presen	t measurement): $D_1T_13 = 31.02 + 12 = 31.1$
Are there any obstructions in the well?	
Description of well bottom conditions (soft, hard, etc):	Here
11/21	
Inspection Date: <u>9100</u> Inspected by:	O Manjo

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RAVENNA	A ARMY AMMUN	HECKLIS	LANT	1				
			<i>.</i>					
WELL INFORMATION	iunctional Area		•					
Number: $\underline{B6}$ MW - 130	E	Érie	Bu	MA	<u>+6</u>	dr	e	
Casing Type: Steel	Stainless Steel		<u> </u>	_ PV	ć			
Screened/Open-Hole Well	een	Mo Ler	nitor li ngth:	nterval		10) ft	
Flush-mount/Above-ground	bare			and the second				
Reported Constructed Depth:	27,99	ft BGS ø	r BTO	C (circl	e one)			
INSPECTION ITEMS		YES	NO	N/A	СОМ	MENT	S	
Well-head Completion:								
Number of guard posts at well: Are the posts positioned to prevent collision well? Are any of the posts damaged or degraded Is a concrete pad installed? Is the pad cracked or deteriorated? Frost he Is steel protective casing installed? Does the protective casing have a weep ho Does vegetation around the well need clean Flush-mount completion: Is the traffic cover securely bolted to the box? Does the well have a flush-mount box? Is the traffic cover cracked or broken? Is the concrete apron cracked or deter heaving? Mentification: Is the well labeled with the correct number Describe labeling:	n damage to the ? eaving? (20) de? ring? the flush-mount priorated? Frost (2) (2) (3) (
Security: Does the well have a cap or lid? Does the well have a weatherproof lock? Does the lock secure the well? Does the inner casing have a water-tight ca Down-hole Condition: Is the well casing bent, corroded, or broken	ap? (at the		[] [] []					
surface?) Is the well casing loose (at the surface)? Is a measurement point marked at the transferred casing? Measured depth of the well from measurer Thickness of sediment accumulation (repo Are there any obstructions in the well? Description of well bottom conditions (soft	top of the well nent point: 5 rted depth-present n t, hard, etc):	[] [] [] [] [] []	[] [] [] []		28,	37t	-12 =	- - <u>7</u> 8,<
Inspection Date:	Inspected by: (SALC	m	- 	1			-

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WELL INFORMATION Location/Functional Area: Wunder: ED2104 Casing Type: Steel Steel Stinless Steel Screened/Open-Hole Well Screener (Type: Steel Push-mount/Above-ground Monitor Interval Completion: Mone Reported Constructed Depth: If Above-ground completion: Mone Above-ground completion: Mone Above-ground completion: Another Are the posts positioned to prevent collision damage to the well? If Are the posts positioned to prevent collision damage to the well? If Stee protective casing Insuled? If Does steepation around the well need clearing? If Plustion completion: If Steep rotective casing Insuled? If Does steepation around the well need clearing? If Plustion completion: If Steep rotective casing Insuled? If Does steepation around the well need clearing? If Steep rotective casing have a weep hole? If Does the well have a flush-mount box? If <	WELL INSPECTION CHECKLIST
Well LocationFunctional Area: Fuzer+ Bosster QUG reached Constructional Area: Number: Ebd Mu 166 Fuzer+ Bosster QUG reached Constructional Area: Screened/Open-Hole Well Stainless Steel PVC Screened/Open-Hole Well Screener (Longhi: 10 ft Fush-mount/Above-ground Addree Length: 10 ft Reported Constructed Depth: 19.44 ft BGS or BTOC (orcle one) INSPECTION ITEMS YES NO N/A COMMENTS Well-head Completion: Addree Interval Interval Interval Interval Are the posts positioned to prevent collision flamage to the well? Interval	WELL INFORMATION
Number: LDQ_MA 166 Forset + Dods + CWarry Casing Type: Steel Stainless Steel PVC Screened/Open-Hole Well Screene (Monitor Interval Length: IO ft Flush-mount/Above-ground Completion: Market IO ft Reported Constructed Depth: I I.4.44 ft BGS o(BTOC (srcle one) INSPECTION ITEMS VES NO N/A COMMENTS Well-head Completion: Are the posts positioned to prevent collision barnage to the well? IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	Well Location/Functional Area:
Casing Type: Steel Stainless Steel PVC	Number: FDQMen - 166 FUZE + DOUSTER QUARVA
Screened/Open-Hole Well Screened (Monitor Interval Length: IO ft Type: IO ft Flush-mount/Above-ground IO ft Completion: IO ft BGS of BTOC (stelle one) INSPECTION ITEMS YES NO N/A COMMENTS Well-head Completion: Above-ground completion: IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	Casing Type: Steel Stainless Steel PVC
Flush-mount/Above-ground Completion: J	Screened/Open-Hole Well Type: Monitor Interval Length: ft
Reported Constructed Depth: 444 ft BGS or BTOC (arcle one) INSPECTION ITEMS YES NO N/A COMMENTS Well-head Completion:	Flush-mount/Above-ground Completion:
INSPECTION ITEMS YES NO NA COMMENTS Well-head Completion: Are the posts positioned to prevent collision damage to the well? I <td< td=""><td>Reported Constructed Depth: 19,49 ft BGS or BTOC (circle one)</td></td<>	Reported Constructed Depth: 19,49 ft BGS or BTOC (circle one)
Well-head 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 the pad cracked or deteriorated? Frost heaving? Is the protective casing have a weep hole? Does the protective casing have a weep hole? If If I Does the protective casing have a weep hole? Is the traffic cover rescurely bolted to the flush-mount box? Is the traffic cover casced or boken? Is the concrete apron cracked or deteriorated? Frost heaving? Is the well have a flush-mount box? Is the concrete apron cracked or deteriorated? Frost heaving? Does the well have a cap or lid? Does the well have a veatherproof lock? If I Does the use control to boken (at the surface?) Is the well casing boet, corroded, or broken (at the surface?) Is the well casing boet, corroded or the port the well Is the well casing loose (at the surface)? Is a measurement point marked at the top of the well	INSPECTION ITEMS YES NO N/A COMMENTS
Above-ground completion: Are the posts positioned to prevent collision damage to the well? Are any of the posts damaged or degraded? [] [] [] [] [] [] [] [] [] [] [] [] [] [Well-head Completion:
Number of guard posts at well: Are the posts positioned to prevent collision barage to the well? Are the posts damaged or degraded? I I I I I I I I I I I I I I I I I I I	Above-ground completion:
Are the posts positioned to prevent collision damage to the well? Image: transmitter of the posts damaged or degraded? Are any of the posts damaged or degraded? Image: transmitter of the posts damaged or degraded? Is a concrete pad installed? Image: transmitter of tr	Number of guard posts at well:
well? If I I I I I I I I I I I I I I I I I I	Are the posts positioned to prevent collision damage to the
Are any of the posts damaged or degraded? []	well?
Is a concrete pad installed? If I I I I I I I I I I I I I I I I I I	Are any of the posts damaged or degraded?
Is the pad cracked or deteriorated? Frost heaving? [] <td>Is a concrete pad installed?</td>	Is a concrete pad installed?
is steel protective casing installed? I I I Does the protective casing have a weep hole? I I I I Does vegetation around the well need clearing? I I I I I Flush-mount completion: Is the traffic cover securely bolted to the flush-mount box? I<	Is the pad cracked or deteriorated? Frost heaving?
Does the protective casing have a weep hole? $[l + l + l + l + l + l + l + l + l + l +$	Is steel protective casing installed?
Does vegetation around the well need clearing? I I IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	Does the protective casing have a weep hole?
<i>Puss-mount completion:</i> 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 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: Is the well labeled with the correct number? Describe labeling: Is the well have a cap or lid? Does the well have a cap or lid? Does the well have a weatherproof lock? If I Does the well casing bent, corroded, or broken (at the surface?) Is the well casing loose (at the surface)? Is the well casing loose (at the surface)? Is a measurement point marked at the top of the well Casing? Measured depth of the well from measurement point: Thickness of sediment accumulation (reported depth-present measurement): Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc): Inspection Date:	Does vegetation around the well need clearing?
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 concrete apron cracked or deteriorated? Frost heaving? [] [] [] [] Identification: [] [] [] [] Is the well labeled with the correct number? [] [] [] [] Describe labeling: If a security: Describe labeling: If a security: Does the well have a cap or lid? [] [] [] [] [] Does the well have a weatherproof lock? [] [] [] [] [] Does the well have a weatherproof lock? [] [] [] [] [] Does the well have a water-tight cap? [] [] [] [] [] Does the inner casing have a water-tight cap? [] [] [] [] [] Down-hole Condition: [] [] [] [] [] Is the well casing loose (at the surface)? [] [] [] [] [] [] Is a measurement point marked at the top of the well [] [] [] [] [] [] Measured depth of the well from measurement point: I] [] [] [] [] [] [] [] Are there any obstructions in t	Flush-mount completion:
Does the well have a flush-mount box? []	Is the traffic cover securely bolited to the flush-mount
Joes the well have a rubit-mount box: I I I I I I I I I I I I I I I I I I I	$\begin{array}{c c} UOX : \\ \hline \\ Does the well have a fluch mount hoy? \\ \hline \\ \hline \\ \end{array}$
Is the transferred of order in the concrete apron cracked or deteriorated? Frost heaving? [] [] [] [] Identification: [] [] [] [] Is the well labeled with the correct number? [] [] [] [] Describe labeling: [] [] [] [] Does the well have a cap or lid? [] [] [] [] [] Does the well have a weatherproof lock? [] [] [] [] [] Does the lock secure the well? [] [] [] [] [] Does the inner casing have a water-tight cap? [] [] [] [] [] Does 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 the well [] [] [] [] [] Measured depth of the well from measurement point: [] [] [] [] [] [] Measured depth of the well from measurement point: [] [] [] [] [] [] Are there any obstructions in the well? [] [] [] [] [] [] Description of well bottom conditions (soft, hard, etc): [] [] [] [] [] [] [] Inspection Date: [] [] [] [] [] [] [] [] [] [] []	Lots the traffic cover cracked or broken? $\begin{bmatrix} 1 \\ 1 \end{bmatrix} \begin{bmatrix} 1 \\ 1 \end{bmatrix} \begin{bmatrix} 1 \\ 1 \end{bmatrix}$
heaving? []	Is the concrete approprotected or deteriorated? Frost
Identification: If I I I I I I I I I I I I I I I I I I	heaving?
Is the well labeled with the correct number? If [1] [1] Describe labeling: If (S S fell) Describe labeling: If (S S fell) Does the well have a cap or lid? If [1] [1] Does the well have a weatherproof lock? If [1] [1] Does the well have a weatherproof lock? If [1] [1] Does the well have a weatherproof lock? If [1] [1] Does the lock secure the well? If [1] [1] Does the inner casing have a water-tight cap? If [1] [1] Does the well casing bent, corroded, or broken (at the surface?) If [1] [1] Is the well casing loose (at the surface)? If [1] [1] Is a measurement point marked at the top of the well casing? If [1] [1] Measured depth of the well from measurement point: If [1] [1] Thickness of sediment accumulation (reported depth-present measurement): If [1] [1] Are there any obstructions in the well? If [1] [1] Description of well bottom conditions (soft, hard, etc): If [1] [1] Inspection Date: If [1] [2]	Identification
Describe labeling: Yest Structure in the construction in the	Is the well labeled with the correct number?
Security: Image: Intervention of the security: Does the well have a cap or lid? Image: Im	Describe labeling: $P_{1} \leq S_{1} \leq P_{1} \leq P$
Does the well have a cap or lid? [Y] [] [] Does the well have a weatherproof lock? [Y] [] [] Does the lock secure the well? [Y] [] [] Does the inner casing have a water-tight cap? [] [] [] Does the inner casing have a water-tight cap? [] [] [] Does 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 the well casing? [] [] [] [] [] Measured depth of the well from measurement point: If If []	Security:
Does the well have a weatherproof lock? [Y] [] [] Does the lock secure the well? [Y] [] [] Does the inner casing have a water-tight cap? [Y] [] [] Down-hole Condition: [Y] [] [] Is the well casing bent, corroded, or broken (at the surface?) [] [Y] [] [] Is the well casing loose (at the surface)? [] [Y] [] Is a measurement point marked at the top of the well casing? [] [Y] [] Measured depth of the well from measurement point: [] [Y] [] Thickness of sediment accumulation (reported depth-present measurement): [] [Y] [] Are there any obstructions in the well? [] [Y] [] [] Description of well bottom conditions (soft, hard, etc): [] [Y] [] [] Inspection Date: [] [] [] [] []	Does the well have a cap or lid?
Does the lock secure the well? Image: Construction of the well? Down-hole Condition: Image: Condition of the well casing bent, corroded, or broken (at the surface?) Is the well casing loose (at the surface)? Image: Condition of the well casing? Is a measurement point marked at the top of the well casing? Image: Condition of the well from measurement point: Measured depth of the well from measurement point: Image: Condition of well bottom conditions (soft, hard, etc): Are there any obstructions in the well? Image: Condition (soft, hard, etc): Inspection Date: Image: Condition (soft, hard, etc):	Does the well have a weatherproof lock?
Does the inner casing have a water-tight cap? [4] [1] [1] Down-hole Condition: [4] [1] [1] Is the well casing bent, corroded, or broken (at the surface?) [1] [4] [1] Is the well casing loose (at the surface)? [1] [4] [1] Is a measurement point marked at the top of the well casing? [1] [4] [1] Measured depth of the well from measurement point: [4] [1] [1] Thickness of sediment accumulation (reported depth-present measurement): [4] [1] [1] [1] Are there any obstructions in the well? [1] [1] [1] [1] Description of well bottom conditions (soft, hard, etc): [1] [1] [1] [1] Inspection Date: [1] [2] [2]	Does the lock secure the well?
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 the well casing? [] [] [] [] [] Measured depth of the well from measurement point: 19, 32 Thickness of sediment accumulation (reported depth-present measurement): 19, 32 Are there any obstructions in the well? [] [] [] [] [] [] [] Description of well bottom conditions (soft, hard, etc): [] [] [] [] [] [] [] [] Inspection Date: 112,53	Does the inner casing have a water-tight cap?
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 the well casing? Measured depth of the well from measurement point: Thickness of sediment accumulation (reported depth-present measurement): Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc): Inspection Date:	Down-hole Condition:
surface?) []	Is the well casing bent, corroded, or broken (at the
Is the well casing loose (at the surface)? []	surface?) [] [4, 14]
Is a measurement point marked at the top of the well casing? [4] [1] [1] Measured depth of the well from measurement point: 19, 3 Thickness of sediment accumulation (reported depth-present measurement): 19, 3 Are there any obstructions in the well? [1] [1] [1] Description of well bottom conditions (soft, hard, etc): [1] [2] [3] Inspection Date: 112,5	Is the well casing loose (at the surface)? [] [] [] [] []
casing? [9] [] [] Measured depth of the well from measurement point: 19,82 Thickness of sediment accumulation (reported depth-present measurement): 19,82 Are there any obstructions in the well? [] [] [] [] [] Description of well bottom conditions (soft, hard, etc): [] [] [] [] [] Inspection Date: 1125 Inspected by:	Is a measurement point marked at the top of the well
Measured depth of the well from measurement point: 19, 32 Thickness of sediment accumulation (reported depth-present measurement):	casing? [/ [] []
Thickness of sediment accumulation (reported depth-present measurement): Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc): Inspection Date:	Measured depth of the well from measurement point: $19, 72$
Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc): Inspection Date:	Thickness of sediment accumulation (reported depth-present measurement):
Inspection Date: 4125 Inspected by: 64	Are there any obstructions in the well?
Inspection Date: 4125 Inspected by: GAANIS	Description of well bottom conditions (soft, hard, etc):
	Inspection Date: <u>425</u> Inspected by: <u>GAANIA</u>

WELL INFORMATION	
Well Location/Functional Area:	
Number: FBQmw-167	Fure: Booster Quarry
Casing Type: Steel Stainless Steel	<u> </u>
	N. C. 1944 - 17 - 44 - 1
Screened/Open-Hole Well	Monitor Interval
Type:	
Flush mount/Above ground	
Completion: Above ground Above and	bund
Reported Constructed Depth: 18.85	_ ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion.	
Wei-neau Completion.	
Above-ground completion:	
Are the posts positioned to request collision demore to the	
well?	
Are any of the nosts damaged or degraded?	
Is a concrete nad installed?	
Is the nad 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: <u>tagon</u>	, pad
Security:	
Does the well have a cap or lid?	[X] [] []
Does the well have a weatherproof lock?	
Does the lock secure the 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 cashing loose (at the sufface):	
a measurement point marked at the top of the wen	
Measured depth of the well from measurement point.	19.08
Thickness of sediment accumulation (renorted denth-present	t measurement):
Are there any obstructions in the well?	
Description of well bottom conditions (soft. hard. etc):	hard
r	
In allock the second	$A \cap R$
Inspection Date: $-\frac{7}{2506}$ Inspected by:	- UK Krieg
	\bigcirc

WELL INFORMATION Well Location/Functional Area: Number: FBQmw-168	Fuge: Booster Quarry
Casing Type: Steel Stainless Steel	PVC
Screened/Open-Hole Well Type: <u>Screened</u>	Monitor Interval Length: 10 ft
Flush-mount/Above-ground Completion: <u>Above grou</u>	ond
Reported Constructed Depth: 21.64	ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
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? Front heaving?	[×] [] []
Is steel protective casing installed? Does the protective casing have a weep hole? Does vegetation around the well need clearing?	[X] [] [X] [] [Y] [] [] []
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	لاما [] [] [] [] [] [] [] [] [] []
heaving?	
Is the well labeled with the correct number? Describe labeling: <u>tag on pa</u>	[×] [] []
Security:	
Does the well have a weatherproof lock? Does the lock secure the well? Does the inner casing have a water-tight can?	[×] [] [] [×] [] [] [×] [] []
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 the well	[] [×] []
casing? Measured depth of the well from measurement point: Thickness of sediment accumulation (reported depth-present n	[γ] [] [] 21.40 neasurement):
Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc):	[] [x] [], Nard
Inspection Date: <u>425/06</u> Inspected by:	al Bully.

WELL INSPECTION C	HECKLIST .
WELL INFORMATION Well Location/Functional Area: Number: FBQmw-169	Fuz : Booster Quary
Casing Type: Steel Stainless Steel	_X PVC
Screened/Open-Hole Well Type: <u>Screened</u>	Monitor Interval ft
Flush-mount/Above-ground Completion: <u>Above group</u>	ound
Reported Constructed Depth: 18.22	ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	-
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? 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?	[X] [] [] [] [] [X] [] [] [X] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] []
Describe labeling: Security: Does the well have a cap or lid? Does the well have a weatherproof lock? Does the lock secure the well? Does the inner casing have a water-tight cap? Down-hole Condition: Is the well casing bent, corroded, or broken (at the	[X] []
surface?) Is the well casing loose (at the surface)? Is a measurement point marked at the top of the well casing? Measured depth of the well from measurement point: Thickness of sediment accumulation (reported depth-present r Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc):	$\begin{bmatrix} 1 & [X] & [1] \\ [1] & [N] & [1] \\ [N] & [N] & [N] [N] & [N] & [N] & [N] \\ [N] & [N] & [N] & [N] & [N] \\ [N] & [N] & [N] & [N] & [N] \\ [N] & [N] & [N] & [N] & [N] \\ [N] & [N] & [N] & [N] & [N] & [N] \\ [N] & [N] & [N] & [N] & [N] & [N] & [N] \\ [N] & [N] \\ [N] & [N] $
Inspection Date: $\frac{4/25/06}{100}$ Inspected by:	al Buillingi

WELL INFORMATION Well Location/Functional Area: Number: FBGCMW - 170 Casing Type: Steel Casing Type: Steel Screened/Open-Hole Well Screened/Open-Hole Well Type: Screened/Open-Hole Well Flush-mount/Above-ground Screened/Open-Hole Well Reported Constructed Depth: Screened/Open-Hole Well INSPECTION ITEMS YES NO N/A COMMENTS Well-head Completion: How
Well Location/Functional Area: Number: FGAME - 170 Casing Type: Steel Screened/Open-Hole Well Screened/Open-Hole Well Type: Screened/Open-Hole Well Flush-mount/Above-ground Monitor Interval Completion: Advale Reported Constructed Depth: 32,59 INSPECTION ITEMS YES NO N/A COMMENTS Well-head Completion: Aver the posts positioned to prevent collision damage to the well? Are any of the posts damaged or degraded? []
Number: FBCAME - 170 Forze crack possible Casing Type: Steel Stainless Steel 2 PVC f Screened/Open-Hole Well Screened/Open-Hole Well Monitor Interval 10 ft Type: Screened/Open-Hole Well Monitor Interval 10 ft Flush-mount/Above-ground Advec Image: Monitor Interval 10 ft Reported Constructed Depth: 32,59 ft BGS or BTOC (circle one) ft INSPECTION ITEMS YES NO N/A COMMENTS Well-head Completion: 4 Are the posts positioned to prevent collision damage to the well? 1 Are any of the posts damaged or degraded? 1 1
Casing Type: Steel Stainless Steel Image: Completion: Screened/Open-Hole Well Image: Completion: Image: Completion: Image: Completion: Screened/Open-Hole Well Image: Completion: Image: Completion: Image: Completion: Flush-mount/Above-ground Image: Completion: Image: Completion: Image: Completion: Reported Constructed Depth: Image: Completion: Image: Completion: Image: Completion: INSPECTION ITEMS YES NO N/A COMMENTS Well-head Completion: Image: Completion: Image: Completion: Image: Completion: Are the posts positioned to prevent collision damage to the well? Image: Completion: Image: Completion: Are any of the posts damaged or degraded? Image: Completion: Image: Completion:
Screened/Open-Hole Well Screened Monitor Interval Length: 10 ft Type: Screened Length: 10 ft Flush-mount/Above-ground Ababe Image: Screened Image: Screened Reported Constructed Depth: Screened Screened Image: Screened Image: Screened INSPECTION ITEMS Screened Screened Image:
Flush-mount/Above-ground Completion: Above Reported Constructed Depth: 32,59 INSPECTION ITEMS YES Well-head Completion: YES Above-ground completion: 4 Are the posts positioned to prevent collision damage to the well? Image: Completion in the posts damaged or degraded?
Reported Constructed Depth: 32,59 ft BGS of BTOC (circle one) INSPECTION ITEMS YES NO N/A COMMENTS Well-head Completion: 4 Above-ground completion: 4 Are the posts positioned to prevent collision damage to the well? 4 Are any of the posts damaged or degraded? []
INSPECTION ITEMS YES NO N/A COMMENTS Well-head Completion:
Well-head Completion: 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? []]
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?
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?
Are the posts positioned to prevent collision damage to the well? Are any of the posts damaged or degraded? [] [] []
well? []
Are any of the posts damaged or degraded?
Is a concrete pad installed?
Is the pad tracked of detenorated? Flost heaving?
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 weatherproof lock?
Does the lock secure the 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)? [] [4 []
Is a measurement point marked at the top of the well
casing?
Measured depth of the well from measurement point: $72.7232.79$
A ra there any obstructions in the well?
Description of well bottom conditions (soft bard etc):
Inspection Date: <u>425</u> Inspected by: <u>GMan</u>

WELL INFORMATION Well Location/Functional Area: Number: FBQmw-171	Typ: Booster Quarry
Casing Type: Steel Stainless Steel	<u> </u>
Screened/Open-Hole Well Type: <u>Screened</u>	Monitor Interval Length: \O ft
Flush-mount/Above-ground Completion:	round
Reported Constructed Depth: <u>31.0b</u>	ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
Above-ground completion: 4 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? Is the well labeled with the correct number?	[X] [] <t< th=""></t<>
Describe labeling: tag on Security: Does the well have a cap or lid? Does the well have a weatherproof lock? Does the lock secure the well? Does the inner casing have a water-tight cap?	[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 the well casing? Measured depth of the well from measurement point: Thickness of sediment accumulation (reported depth-present m Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc): 	$\begin{bmatrix} 1 & [Y] & [1] \\ [1] & [Y] & [Y] & [Y] & [Y] \\ [Y] & [Y] & [Y] & [Y] & [Y] \\ [Y] & [Y] & [Y] & [Y] & [Y] \\ [Y] & [Y] & [Y] & [Y] & [Y] & [Y] \\ [Y] & [Y] & [Y] & [Y] & [Y] & [Y] \\ [Y] & [Y] & [Y] & [Y] & [Y] & [Y] \\ [Y] & [Y] \\ [Y] & [Y] \\ [Y] & [Y] $
Inspection Date: $\frac{4}{2506}$ Inspected by:	Ul Bullizi

WELL INFORMATION					
Well Loc	ation/Functional Area:				0
Number: <u>FBQmw-172</u>	_	tuge	e Ba	oster	- quarry
Cosing Type: Steel	Stainloss Staal	-	~	זת /	0
Cashig Type Steel	Statilless Steel			<u> </u>	
Screened/Open-Hole Well		М	lonitor	Interval	
Туре:	Screened	Le	ength:		ft
	······		-		
Flush-mount/Above-ground	N I	١			
Completion:	Above qu	ound		-	
	21120	6 8 9 9 9			
Reported Constructed Depth:	54.22	- ft BGS	or BTC	OC (circ	le one)
INSPECTION ITEMS		VES	NO	NT/A	COMMENTS
INSI ECTION ITEMS		IES	NO	IN/AL	COMMENTS
Well-head Completion:					
Above-ground completion.			-		
Number of guard posts at well:	4				
Are the posts positioned to prevent	collision damage to the				
well?	FOR THE STATE OF T	[X]	[]	۲1	
Are any of the posts damaged or de	graded?	[]	[×]	ſ ĺ	
Is a concrete pad installed?	- , ,	[X]	[]	[]	
Is the pad cracked or deteriorated? I	Frost heaving?	[]	[X]	[]	
Is steel protective casing installed?		[X]	[]	[]	
Does the protective casing have a w	eep hole?	[入]	[]	[]	
Does vegetation around the well nee	d clearing?	[]	[×]	[]	
Flush-mount completion:					
Is the traffic cover securely bolte	d to the flush-mount				
box?	2			$[\times]$	
Does the well have a flush-mount be	DX?			[x]	
Is the concrete appropriate or broken	n. datarianatad? Eraat	[]	[]	[]	
heaving?	i deteriorateu? Frost	r 1	۲ I	f 1	
Identification ·		LI	LJ	[K]	
Is the well labeled with the correct n	umber?	[X]	۲ I	ſ	
Describe labeling:	tca or	2 ogd	1 1	LJ	
Security:	<u> </u>	1 poor			27.117.251.117.017.017.017.017.017.017.017.017.01
Does the well have a cap or lid?			[]	ſ]	
Does the well have a weatherproof l	ock?	[X]	[]	[]	
Does the lock secure the well?		[x]	[]	[]	
Does the inner casing have a water-t	ight cap?	[x]	[]	[]	
Down-hole Condition:					
Is the well casing bent, corroded, or t	oroken (at the				
surface?)	\ <u>a</u>				
Is the well casing loose (at the surface		[]	[X]		
is a measurement point marked at	t the top of the well	f. 1	r 1	с 1	
Casing: Measured denth of the well from me	asuramant noint	الا ا 2 یا	50		in 1979 - The second
Thickness of sediment accumulation	(reported depth-present)	<u>7</u>	$\frac{1}{2}$		
Are there any obstructions in the we	119	f]	$\int \sqrt{1}$	r 1	
Description of well bottom condition	ns (soft, hard, etc):	ι μ		LJ	
	- (- vavy same by viv).		<u> </u>		
Langeting Data 4/25/01	¥	\cap	n R	. <u>'</u> ^ ^	
inspection Date: 1/22/06	Inspected by:		u la	mel	\sim
					\cup

WELL INFORMATION Well Location/Func	tional Area:	E	i R		
100mw-115		<u> </u>	<u>.</u>	0051	<u>er quarry</u>
Casing Type: Steel St	tainless Steel			PV	/C
Screened/Open-Hole Well Type:	eened	M	ionitor I ength:	nterval	ft
Flush-mount/Above-ground Completion:	bove o	roun	9		
Reported Constructed Depth: 5	3.01	ft BGS	orBTO	Ccirc	le one)
INSPECTION ITEMS		YES	NO	N/A	COMMENTS
Well-head Completion:					
Above-ground completion: Number of guard posts at well: Are the posts positioned to prevent collision da well? Are any of the posts damaged or degraded? Is a concrete pad installed? Is the pad cracked or deteriorated? Frost heavi 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 f box? Does the prolective casing have a weep hole?	mage to the ng? ? flush-mount	[×] [×] [×] [×]	[] [×] [] [] [] []	[] [] [] [] [] []	
Does the well have a flush-mount box? Is the traffic cover cracked or broken? Is the concrete apron cracked or deteriorate heaving? <i>Identification:</i> Is the well labeled with the correct number?	ated? Frost	[] [] [x]	[] [] []	[×] [×] [×]	
Security: Does the well have a cap or lid? Does the well have a weatherproof lock? Does the lock secure the well? Does the inner casing have a water-tight cap? Down-hole Condition: Is the well casing bent, corroded, or broken (at t surface?) Is the well casing loose (at the surface)? Is a measurement point marked at the top of casing?	he he well	[X] [X] [X] [X] [X] []	[X] [X] []		
Measured depth of the well from measurement Thickness of sediment accumulation (reported Are there any obstructions in the well? Description of well bottom conditions (soft, ha Inspection Date: $\frac{\frac{1}{25}06}{10}$	point: depth-present n rd, etc): (nspected by:	۱۶۶۱ neasurema	[] 5].73 ent): [X] Mard	[] Br	illigu

WELL INSPECTION CHECKLIST	
WELL INFORMATION Well Location/Functional Area: Number: FBQmw-174	varia
Casing Type: Steel Stainless Steel PV0	c
Screened/Open-Hole Well Monitor Interval Length:	<u>/0</u> ft
Flush-mount/Above-ground Completion: <u>Above ground</u>	
Reported Constructed Depth: 26.19 ft BGS or BTOC (circle	e one)
INSPECTION ITEMS YES NO N/A	COMMENTS
Well-head Completion:	
Above-ground completion: 4 Number of guard posts at well: 4 Are the posts positioned to prevent collision damage to the well? [X] [] 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] [] Does vegetation around the well need clearing? [] [X] [] Does 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? [] [] [] [] Is the well labeled with the correct number? [] [] [] [] [] [] <td< td=""><td></td></td<>	
Ical of paoSecurity:Does the well have a cap or lid?Does the well have a weatherproof lock? $[x]$ $[]$ Does the lock secure the well? $[x]$ $[]$ $[]$ Does the inner casing have a water-tight cap? $[x]$ $[]$ $[]$ Down-hole Condition: $[x]$ $[]$ $[]$ $[]$ Down-hole Condition: $[x]$ $[]$ $[]$ $[]$ 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 the well $[x]$ $[]$ $[]$ casing? $[x]$ $[]$ $[]$ $[]$ Measured depth of the well from measurement point: 22.94 2.94 Thickness of sediment accumulation (reported depth-present measurement): $Are there any obstructions in the well?[][x][]Description of well bottom conditions (soft, hard, etc):[Aard][Aard]$	
Inspection Date: <u>4/25/06</u> Inspected by: <u>(11/Drulla</u>)	yez

RAVENNA ARMY AMMUN WELL INSPECTION CH	IITION PLANT HECKLIST
Well Location/Eurotional Area:	
Number: EBQuout 175	ing : Booster Quarry
	<u>orden to and</u>
Casing Type: Steel Stainless Steel	<u> </u>
Screened/Open-Hole Well Type: <u>Screened</u>	Monitor Interval Length: 10 ft
Flush-mount/Above-ground Completion:	und
Reported Constructed Depth: 25.57	ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
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 of deteriorated? Frost heaving?	
The steel protective casing instanted?	
Does the protective casing have a weep note?	
Fluch mount completion	
Is the traffic cover securely holted to the flush-mount	
hov?	
Does the well have a flush-mount hox?	
Is the traffic cover cracked or broken?	
Is the concrete apron cracked or deteriorated? Frost	
heaving?	[] [] [x]
Identification:	
Is the well labeled with the correct number?	[X], [] []
Describe labeling: tag on	pad
Security:	
Does the well have a cap or lid?	
Does the well have a weatherproof lock?	
Does the lock secure the 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)?	
asing?	
Measured depth of the well from measurement noint:	1595
Thickness of sediment accumulation (reported depth-present II	neasurement):
Are there any obstructions in the well?	
Description of well bottom conditions (soft, hard, etc):	Hard
Inspection Date: <u>4/25/06</u> Inspected by:	al Bully.
	\mathcal{L}^{i}

RAVENNA ARMY AMMUNITION PLANT WELL INSPECTION CHECKLIST				
WELL INFORMATION Well Location/Functional Area: Number: Ff. Location/Functional Area:	Fire & Boosder Querry			
Casing Type: Steel Stainless Steel	PVC			
Screened/Open-Hole Well Screened	Monitor Interval Length:ft			
Flush-mount/Above-ground Completion:				
Reported Constructed Depth: 23,34	_ ft BGS or BTOC (circle one)			
INSPECTION ITEMS	YES NO N/A COMMENTS			
Well-head Completion:				
Above-ground completion: \checkmark Number of guard posts at well: \checkmark Are the posts positioned to prevent collision damage to thewell?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: $\sum 5a \le 3a \le aa$ Security:Does the well have a cap or lid?Does the well have a weatherproof lock?Does the well have a weatherproof lock?	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$			
Does the inner casing have a water-tight cap?				
Down-note Conation: 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 the well casing? Measured depth of the well from measurement point: Thickness of sediment accumulation (reported depth-present Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc):	$\begin{bmatrix} 1 & [] & [] \\ 1 & [] & [] \\ 1 & [] & [] \\ \hline 72 & 72 \\ \hline 72 & 72 \\ \hline \\ measurement): \\ \begin{bmatrix} 1 & [] & [] \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\$			
Inspection Date: 425 Inspected by:	GHanis			

Inspection Date: 425

Inspected by:

Well Location/Functional Area: Number: FlogAnul-177 Casing Type:	WELL MOI LETION C	
Number: FBQmw1-177 Fug:: Booster Quang Casing Type: Steel Stainless Steel PVC Screened/Open-Hole Well Decreened Monitor Interval Logth: 10 ft Type: Decreened Length: 10 ft Flust-mount/Above-ground Above ground	WELL INFORMATION Well Location/Functional Area:	
Casing Type:	Number: FBqmw-177 F	Uze: Booster Quarry
Screened/Open-Hole Well Monitor Interval ID ft Type:	Casing Type: Steel Stainless Steel	<u> </u>
Flush-mount/Above-ground Above ground Completion: 24.8 y ft BGS or BTOC circle one) INSPECTION ITEMS YES NO N/A COMMENTS Well-head Completion: Are the posts postioned to prevent collision damage to the well? [X] []	Screened/Open-Hole Well Type: Screened	Monitor Interval Length: 10 ft
Reported Constructed Depth: 24.84 ft BGS or BTOC circle one) INSPECTION ITEMS YES NO N/A COMMENTS Well-head Completion: 4	Flush-mount/Above-ground Completion: Above gro	und
INSPECTION ITEMS YES NO N/A COMMENTS Well-head Completion:	Reported Constructed Depth: 24.84	ft BGS or BTOC (circle one)
Well-head Completion: Above-ground completion: Number of guard posts at well: 4 Are the posts positioned to prevent collision damage to the well? [X] [] Are any of the posts damaged or degraded? [] [X] [] Is a concrete pad installed? [X] [] [X] [] Is the pad cracked or deteriorated? Frost heaving? [] [X] [] [] Does the protective casing have a weep hole? [X] [] [] [] Does the protective casing have a weep hole? [X] [] [] [] Does the protective casing have a weep hole? [X] [] [] [] Does the protective casing have a weep hole? [] [] [] [] [] Does the protective casing have a weether hout hot? [] [] [] [] [] Does the well have a flush-mount box? [] </th <th>INSPECTION ITEMS</th> <th>YES NO N/A COMMENTS</th>	INSPECTION ITEMS	YES NO N/A COMMENTS
Above-ground completion: 4 Number of guard posts at well: 4 Are the posts positioned to prevent collision damage to the well? [X] [] Are any of the posts damaged or degraded? [] [X] [] Is a concrete pad installed? [X] [] [X] [] Is the pad cracked or deteriorated? Frost heaving? [] [X] [] [] Does the protective casing installed? [] [] [] [] [] Does the protective casing have a weep hole? [] [] [] [] [] [] Does the protective casing have a weep hole? []	Well-head Completion:	
Number of guard posts at well: 4 Are the posts positioned to prevent collision damage to the well? [X] [] [] [] Are any of the posts damaged or degraded? [] [X] [] [] Is the pad cracked or deteriorated? Frost heaving? [] [] [X] [] Is the pad cracked or deteriorated? Frost heaving? [] [] [X] [] Does the protective casing installed? [X] [] [] [] Does the protective casing have a weep hole? [X] [] [] [] Does the protective casing have a weep hole? [X] [] [] [X] Does the protective casing have a weep hole? [X] [] [] [X] Does the protective casing have a weep hole? [X] [] [] [X] Does the well have a flush-mount box? [] [] [X] Does the well have a flush-mount box? [] [] [X] Is the wall labeled with the correct number? [X] [] [] [X] Is the well labeled with the correct number? [X] [] [] [] Does the well have a cap or lid? [X] [] [] [] Does the well have a watherproof lock? [X] [] [] [] Does the well have a watherproof lock? [X] [] [] [] Does the well have a watherproof lock? [X] [] [] [] Does the well have a watherproof lock? [X] [] [] [] Does the well have a watherproof lo	Above-ground completion:	
Are the posts positioned to prevent collision damage to the well? [X] [] [X] [] <th>Number of guard posts at well:</th> <th></th>	Number of guard posts at well:	
well? [X] [X] <t< th=""><th>Are the posts positioned to prevent collision damage to the</th><th></th></t<>	Are the posts positioned to prevent collision damage to the	
Are any of the posts damaged or degraded? [] [X] [] Is the pad cracked or deteriorated? Frost heaving? [] [X] [] Is the pad cracked or deteriorated? Frost heaving? [] [X] [] Is the pad cracked or deteriorated? Frost heaving? [] [X] [] [] Does the protective casing have a weep hole? [X] [] [] [] Does the protective casing have a weep hole? [X] [] [] [] Does the protective casing have a weep hole? [X] [] [] [] Does the protective casing have a weep hole? [X] [] [] [] Does the protective casing have a weep hole? [X] [] [] [] Does the well have a flush-mount box? [] [] [] [] [] Does the well have a flush-mount box? [] [] [] [] [] [] Is the traffic cover cracked or broken? [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] []	well?	[X] [] []
Is a concrete pad installed? $[\times]$ $[1]$ $[1]$ $[1]$ Is steel protective casing installed? $[\times]$ $[1]$ $[1]$ $[1]$ Does the protective casing have a weep hole? $[\times]$ $[1]$ $[1]$ $[1]$ Does the protective casing installed? $[\times]$ $[1]$ $[1]$ $[1]$ $[1]$ Does the protective casing installed? $[\times]$ $[1]$ $[1]$ $[\times]$ $[1]$ B the traffic cover securely bolted to the flush-mount box? $[1]$ $[1]$ $[\times]$ $[\times]$ Does the well have a flush-mount box? $[1]$ $[1]$ $[\times]$ <	Are any of the posts damaged or degraded?	[] [X] []
Is the pad cracked or deteriorated? Frost heaving? [] [x] [] [x] [] [x] [] [x] []	Is a concrete pad installed?	[×] [] []
Is steel protective casing installed? $[x]$ $[1]$ $[1]$ Does the protective casing have a weep hole? $[x]$ $[1]$ $[1]$ $[1]$ Does the protective casing have a weep hole? $[x]$ $[1]$ $[1]$ $[1]$ $[1]$ Does the protective casing have a weep hole? $[1]$ $[x]$ $[1]$ $[$	Is the pad cracked or deteriorated? Frost heaving?	[] [×] []
Does the protective casing have a weep hole? $[x]$ $[1]$ $[1]$ $[x]$ $[1]$ $[1]$ $[x]$ $[1]$	Is steel protective casing installed?	[X] [] []
Does vegetation around the well need clearing? $\begin{bmatrix} 1 & \begin{bmatrix} 1 & \begin{bmatrix} 1 \\ k \end{bmatrix} $	Does the protective casing have a weep hole?	
Flush-mount completion:	Does vegetation around the well need clearing?	
Is the traffic cover securely bolted to the flush-mount box? []	Flush-mount completion:	
box? []	Is the traffic cover securely bolted to the flush-mount	
Does the well have a flush-mount box? [] <td< th=""><th>box?</th><th></th></td<>	box?	
Is the transc cover cracked or broken? [] <t< th=""><th>Does the well have a flush-mount box?</th><th></th></t<>	Does the well have a flush-mount box?	
Is the concrete apron cracked of deteriorated? First heaving? [] [] [] [X] Identification: [] [] [] [X] Is the well labeled with the correct number? [X] [] [] [] Describe labeling: +ax on pad Security: Does the well have a cap or lid? [X] [] [] [] Does the well have a weatherproof lock? [X] [] [] [] [] Does the well have a weatherproof lock? [X] [] [] [] [] Does the lock secure the well? [X] [] [] [] [] Does the lock secure the well? [X] [] [] [] [] Does the inner casing have a water-tight cap? [X] [] [] [] [] Down-hole Condition:	Is the traine cover cracked or broken?	
Identification: If I I I I I I I I I I I I I I I I I I	is the concrete apron cracked of deteriorated? Prost	
Is the well labeled with the correct number? $[x]$ $[1]$ $[1]$ $[1]$ Describe labeling: $+a_{3}$ on pad a_{3} a_{3} a_{3} Security: Does the well have a cap or lid? $[x]$ $[1]$ $[1]$ $[1]$ Does the well have a weatherproof lock? $[x]$ $[1]$ $[1]$ $[1]$ $[1]$ Does the lock secure the well? $[x]$ $[1]$ $[1]$ $[1]$ $[1]$ Does the lock secure the well? $[x]$ $[1]$ $[1]$ $[1]$ $[1]$ Does the lock secure the well? $[x]$ $[1]$ $[1]$ $[1]$ $[1]$ Does the lock secure the well? $[x]$ $[1]$ $[1]$ $[1]$ $[1]$ Does the well casing bent, corroded, or broken (at the surface?)? $[1]$ $[x]$	Identification.	
Describe labeling: $+a_{3}$ on pad Security: a_{3} on pad Does the well have a cap or lid? $[x]$ [] [] [] Does the well have a weatherproof lock? $[x]$ [] [] [] Does the lock secure the well? $[x]$ [] [] [] Does the inner casing have a water-tight cap? $[x]$ [] [] [] Does the inner casing bate a water-tight cap? $[x]$ [] [] Does 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 the well casing? [x] [] [] [x] [] Measured depth of the well from measurement point: 25.02 Thickness of sediment accumulation (reported depth-present measurement): Are there any obstructions in the well? Are there any obstructions in the well? [] [x] [] [] Description of well bottom conditions (soft, hard, etc): $soff$ Inspection Date: $-4[25]06$ Inspected by: QA	Is the well labeled with the correct number?	
Security: [x] [] [] Does the well have a cap or lid? [x] [] [] Does the well have a weatherproof lock? [x] [] [] Does the lock secure the well? [x] [] [] Does the inner casing have a water-tight cap? [] [] [] Does the well casing bent, corroded, or broken (at the surface?) [] [] [] Is the well casing loose (at the surface)? [] [] [] [] Is the well casing loose (at the surface)? [] [] [] [] [] Is a measurement point marked at the top of the well casing? [] [] [] [] [] Measured depth of the well from measurement point: 25.02 [] [] [] [] Are there any obstructions in the well? [] [] [] [] [] [] Description of well bottom conditions (soft, hard, etc):	Describe labeling: +an or	Dad
Does the well have a cap or lid? $[x]$ $[1]$ $[1]$ Does the well have a weatherproof lock? $[x]$ $[1]$ $[1]$ Does the lock secure the well? $[x]$ $[1]$ $[1]$ Does the inner casing have a water-tight cap? $[x]$ $[1]$ $[1]$ Does the inner casing have a water-tight cap? $[x]$ $[1]$ $[1]$ Does the well casing bent, corroded, or broken (at the surface?) $[1]$ $[x]$ $[1]$ Is the well casing loose (at the surface)? $[1]$ $[x]$ $[1]$ $[x]$ $[1]$ Is a measurement point marked at the top of the well $[x]$ $[1]$ $[x]$ $[1]$ $[x]$ $[1]$ Measured depth of the well from measurement point: 25.02 25.02 25.02 Thickness of sediment accumulation (reported depth-present measurement): $xre there any obstructions in the well? [1] [x] [1] $	Security:	
Does the well have a weatherproof lock? $[x]$ $[1]$ $[1]$ $[1]$ Does the lock secure the well? $[x]$ $[1]$ $[1]$ $[1]$ $[1]$ Does the inner casing have a water-tight cap? $[x]$ $[1]$ $[1]$ $[1]$ $[1]$ Does the inner casing have a water-tight cap? $[x]$ $[1]$ $[1]$ $[1]$ $[1]$ Down-hole Condition:	Does the well have a cap or lid?	[ɣ] [] []
Does the lock secure the well? $[\chi]$ $[]$ $[]$ Does the inner casing have a water-tight cap? $[\lambda]$ $[]$ $[]$ Down-hole Condition: $[\lambda]$ $[]$ $[]$ $[]$ 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 the well casing? $[]$	Does the well have a weatherproof lock?	[x] [] []
Does the inner casing have a water-tight cap? $[\lambda]$ $[1]$ $[-]$ Down-hole Condition:	Does the lock secure the well?	
Down-hole Condition:	Does the inner casing have a water-tight cap?	[x] [] []
Is the well casing bent, corroded, or broken (at the surface?) [] [χ] [] [χ] [] [] [] Is the well casing loose (at the surface)? [] [χ] [] [χ] [] [] [] [] [] [] [] [] [] [] [] [] []	Down-hole Condition:	
Is the well casing loose (at the surface)? [] [χ] [] [χ] [] Is a measurement point marked at the top of the well [χ] [] [χ] [] [] Is a measurement point marked at the top of the well [χ] [] [] [] [] Is a measurement point marked at the top of the well [χ] [] [] [] [] Measured depth of the well from measurement point: 25.02 [] [] [] [] Thickness of sediment accumulation (reported depth-present measurement): 25.02 [] [] [] [] Are there any obstructions in the well? [] [] [] [] [] [] Description of well bottom conditions (soft, hard, etc):	is the well casing bent, corroded, or broken (at the surface?)	
Is a measurement point marked at the top of the well casing? $[\chi]$ $[\chi]$ $[\chi]$ $[\chi]$ $[\chi]$ $[\chi]$ Measured depth of the well from measurement point: 25.02 Thickness of sediment accumulation (reported depth-present measurement): Are there any obstructions in the well? $[\chi]$ $[\chi]$ $[\chi]$ $[\chi]$ $[\chi]$ Description of well bottom conditions (soft, hard, etc): 20 fH Inspection Date: $ \chi $	Is the well casing loose (at the surface)?	
casing? $[\chi]$ $[]$	Is a measurement point marked at the top of the well	
Measured depth of the well from measurement point: 25.02 Thickness of sediment accumulation (reported depth-present measurement): Are there any obstructions in the well? [] Are there any obstructions in the well? [] [] [] Description of well bottom conditions (soft, hard, etc): $30f4$ Inspection Date: $4 25 06$ Inspected by: $all Bullary$	casing?	
Thickness of sediment accumulation (reported depth-present measurement): Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc): Inspection Date:	Measured depth of the well from measurement point:	25.02
Are there any obstructions in the well? [] $[x]$ [] Description of well bottom conditions (soft, hard, etc): [] $[x]$ [] Inspection Date: $-1 25 06$ Inspected by: $all Bullage$	Thickness of sediment accumulation (reported depth-present r	neasurement):
Description of well bottom conditions (soft, hard, etc): <u>Soft</u> Inspection Date: <u>-12506</u> Inspected by: <u>QC Bulley</u>	Are there any obstructions in the well?	
Inspection Date: <u>-12506</u> Inspected by: <u>QC Bulley</u>	Description of well bottom conditions (soft, hard, etc):	30++
	Inspection Date: <u>-12506</u> Inspected by:	Qe Bulan

RAVENNA ARMY AMMU WELL INSPECTION C	NITION PLANT CHECKLIST	
WELL INFORMATION Well Location/Functional Area: Number: <u>NWmw-024</u>	Landfill North of Winklepeck	
Casing Type: Steel Stainless Steel	<u> </u>	
Screened/Open-Hole Well Screened	Monitor Interval Length:ft	
Flush-mount/Above-ground Completion: Above quoi	bre	
Reported Constructed Depth: 22.70	ft BGS on BTOC (dircle one)	
INSPECTION ITEMS	YES NO N/A COMMENTS	
Well-head Completion:		
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?	[X] [] [] <u>concrete cap on one</u> pos [X] [] [] <u></u> [X] [] [] [] [X] []	f lesse
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?	[x] [] []	
Security: Does the well have a cap or lid? Does the well have a weatherproof lock? Does the lock secure the well? Does the inner casing have a water-tight cap? Dawn-hale 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 the well		
casing? Measured depth of the well from measurement point: Thickness of sediment accumulation (reported depth-present r Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc):	[X] [] [] 22.67 measurement): [] [X] [] hand	
Inspection Date: $4-26-06$ Inspected by:	<u> </u>	
WELL INFORMATION Well Location/Functional Area: Number: <u>NWmw-02-5</u>	Landfill North of Winklepeck	
---	---	
Casing Type: Steel Stainless Steel	<u> </u>	
Screened/Open-Hole Well Screened	Monitor Interval Length: <u>10</u> ft	
Flush-mount/Above-ground Completion: Above Gr	bund	
Reported Constructed Depth: 19.93	ft BGS or BTOC (circle one)	
INSPECTION ITEMS	YES NO N/A COMMENTS	
Well-head Completion:		
Above-ground completion: Number of guard posts at well: <u>3</u> 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?	[X] [] [] [] [X] [] [X] [] []	
Is steel protective casing installed? Does the protective casing have a weep hole? Does vegetation around the well need clearing?	[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?	[] [] [X] [] [] [X] [] [] [Y]	
heaving?	[] [] [<u>x</u>]	
Identification: Is the well labeled with the correct number? Describe labeling: $+\alpha \alpha n \log d$	[k] [] []	
Security: Does the well have a cap or lid? Does the well have a weatherproof lock? Does the lock secure the well? Does the inner casing have a water-tight cap?	[X] [] [] [X] [] [] [X] [] [] [X] [] []	
Down-hole Condition:	V<1 (1 (1)	
Is the well casing bent, corroded, or broken (at the surface?) Is the well casing loose (at the surface)?	[] [X] [] [] [X] []	
Is a measurement point marked at the top of the well casing? Measured depth of the well from measurement point:	[x] [] [] z d.43	
Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc):	I Di []	
Inspection Date: <u>4-26-06</u> Inspected by:	- Ql Bulling	

WELL INFORMATION Well Location/Functional Area:	and fill North of Winklopert
	and the second second second
Casing Type: Steel Stainless Steel	<u> </u>
Screened/Open-Hole Well Type: Screened	Monitor Interval Length: <u>/O</u> ft
Flush-mount/Above-ground Completion:	bund
Reported Constructed Depth: 25,80	_ ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
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?	[¥] [] [] [] [×] [] [X] [] [] [] [×] [] [K] [] []]
Does the protective casing have a weep hole?	[K] [] []
Flush-mount completion:	[] [M] [] <u></u>
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? <i>Identification:</i> Is the well labeled with the correct number?	[] []
Describe labeling:	in lid
Security: 0 Does the well have a cap or lid? Does the well have a weatherproof lock? Does the lock secure the well? Does the inner casing have a water-tight cap?	[*] [] [] [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 the well casing? Measured depth of the well from measurement point: Thickness of sediment accumulation (reported depth-present Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc):	$\begin{bmatrix} 1 & [X] & [1 \\ 1 & [X] & [1 \\ 1 & [X] & [1 \\ 2 & .12 \\ \hline \\ \hline \\ \\ \hline \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ $
Inspection Date: <u>4-26-06</u> Inspected by:	Al Bully.

RAVENNA ARMY AMMUI WELL INSPECTION C	NITION PLANT HECKLIST
WELL INFORMATION	
Number: LNWmw-027	and fill North of Winkloperk
Casing Type: Steel Stainless Steel	<u> </u>
Screened/Open-Hole Well Type: <u>Screened</u>	Monitor Interval Length: <u>10</u> ft
Flush-mount/Above-ground Completion: <u>Above grou</u>	m
Reported Constructed Depth: 26,73	ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
Above-ground completion:	•
Number of guard posts at well: <u>5</u>	
Are the posts positioned to prevent collision damage to the	
Well? Are any of the posts damaged or degraded?	
Is a concrete nad installed?	
Is the nad 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?	[] [] [X]
Identification:	
Is the well labeled with the correct number?	[x,] [] []
Describe labeling: tag on	ha
Security:	
Does the well have a cap or lid?	[x] [] []
Does the well have a weatherproof lock?	[X] [] []
Does the lock secure the well?	[×] [] []
Does the inner casing have a water-tight cap?	[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 the well	
casing: Measured depth of the well from measurement relation	
Thickness of sediment accumulation (reported donth eccent	46,11
Are there any obstructions in the well?	
Description of well bottom conditions (soft hard etc.)	hand
11 21 20	MOB NA
Inspection Date: <u>7-L0-00</u> Inspected by:	Ul Mellen
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WELL INSPECTION C	Inecalist
WELL INFORMATION	
Well Location/Functional Area:	
Number: NJAmw-107	NARA TEST AREA
Casing Type: Steel Stainless Steel	\times PVC
Screened/Open-Hole Well Screened	Monitor Interval Length: <u>/()</u> ft
Flush-mount/Above-ground Completion: Above grou.	nd
Reported Constructed Depth: 29,65	ft BGS or BTOC (dircle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
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?	[] [X] []
Is a concrete pad installed?	[x] [] []
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?	[] [] [X]
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]
Identification:	- ,
Is the well labeled with the correct number?	[N] [] []
Describe labeling: tay on lid	
Security:	
Does the well have a cap or lid?	[X] [] []
Does the well have a weatherproof lock?	
Does the lock secure the well?	[X] [] []
Does the inner casing have a water-tight cap?	
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 the well	
casing?	[Ŋ [] []
Measured depth of the well from measurement point:	24.45
Thickness of sediment accumulation (reported depth-present	measurement):
Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc):	[] [A] [] firm sill i hittom
	$\bigcap o' \mathcal{R}$
Inspection Date: 4125106 Inspected by:	UL Dr. Vlen
	,
	\bigcirc

WELL INSPECTION C	.nccali	31		
Well INFURIVIATION				
Number: ATAmatrik ²	Nine	To-4	Acar	• •
Number. NIAMWING	Muca	1231	And	1
Casing Type: Steel Stainless Steel		<u>×</u>	P\	/C
Screened/Open-Hole Well Type: Screened	Le	onitor l ngth:	Interval	_ <i></i> ft
Flush-mount/Above-ground Completion: <u>Above grou</u>	und			
Reported Constructed Depth: <u>24.40</u>	_ ft BGS o	or BTC)C (circ	ele one)
INSPECTION ITEMS	YES	NO	N/A	COMMENTS
	2 110			
Well-head Completion:		-		
Above-ground completion:				
Number of guard posts at well:				
Are the posts positioned to prevent collision damage to the	r./ 1			
well?				
Are any of the posts damaged or degraded?		[×]		and a second
Is a concrete pad installed?	[×]			
Is the pad cracked or deteriorated? Frost heaving?				a succession of the second
is steel protective casing installed?				
Does the protective casing have a weep noie?				and a factor of the Solar of a statement of the statement
Does vegetation around the well need clearing?	LJ	[×]	[]	- The second
Flush-mount completion:				
is the traffic cover securely bolted to the flush-mount	r 1	гı	r \/ 1	
Does the well have a fluch mount how?		L J T J		
Loes the well have a flush-mount box?			1 1	
Is the concrete entropy gracked of deteriorsted? Front	L I	LI	ĽχJ	
heaving?	r 1	r ı	۲v1	
Identification.	LJ	11	ιγı	
Is the well labeled with the correct number?	[X]	٢٦	۲ I	
Describe labeling:	L/ J			
Security:				nan halan hir manan maalamaa daa maaya daa ka ka sa ahaa ka sa ahaa ka sa ahaa ka sa sa ahaa ka sa sa sa ahaa n
Does the well have a cap or lid?	[X]	[]	۲ I	
Does the well have a weatherproof lock?	[X]	[]	ŗ i	an a
Does the lock secure the well?	[X]	[]	Î Î	and an array of the second
Does the inner casing have a water-tight cap?	ſxī	[]	Ĩ Ì	
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 the well				
casing?	[×]	[]	[]	
Measured depth of the well from measurement point:	24.62			and a second
Thickness of sediment accumulation (reported depth-present	measurem	ent):		an a
Are there any obstructions in the well?	[]	[*]	[]	
Description of well bottom conditions (soft, hard, etc):	tir			a na na ana amin'ny tanàna mandritra dia kaominina mandritra dia mampina dia kaominina dia kaominina dia kaomin
	\wedge	\cap	Λ	2
Inspection Date: 4-25. 7006 Inspected by:	())	12	nl	le l'
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				\bigcup

WELL INSPECTION CF	IECKL	151		
WELL INFORMATION Well Location/Functional Area: Number: งาัAmwาบริ	NACA	test	r Are	a
Casing Type: Steel Stainless Steel		<u>_X</u>	P\	/C
Screened/Open-Hole Well Type: <u>Screened</u>	. L	Ionitor l ength:	Interval	<u>10</u> ft
Flush-mount/Above-ground Completion: <u>Above ground</u>			-	
Reported Constructed Depth: 20,95	ft BGS	or BTC	C (circ	ele one)
INSPECTION ITEMS	YES	NO	N/A	COMMENTS
Well-head Completion:		_ .		
Above-ground completion:				
Number of guard posts at well: <u>3</u>				
Are the posts positioned to prevent collision damage to the				
well?			[]	
Are any of the posts damaged or degraded?		[X]	[]	
Is a concrete pad installed?	[X]	[]	[]	
Is the pad cracked or deteriorated? Frost heaving?	[X]	[]	[]	pad rocks when stepped on
Is steel protective casing installed?	[X]	[]	[]	
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?	[]	[]	[X]	
Does the well have a flush-mount box?	Î Î	î î	[×]	
Is the traffic cover cracked or broken?	ŗ į	ŗ į	[x]	
Is the concrete apron cracked or deteriorated? Frost	1 3		LVI	
heaving?	۲ I	۲ I	۲v٦	
Idantification.	LJ	LJ	L f I	Characteristic
In the well labeled with the correct number?	[5]	r 1	r 1	
Describe lebeling:		ĹĴ	LJ	- 44 min
Describe labeling: <u></u>				an a
Deep the well have a set of lid?	5/1	r ı	гэ	4) 50 4 20 50 4 20 4 20 4 20 4 20 4 20 4 2
Does the well have a cap of hu?	[*]	L J T T	1 1	
Does the lock secure the mall?	[%]	11	l J r r	
Does the lock secure the well?	[~]	L J T J		
Does the inner casing nave a water-tight cap?	[\]	LI	L J	
Down-hole Condition:				
is the well casing bent, corroded, or broken (at the	r 1	r	с)	
surface?)			l l	
Is the well casing loose (at the surface)?	[X]	[]	[]	outer cg. is wor
Is a measurement point marked at the top of the well				
casing?	[×]	ĹIJ	IJ	
Measured depth of the well from measurement point:		-1.01		
Thickness of sediment accumulation (reported depth-present m	leasuren	nent):		
Are there any obstructions in the well?	[]	[×]	[]	
Description of well bottom conditions (soft, hard, etc):	5(<u>2++</u>		
Inspection Date: <u>4-25-06</u> Inspected by:	(re 1	<u>Zul</u>	lingu

WELL INFORMATION Well Location/Functional Area: Number: NTAmw-110	NACA test Area
Casing Type: Steel Stainless Steel	PVC
Screened/Open-Hole Well Type: Screened	Monitor Interval Length:ft
Flush-mount/Above-ground Completion:	<u>d</u>
Reported Constructed Depth: <u>29.59</u>	ft BGS of BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
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 domaged or degraded?	
Are any of the posts damaged of degraded?	
Is the pad amaked or deteriorated? Frost heaving?	
Is the pad cracked of deteriorated? Prost heaving?	
To steel protective casing instance?	
Does the protective casing have a weep note?	
Does vegetation around the well need clearing?	
Fiusn-mount completion:	
is the traffic cover securely bolted to the flush-mount	
Door the well have a flush mount hav?	
Lots the traffic cover cracked or broken?	
Is the concerts error crecked or deteriorated? Frost	
is the concrete apron cracked or deteriorated? Frost	
Identification.	
In the well labeled with the correct number?	
Describe labeling:	
Security	outer casing
Does the well have a can or lid?	
Does the well have a weatherproof lock?	
Does the lock secure the well?	
Does the inner casing have a water-tight can?	
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 the well	
casing?	[X] [] []
Measured depth of the well from measurement point:	29.951
Thickness of sediment accumulation (reported depth-present	measurement):
Are there any obstructions in the well?	[] [N] []
Description of well bottom conditions (soft, hard, etc):	hard
•	
Inspection Date: <u>4-25-06</u> Inspected by:	al Bulling

WELL INFORMATION Well Location/Functional Area:		and the	() en c
	Nota	1621	ALEG
Casing Type: Steel Stainless Steel		<u>X</u>	PVC
Screened/Open-Hole Well Type: <u>Screened</u>	Mo Le	onitor I ngth:	Interval ft
Flush-mount/Above-ground Completion: Above groun	J		
Reported Constructed Depth: <u>22.37</u>	ft BGS o	BTO	Q(circle one)
INSPECTION ITEMS	YES	NO	N/A COMMENTS
Well-head Completion:			
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?	[]	[木]	
Is a concrete pad installed?	[×]		
Is the pad cracked or deteriorated? Frost heaving?		[X]	
Is steel protective casing installed?	[×]		
Does the protective casing have a weep noie?	[X]	[] [~]	
Does vegetation around the well need clearing?	[]	[X]	L]
Fush-mount completion:			
hor?	[]	۲ I	[Y]
Does the well have a flush-mount hox?	[]		[X]
Is the traffic cover cracked or broken?	[]	[]	
Is the concrete apron cracked or deteriorated? Frost			
heaving?	[]	[]	[X]
Identification:			
Is the well labeled with the correct number?	[7]	[]	[]
Describe labeling: <u>tay on lid</u>			
Security:			
Does the well have a cap or lid?	[×]	[]	[]
Does the well have a weatherproof lock?	[X]		
Does the lock secure the well?			
Does the inner casing have a water-tight cap?	[X]		
Lown-noile Condition:			
is the well casing bell, corroued, or broken (at the surface?)	۲ I	[X]	[]
Is the well casing loose (at the surface)?	[]	[x]	
Is a measurement point marked at the top of the well		175	
casing?	[*]	[]	[]
Measured depth of the well from measurement point:	22.18	3	
Thickness of sediment accumulation (reported depth-present	measurem	ent):	
Are there any obstructions in the well?	[]	[ێ]	[]
Description of well bottom conditions (soft, hard, etc):	<u> </u>	<u>ird</u>	
Inspection Date: <u>4.25.06</u> Inspected by:	Qe	Br	long

WELL INFORMATION Location/Functional Area: Maca Test Area Number: NTAmud-112 Nature Nature Nature Casing Type: Steel Stainless Steel X PVC Screened/Open-Hole Well Screened Length: dD_{max} n Type: Screened Length: dD_{max} n Reported Constructed Depth: $T(g, K)$ t BGS of BTOC (dircle one) INSPECTION ITEMS YES NO NA COMMENTS Well head Completion: 3 Number of guard posts at well: 3 Are the posts positioned to prevent collision damage to the well? Ki [1] [1] [1] Are the posts positioned to grewent collision damage to the well? [X] [1] [1] [X] [1] [1] Are the posts positioned to grewent collision damage to the well? [X] [1] [1] [X] [1] [] Are the posts positioned to grewent collision damage to the well? [X] [1] [] [] [] [] [] [] [] [] [] [] [] []	WELL HIGH ECTION	
Weinber: NTAnnet:11 Licknow Procession Casing Type:	WELL INFORMATION	
Numer Numeric Numeric Numeric Casing Type:	Number: NTA 112	NACO Test Acar
Casing Type:	Number. NIAMWITZ	Think lest filed
Screened/Open-Hole Well Screened Monitor Interval Length: Image:	Casing Type: Steel Stainless Steel	PVC
Flush-mount/Above-ground Ancwe ground Completion: $2l_{dec} 8 - ft BGS of BTOC (gircle one)$ INSPECTION ITEMS YES NO N/A COMMENTS Well-head Completion: Are the pasts of posts at well: 3 3 Are the pasts positioned to prevent collision damage to the well? [Y] [] [] [] Are any of the posts damaged or degraded? [] [X] [] [] [] Are any of the posts damaged or degraded? [] [X] [] [] [] Are any of the posts damaged or degraded? [] [X] [] [] [] Sa concrete pationsated? Frost heaving? [] [X] [] [] [] Does step cotective casing have a weep hole? [X] [] [] [] [] Does step cotective casing have a weep hole? [X] [] [] [] [] Does step cotective casing have a weep hole? [X] [] [] [] [] [] Does step cot corded or broken? [] [] [] [] [] [] [] [] <	Screened/Open-Hole Well Type: <u>Screened</u>	Monitor Interval Length:ft
Reported Constructed Depth:	Flush-mount/Above-ground Completion:	nd
INSPECTION ITEMS YES NO N/A COMMENTS Well-head Completion:	Reported Constructed Depth: 26.87	_ ft BGS of BTOC (circle one)
Well-head Completion: Above-ground completion: Number of guard posts at well: 3 Are the posts positioned to prevent collision damage to the well? [X] [] Are any of the posts damaged or degraded? [] [X] [] Is a concrete pad installed? [X] [] [X] [] Is the pad cracked or deteriorated? Frost heaving? [] [X] [] [] Does the protective casing installed? [X] [] [] [] Does the protective casing installed? [X] [] [] [] Does the protective casing installed? [X] [] [] [] [] Does the protective casing have a weep hole? [X] [] [] [] [] [] Does the well have a flush-mount box? [] [X] []	INSPECTION ITEMS	YES NO N/A COMMENTS
Above-ground completion: 3 Number of guard posts at well: 3 Are the posts positioned to prevent collision damage to the well? [X] [] Are any of the posts damaged or degraded? [] [X] [] Is a concrete pad installed? [X] [] [] Is the pad cracked or deteriorated? Frost heaving? [] [X] [] Does the protective casing have a weep hole? [] [X] [] Does the protective casing have a weep hole? [] [X] [] Does the protective casing have a weep hole? [] [X] [] Does the protective casing have a weep hole? [] [X] [] [] Does the protective casing have a weep hole? [] [X] [] [] Does the protective casing have a weep hole? [] [] [] [] B the traffic cover cacked or broken? [] [] [] [] [] Is the traffic cover cacked or broken? [] [] [] [] [] [] Is the traffic cover cacked or broken? [] [] [] [] [] <th>Well-head Completion:</th> <th></th>	Well-head Completion:	
Number of guard posts at well:	Above-ground completion:	
Are the posts positioned to prevent collision damage to the well? [Y] [] <th>Number of guard posts at well:</th> <th></th>	Number of guard posts at well:	
weil? $[N_1 \ [N_1 \ [n]]$ Are any of the posts damaged or degraded? $[N_1 \ [n] \ [n]$ Is a concrete pad installed? $[N_1 \ [n] \ [n]$ Is the pad cracked or deteriorated? Frost heaving? $[N_1 \ [n] \ [n]$ Is steel protective casing have a weep hole? $[N_1 \ [n] \ [n]$ Does the protective casing have a weep hole? $[N_1 \ [n] \ [n] \ [n]$ Does the protective casing have a weep hole? $[N_1 \ [n] \ [n] \ [n]$ Does the protective casing have a weep hole? $[N_1 \ [n] \ [n] \ [n] \ [n]$ Does the protective case are weep hole? $[N_1 \ [n] \ [n] \ [n] \ [n] \ [n]$ Does the well have a flush-mount box? $[N_1 \ [n] \ [$	Are the posts positioned to prevent collision damage to the	rya ra ra
Are any of the posts damaged or degraded? [1] [X] [1] [X] Is a concrete pad installed? [X] [1] [X] [1] Is the pad cracked or deteriorated? Frost heaving? [X] [X] [X] [X] [X] Does the protective casing have a weep hole? [X] [X] [X] [X] [X] Does the protective casing have a weep hole? [X] [X] [X] [X] Does the protective casing have a weep hole? [X] [X] [X] [X] Does the protective casing have a weep hole? [X] [X] [X] Joes the well have a flush-mount box? [X] [X] [X] Does the well have a flush-mount box? [X] [X] [X] Is the traffic cover cracked or broken? [X] [X] [X] Is the traffic cover cracked or broken? [X] [X] [X] Is the concrete apron cracked or deteriorated? Frost heaving? [X] [X] [X] Identification: [X] [X] [X] [X] Is the well labeled with the correct number? [X] [X] [X] [X] Does the well have a cap or lid? [X] [X] [X] [X] [X] Does the well have a cap or lid? [X] [X] [X] [X] [X] [X] Does the look secure the well? [X] [X] [X] [X] [X] [X] Does the look secure the well? [X] [X] [X] [X] [X] [X] [X] Does the look secure the well? [X] [X] [X] [X] [X] [X] [X] [X] [X] Does	well?	
Is a concrete part installed? [X]	Are any of the posts damaged or degraded?	
Is the pad cracked of deteriorated? Fost heaving? [1] [1] [1] [1] Is stee protective casing installed? [X] [1] [1] Does the protective casing installed? [X] [1] [1] Does the protective casing installed? [X] [1] [1] Does the protective casing installed? [X] [1] [X] Does the protective casing installed? [X] [1] [X] Is the traffic cover securely bolted to the flush-mount [X] [1] [X] Does the well have a flush-mount box? [I] [I] [X] Is the traffic cover cracked or broken? [I] [I] [X] Is the concrete apron cracked or deteriorated? Frost heaving? [X] [I] [X] Is the well labeled with the correct number? [X] [X] [I] [X] Does the well have a cap or lid? [X] [I] [I] Does the well have a cap or lid? [X] [I] [I] Does the well have a veatherproof lock? [X] [I] [I] Does the lock secure the well? [X] [I] [I] Does the lock secure the well? [X] [I] [I] Does the lock secure the well? [X] [I] [I] Does the lock secure the well? [X] [I] [I] Does the well asing boet, corroded, or broken (at the surface?) [X] [I] [X] [I] Is the well casing loose (at the surface)? [X] [I] [X]	Is a concrete pad installed?	
Image: Steel protective casing have a weep hole? $[x]$ $[x]$ $[1]$ <	Is the pad cracked or deteriorated? Frost neaving?	
Does the protective casing have a weep hole? [x] [x] <t< th=""><th>Is steel protective casing installed?</th><th></th></t<>	Is steel protective casing installed?	
<i>Flush-mount completion:</i> I I<	Does the protective casing have a weep note?	
Is the traffic cover securely bolted to the flush-mount Image: construction of the secure is the	Does vegetation around the well need clearing?	
by the traine cover securely bolied to the hush-moduli box? [1] [1] [X] [] Does the well have a flush-mount box? [1] [1] [X] [] Is the traffic cover cracked or broken? [1] [1] [X] [] Is the concrete apron cracked or deteriorated? Frost heaving? [1] [1] [X] [] Identification: Is the well labeled with the correct number? [X] [1] [1] [X] [] Describe labeling: $+\alpha_{3}$ on Vid Security: Does the well have a cap or lid? [X] [1] [1] [] Does the well have a cap or lid? [X] [1] [1] [] Does the well have a cap or lid? [X] [1] [1] [] Does the well have a watherproof lock? [X] [1] [1] [] Does the inner casing have a water-tight cap? [X] [1] [1] [] Dows the inner casing have a water-tight cap? [X] [1] [1] [] Dows the well casing bent, corroded, or broken (at the surface?) [1] [X] [1] [1] [] Is the well casing loose (at the surface)? [X] [1] [X] [1] [] Measured depth of the well from measurement point: Thickness of sediment accumulation (reported depth-present measurement): Are there any obstructions in the well? [1] [X] [1] [X] [1] [1] Description of well bottom conditions (soft, hard, etc): 24.72 Inspection Date: <u>4.25 cc</u> Inspected by: <u>AB Meduac</u>	Fush-mount completion:	
Does the well have a flush-mount box? [] <td< th=""><th>is the traffic cover securely bolied to the hush-mount</th><th></th></td<>	is the traffic cover securely bolied to the hush-mount	
Is the will have a master industry of the well? []	Does the well have a flush mount hav?	
Is the darked of of octent? I I I I I I I I I I I I I I I I I I I	Locs the well have a musil-mount box :	
Is the content of determinated. From the earling? [] <th>Is the concrete aprop cracked or deteriorated? Frost</th> <th></th>	Is the concrete aprop cracked or deteriorated? Frost	
Identification: Image: transmitted in the correct number? [X] [Image: transmitted in the correct number? Is the well labeled with the correct number? [X] [Image: transmitted in the correct number? [X] [Image: transmitted in the correct number? Describe labeling:	heaving?	
Is the well labeled with the correct number? [X] [X] [I] [I] Describe labeling: +ag on hid [X] [I] [I] Security:	Identification:	
Describe labeling: +ag on tid Security:	Is the well labeled with the correct number?	
Security:	Describe labeling:	
Does the well have a cap or lid? [X] [] [] Does the well have a weatherproof lock? [X] [] [] Does the lock secure the well? [X] [] [] Does the inner casing have a water-tight cap? [X] [] [] Does the well casing bave a water-tight cap? [X] [] [] Does 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 the well casing? [] [X] [] [] [] Measured depth of the well from measurement point: Thickness of sediment accumulation (reported depth-present measurement):	Security:	алан алан талан талан талай улар бар бар бар талан талар бар талар талар талар талар талар талар талар талар та
Does the well have a weatherproof lock? [X] [] <	Does the well have a cap or lid?	
Does the lock secure the well? [×] [] <th>Does the well have a weatherproof lock?</th> <th></th>	Does the well have a weatherproof lock?	
Does the inner casing have a water-tight cap? [X] [] [] Down-hole Condition: [X] [] [] Is the well casing bent, corroded, or broken (at the surface?) [] [X] [] Is the well casing loose (at the surface)? [] [X] [] Is the well casing loose (at the surface)? [] [X] [] Is a measurement point marked at the top of the well casing? [] [X] [] Measured depth of the well from measurement point: [] [X] [] [] Thickness of sediment accumulation (reported depth-present measurement): [] [X] [] [] Are there any obstructions in the well? [] [X] [] [] [] Description of well bottom conditions (soft, hard, etc): 26.72 [] [] [] Inspection Date: <u>4.25 c6</u> Inspected by: <i>QUBLUMY</i> []	Does the lock secure the well?	
Down-hole Condition:	Does the inner casing have a water-tight cap?	
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 the well casing? [] [X] [] [] Measured depth of the well from measurement point: [X] [] [] [] Measured depth of the well from measurement point: [X] [] [] [] Measured depth of the well from measurement point: [X] [] [] [] Measured depth of the well from measurement point: [] [X] [] [] Measured depth of the well from measurement point: [] [X] [] [] Measured depth of the well from measurement point: [] [X] [] [] [] Measured depth of the well from measurement point: [] [X] [] [] [] Inspection of sediment accumulation (reported depth-present measurement): [] [X] [] [X] [] Are there any obstructions in the well? [] [X] [] [X] [] Description of well bottom conditions (soft, hard, etc): 26.72 Inspected by:	Down-hole Condition:	
surface?) [] [X] [] Is the well casing loose (at the surface)? [] [X] [] Is a measurement point marked at the top of the well [] [X] [] casing? [X] [] [] Measured depth of the well from measurement point: [X] [] [] Thickness of sediment accumulation (reported depth-present measurement): Are there any obstructions in the well? [] [X] [] Description of well bottom conditions (soft, hard, etc): 26.72 Inspection Date: <u>4.2506</u> Inspected by:	Is the well casing bent, corroded, or broken (at the	
Is the well casing loose (at the surface)? [] [X] [] Is a measurement point marked at the top of the well [X] [] [] casing? [X] [] [] Measured depth of the well from measurement point: [X] [] [] Thickness of sediment accumulation (reported depth-present measurement): [] [X] [] Are there any obstructions in the well? [] [X] [] Description of well bottom conditions (soft, hard, etc): 26.72 Inspection Date: <u>4.25 c6</u> Inspected by:	surface?)	[] [X] []
Is a measurement point marked at the top of the well casing? [x] [] [] Measured depth of the well from measurement point: Thickness of sediment accumulation (reported depth-present measurement): Are there any obstructions in the well? [] [x] [] Description of well bottom conditions (soft, hard, etc): 26.72 Inspection Date: <u>4.25 c6</u> Inspected by: <u>ABABMAY</u>	Is the well casing loose (at the surface)?	[] [X] []
casing? [x] [] [] Measured depth of the well from measurement point:	Is a measurement point marked at the top of the well	
Measured depth of the well from measurement point: Thickness of sediment accumulation (reported depth-present measurement): Are there any obstructions in the well? [] [] [] Description of well bottom conditions (soft, hard, etc): 26.72 Inspection Date: <u>4-2506</u> Inspected by:	casing?	[x] [] []
Thickness of sediment accumulation (reported depth-present measurement): Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc): 26.72 Inspection Date: 4-2506 Inspected by: Description	Measured depth of the well from measurement point:	
Are there any obstructions in the well? [] [k] [] Description of well bottom conditions (soft, hard, etc): 26.72 Inspection Date: 4.2506 Inspected by: all Bulling	Thickness of sediment accumulation (reported depth-present	measurement):
Inspection Date: <u>4-2506</u> Inspected by: <u>ABARLEMAN</u>	Are there any obstructions in the well?	
Inspection Date: <u>4-2506</u> Inspected by: <u>Al Bulling</u>	Description of well bottom conditions (soft, hard, etc):	<u></u>
	Inspection Date: <u>4-2506</u> Inspected by:	al Bulling

WELL INSPECTION C	
WELL INFORMATION	
Well Location/Functional Area:	
Number: NTAMW-113	NACA Test Area
Casing Type: Steel Stainless Steel	<u> </u>
Screened/Open-Hole Well	Monitor Interval
Type: Dereened	Length: $()$ ft
Flush mount/Abour ground	
Completion:	ad
Reported Constructed Depth: 30,07	ft BGS or BTOC (circle one)
• • •	
INSPECTION ITEMS	YES NO N/A COMMENTS
Wall head Completion.	
wen-neau Completion.	
Above-ground completion:	
Number of guard posts at well:	
Are the posts positioned to prevent collision damage to the	נעז בו בו
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	r i r i rVi
neaving!	
Is the well labeled with the correct number?	
Describe labeling:	
Security:	
Does the well have a cap or lid?	[X] [] []
Does the well have a weatherproof lock?	[×] [] []
Does the lock secure the 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 cashing loose (at the surface)?	
casing?	
Measured depth of the well from measurement point:	29.67
Thickness of sediment accumulation (reported depth-present	measurement):
Are there any obstructions in the well?	
Description of well bottom conditions (soft, hard, etc):	soft
Inspection Date: 4.75.06 Inspected by	() Bullini
	INK 19

WELL INSI ECTION C	
WELL INFORMATION	
Well Location/Functional Area:	
Number: NTAmantellu	NACA Tost Acen
	WITCH ISST Well
Casing Type: Steel Stainless Steel	X PVC
Screened/Open-Hole Well	Monitor Interval
Type: Screened	Length: //) ft
	<u> </u>
Flush-mount/Above-ground	
Completion: Abuse groun	nd
Reported Constructed Depth: <u>12,60</u>	_ ft BGS (r_BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well head Completions	
wen-nead Completion:	
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?	
Flush-mount completion:	
is the traffic cover securely bolted to the flush-mount	
Doss the well have a fluch mount hav?	
Lots the well have a hush-mount box?	
Is the concerts arran created or deteriorated? Frost	
heaving?	
Identification	ιι ιι ιχι
Is the well labeled with the correct number?	
Describe labeling:	1:d
Security:	
Does the well have a cap or lid?	
Does the well have a weatherproof lock?	
Does the lock secure the well?	
Does the inner casing have a water-tight cap?	
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 the well	
casing?	[8] [] []
Measured depth of the well from measurement point:	22.90
Thickness of sediment accumulation (reported depth-present	measurement):
Are there any obstructions in the well?	[] [X] []
Description of well bottom conditions (soft, hard, etc):	hard
Inspection Date: 4.25.06 Inspected by	DO Bullin -

WELL INSI ECTION	
WELL INFORMATION	
Well Information	
Number: al 70 al 70	NACA Tect Area
	Nitori legi piled
Casing Type: Steel Stainless Steel	> PVC
Casing Type Sacr Stanness Sacr	
Screened/Onen-Hole Well	Monitor Interval
Type:	Length: // ft
Flush-mount/Above-ground	
Completion: Abuve anou	h d
Reported Constructed Depth: 25, 24	ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
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?	[] [X] []
Is a concrete pad installed?	[¥] [] []
Is the pad cracked or deteriorated? Frost heaving?	[] [X] []
Is steel protective casing installed?	[×] [] []
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?	
Does the well have a flush-mount box?	
Is the traffic cover cracked or broken?	[] [] [X]
Is the concrete apron cracked or deteriorated? Frost	
heaving?	
Identification:	
Is the well labeled with the correct number?	
Describe labeling: <u>tag co</u>	<u>h</u> 0
Security:	
Does the well have a cap of hd?	
Does the well have a weatherproof lock?	
Does the lock secure the well?	
Does the inner casing have a water-tight cap?	
Lown-noile Condition:	
is the well casing bent, confided, of broken (at the surface?)	
Surface?) Is the well casing loose (at the surface)?	
Is a measurement point marked at the top of the well	
casing?	
Measured depth of the well from measurement point.	2540
Thickness of sediment accumulation (reported denth-present	measurement):
Are there any obstructions in the well?	
Description of well bottom conditions (soft, hard, etc.):	hand
	Do Brog-
Inspection Date: $4.25-2000$ Inspected by:	- We isriema

WELL HIST ECTION	
WELL INFORMATION	
Well Location/Functional Area:	
Number: ATAman Hula	NACA Test Area
Casing Type: Steel Stainless Steel	_X PVC
Screened/Open-Hole Well Type: <u>Screened</u>	Monitor Interval Length: <u>10</u> ft
Completion: <u>Abose ground</u>	and
Reported Constructed Depth: 22.65	ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
Above-ground completion:	
Number of guard posts at well: 3	
Are the posts positioned to prevent collision damage to the	
well?	[X] [] []
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?	
Does the protective casing have a weep hole?	
Does vegetation around the well need clearing?	[] [X] []
Flush-mount completion:	
Is the traffic cover securely bolted to the flush-mount	
box?	
Loes the well have a flush-mount box?	
Is the concrete approx cracked or deteriorated? Frost	
heaving?	
Identification:	
Is the well labeled with the correct number?	
Describe labeling:	ф1 () () <u></u>
Security:	
Does the well have a cap or lid?	
Does the well have a weatherproof lock?	[X] [] []
Does the lock secure the well?	[x] [] []
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)?	[] [X] []
Is a measurement point marked at the top of the well	
Casing?	
Thickness of sediment accumulation (reported don'th present	LL.60
Are there any obstructions in the well?	
Description of well bottom conditions (soft, hard, etc.)	hard
- serption of the obtion obtaining (borth hard, oto).	
	DOB. OD
Inspection Date: $1^{-} L^{-} U^{-} U^{-}$ Inspected by:	- lil / milling-

WELL INSPECTION C	
WELL INFORMATION	
Well Location/Eunctional Area:	
Number: NITA and NITA	ALA Tart Aroa
	phon issi real
Casing Type: Steel Stainless Steel	× PVC
Casing Type Sacr Sanness Steer	
Screened/Open-Hole Well	Monitor Interval
Tyme: Sc Cocino 1	Length: //) ft
Flush-mount/Above-ground	
Completion: Above ground	ind
	<u>Zanaki internet province prov</u>
Reported Constructed Depth: 27,37	ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
Above-ground completion:	•
Number of guard posts at well: 3	
Are the posts positioned to prevent collision damage to the	ς
well?	
Are any of the posts damaged or degraded?	[] [X] []
Is a concrete pad installed?	[K] [] []
Is the pad cracked or deteriorated? Frost heaving?	[] [] []
Is steel protective casing installed?	[x] [] []
Does the protective casing have a weep hole?	[] [] []
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?	
Describe labeling: -tag on	, lid
Security:	
Does the well have a cap or lid?	
Does the well have a weatherproof lock?	
Does the lock secure the 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 the well casing?	
vasured denth of the well from measurement point.	v_{1} v_{1} v_{1} v_{2}
Thickness of sediment accumulation (reported death present	measurement).
A re there any obstructions in the wall?	
Description of well bottom conditions (soft hard etc).	had
Description of wen boltom conditions (sold natu, cw).	VIGIO
	$\bigcirc \bigcirc $
Inspection Date: <u>4-25-06</u> Inspected by:	Ul Bulling
	\sim

WELL INFORMATION Well Location/Functional Area:	1.			
Number: NTAMW-119	NACA	I Tes	A Ari	<u>2</u> <u>a</u>
Casing Type: Steel Stainless Steel		_X	PV	/C
Screened/Open-Hole Well Screened	M	onitor l ength:	Interval	<i>10</i> ft
Flush-mount/Above-ground Completion:	bund			
Reported Constructed Depth: 29.58	ft BGS	orBTO	Ccirc	le one)
INSPECTION ITEMS	YES	NO	N/A	COMMENTS
Well-head Completion:				
Above-ground completion:				
Number of guard posts at well: <u>3</u>				
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?	[X] [x]			
Does upgetation around the well need electring?	[X] []		11	
Does vegetation around the well need clearing?	11		ĹĴ	- <u>1994-1995-1996-1996-1996-1996-1996-1996-1996</u>
<i>Fush-mount completion:</i>				
hox?	[]	۲ I	· [v]	
Does the well have a flush-mount box?	[]		[X]	an a
Is the traffic cover cracked or broken?	[]	[]	[x]	
Is the concrete apron cracked or deteriorated? Frost				
heaving?	[]	[]	[¥]	
Identification:			,	
Is the well labeled with the correct number?	$[\mathcal{N}]$	[]	[]	
Describe labeling: tag on lid				
Security:				
Does the well have a cap or lid?				
Does the well have a weatherproof lock?	[X]			cover broken off
Does the lock secure the well?	[×]			and the second state of th
Does the inner casing have a water-tight cap?	[×]	LJ	LI	
Lown-noile Condition: Is the well casing heat corroded or broken (at the				an a
surface?)	[]	ſx]	[]	
Is the well casing loose (at the surface)?	[]	[x]		
Is a measurement point marked at the top of the well	Ļ J	1.1.1		an a
casing?	[×]	[]	[]	
Measured depth of the well from measurement point:	20	1.84		
Thickness of sediment accumulation (reported depth-present r	neasuren	nent):		
Are there any obstructions in the well?	[]	[×]	[]	
Description of well bottom conditions (soft, hard, etc):	<u> h</u> a	ard		
Inspection Date: <u>4.25.66</u> Inspected by:	<u>Ae</u>	Bu	ée-	<u>.</u>

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RAVENNA ARMY AMMU WELL INSPECTION C	NITION PLANT HECKLIST
WELL INFORMATION	
Well Location/Functional Area:	
Number: $K(ALmw - 006)$	Consdell altry
Casing Type: Steel Stainless Steel	PVC
Screened/Open-Hole Well	Monitor Interval Length:
Flush-mount/Above-ground Completion:	20.95
Reported Constructed Depth: <u>41,27</u>	ft BGS of BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
Above-ground completion:	
Are the posts positioned to prevent collision damage to the	
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: UTUSS TC	4 cr tag
Security:	
Does the well have a cap or lid?	
Does the well have a weatherproof lock?	
Does the lock secure the well?	
Does the inner casing have a water-tight cap?	
Down-hole Condition:	
Is the well casing bent, corroded, or broken (at the	
surface () In the well ensure loose (at the surface)?	Hince the and the
Is the well cashing loose (at the surface)?	() (I () MINGENSONTA)
esting?	
Vuoling: Measured denth of the well from measurement point:	~4 an
Thickness of sediment accumulation (reported depth-present a	measurement): Ω , T(R 41.05 + 17 =
Are there any obstructions in the well?	$\begin{bmatrix} 1 \end{bmatrix} \begin{bmatrix} 1 $
Description of well bottom conditions (soft, hard, etc):	Hard
, 1 <u>-</u>	
Inspection Date: 4.1.1.5 Inspected by:	Jailtan:

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RAVENNA ARMY AMMU WELL INSPECTION C	NITION PLANT CHECKLIST
Well INFORMATION Well Location/Functional Area:	Cansdell Quarry
Casing Type: Steel Stainless Steel	PVC
Screened/Open-Hole Well Screened	Monitor Interval Length: <u>10</u> ft
Flush-mount/Above-ground Completion:	ourel
Reported Constructed Depth: 18.00	ft BGS of BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
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? 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 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:	[] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] []
Does the well have a cap or lid? Does the well have a weatherproof lock? Does the lock secure the well? Does the inner casing have a water-tight cap?	[4 [] [] [4 [] [] [4 [] [] [4 [] []
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 the well casing? Measured depth of the well from measurement point: Thickness of sediment accumulation (reported depth-present the Are there any obstructions in the well? Description of well bottom conditions (soft hard, etc.)	$\begin{bmatrix} 1 & [Y & [] \\ 1 & [Y & [Y & [Y & [] \\ 1 & [Y & $
Inspection Date: $4/25$ Inspected by:	DailHan

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RAVENNA ARMY AMMUN WELL INSPECTION CH	ITION PLANT ECKLIST
WELL INFORMATION Well Number: Kalmus 2008	consdelf antering
Casing Type: Steel Stainless Steel	()
Screened/Open-Hole Well Screene (Monitor Interval Length: <u>JO</u> ft
Flush-mount/Above-ground Completion:	
Reported Constructed Depth: 18.26	ft BGS or BTOC (eircle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
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? Flush-mount completion: Is the traffic cover securely bolted to the flush-mount box? Does the well have a flush-mount box? Is the concrete apron cracked or deteriorated? Frost heaving? Is the concrete apron cracked or deteriorated? Frost heaving? Security:	
Does the well have a cap or lid? Does the well have a weatherproof lock? Does the lock secure the 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 the well casing? Measured depth of the well from measurement point: Thickness of sediment accumulation (reported depth-present m Are there any obstructions in the well? Description of well bottom conditions (soft; hard, etc): Inspection Date:	$\begin{bmatrix} 1 & [4 & [1] \\ 1 & [4 & [1] \\ 1 & [4 & [1] \\ 1 & [4 & [1] \\ 1 & [4 & [1] \\ 1 & [1]$

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RAVENNA ARMY AMMU WELL INSPECTION	JNITION PLANT CHECKLIST
WELL INFORMATION	N N
Well Location/Functional Area: Number: Ralmw-	Ramsdell Quarry
Casing Type:SteelStainless Steel	PVC
Screened/Open-Hole Well Screened	Monitor Interval Length: /O ft
Flush-mount/Above-ground Completion:	
Reported Constructed Depth: 17,8%	_ ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
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?	
<i>Flush-mount completion:</i> Is the traffic cover securely holted to the flush-mount	
box?	[] [] []
Does the well have a flush-mount box?	
Is the concrete apron cracked or deteriorated? Frost	
heaving?	[] [] [/]
Identification:	
Is the well labeled with the correct number?	
Security:	
Does the well have a cap or lid?	
Does the well have a weatherproof lock?	
Does the lock secure the well?	
Does the inner casing nave a water-tight cap?	
Is the well casing bent, corroded, or broken (at the	
surface?)	$[] [4/[] \$
Is the well casing loose (at the surface)?	[] [4] [] sont Hinge
is a measurement point marked at the top of the well casing?	
Measured depth of the well from measurement point:	5.38 +.12
Thickness of sediment accumulation (reported depth-present	t measurement): $D.T.P = 18.9$
Are there any obstructions in the well?	
Description of well borrom conditions (soft, hard, etc):	Harce Healt
Inspection Date: <u>4125</u> Inspected by:	Bailt an

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RAVENNA ARMY AMMU	INITION PLANT
WELL INSPECTION	CHECKLIST
WELL INFORMATION	
Well (2.0.) Location/Functional Area:	
Number: KQLMW-010	(ansdell Quarry
Casing Type: Staal Stainloss Staal	PVC
Casing Type Steel Stanliess Steel	
Screened/Open-Hole Well	Monitor Interval
Type: <u>Screened</u>	Length: ft
Flush-mount/Above-ground	
Completion:	
Reported Constructed Depth: <u>456</u>	_ ft BGS or STOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion.	
A Louis anound a sour lations	
Number of guard posts at well 7	
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	
Does the well have a flush-mount hox?	
Is the traffic cover cracked or broken?	
Is the concrete anron cracked or deteriorated? Frost	
heaving?	
dentification:	
Is the well labeled with the correct number?	
Describe labeling: Brass tag m	Vac
Security:	/
Does the well have a cap or lid?	
Does the well have a weatherproof lock?	
Does the lock secure the well?	
Does the inner casing have a water-tight cap?	
Jown-nole Condition:	
is the went casing beni, confided, or broken (at the surface?)	
Is the well casing loose (at the surface)?	
Is a measurement point marked at the top of the well	
casing?	
Measured depth of the well from measurement point:	25.14
Thickness of sediment accumulation (reported depth-present	measurement): DTR 35, 25, 1, 12=35
Are there any obstructions in the well?	
Description of well bottom conditions (soft, hard, etc).	Sticken
Inspection Date: 9/25 Inspected by:	Dailton
	- m yurry
$\langle 1 \rangle$	
(\vee)	

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RAVENNA ARMY AMMI WELL INSPECTION	UNITION PLANT CHECKLIST
WELL INFORMATION	
Well Location/Functional Area: Number:	Runsdell Quarny
Casing Type: Steel 5 Stainless Steel	L PVC
Screened/Open-Hole Well Screened	Monitor Interval Length:
Flush-mount/Above-ground Completion:	Zoft
Reported Constructed Depth: <u>34.37</u>	_ ft BGS or BTOC (eircle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
Above-ground completion: Number of guard posts at well:	
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?	[] [4 []
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?	
dentification:	
Is the well labeled with the correct number?	
Describe labeling: <u>19445 146 (M) 1</u>	aq.
Deep the well have a con or lid?	и х га га
Does the well have a weatherproof lock?	
Does the lock secure the well?	
Does the inner casing have a water-tight can?	
Down-hole Condition:	
Is the well casing bent, corroded, or broken (at the	<u> </u>
surface?)	
Is the well casing loose (at the surface)?	
Is a measurement point marked at the top of the well	
casing?	[Y [] []
Measured depth of the well from measurement point:	21.12
Thickness of sediment accumulation (reported depth-presen	t measurement): $10 - 1, B 3 G 2 R + 12 = 35.9$
Are there any obstructions in the well?	
Description of wen bottom conditions (soft, nard, etc):	NEW
Inspection Date: <u>4176</u> Inspected by:	Sail Hain
	÷.

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RAVENNA ARMY AMMU	NITION PLANT
WELL INSPECTION C	HECKLIST
WELL INFORMATION	
Well O Location/Functional Area:	
Number: $V(31, \Lambda U) - D(1)$	ansdell QUEFUM
	DVC
Casing Type: Steel Stainless Steel	
Screened/Open-Hole Well Screened	Monitor Interval Length:ft
Flush-mount/Above-ground Completion:	17x. j.
Reported Constructed Depth: 32.33	ft BGS or BTOC (c)rcle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion	
Above every descriptions	
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? <i>Flush-mount completion:</i> 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? <i>Identification:</i> Is the well labeled with the correct number? Describe labeling: <i>Security:</i> Does the well have a cap or lid? Does the well have a weatherproof lock?	$\begin{bmatrix} 1 & \begin{bmatrix} 1 & \begin{bmatrix} 1 & \\ 1 & \begin{bmatrix} 1 & \\ 1 & \end{bmatrix} \\ \begin{bmatrix} 1 & \begin{bmatrix} 1 & \\ 1 & \\ 1 & \end{bmatrix} \\ \begin{bmatrix} 1 & \begin{bmatrix} 1 & \\ 1 & \\ 1 & \end{bmatrix} \\ \begin{bmatrix} 1 & \begin{bmatrix} 1 & \\ 1 & \\ 1 & \end{bmatrix} \\ \begin{bmatrix} 1 & \begin{bmatrix} 1 & \\ 1 & \\ 1 & \end{bmatrix} \\ \begin{bmatrix} 1 & \begin{bmatrix} 1 & \\ 1 & \\ 1 & \\ 1 & \end{bmatrix} \\ \begin{bmatrix} 1 & \begin{bmatrix} 1 & \\ 1 & \\ 1 & \\ 1 & \\ 1 & \end{bmatrix} \\ \begin{bmatrix} 1 & \begin{bmatrix} 1 & \\ 1 & $
Does the lock secure the well?	
Does the inner casing have a water-tight cap?	
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 the well casing?	[] [] [] [] <u>marked 9/25/2</u> 0
Measured depth of the well from measurement point: Thickness of sediment accumulation (reported depth-present Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc):	$\frac{21.30}{\text{measurement}} \xrightarrow{\text{p.T.}} 32.60 + 12=32$
Inspection Date: <u>4/25</u> inspected by:	SailHan
$\left(\begin{array}{c} \mathbf{y} \end{array} \right)$	

Appendix C

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RAVENNA ARMY AMMU	NITION PLANT
WELL INSPECTION C	HECKLIST
WELL INFORMATION	
Well O Location/Functional Area:	
Number: KQLMW-013	Lansdell (JUGNM
· · · · · · · · · · · · · · · · · · ·	X
Casing Type: Steel Stainless Steel	PVC 0
f	
Screened/Open-Hole Well	Monitor Interval
Type:	
Flush-mount/Above-ground	
Completion:	
71	\sim
Reported Constructed Depth: 26.27	ft BGS or BPOC (circle one)
INCORPORTANT PREMA	VES NO NUA COMMENTS
INSPECTION ITEMS	TES NO N/A COMMENTS
Well-head Completion:	
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?	
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?	[4] [] []
Describe labeling: <u>ISPASSIAC</u> CO	Pad
Security:	
Does the well have a cap or lid?	[<i>W</i> _[] []
Does the well have a weatherproof lock?	
Does the lock secure the well?	[4] []
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)?	[] [U []
Is a measurement point marked at the top of the well	maked Alachard
casing?	1 19 11 Marced 41251006
Measured depth of the well from measurement point: $\underline{7}$	7,80 x 2 12 12 21 10 21 10
I nickness of sediment accumulation (reported depth-present	measurement): $D_1 T_1 = \frac{16}{4} \frac{16}{4} \frac{1}{4} $
Are there any obstructions in the well?	11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Description of well bottom conditions (soft, hard, etc):	Mul You Se
1. 1. 0. 0	$\lambda = 0$ (1 as
Inspection Date: Inspected by:	ray staring
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Appendix C

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RAVENNA ARMY AMMUN WELL INSPECTION C	NITION PLANT HECKLIST
WELL INFORMATION	
Well Location/Functional Area: Number: $RQLMW - OH$	Emsdell Querry
Casing Type: Steel Stainless Steel	PVC
Screened/Open-Hole Well Screened/	Monitor Interval Length:ft
Flush-mount/Above-ground Completion:	
Reported Constructed Depth: <u>31.23</u>	ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head 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?	[] [] [] [] [] []
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:	
Describe labeling:	Vac
Security: Does the well have a cap or lid? Does the well have a weatherproof lock? Does the lock secure the well? Does the inner casing have a water-tight cap? Down-hale 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 the well casing?	
Measured depth of the well from measurement point: Thickness of sediment accumulation (reported depth-present r Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc):	$\frac{15.45}{\text{neasurement}} \stackrel{\text{(III)}}{=} \frac{33.45 + 12 = 3}{14 - 1}$
Inspection Date: <u>4125</u> Inspected by:	Sail Han;

Appendix C

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	RA	VENNA ARMY AMM	UNITION PLANT	
	1/5	WELL INSPECTION	CHECKLIST	
WELL INFORMATIO	N C			
Well	Lo	cation/Functional Area:		Survey and Su
Number: 1(ULr	W-OUS	>	Kunsdell (lue m
Casing Type:	Steel	Stainlass Steel	L	
Casing Type.		Statilless Steel		
Screened/Open-Hole We Type:		Screene cl	Monitor In	nterval <u> </u>
Flush-mount/Above-grou Completion:	und	Above		
Reported Constructed De	epth:	41.24	_ ft BGS or BTO	C (circle one)
INSPECTION ITEMS			YES NO	N/A COMMENTS
Well-head Completion:				
Above-ground completion	on:			
Number of guard pos	ts at well:		Merror and	
Are the posts position	ned to prevent	collision damage to the	C Armenter C 1	r a
Well?	temporad or de	amadad?		[]
Is a concrete pad inst	alled?	cgraucu:		
Is the pad cracked or	deteriorated?	Frost heaving?		
Is steel protective cas	ing installed?			
Does the protective c	asing have a v	weep hole?		F1
Does vegetation arou	nd the well ne	ed clearing?		
Flush-mount completion	n:	..		
Is the traffic cover	securely bolt	ted to the flush-mount		
box?	,			[Y]
Does the well have a	flush-mount l	box?		<u>г</u>
Is the traffic cover cra	acked or brok	en?		[1]
Is the concrete apr	on cracked	or deteriorated? Frost		
heaving?			[] [].	[1]
Identification:			and the second	
Is the well labeled wi	th the correct	number?	114 []	[]
Describe labeling:	15005	stac on p	ac\	
Security:			V	
Does the well have a	cap or lid?		[4][]	[]
Does the well have a	weatherproof	lock?	[4 []	[]
Does the lock secure	the well?		[4 []	[]
Does the inner casing	; have a water	-tight cap?		[]
Down-hole Condition:				
Is the well casing bent	t, corroded, or	broken (at the		
surface?)			[] [4	
Is the well casing loop	se (at the surf	ace)?		
Is a measurement po	oint marked	at the top of the well		EDINI Labordon
casing?	11 C	R4	301114	11 marked at 25 rac
Thickness of and	e well from m	leasurement point:	1. 00 - 1. 31. 30 -	Bhites VSD
I mickness of sedimen	n accumulatio	on (reported depth-presen	I Incasurement):	
Are usere any obstruc	uous in the W	vii!	Lind	
	A A A A A A A A A A A A A A A A A A A		11.01 + 17 -	110 118
Inspection Date:	125		- Sal	42.08
\sim \sim (1)				
(V) ily d	IM			
Appendix C 🔌	\mathcal{U}	218	F	WGWMP 2006 Annual Report

	1:59
RAVENNA ARMY AMMU	INITION PLANT
WELL INSPECTION	CHECKLIST
WELL INFORMATION	
Well Location/Functional Area:	D All Chan
Number: NGV <u>fatma</u>	Kansdell Wall
Casing Type: $kQLmw - OIO$ Steel Stainless Steel	PVC
Screened/Open-Hole Well Type: <u>Screerec</u>	Monitor Interval Length: 10 ft
Flush-mount/Above-ground Completion:	
Reported Constructed Depth:	_ ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
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 of 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?	[] [4 []
Flush-mount completion:	
is the traffic cover securely bolted to the flush-mount	
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:	
Describe labeling:	
Security:	
Does the well have a cap or lid?	
Does the well have a weatherproof lock?	[4 [] []
Does the lock secure the well?	
Does the inner casing have a water-tight cap?	
Is the well easing heat corroded or broken (at the	
surface?)	[] $[]$
Is the well casing loose (at the surface)?	
Is a measurement point marked at the top of the well	
casing?	[] [4 [] Markell 9/25/20/
Measured depth of the well from measurement point:	$\frac{22}{(l-1)}$
Are there any obstructions in the well?	$\begin{bmatrix} 1 & 12 & 12 & 12 & 12 & 12 & 12 & 12 &$
Description of well bottom conditions (soft, hard, etc):	Sticken
	N JII
Inspection Date: <u>4175</u> Inspected by:	Saltan



WELL INSPECTION CI	HECKLIST	
WELL INFORMATION		
Number: RQLmw-017	RQL	
Casing Type: GW Steel Stainless Steel	PVC	
	Monitor Interval	
Screened/Open-Hole Well Screenerd	Length: _/Ò	_ 1
Flush-mount/Above-ground	round	
Reported Constructed Depth: 32.32	ft BGS or BTOC (circle one)	
INSPECTION ITEMS	YES NO N/A COMMENTS	
Well-head Completion:		
Above-ground completion: Number of guard posts at well:	·	
Are the posts positioned to prevent collision damage to the		
Are any of the posts damaged or degraded?		
Is a concrete pad installed?	(x) () ()	
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] []	
usn-mount completion: Is the traffic cover securally holted to the fluch mount		
box?		
Does the well have a flush-mount box?		
Is the traffic cover cracked or broken?	[] [] [x]	
Is the concrete apron cracked or deteriorated? Frost		
heaving?	[] [] [XI	
dentification:		
Is the well labeled with the correct number?		
Describe labeling: <u>Hum Klate & Brass</u>	Mate	
Does the wall have a cap or lid?		
Does the well have a weather proof lock?		
Does the lock secure the 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)?	[] [X] []	
Is a measurement point marked at the top of the well		~
Casing!	[] [X] [] <u>Planked 4-25-(</u>	<u>ه ر</u>
الكر تابعة Thickness of sediment accumulation (reported depth present a	=>> SKILE F, 12 - 32,88	
Are there any obstructions in the well?		
Description of well bottom conditions (soft, hard, etc):	Hara	-

Appendix C

WELL INSPECTION CI	HEUKLISI
WELL INFORMATION Well Location/Functional Area: Number: NRAmwr005	Winklepeck Burning Graind
Casing Type: Steel Stainless Steel	<u> </u>
Screened/Open-Hole Well Type: Screened	Monitor Interval Length: <u>LO</u> ft
Flush-mount/Above-ground Completion:	bund
Reported Constructed Depth: <u>20,80</u>	ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
Above-ground completion: 3 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? 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? Is the well labeled with the correct number? Describe labeling:	[X] [] [] [] [K] [] [K] [] [] [K] [] [] [K] [] [] [K] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] []
Security: Icce	$ \begin{bmatrix} x \\ x \\$

RAVENNA ARMY AMMUNI WELL INSPECTION CH	ITION PLANT		
WELL INSPECTION CH	IECKLIST		
WELL INFORMATION			
Well Location/Functional Area:			
Number: WBGmid-006	Vinklepeck Burning Bround		
Casing Type: Steel Stainless Steel	X PVC		
Screened/Open_Hole Well	Monitor Interval		
Type: Screened	Length: 10	ft	
Flush-mount/Above-ground	1		
Completion: Abale graune	2		
200 08			
Reported Constructed Depth: $20,06$	ft BGS or BTOC (circle one)		
INSPECTION ITEMS	VES NO N/A COMMENTS		
INSI ECTION ITEMS	TES NO IVA COMMENTS		
Well-head Completion:			
Above-ground completion:			
Number of guard posts at well: 3	"·		
Are the posts positioned to prevent collision damage to the			
well?	[X] [] []		
Are any of the posts damaged or degraded?	[x] [] [] <u>Sl. rust</u>	<u> </u>	
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?	[] [] [¥]		
Is the concrete apron cracked or deteriorated? Frost			
heaving?	[] [] [¥]		
Identification:			
Is the well labeled with the correct number?			
Describe labeling: <u>tag on</u>	pad		
Security:	۱ 		
Does the well have a cap or lid?			
Does the well have a weatherproof lock?			
Does the lock secure the well?			
Does the inner casing have a water-tight cap?			
Down-hole Condition:			
Is the well casing bent, corroded, or broken (at the		- L	
surface?)	[X] [] [] <u>Slight Some ru</u> :	<u>5T</u>	
Is the well casing loose (at the surface)?			
is a measurement point marked at the top of the well			
Casing: [X] [] []			
Thiskness of adiment assumulation (reported donth present me	<u>20,39</u>		
A re there any obstructions in the well?			
Description of well bottom conditions (soft hard etc.) $C = \frac{1}{2}$			
Description of wen bottom contantons (soft, flatd, etc).	ticm-hang		
	ADR DO		
Inspection Date: <u>1.26-06</u> Inspected by:	Al wulling.		
	\bigcirc		

RAVENNA ARMY AMMUNITION PLANT WELL INSPECTION CHECKLIST		
WELL INFORMATION		
Well Location/Functional Area:		
Number: WBGmw-001	Ninklepeck Burning Ground	
	<i>i b b b b b b b b b b</i>	
Casing Type: Steel Stainless Steel	<u> </u>	
Screened/Open-Hole Well	Monitor Interval	
Type: Screened	_ Length: $()$ ft	
Flush-mount/Above-ground	1	
Completion: Above Grow	und	
Personal Company Durity 7(a (b))		
Reported Constructed Depth: \underline{CQ}	it BGS of BTOC (efficie one)	
INSPECTION ITEMS	VES NO N/A COMMENTS	
	TES NO IVA COMMENTS	
Well-head Completion:		
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?	[x] [] []	
Is the pad cracked or deteriorated? Frost heaving?	[] [×] []	
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?	[] [] [×]	
Is the concrete apron cracked or deteriorated? Frost		
heaving?		
Identification:		
Is the well labeled with the correct number?		
Security		
Does the well have a cap or lid?	Fx 1 [1 [1	
Does the well have a weatherproof lock?		
Does the lock secure the well?		
Does the inner casing have a water-tight can?		
Down-hole Condition:		
Is the well casing bent, corroded, or broken (at the		
surface?)	[x] [] [] rusty hinge	
Is the well casing loose (at the surface)?	[] [X] [] <u>0 d</u>	
Is a measurement point marked at the top of the well		
casing?	[X] [] []	
Measured depth of the well from measurement point:	26.50	
Thickness of sediment accumulation (reported depth-present m	neasurement):	
Are there any obstructions in the well? [] [X] []		
Description of well bottom conditions (soft, hard, etc):	mano	
	\wedge β $\rho \rho$	
Inspection Date: <u>4-26-06</u> Inspected by: _	We Dulling	
,		

RAVENNA ARMY AMMUNITION PLANT WELL INSPECTION CHECKLIST		
WELL INFORMATION Well Location/Functional Area:		
Number: WBizmusi-008	Winklepeck Burning Ground	
Casing Type: Steel Stainless Steel	PVC	
Screened/Open-Hole Well Type: <u>Screened</u>	Monitor Interval Length: <u>10</u> ft	
Flush-mount/Above-ground Completion: <u>Above grou</u>	ind	
Reported Constructed Depth: 20.66	ft BGS or BTOC (c)rcle one)	
INSPECTION ITEMS	YES NO N/A COMMENTS	
Well-head Completion:		
Above-ground completion:	• •	
Number of guard posts at well: <u>3</u>		
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 gracked or deteriorated? Front heaving?		
Is the pau cracked of deteriorated? Prost heaving?		-
Does the protective casing instance?		
Does vegetation around the well need clearing?		
Flush-mount completion:		
Is the traffic cover securely bolted to the flush-mount		
box?	[] [] [Ă]	
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?	LI LI L/M	-
Is the well labeled with the correct number?		-
Describe labeling:		-
Security:	- <u>p. 0</u>	-
Does the well have a cap or lid?	[X] [] []	_
Does the well have a weatherproof lock?	[*] [] []	_
Does the lock secure the 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] [] [] victa bing	
Is the well casing loose (at the surface)?	$\begin{bmatrix} 1 \\ 1 \end{bmatrix} \begin{bmatrix} 1 $	
Is a measurement point marked at the top of the well		
casing?	[X] [] []	
Measured depth of the well from measurement point:	20.93	_
Thickness of sediment accumulation (reported depth-present r	measurement):	_
Are there any obstructions in the well? [] [X] []		
Description of well bottom conditions (soft, hard, etc): $V (\alpha Q)$		
Inspection Date: <u>4-26-06</u> Inspected by:	De Bully:	-

WELL INSPECTION C	
WELL INFORMATION	
Well Location/Functional Area:	
Number: WBGmw 009	Winklepeck Burning Ground
· · · · · · · · · · · · · · · · · · ·	<i>0</i>
Casing Type: Steel Stainless Steel	$\underline{}$ PVC
Screened/Open-Hole Well	Monitor Interval
Type:	$- 10^{-10}$
Flush-mount/Above-ground	
Completion: Above grou	nd
Reported Constructed Depth: <u>23.96</u>	_ ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
Above-grouna completion:	
Are the posts positioned to prevent collision damage to the	
well?	
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?	
Does vegetation around the well need clearing?	[] [k] []
Flush-mount completion:	
is the traffic cover securely bolted to the flush-mount	
Does the wall have a fluch mount hav?	
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?	[N] [] []
Describe labeling: <u>taq un p</u>	ad
Security:	
Does the well have a cap or lid?	
Does the well have a weatherproof lock?	
Does the lock secure the well?	
Does the finite casing have a water-tight cap?	
Is the well casing bent, corroded, or broken (at the	
surface?)	[X] [] [] Some Kist
Is the well casing loose (at the surface)?	
Is a measurement point marked at the top of the well	
casing?	[ᢂ [] []
Measured depth of the well from measurement point:	24.37
Thickness of sediment accumulation (reported depth-present r	measurement):
Are there any obstructions in the well?	
Description of wen bottom conditions (soft, nard, etc):	TUNO
	OD B NO
Inspection Date: <u>1-26-06</u> Inspected by:	- Ul Dully-
	Served Served

RAVENNA ARMY AMMUNITION PLANT WELL INSPECTION CHECKLIST		
WELL INFORMATION Well Location/Functional Area: Number: WB4mint-010	Winklepeck Burning Ground	
Casing Type: Steel Stainless Steel	_X PVC	
Screened/Open-Hole Well Type: <u>Screened</u>	Monitor Interval Length: ft	
Flush-mount/Above-ground Completion: <u>Above grou</u>	und	
Reported Constructed Depth: 23, 75	ft BGS of BTOC (circle one)	
INSPECTION ITEMS	YES NO N/A COMMENTS	
Well-head Completion:		
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?	[X] [] [] [X] [] [] [] [] [] [] <u>concrete at base of post</u> [] [X] [] [] [X] [] []	t cnacked
Does vegetation around the well need clearing? Flush-mount completion:	[x] [] [] <u>minor clearing</u>	
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]	
Identification:		
Describe labeling: $+\alpha_{3} \circ \alpha_{4}$		
Security: Does the well have a cap or lid? Does the well have a weatherproof lock? Does the lock secure the 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 the well	[] [X] [] [] [X] []	
casing? Measured depth of the well from measurement point: Thickness of sediment accumulation (reported depth-present n Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc):	[x] [] [] 23,48 neasurement): [] [k] [] Vard-from	-
Inspection Date: <u>4-26-06</u> Inspected by:	<u>a</u> e Bulling	

RAVENNA ARMY AMMUNITION PLANT WELL INSPECTION CHECKLIST	
WELL INFORMATION Well Location/Functional Area: Number: <u>WBGmw-011</u> Winklepeck Burning Ground	
Casing Type: Steel Stainless Steel PVC	
Screened/Open-Hole Well Type: <u>Screened</u> Monitor Interval Length: <u>10</u> ft	
Flush-mount/Above-ground Completion: <u>Above ground</u>	
Reported Constructed Depth: ft BGS or BTOC (circle one)	
INSPECTION ITEMS YES NO N/A COMMENTS	
Well-head Completion:	
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? [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 the protective casing have a weep hole? [X] [] [] Is the traffic cover securely bolted to the flush-mount box? [] [] [] [] Does the well have a flush-mount box? [] [] [] [] []	V
Is the traffic cover cracked or broken?	
heaving?	
Identification:	
Is the well labeled with the correct number? [\lambda] [\lambda] [\lambda]	
Describe labeling: <u>fag on pad</u>	
Security:	
Down-hole Condition:	
Is the well casing bonse (at the surface)?	
Is a measurement point marked at the top of the well casing? [x] [] [] Measured depth of the well from measurement point: 23.95	
Thickness of sediment accumulation (reported depth-present measurement): Are there any obstructions in the well? $[]$ Description of well bottom conditions (soft, hard, etc):	
Inspection Date: <u>4-26-06</u> Inspected by: <u>AR Bulling</u>	

WELL INSPECTION C	
WELL INFORMATION	
Well Location/Functional Area:	
Number: WBGmut 012	Norklepeck Burning Ground
<u>VUSKNUC</u>	<u> </u>
Casing Type: Steel Stainless Steel	× PVC
	· · ·
Screened/Open-Hole Well	Monitor Interval
Type: <u>Screened</u>	$_$ Length: $_$ $() ft$
Flush-mount/Above-ground	
Completion: <u>ANDOVE 97007</u>	
Reported Constructed Depth: 21.61	ft BGS or BTOC (circle one)
	-
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	ал. Ф
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 note?	
Eluch mount completion:	
Is the traffic course, holted to the fluch mount	
hor?	ר ז ר ז ראו
Does the well have a flush-mount hox?	
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: +ag on	pad
Security:	
Does the well have a cap or lid?	[X] [] []
Does the well have a weatherproof lock?	[X] [] []
Does the lock secure the 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 the well	
casing! Measured depth of the well from measurement relation	
Thickness of sediment accumulation (reported donth	JI, IJ
A re there any obstructions in the wall?	
Description of well bottom conditions (soft bard etc):	
Description of wen bottom continuous (soft, liatu, etc).	MULU
1	DO BODO '
Inspection Date: 4.76-06 Inspected by:	Ull Dullingn
	U

WELL INFORMATION Well Location/Functional Area Number: bl/260	a:	
Nulliber. Wiscimw 015	Winklepeck Domning Ground	
Casing Type: Steel Stainless Steel	el $\underline{\times}$ PVC	
Screened/Open-Hole Well Type: <u>Screened</u>	Monitor Interval Length: _/() ft	
Flush-mount/Above-ground Completion: <u>Above grou</u>	bnd	
Reported Constructed Depth: <u>23,60</u>	ft BGS or BTOC (circle one)	
INSPECTION ITEMS	YES NO N/A COMMENTS	
Well-head Completion:		
Above-ground completion:		
Number of guard posts at well:		
Are the posts positioned to prevent collision damage to th		
Well?		
Are any of the posts damaged of degraded?	[X] [] [] <u>SI.rust broken concret</u> e foote	
Is a concrete pad installed?		
Is the pad cracked or deteriorated? Frost neaving?		
Is steel protective casing installed?		
Does the protective casing have a weep note?		
Does vegetation around the well need clearing?		
Flush-mount completion:		
is the traffic cover securely bolted to the flush-moun		
DOX?		
Loes the well have a flush-mount box?		
is the traffic cover cracked or broken?		
Is the concrete apron cracked or deteriorated? Pros	SC C C C C C C C C C C C C C C C C C C	
neaving?		
Identification:		
Is the well labeled with the correct number?		
Describe labeling: tag on pa	<u>\d</u>	
Security:		
Does the well have a cap of lid?		
Does the lock secure the well?		
Does the lock secure the well?		
Does the liner casing have a water-tight cap?		
Lown-noie Condution:		
is the well casing bell, conoded, of broken (at the	רו שו רו	
In the well assing loose (at the surface)?		
Is a measurement point marked at the top of the well		
a measurement point marked at the top of the wei		
Measured denth of the well from measurement point:	1 ^m J L J L J	
Thickness of sediment accumulation (reported depth-pres	cent measurement):	
Are there any obstructions in the well?		
Description of well bottom conditions (soft hard etc).		
Description of wear bottom conditions (soft, natu, Etc).		
Inspection Date: <u>4-26-06</u> Inspected b	by: <u>Al Bulling</u>	
WELL INSPECTION C	CHECKLIST	
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WELL INFORMATION		
Well Location/Functional Area:		
Number: WBGmw Cont AB	Winklepeck Burning Ground	
Casing Type: Steel Stainless Steel	PVC	
Screened/Open-Hole Well	Monitor Interval	
Type: <u>Screened</u>	Length:ft	
Flush-mount/Above-ground Completion: <u>Above ground</u>	ound	
Reported Constructed Depth: 24,68	_ ft BGS or BTOC (eircle one)	
INSPECTION ITEMS	YES NO N/A COMMENTS	
Well-head Completion:		
Above-ground completion:		
Number of guard posts at well: 4		
Are the posts positioned to prevent collision damage to the		
well?	[x] [] []	
Are any of the posts damaged or degraded?	[] [X] [] rust broken conc. (Still s	ecure ?
Is a concrete pad installed?		functional)
Is the pad cracked or deteriorated? Frost heaving?	[] [X] []	
Is steel protective casing installed?		
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?		
Describe labeling: +ag on pad		
Security: U		
Does the well have a cap or lid?	[x] [] []	
Does the well have a weatherproof lock?	[x] [] []	
Does the lock secure the 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?)		
Is the well casing loose (at the surface)?		
Is a measurement point marked at the top of the well		-
casing?		
Measured depth of the well from measurement point:		
I nickness of sediment accumulation (reported depth-present	measurement):	
Are mere any obstructions in the well?		
Description of well bottom conditions (soft, hard, etc):	nava	
	$\wedge \wedge Q \wedge A \wedge A$	
Inspection Date: <u>4-26-06</u> Inspected by:	Ul Dullinge	
- · · · · · · · · · · · · · · · · · · ·	(4)	

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WELL INFORMATION				
Well Location/Functional Area:				
Number: WBGmurans	Winl	clepe	eck F	Survine Ground
				0
Casing Type: Steel Stainless Steel		>	с ру	VC
Screened/Open-Hole Well	Μ	lonitor	Interval	
Type: Screened	L	ength:		$O_{\rm ft}$
		-		
Flush-mount/Above-ground				
Completion: Abare groun	nd		_	
22 10				
Reported Constructed Depth: 45,50	ft BGS	or BTC)C (olro	cle one)
		Sec.	2	
INSPECTION ITEMS	YES	NO	N/A	COMMENTS
Well head Completion				
wen-nead Completion:				
Above-ground completion:				
Number of guard posts at well: 7				
Are the posts positioned to prevent collision damage to the				
well?	[X]	[]	[]	
Are any of the posts damaged or degraded?	[]	[×]	[]	
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?				
Does vegetation around the well need clearing?		[⊁]	[]	
Flush-mount completion:				
Is the traffic cover securely bolted to the flush-mount		<i>с</i> ,	r) -0	
box?			IX1	
Does the well have a flush-mount box?			IXI	
is the traffic cover cracked or broken?	[]	[]	I XI	
Is the concrete apron cracked or deteriorated? Frost	<u>ر</u> ا	гı	гìи	
neaving?	[]		L Xr	
Identification:	r. 1	£ 1	, r ,	
Is the well labeled with the correct number?	1			
Describe rabering: $Tag r pa$	id			
Dees the well have a cap or lid?	fer 1	r ı	r 1	
Does the well have a wastherproof look?				
Does the lock secure the well?	[¥] [N]			
Does the input casing have a water tight can?		[] []		
Does the finite casing have a water-tight cap:	[*]	LI		
Is the well easing heat corroded or broken (at the				
surface?)	F]	ſv I	۲ I	
Is the well casing loose (at the surface)?	[]	[¥]		
Is a measurement point marked at the top of the well	[]	[~]		
casing?	[1]	r 1	۲ I	
Measured depth of the well from measurement point:	[7]	1 3	1265	7
Thickness of sediment accumulation (reported depth-present t	measurem	ent).	~ J. C (
Are there any obstructions in the well?		[5]	۲ I	
Description of well bottom conditions (soft, hard, etc.)	Var	in	LJ	
	<u> </u>	<u>~~</u>		raan verdaleksimistereksi esi eenteensaan o
- in the -	A,	n R	ni	2.
Inspection Date: <u>1-26-06</u> Inspected by:	_ (il	10	ne	angi
				\bigcirc

WEEL INSI LETION C	
WELL INFORMATION	
Well Location/Functional Area:	
Number: WBGMW-016	Winklepeck Burning Ground
Casing Type: Steel Stainless Steel	PVC
Screened/Open-Hole Well	Monitor Interval
Type: Screened	_ Length: 10 ft
Flush-mount/Above-ground	N
Completion: <u>Above ground</u>	<u></u>
7512	
Reported Constructed Depth:	ft BGS of BTOC (circle one)
INCREATION ITEM	
INSPECTION ITEMS	YES NU N/A CUMMENTS
Well-head Completion:	
Above-ground completion:	
Are the positioned to prevent collision domage to the	
well?	
Are any of the posts damaged or degraded?	
Is a concrete nad installed?	
Is the nad 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?	$\begin{bmatrix} 1 \\ x \end{bmatrix} \begin{bmatrix} 1 \\ x \end{bmatrix} \begin{bmatrix} 1 \\ x \end{bmatrix}$
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]
Identification:	1
Is the well labeled with the correct number?	
Describe labeling: tag on P	ad
Security:	
Does the well have a cap or lid?	[¥] [] []
Does the well have a weatherproof lock?	[¥] [] []
Does the lock secure the well?	[v] [] []
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 the well	
casing?	
Thiskness of addiment compression (according to the second	<u>کې ځې</u>
Another and a betweeting in the well?	measurement):
Are more any cosmuctions in the well? Description of well bottom conditions (soft bard stal)	hard
Description of wen obtion conditions (soft, nata, etc).	
	MAR MA
Inspection Date: <u>4-26-06</u> Inspected by:	We Bullya
	\bigcirc

RAVENNA ARMY AMMUNITION WELL INSPECTION CHECKI	N PLANT LIST
WELL INFORMATION Well Location/Functional Area: Number: WBGimul-017	Lepeck Burning Ground
Casing Type: Steel Stainless Steel	PVC
Screened/Open-Hole Well Screened I	Monitor Interval Length: <u>10</u> ft
Flush-mount/Above-ground Completion: <u>Above ground</u>	
Reported Constructed Depth: $\frac{15.62}{15.62}$ ft BGS	S or BTOC (circle one)
INSPECTION ITEMS YES	NO N/A COMMENTS
Well-head Completion:	
Above-ground completion: 4 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? [] Is the well labeled with the correct number? [] Describe labeling: 4ag on page Security: 4ag on page	<pre> []</pre>
Does the well have a cap or lid? [X] Does the well have a weatherproof lock? [X] Does the lock secure the well? [X] Does the inner casing have a water-tight cap? [X] Down-hole Condition: [X] 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 the well casing? [X] Measured depth of the well from measurement point: [X] Thickness of sediment accumulation (reported depth-present measurement Are there any obstructions in the well? []]	[] [] [] [] [] [] [] [] [] [] [x] [] [x] [] [x] [] [x] [] [x] []
Description of well bottom conditions (soft, hard, etc):	Firm
Inspection Date: <u>4-26-06</u> Inspected by: <u>()</u>	e Bull-ji

WELL INFORMATION	
Number: <u>MBSmW-0</u> 01	spected Mustand Agent Burial Site
Casing Type: Steel Stainless Steel	× PVC
Screened/Open-Hole Well Type: Screened	Monitor Interval Length: <u>+0-9,7</u> ft
Flush-mount/Above-ground Completion:	ind
Reported Constructed Depth: <u>3\.22</u>	ft BGS or BTOC circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
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 of degraded?	
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?	[] [] [X]
Does the well have a flush-mount box?	[] [] [X]
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: <u>Tag on pad</u>	(pad under woder)
Does the well have a cap or lid?	
Does the well have a weatherproof lock?	
Does the lock secure the well?	
Does the inner casing have a water-tight cap?	
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 the well	
casing?	
Thiskness of acdiment accumulation (reported donth areasent	
Are there any obstructions in the well?	
Description of well bottom conditions (soft hard etc):	firm-soft
Description of wen bottom conditions (soft, hard, etc).	T (1 1/1 - 207 (
121.46	OD B OD (
Inspection Date: $\underline{\gamma}_{-} \underline{\zeta}_{b-} \underline{\zeta}_{b-$	Ull Bulling
	U

WELL INFORMATION Well Location/Functional Area: Number: MBSmul-002	Suspected Mustand Agent Buricl Site
Casing Type: Steel Stainless Steel	_≻ PVC
Screened/Open-Hole Well Screened	Monitor Interval Length: $-10-9.3$ ft
Flush-mount/Above-ground Completion: <u>Above gr</u>	ound
Reported Constructed Depth: <u>30.02</u>	ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
Above-ground completion: 4 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?	[Y] [] [] [] [x] [] [x] [] []
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? <i>Flush-mount completion:</i>	[] [x] [] [x] [] [] [x] [] [] [] [] [x] []
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]
Identification:	
Is the well labeled with the correct number? Describe labeling: $\frac{1}{2} \partial A \partial A$	
Security: Does the well have a cap or lid? Does the well have a weatherproof lock? Does the lock secure the well? Does the inner casing have a water-tight cap?	[X] [] [] [X] [] [] [Y] [] [] [Y] [] [] [Y] [] []
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 the well	[] [X] [] [] [Y] []
casing? Measured depth of the well from measurement point: Thickness of sediment accumulation (reported depth-present Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc):	[Y] [] [] <u>30,45</u> measurement): [] [X] [] soft
Inspection Date: <u>4-26-06</u> Inspected by:	De Brelze

RAVENNA ARMY AM WELL INSPECTIO	IMUNITION PLANT ON CHECKLIST
WELL INFORMATION Well Location/Functional Are Number: <u>MBSmw-00</u> 3	a: Suspected Mustand Agent Burial Site
Casing Type: Steel Stainless Ste	eel <u>></u> PVC
Screened/Open-Hole Well Type: Screened	Monitor Interval Length: <u>+0-9.7</u> ft
Flush-mount/Above-ground Completion:	ground
Reported Constructed Depth: <u>30,20</u>	ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
 Above-ground completion: Number of guard posts at well: <u>4</u> 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-mound box? 	he $[\] \]$
Is the traffic cover cracked or broken?	
Is the concrete apron cracked or deteriorated? Fro heaving?	st [] [] [χ]
Identification: Is the well labeled with the correct number? Describe labeling: <u>+ag on pad</u>	[] [] []
Does the well have a cap or lid? Does the well have a weatherproof lock? Does the lock secure the well? Does the inner casing have a water-tight cap? Down-hole Condition: Is the well casing bent, corroded, or broken (at the surface?)	[x] [] [] [x] [] [] [x] [] [] [x] [] [] [x] [] [] [x] [] [] [x] [] []
Is the well casing loose (at the surface)? Is a measurement point marked at the top of the we casing? Measured depth of the well from measurement point: Thickness of sediment accumulation (reported depth-pre- Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc):	$\begin{bmatrix} 1 & [\times] & [&] \\ [\times] & [&] \\ [\times] & [&] \\ 30.80 \end{bmatrix}$ sent measurement): $\begin{bmatrix} 1 & [\times] & [&] \\ Nord \end{bmatrix}$
Inspection Date: <u>c/-26-06</u> Inspected	by: <u>Al Bullingi</u>

WELL INFORMATION				
Well Location/Functional Area:				
Number: <u>MBSmw-00</u> 4	<i>ispect</i>	ed Mi	istar	1 Agent Burial Site
Casing Type: Steel Stainless Steel		<u> </u>	<u> </u>	/C
Screened/Open-Hole Well Screened	M	lonitor I ength:	Interval	10 -9.7 ft
Flush-mount/Above-ground Completion:	brio			
Reported Constructed Depth: 2665	ft BGS	O BTO	C (eirc	le one)
INSPECTION ITEMS	YES	NO	N/A	COMMENTS
Well-head Completion:		-		
Above-ground completion:				
Number of guard posts at well: $\frac{4}{100000000000000000000000000000000000$				
well?	[X]	[]	[]	
Are any of the posts damaged or degraded?		K1		
Is a concrete pad installed?	[X]			
Is the pad cracked or deteriorated? Frost heaving?				
Is steel protective casing installed?	[X] [x]		L J	
Does use protective casing have a weep note?	[X]	L J [5]]		<u> </u>
Elush mount completion:	ĹĴ		1 1	
Fush-mouni completion: Is the traffic cover securely helted to the flush mount				· · · · · · · · · · · · · · · · · · ·
how?	[]	r ٦	$[\mathbf{y}]$	
Does the well have a flush-mount hox?	[]	[]	[]	
Is the traffic cover cracked or broken?	[]		$\begin{bmatrix} 1 \\ 1 \end{bmatrix}$	
Is the concrete apron cracked or deteriorated? Frost	11	ι.	179	
heaving?	[]	[]	ГVI	
Identification:			· / ·	· · · · · · · · · · · · · · · · · · ·
Is the well labeled with the correct number?		[]	[]	
Describe labeling: 100 D	ad			
Security:			101 - 3 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2	<u></u>
Does the well have a cap or lid?	[×]	[]	[]	
Does the well have a weatherproof lock?	[x]	[]	[]	
Does the lock secure the 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)?	[]	[x]	[]	
Is a measurement point marked at the top of the well				
casing?	[¥]			
Measured depth of the well from measurement point:			2	10.68
Thickness of sediment accumulation (reported depth-present r	neasuren	ient):	r 7	
Are there any obstructions in the well?	L L		[]	
Description of wen bottom conditions (soft, nard, etc):	<u></u>	MW		······
	((2	nă .
Inspection Date: <u>4.26.06</u> Inspected by:	(NK 1	su	llux-

RAVENNA ARMY AMMU WELL INSPECTION	JNITION PLANT CHECKLIST
WELL INFORMATION Well Location/Functional Area: Number: MB5mw-005	Suspected Musterd Agent Burich Site
Casing Type: Steel Stainless Steel	<u>`x</u> PVC
Screened/Open-Hole Well Type: <u>Screened</u>	Monitor Interval Length: <u>10</u> ft
Flush-mount/Above-ground Completion: <u>Above Gro</u>	ound
Reported Constructed Depth: <u>30.00</u>	ft BGS of BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
 Above-ground completion: Number of guard posts at well: <u>4</u> 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? 	[x] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] []
Is the well labeled with the correct number?	[¥] [] []
Describe labeling: tag on (pad
Does the well have a cap or lid? Does the well have a weatherproof lock? Does the lock secure the well? Does the inner casing have a water-tight cap? Down-hole Condition:	[x] [] [] [¥] [] [] [¥] [] [] [x] [] []
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 the well casing? Measured depth of the well from measurement point:	$\begin{bmatrix} 1 & [x] & [1 \\ [1 & [x] & [1 \\ [1 & [x] & [1 \\ [20, 15 \\ \hline \end{tabular}$
Thickness of sediment accumulation (reported depth-present Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc):	imeasurement):
Inspection Date: $\frac{4-26-06}{1-26-06}$ Inspected by:	Al Bully-

RAVENNA ARMY AMMUN WELL INSPECTION C	NITION PLANT CHECKLIST
WELL INFORMATION Well Location/Functional Area: Number: MBSmwl.006	Suspected Mustand Agent Borial Site
Casing Type: Steel Stainless Steel	<u> </u>
Screened/Open-Hole Well Type: <u>Screened</u>	Monitor Interval Length: <u>10</u> ft
Flush-mount/Above-ground Completion: <u>Above group</u>	und
Reported Constructed Depth: 28.10	ft BGS or BTOC (circle one)
INSPECTION ITEMS	YES NO N/A COMMENTS
Well-head Completion:	
Above-ground completion: 4 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: 4000 f Security: Does the well have a cap or lid?	[×] [] [] [×] [] [] [×] [] [] [×] [] [] [×] [] [] [] [] []<
Does the well have a weatherproof lock? Does the lock secure the well?	[Y] [] [] [x] [] []
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 the well casing? Measured depth of the well from measurement point: Thickness of sediment accumulation (reported depth-present r Are there any obstructions in the well? Description of well bottom conditions (soft, hard, etc):	$\begin{bmatrix} x \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\$
Inspection Date: $4-26-06$ Inspected by:	al Bullize

6) () P.S. RECORDED BY: PROJECT NAME: RVAAP Facility-Wide Groundwater Monitoring Program WELL NUMBER *All measurements from top of casing. 125 mig-ols LOMW - ax 18 MW-0 20-mm Bu - Saul SME -000 SARO -5 MB - - 0 6 ME-6M2-00 8 P P DO. MW Z Í, Č 4120 DN 267 5 4124 4124 (Signature and Date DATE 101.50 11:27 12:05 11:02 N V 11:44 10:56 13:45 41.51 12,59 11:30 10:07 0:42AM 0'32 M TIME X Mr. 4-24-0 COMPREHENSIVE WATER LEVEL MEASUREMENTS 50-10.1 9.22 12 P DEPTH TO WATER* Q 01/1 4-24-04 13,20 J 3 R \mathcal{S} X Ž 57 0 3 ς Λ 25 21 \mathbb{S} -6 INSTRUMENT 25 QA CHECK BY: 270 05769 SERIAL NO. Æ È (Signature and Date) 127.06 + .12=27.18 have 351+ 20.20 2 +10.64 NC, 17 - 21, 77, N 15,71+,12=25.83 27.14 +,12 - 27,26 firm 22.34+.12=22.96 22,98 +,12=23,10 hard 29,50+,12=29,62,500 32,56+0.12 =32.48 hu 17,76+. 17.53+:12: DTB 27.50+ 10+12=32-32 AT T and 4-30-06 さしい N -22/23/Va-10 12=53,16 REMARKS 12=8:35 22 11 thing the 88'11 Ψ, 5 11 JMCC Mare Nas 6 FWGWMP 2006 Amnual Report Z Appendix C 240

Appendix C

C FWGWMP 2006 Annual Report

241

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Q and 4-3004	Marine	QA CHECK BY:	× 4.25-06	Sulla		RECORDED BY:	
				asing.	from top of c	"All measurements	
47.32 + 0.12 = 47.44 have			39.01	<u>13</u>	A.	CBLMW OUL	Co.
49.69+0.12=49.81 firm			44.34	09:04	-	CBLMW-001	ê
47.01+0.12= 47.13 hand			36.69	50 50 50		Comm. and	Z
44.70 10.12= 44.52 hond			37.09	b8:44	4-26-C	CBLMW - 003	Z
35.68 *0.12= 35.80 soft	7 -	na na mana na mana na mana mana mana ma	35 18,07	6125	K	SKGmw-019	
35,96+0,12=36,08 hard			16.22	10110		BROMW ONT	e V
20,91 +0.12 = 21.03 mard			10,08	16:00		1 5KGmw-003	~ ^
20,89+0,12=21.01 soft			C. TC	15:45	Stand Standard Stand	NTAMWIOG	Č
29.75+0.12=29.87 hand			(3,20	15:35		NTAMW-110	C C
29.55+0.12=29.67 Seft	-		19.5 19.1	15:22		NTAMW-113	No.
24.72+012=24.24 hard			7.70	15:13		MAMW-UND	China and a start of the start
27.50+0.12= 27.62 hard			12.50	15:03		NTA MW-117	L
22.50+0.12-22.62 mard			4.64	15:00		NTAMW-IIL	لتنبي
25.28+0.12= 2540 Mend			13.04	14:50		NTAMW 115	Ś
22.78 . U.2- 22.90 Mard	-		520	14:42		NTAMW IIY	Seren :
26.66+0.12=26.72 firm	05769	run dipper-T	7.92 He	14:32	4-25 cc	NTAMWINZ	et i
DITIB							
REMARKS	SERIAL NO.	INSTRUMENT	DEPTH TO WATER*	TIME	DATE	WELL NUMBER	
	6 6	Monitoring Program	de Groundwater	• Facility-Wi	NE: RVAAF	PROJECT NAM	
	SUREMENT	ATER LEVEL MEA	PREHENSIVE	COM			
					والمستعمل المراجع المستحد المستحد	<u></u>	

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RECORDED BY:	*All measurements	NJAMW-105	NTHMW-107	Mr. Com	FRAMW-16	/FBCAMW-16	FBAMW-1	FIXAMU-	FRAM	FRAMW-	/ Elamu -	FBQ mw	FIXA MW-	FBQ mu -1-	Frame-	(IFISQ mu -1	WELL NUMBER	PROJECT NAM	
(Signature	s from top of ca			-16	2	12	ŝ	172	N-171	25	174	011	11%	17	76	521199	DATE	NE: RVAAP	
and Date)	ising.	14:17	14.10	1153	1:32	11:35	2 TES	20:11	10:59	10:51	CD:01	10:41	52.01	10:22	16:17	10:09	TIME	Facility-Wid	COMP
4.2506	C S	10.73	Arican Contraction	5.11	515	4.20	13.63	1590	19.12	18,20	17.38	19.30	11.12	1.02	7.85	1.51	DEPTH TO WATER*	e Groundwa	REHENSIVE
QA CHECK BY:	k										-					Heron Dar -T	INSTRUMENT	ter Monitoring Program	WATER LEVEL MEAS
(Signatt	~					<u> </u>									×.	05769	SERIAL NO.		UREMENTS
λ (And) 4.30 -Oφ ure and Date)	22.00+012=22.18 March	24.5c+0.12=24.62 from - 5:4	24.33+0.12= 24.45 firm- sil	21.12 1.12 21.75 Sch	16964.12: 19,08 Hore	K, 0 KH1 K, 20 HM	51.62.+.12 51.734	74.38+,12 79,50 He	31,3917,12 31,51 14:	25. #+. 12 25.85 suller	22.82+12 22.94 Her	32.67+,12 32,79 He	MAG + N2 21.40 42	29,90+12 25,02 24	24,107.12/24.22 5	M.707.12/19,52/	REMARKS		
Appendix C	L	1. 7. 0	1+2+10	-5-	CELANDER	2	6	243	<u></u>	- <u>(</u>) -		کر FV	/GW	ہے۔ MP 2	4 006 A	kninua	l Report	L	

	*All measurements from t	LOO-MUDIT/NE	ADW TTION	MD-MW OLLV .	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	W/LIDNE CUZ	100million	~1225mw-005	000-000	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	200-mazth	VUS MW-COD	* VILSMW ZAV	VILL MW -CCZ	VILL7MW-DOS	2 LL7mw-006 9			PROJECT NAME: R		
gnature and Date	15'40	15:30	15.26	15:21	15:14	15'.08	15:02	14:50	14:42	14.35	14:31	M:25	H:20)	D N CLO	12:58	24 13:51		TIME	VAAP Facility-Wic	COMP	
~ 4-29-03 m~ 4-24	M37	19,96	11.63	10.47	W.07	16.20	72,97	19.40	18,38	15.67	16 AQ	16.70	17.90	16,14	19.88	8.972		DEPTH TO	le Groundwa	REHENSIVE	
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PROJECT NAME: RVAAP Facility-Wide Groundwater Monitoring Program

COMPREHENSIVE WATER LEVEL MEASUREMENTS

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APPENDIX D

TIME TREND GRAPHS

Note: This item has been removed from the 2006 Annual Report. Time trend graphs will be discussed at the June 2007 FWGWMP Program meeting.

APPENDIX E

INVESTIGATION-DERIVED WASTE CHARACTERIZATION AND DISPOSAL PLAN

INVESTIGATION-DERIVED WASTE CHARACTERIZATION AND DISPOSAL PLAN

FOR THE FACILITY WIDE GROUNDWATER MONITORING PROGRAM SAMPLING EVENTS IN MARCH, MAY, JULY and OCTOBER 2006 AT THE RAVENNA ARMY AMMUNITION PLANT RAVENNA, OHIO

MARCH 2007

Prepared for

U.S. Army Joint Operations Command GSA Contract No. GS-10F-0448P

Prepared by

SpecPro, Inc. 8451 State Route 5 Ravenna, OH 44266

CONTENTS

CONT	ENTS	ii
TABLE	ES	ii
ACRO	NYMS	. iii
1.0 IN	TRODUCTION	1
2.0 OF	PERATIONAL HISTORY AND WASTE GENERATION	1
3.0	MANAGEMENT OF ENVIRONMENTAL MEDIA	2
4.0	DISCUSSION OF ANALYTICAL RESULTS	3
5.0	RECOMMENDATIONS FOR DISPOSAL	3
5.1	Groundwater	4
5.2	Decontamination Fluids	4
5.3	Summary of Disposal Recommendations	5
6.0	REFERENCES	6

TABLES

Table 2-1. IDW Inventory of Drums	2
Table 5.1 Detected analytical results when compared to EPA Regulatory	
Maximum Toxicity Characteristics (40 CFR 261.24)	4
Table 5.2 Summary of Drum Containers, TCLP Criteria, and Disposal	
Recommendations	5

APPENDICES

Appendix 1 Investigation-Derived Waste Analytical Results Summary

ACRONYMS

DOD	Department of Defense
EPA	U.S. Environmental Protection Agency
IDW	investigation-derived wastes
Ohio EPA	Ohio Environmental Protection Agency
PPE	personal protective equipment
RVAAP	Ravenna Army Ammunition Plant
TCLP	Toxicity Characteristic Leaching Procedure
USACE	US Army Corps of Engineers
UXO	unexploded ordnance

1.0 INTRODUCTION

Investigative activities were conducted during the Facility Wide Groundwater Monitoring Program sampling events during March (Event #1), May (Event #2), July (Event #3), and October (Event #4) 2006 at the Ravenna Army Ammunition Plant (RVAAP), Ravenna, Ohio, resulting in the generation of investigationderived wastes (IDW) consisting of purge-water and decon water wastes. The IDW purge water was generated in the course of sampling each well and the decontamination activities of the equipment needed to sample each well. The purpose of this report is to characterize and classify the IDW for proper disposal. The report includes a summary of the IDW generated and its origin; classification of the IDW and recommendations for disposal; and a review of the analytical results used for waste characterization. This document follows guidance established by the USACE and the Ohio EPA regarding IDW disposition at RVAAP.

2.0 OPERATIONAL HISTORY AND WASTE GENERATION

Information regarding the operational history and suspected contaminants for the Facility Wide Groundwater Monitoring Program Plan is presented in Section 1.2 of the Final Part 1- Sampling and Analysis Plan Addendum for the Facility-Wide Groundwater Monitoring Program Plan at the Ravenna Army Ammunition Plant, Ravenna, Ohio (SAP Addendum). Section 4.6 of the SAP Addendum describes procedures used for sampling and managing IDW at RVAAP.

Water (purged groundwater and decontamination water) IDW was generated during each sampling event during the 2006 sampling period which included March (Event #1), May (Event #2), July (Event #3), and October (Event #4). Each AOC area had a drum designated and labeled for purge water disposal before any sampling events occurred as agreed upon by USACE, OHIO EPA, and SpecPro. The Background wells had two drums labeled for their use prior to the sampling events beginning. Purge water was generated in every event in accordance with the Facility Wide Sampling and Analysis Plan (SAP), Section 4.3.4.2 (SAIC 2001) under Micro-Purging criteria. Decontamination water was generated during each event from the washing, rinsing, and decontamination procedures used for all non-dedicated sampling equipment. These decontamination procedures are described in Section 4.3.8 Decontamination Procedures of the Facility Wide SAP.

Five RCRA wells are sampled semi-annually in the FWGWMP Program. Two of the RCRA wells are located in Demolition Area 2 (DA2-Det3 and DA2-Det4). Three of the RCRA wells are located at Ramsdell Quarry Landfill (RQL-007, -

008, and -009). These wells were sampled in May 2006 and October 2006. The purge water collected from the DA2 RCRA wells was combined in a 55-gallon drum with the purge water collected from the monitoring well DA2-107. The purge water collected from the Ramsdell Quarry Landfill wells was collected in a 55-gallon drum dedicated to the Ramsdell Quarry Landfill purge water.

The unique drum container label number, the type and size of drum container used, estimated volume within each drum, and the source of purge waste water or decon fluid is presented in Table 2-1 below.

Drum Container Labeled as	Container Type & Size	Contents of Drum	Estimated Volume	Location Source of Waste
FWGW-001	55 Gal. Closed Top	Purge water	1/2	LL1 Monitoring Wells 078, 080, 083
FWGW-002	55 Gal. Closed Top	Purge water	1/2	LL2 Monitoring Wells 059, 262, 263
FWGW-003	55 Gal. Closed Top	Purge water	1/3	LL3 Monitoring Wells 238, 242
FWGW-004	55 Gal. Closed Top	Purge water	1/3	LL4 Monitoring Wells 198, 199
FWGW-005	55 Gal. Closed Top	Purge water	1/3	LL11 Monitoring Wells 002, 007
FWGW-006	55 Gal. Closed Top	Purge water	3⁄4	LL12 Monitoring Wells 153,182,183,186
FWGW-007	55 Gal. Closed Top	Purge water	1/2	CBP Monitoring Wells 005, 007
FWGW-008	55 Gal. Closed Top	Purge water	3/4	WBG Monitoring Wells 006, 007, 009
FWGW-009	55 Gal. Closed Top	Purge water	Full*	RVAAP Background Monitoring Wells
FWGW-010	55 Gal. Closed Top	Purge water	1/2	RVAAP Background Monitoring Wells
FWGW-011	55 Gal. Closed Top	Purge water	1/3	DA2 Monitoring Wells 107, Det3(RCRA well), Det4(RCRA well)
FWGW-012	55 Gal. Closed Top	Purge water	1/3	RQL Monitoring Wells 007, 008, 009 (all RCRA wells)
FWGW-013	55 Gal. Closed Top	IDW water	Full*	IDW wash decon water
FWGW-014	55 Gal. Closed Top	IDW water	Full*	IDW rinse decon water

Table 2-1. IDW Inventory of Drums

*Please note: Full means the drum at ~90% full liquid capacity

3.0 MANAGEMENT OF ENVIRONMENTAL MEDIA

All environmental media were managed in a manner that minimized potential risk to human health and the environment. IDW was handled as nonhazardous material pending waste characterization and classification based on analytical results. The Facility-Wide SAP (SAIC 2001) and the Final Part 1 Sampling and Analysis Plan (2004) describe approved procedures used for containerizing and handling IDW.

All liquid indigenous (purge groundwater) IDW generated from each monitoring well micro-purging was segregated into different drums by AOC areas and placed into closed-top 55-gallon drums as agreed upon by USACE, Ohio EPA, and SpecPro. The purge water was transferred daily from each well location after sampling by closed top 5-gallon buckets to the appropriately labeled closed-top 55-gallon drums located and staged behind building 1036.

4.0 DISCUSSION OF ANALYTICAL RESULTS

Per Section 7.4 of the Facility-Wide SAP (2001), IDW Characterization and Classification for Disposal, all IDW indigenous wastes were characterized for disposal by taking composite samples collected from each of the segregated waste streams. There were only two segregated waste streams that needed to be investigated; one for the purge water generated, and one for the decontamination procedures. The composite sample collected for the purge water waste stream included purge water collected from the drums storing RCRA wells purge water. Each waste stream had a composite sample taken by using a "drum thief" until a total of 4 liters was withdrawn in equal amounts from all drums of that particular waste stream. Each waste stream composite sample was submitted to STL Laboratories, North Canton for full toxicity characteristic leaching procedure (TCLP) analysis using the following methods in accordance with the Facility-Wide SAP (2001):

- TCLP Mercury by SW846 1311/7470A
- TCLP Metals (Silver, arsenic, barium, cadmium, chromium, lead, and selenium) by SW846 1311/6010B
- TCLP SVOCs by SW846 1311/8270C
- TCLP VOAs by SW846 1311/8260B
- Reactive Cyanide by SW846 7.3.3
- Reactive Sulfide by SW846 7.3.4
- Flash Point by SW846 1010
- pH by SW846 9040B

The IDW TCLP results are presented in Appendix 1.

5.0 RECOMMENDATIONS FOR DISPOSAL

Table 7-1 in the Facility-Wide SAP (2001) presents all the maximum concentration of contaminants for the toxicity characteristic for hazardous wastes

as per 40 CFR 261.24. Analytical results for the 2006 Groundwater Sampling Events IDW were compared against these criteria to determine whether waste streams generated were potentially hazardous or non-hazardous.

5.1 Groundwater

IDW was generated during the well sampling activities by micro-purging monitoring wells associated with this investigation. After comparing the analytical data results generated from groundwater sampling activities to the contaminants and their regulatory levels from Table 7-1, the data indicated that no regulatory criteria for RCRA hazardous waste determinations were exceeded. Please see Table 5.1 below for the detected results compared to the toxicity characteristic for hazardous wastes as per 40 CFR 261.24. For a complete listing of all values please see Table 7-1 in the Facility-Wide SAP (2001).

Table 5.1	Detected analytical results when compared to EPA Regulatory Maximum
	Toxicity Characteristics (40 CFR 261.24).

Sample ID	Detected Contaminant	Detected Result (mg/L)	Regulatory Level (mg/L)	Above Regulatory Yes/No
FWG-IDW- MWPURGE06	Barium	0.040	100.00	NO
FWG-IDW-	Barium	0.0097	100.00	NO
MWDECON06	Chromium	0.0036	5.0	NO
	Lead	0.0029	5.0	NO
	Vinyl Chloride	0.085	0.2	NO

It is recommended that the drums containing purged groundwater, including the drums containing purge water from the RCRA wells, be classified as contaminated, but non-hazardous and that they be sent off-site for disposal to a permitted water treatment facility in accordance with the Facility-Wide SAP (2001) guidance under Section 7.0 "Investigation-Derived Waste".

5.2 Decontamination Fluids

A composited sample collected from decontamination fluids generated from cleaning of non-dedicated sampling equipment used during the investigation indicated that all analytes were below TCLP threshold values and therefore is classified as non-hazardous. It is recommended that these containers be classified as contaminated, non-hazardous, and that they be sent off-site for disposal to a permitted water treatment facility in accordance with the Facility-Wide SAP (2001) guidance under Section 7.0 Investigation-Derived Waste.

5.3 Summary of Disposal Recommendations

We recommend that all drums be classified as contaminated, but non-hazardous and that they be sent off-site for disposal to a permitted water treatment facility. The TCLP test results for both composited samples show that no chemical was detected in levels that required a labeling of hazardous. Table 5-2 presents a summary of each drum and the recommended disposal options for the waste streams presented and previously discussed in Section 5.

Drum Container	Media	TCLP Criteria	Disposal Recommendation
FWGW-001	Water	Maximum Concentration of Contaminates NOT exceeded	Consolidated for Off-Site Non-Hazardous Disposal
FWGW-002	Water	Maximum Concentration of Contaminates NOT exceeded	Consolidated for Off-Site Non-Hazardous Disposal
FWGW-003	Water	Maximum Concentration of Contaminates NOT exceeded	Consolidated for Off-Site Non-Hazardous Disposal
FWGW-004	Water	Maximum Concentration of Contaminates NOT exceeded	Consolidated for Off-Site Non-Hazardous Disposal
FWGW-005	Water	Maximum Concentration of Contaminates NOT exceeded	Consolidated for Off-Site Non-Hazardous Disposal
FWGW-006	Water	Maximum Concentration of Contaminates NOT exceeded	Consolidated for Off-Site Non-Hazardous Disposal
FWGW-007	Water	Maximum Concentration of Contaminates NOT exceeded	Consolidated for Off-Site Non-Hazardous Disposal
FWGW-008	Water	Maximum Concentration of Contaminates NOT exceeded	Consolidated for Off-Site Non-Hazardous Disposal
FWGW-009	Water	Maximum Concentration of Contaminates NOT exceeded	Consolidated for Off-Site Non-Hazardous Disposal
FWGW-010	Water	Maximum Concentration of Contaminates NOT exceeded	Consolidated for Off-Site Non-Hazardous Disposal
FWGW-011	Water	Maximum Concentration of Contaminates NOT exceeded	Consolidated for Off-Site Non-Hazardous Disposal
FWGW-012	Water	Maximum Concentration of Contaminates NOT exceeded	Consolidated for Off-Site Non-Hazardous Disposal
FWGW-013	Water	Maximum Concentration of Contaminates NOT exceeded	Consolidated for Off-Site Non-Hazardous Disposal
FWGW-014	Water	Maximum Concentration of Contaminates NOT exceeded	Consolidated for Off-Site Non-Hazardous Disposal

Table 5.2Summary of Drum Containers, TCLP Criteria, and Disposal
Recommendations
6.0 REFERENCES

SAIC 2001. Facility-Wide Sampling and Analysis Plan for Environmental Investigations at the Ravenna Army Ammunition Plant, Ravenna, Ohio.

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

APPENDIX 1

INVESTIGATION-DERIVED WASTE ANALYTICAL RESULTS SUMMARY



STL North Canton 4101 Shuffel Drive NW North Canton, OH 44720

Tel: 330 497 9396 Fax: 330 497 0772 www.stl-inc.com

ANALYTICAL REPORT

PROJECT NO. 001074.0001

FACILITY-WIDE GROUNDWATER

Lot #: A6J060158

Chantelle Carrol

SpecPro Inc 8451 State Route 5 Ravenna, OH 44266

SEVERN TRENT LABORATORIES, INC.

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Frank J. Calovini Project Manager

October 31, 2006

CASE NARRATIVE A6J060158

The following report contains the analytical results for two water samples submitted to STL North Canton by Spec Pro from the Facility-Wide Groundwater Site. The samples were received October 06, 2006, according to documented sample acceptance procedures.

STL utilizes USEPA approved methods in all analytical work. The samples presented in this report were analyzed for the parameter(s) listed on the analytical methods summary page in accordance with the method(s) indicated. Preliminary results were provided to Chantelle Carrol on October 27, 2006, and October 30, 2006. A summary of QC data for these analyses is included at the back of the report.

STL North Canton attests to the validity of the laboratory data generated by STL facilities reported herein. All analyses performed by STL facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the applicable methods. STL's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

If you have any questions, please call the Project Manager, Frank J. Calovini, at 330-497-9396.

This report is sequentially paginated. The final page of the report is labeled as "END OF REPORT." The total number of pages in this report is 44.

SUPPLEMENTAL QC INFORMATION

SAMPLE RECEIVING

The coolers were received at temperatures ranging from 2.4 to 5.4°C.

CASE NARRATIVE (continued)

GC/MS VOLATILES

The matrix spike/matrix spike duplicate(s) for batch(es) 6284662 had recoveries outside acceptance limits. However, since the associated method blank(s) and laboratory control sample(s) were in control, no corrective action was necessary.

GC/MS SEMIVOLATILES

The analytical results met the requirements of the laboratory's QA/QC program.

METALS

The sample(s) that contain results between the MDL and the RL were flagged with "B". There is the possibility of false positive or mis-identification at these quantitation levels. The acceptance criteria for the ICB, CCB, and Method Blank are +/- the standard reporting limit (SRL).

GENERAL CHEMISTRY

Reactive Cyanide and/or Reactive Sulfide results have been reported herein with an SW846 method reference. Although the analyses are based on the referenced methods, US EPA has amended sections 7.3.3 and 7.3.4 of SW846-Chapter Seven to withdraw the Cyanide and Sulfide reactivity guidance from *Test Methods for Evaluating Solid Waste*, *Physical/Chemical Methods in* June of 2005 (6/14/05; 70 FR 34537). The analyses are no longer approved by USEPA for use in complying with RCRA regulations.

QUALITY CONTROL ELEMENTS OF SW-846 METHODS

STL North Canton conducts a quality assurance/quality control (QA/QC) program designed to provide scientifically valid and legally defensible data. Toward this end, several types of quality control indicators are incorporated into the QA/QC program, which is described in detail in QA Policy, QA-003. These indicators are introduced into the sample testing process to provide a mechanism for the assessment of the analytical data.

<u>OC BATCH</u>

Environmental samples are taken through the testing process in groups called QUALITY CONTROL BATCHES (QC batches). A QC batch contains up to twenty environmental samples of a similar matrix (water, soil) that are processed using the same reagents and standards. STL North Canton requires that each environmental sample be associated with a QC batch.

Several quality control samples are included in each QC batch and are processed identically to the twenty environmental samples. These QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) pair or a MATRIX SPIKE/SAMPLE DUPLICATE (MS/DU) pair. If there is insufficient sample to perform an MS/MSD or an MS/DU, then a LABORATORY CONTROL SAMPLE DUPLICATE (LCSD) is included in the QC batch.

LABORATORY CONTROL SAMPLE

The Laboratory Control Sample is a QC sample that is created by adding known concentrations of a full or partial set of target analytes to a matrix similar to that of the environmental samples in the QC batch. The LCS analyte recovery results are used to monitor the analytical process and provide evidence that the laboratory is performing the method within acceptable guidelines. All control analytes indicated by a bold type in the LCS must meet acceptance criteria. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch. The only exception is that if the LCS recoveries are biased high and the associated sample is ND (non-detected) for the parameter(s) of interest, the batch is acceptable.

At times, a Laboratory Control Sample Duplicate (LCSD) is also included in the QC batch. An LCSD is a QC sample that is created and handled identically to the LCS. Analyte recovery data from the LCSD is assessed in the same way as that of the LCS. The LCSD recoveries, together with the LCS recoveries, are used to determine the reproducibility (precision) of the analytical system. Precision data are expressed as relative percent differences (RPDs). If the RPD fails for an LCS/LCSD and yet the recoveries are within acceptance criteria, the batch is still acceptable.

METHOD BLANK

The Method Blank is a QC sample consisting of all the reagents used in analyzing the environmental samples contained in the QC batch. Method Blank results are used to determine if interference or contamination in the analytical system could lead to the reporting of false positive data or elevated analyte concentrations. All target analytes must be below the reporting limits (RL) or the associated sample(s) must be ND except under the following circumstances:

Common organic contaminants may be present at concentrations up to 5 times the reporting limits. Common metals contaminants may be present at concentrations up to 2 times the reporting limit, or the reported blank concentration must be twenty fold less than the concentration reported in the associated environmental samples. (See common laboratory contaminants listed below.)

Volatile (GC or GC/MS)	Semivolatile (GC/MS)	Metals ICP-MS	Metals ICP Trace
Methylene Chloride.	Phthalate Esters	Copper, Iron, Zinc,	Copper, Iron, Zinc, Lead
Acetone, 2-Butanone		Lead, Calcium,	
		Magnesium, Potassium,	
		Sodium, Barium,	
		Chromium, Manganese	

QUALITY CONTROL ELEMENTS OF SW-846 METHODS (Continued)

- Organic blanks will be accepted if compounds detected in the blank are present in the associated samples at levels 10 times the blank level. Inorganic blanks will be accepted if elements detected in the blank are present in the associated samples at 20 times the blank level.
- Blanks will be accepted if the compounds/elements detected are not present in any of the associated environmental samples.

Failure to meet these Method Blank criteria requires the repreparation and reanalysis of all samples in the QC batch.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A Matrix Spike and a Matrix Spike Duplicate are a pair of environmental samples to which known concentrations of a full or partial set of target analytes are added. The MS/MSD results are determined in the same manner as the results of the environmental sample used to prepare the MS/MSD. The analyte recoveries and the relative percent differences (RPDs) of the recoveries are calculated and used to evaluate the effect of the sample matrix on the analytical results. Due to the potential variability of the matrix of each sample, the MS/MSD results may not have an immediate bearing on any samples except the one spiked; therefore, the associated batch MS/MSD may not reflect the same compounds as the samples contained in the analytical report. When these MS/MSD results fail to meet acceptance criteria, the data is evaluated. If the LCS is within acceptance criteria, the batch is considered acceptable. The acceptance criteria do not apply to samples that are diluted for organics if the native sample amount is 4x the concentration of the spike.

For certain methods, a Matrix Spike/Sample Duplicate (MS/DU) may be included in the QC batch in place of the MS/MSD. For the parameters (i.e. pH, ignitability) where it is not possible to prepare a spiked sample, a Sample Duplicate may be included in the QC batch. However, a Sample Duplicate is less likely to provide usable precision statistics depending on the likelihood of finding concentrations below the standard reporting limit. When the Sample Duplicate result fails to meet acceptance criteria, the data is evaluated.

SURROGATE COMPOUNDS

In addition to these batch-related QC indicators, each organic environmental and QC sample is spiked with surrogate compounds. Surrogates are organic chemicals that behave similarly to the analytes of interest and that are rarely present in the environment. Surrogate recoveries are used to monitor the individual performance of a sample in the analytical system.

If surrogate recoveries are biased high in the LCS, LCSD, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, LCSD, or Method Blank surrogate(s) fail to meet recovery criteria, the entire sample batch is repreped and reanalyzed. If the surrogate recoveries are outside criteria for environmental samples, the samples will be repreped and reanalyzed unless there is objective evidence of matrix interference or if the sample dilution is greater than the threshold outlined in the associated method SOP.

For the GC/MS BNA methods, the surrogate criterion is that two of the three surrogates for each fraction must meet acceptance criteria. The third surrogate must have a recovery of ten percent or greater.

For the Pesticide, PCB, and PAH methods, the surrogate criterion is that one of two surrogate compounds must meet acceptance criteria.



STL North Canton Certifications and Approvals:

California (#01144CA), Connecticut (#PH-0590), Florida (#E87225), Illinois (#200004), Kansas (#E10336), Minnesota (#39-999-348), New Jersey (#OH001), New York (#10975), Ohio (#6090), OhioVAP (#CL0024), Utah (#QUAN9), West Virginia (#210), Wisconsin (#999518190), NAVY, ARMY, USDA Soil Permit, ACIL Seal of Excellence – Participating Lab Status Award (#82)

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EXECUTIVE SUMMARY - Detection Highlights

A6J060158

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
FWG-1DW-MWPURGE06 10/05/06 16:18 00	01			
Barium - TCLP Flashpoint pH (liquid)	0.040 B >180 6.9	10.0	mg/L deg F No Units	SW846 6010B SW846 1010 SW846 9040B
FWG-1DW-MWDECON06 10/05/06 16:18 00	02			
Barium - TCLP Chromium - TCLP Lead - TCLP Vinyl chloride Flashpoint pH (liquid)	0.0097 B 0.0036 B 0.0029 B 0.085 >180 9.0	10.0 0.50 0.50 0.025	mg/L mg/L mg/L mg/L deg F No Units	SW846 6010B SW846 6010B SW846 6010B SW846 8260B SW846 1010 SW846 9040B

ANALYTICAL METHODS SUMMARY

A6J060158

	ANALYI	ICAL	
PARAMETER	METHOL)	
pH Aqueous	SW846	9040B	
Inductively Coupled Plasma (ICP) Metals	SW846	6010B	
Mercury in Liquid Waste (Manual Cold-Vapor)	SW846	7470A	
Pensky-Martens Method for Determining Ignitability	SW846	1010	
Reactive Cvanide	SW846	7.3.3	
Reactive Sulfide	SW846	7.3.4	
Semivolatile Organic Compounds by GC/MS	SW846	8270C	
Volatile Organics by GC/MS	SW846	8260B	

References:

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

A6J060158

<u>wo #</u>	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
JFT8N	001	FWG-1DW-MWPURGE06	10/05/06	16:18
JFT8Q	002	FWG-1DW-MWDECON06	10/05/06	16:18

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.

- All calculations are performed before rounding to avoid round-off errors in calculated results.

- Results noted as "ND" were not detected at or above the stated limit.

- This report must not be reproduced, except in full, without the written approval of the laboratory.

- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor,

paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Client Sample ID: FWG-1DW-MWPURGE06

TCLP GC/MS Volatiles

Lot-Sample #:	A6J060158-001	Work	Order #:	JFT8N1AA	Matrix:	WG
Date Sampled:	10/05/06 16:18	Date	Received:	10/06/06		
Leach Date:	10/09/06	Prep	Date:	10/12/06	Analysis Date:	10/12/06
Leach Batch #:	P628213	Prep	Batch #:	6284662		
Dilution Factor:	1					

Method..... SW846 8260B

		REPORTING		
PARAMETER	RESULT	LIMIT	UNITS	MDL
Benzene	ND	0.025	mg/L	0.00023
Carbon tetrachloride	ND	0.025	mg/L	0.00045
Chlorobenzene	ND	0.025	mg/L	0.00028
Chloroform	ND	0.025	mg/L	0.00040
1,2-Dichloroethane	ND	0.025	mg/L	0.00048
1,1-Dichloroethylene	ND	0.070	mg/L	0.00060
Methyl ethyl ketone	ND	0.25	mg/L	0.0010
Tetrachloroethylene	ND	0.070	mg/L	0.00083
Trichloroethylene	ND	0.050	mg/L	0.00041
Vinyl chloride	ND	0.025	mg/L	0.00044
	PERCENT	RECOVERY		
SURROGATE	RECOVERY	LIMITS		
Dibromofluoromethane	106	(86 - 125)		
1,2-Dichloroethane-d4	100	(80 - 122)		
Toluene-d8	105	(90 - 122)		
4-Bromofluorobenzene	99	(84 - 125)		

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

FWG-1DW-MWPURGE06

GC/MS Volatiles

Lot-Sample #: A6J060158-001 Work Order #: JFT8N1AA Matrix: WG

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

			ESTIMATED	RETENTION	
PARAMETER	CAS	#	RESULT	TIME	UNITS
None					mg/L

Client Sample ID: FWG-1DW-MWPURGE06

TCLP GC/MS Semivolatiles

Lot-Sample #:	A6J060158-001	Work	Order #: JFT8N1AC	Matrix	WG
Date Sampled:	10/05/06 16:18	Date	Received: 10/06/06		
Leach Date:	10/09/06	Prep	Date: 10/10/06	Analysis Date:	10/12/06
Leach Batch #:	P628209	Prep	Batch #: 6283103		
Dilution Factor:	1				

Method.....: SW846 8270C

		REPORTIN	5	
PARAMETER	RESULT	LIMIT	UNITS	MDL
o-Cresol	ND	0.0040	mg/L	0.00056
m-Cresol & p-Cresol	ND	0.040	mg/L	0.00075
1.4-Dichlorobenzene	ND	0.0040	mg/L	0.00052
2 4-Dinitrotoluene	ND	0.020	mg/L	0.00040
Hexachlorobenzene	ND	0.020	mg/L	0.000065
Hexachlorobutadiene	ND	0.020	mg/L	0.00051
Hexachloroethane	ND	0.020	mg/L	0.00058
Nitrohenzene	ND	0.0040	mg/L	0.000053
Pentachlorophenol	ND	0.040	mg/L	0.00048
Pyridine	ND	0.020	mg/L	0.00078
2 4 5-Trichloro-	ND	0.020	mg/L	0.00096
nhenol				
2 4 6-Trichloro-	ND	0.020	mg/L	0.0014
phenol				
	PERCENT	RECOVERY		
SURROGATE	RECOVERY	LIMITS		
Nitrobenzene-d5	48	(27 - 11	0)	
2-Fluorobiphenvl	44	(20 - 11	0)	
Terphenyl-d14	77	(44 - 11	0)	
Phenol-d5	16	(10 - 11)	0)	
2-Fluorophenol	23	(10 - 11)	0)	

(28 - 110)

NOTE(S):

2,4,6-Tribromophenol

.

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

Client Sample ID: FWG-1DW-MWPURGE06

TCLP Metals

Lot-Sample #. Date Sampled. Leach Date	: A6J060158 : 10/05/06 : 10/09/06	-001 16:18 Date Leacl	Received. n Batch #.	.: 10/06/06 .: P628209	Matrix	: WG
PARAMETER	RESULT	REPORTII LIMIT	IG <u>UNITS</u>	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #.	: 6284023					
Arsenic	ND	0.50	mg/L	SW846 6010B	10/11/06	JFT8N1AD
		Dilution Fa	ctor: 1	MDL 0.0	043	
Barium	0.040 B	10.0	mq/L	SW846 6010B	10/11/06	JFT8N1AE
Duit I um		Dilution Fa	ctor: 1	MDL 0.0	032	
Co dimitivi	NID	0 10	ma / I.	SW846 6010B	10/11/06	JFT8N1AF
Cadiniium	ND	Dilution Fa	ctor: 1	MDL 0.0	0042	
		0 50	ma /T	GW846 6010B	10/11/06	JFT8N1AG
Chromium	ND	0.50 Dilution Fa	ctor: 1	MDL 0.0	0016	
					<i>t</i>	
Lead	ND	0.50	mg/L	SW846 6010B	10/11/06	JFT8NIAH
		Dilution Fa	ctor: 1	MDL: 0.0	0017	
Selenium	ND	0.25	mg/L	SW846 6010B	10/11/06	JFT8N1AJ
		Dilution Fa	ctor: 1	MDL 0.0	024	
- ']	NTD.	0 50	ma /T	SW846 6010B	10/11/06	JFT8N1AK
Silver	ND	Dilution Fa	ctor: 1	MDL 0.(0021	
Mercury	ND	0.0020	mg/L	SW846 7470A	10/11/06	JFT8N1AL
		Dilution Fa	ctor: 1	MDL: 0.0	00090	

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

B Estimated result. Result is less than RL.

Client Sample ID: FWG-1DW-MWPURGE06

General Chemistry

 Lot-Sample #...: A6J060158-001
 Work Order #...: JFT8N

 Date Sampled...: 10/05/06 16:18
 Date Received..: 10/06/06

Matrix..... WG

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
pH (liquid)	6.9		No Units	SW846 9040B	10/06/06	6280038
~ –		Dilution Fac	tor: 1	MDL:		
Flashpoint	>180		deg F	SW846 1010	10/25/06	6298508
*		Dilution Fac	tor: 1	MDL:		
Reactive Cvanide	ND	200	mg/kg	SW846 7.3.3	10/18/06	6291546
		Dilution Fac	tor: 1	MDL 71		
Reactive Sulfide	ND	500	mq/kq	SW846 7.3.4	10/18/06	6291394
Redective Duttine		Dilution Fac	tor: 1	MDL 61		

Client Sample ID: FWG-1DW-MWDECON06

TCLP GC/MS Volatiles

Lot-Sample #:	A6J060158-002	Work	Order #:	JFT8Q1AA	Matrix:	WG
Date Sampled:	10/05/06 16:18	Date	Received:	10/06/06		
Leach Date:	10/09/06	Prep	Date:	10/12/06	Analysis Date:	10/12/06
Leach Batch #:	P628213	Prep	Batch #:	6284662		
Dilution Factor:	1					

Method..... SW846 8260B

		REPORTIN	G		
PARAMETER	RESULT	LIMIT	UNITS	MDL	
Benzene	ND	0.025	mg/L	0.00023	
Carbon tetrachloride	ND	0.025	mg/L	0.00045	
Chlorobenzene	ND	0.025	mg/L	0.00028	
Chloroform	ND	0.025	mg/L	0.00040	
1.2-Dichloroethane	ND	0.025	mg/L	0.00048	
1.1-Dichloroethylene	ND	0.070	mg/L	0.00060	
Methyl ethyl ketone	ND	0.25	mg/L	0.0010	
Tetrachloroethvlene	ND	0.070	mg/L	0.00083	
Trichloroethylene	ND	0.050	mg/L	0.00041	
Vinyl chloride	0.085	0.025	mg/L	0.00044	
	PERCENT	RECOVERY	,		
SURROGATE	RECOVERY	LIMITS			
Dibromofluoromethane	103	(86 - 12	25)		
1.2-Dichloroethane-d4	105	(80 - 12	22)		
Toluene-d8	104	(90 - 12	22)		
4-Bromofluorobenzene	100	(84 - 12	25)		

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

FWG-1DW-MWDECON06

GC/MS Volatiles

Lot-Sample #: A6J060158-002 Work Order #: JFT8Q1AA Matrix: WG

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

			ESTIMATED	RETENTION	
PARAMETER	CAS	#	RESULT	TIME	UNITS
None					mg/L

Client Sample ID: FWG-1DW-MWDECON06

TCLP GC/MS Semivolatiles

Lot-Sample #:	A6J060158-002	Work	Order #: JFT8Q1AC	Matrix	WG
Date Sampled:	10/05/06 16:18	Date	Received: 10/06/06		/ /
Leach Date:	10/09/06	Prep	Date: 10/10/06	Analysis Date:	10/12/06
Leach Batch #:	P628209	Prep	Batch #: 6283103		
Dilution Factor:	1				

Method.....: SW846 8270C

		REPORTIN	G	
PARAMETER	RESULT	LIMIT	UNITS	MDL
o-Cresol	ND	0.0040	mg/L	0.00056
m-Cresol & p-Cresol	ND	0.040	mg/L	0.00075
1 4-Dichlorobenzene	ND	0.0040	mg/L	0.00052
2.4-Dinitrotoluene	ND	0.020	mg/L	0.00040
Hexachlorobenzene	ND	0.020	mg/L	0.000065
Hexachlorobutadiene	ND	0.020	mg/L	0.00051
Hexachloroethane	ND	0.020	mg/L	0.00058
Nitrobenzene	ND	0.0040	mg/L	0.000053
Pentachlorophenol	ND	0.040	mg/L	0.00048
Pyridine	ND	0.020	mg/L	0.00078
2.4.5-Trichloro-	ND	0.020	mg/L	0.00096
phenol				
2.4.6-Trichloro-	ND	0.020	mg/L	0.0014
phenol				
	PERCENT	RECOVERY		
SURROGATE	RECOVERY	LIMITS		
Nitrobenzene-d5	49	(27 - 11	0)	
2-Fluorobiphenvl	47	(20 - 11	0)	
Terphenvl-d14	53	(44 - 11	.0)	
Phenol-d5	16	(10 - 11	.0)	
2-Fluorophenol	19	(10 - 11)	.0)	
2,4,6-Tribromophenol	52	(28 - 11	.0)	

NOTE (S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

Client Sample ID: FWG-1DW-MWDECON06

TCLP Metals

Lot-Sample #. Date Sampled. Leach Date	: A6J060158 : 10/05/06 : 10/09/06	-002 16:18 Date Leac	Received. h Batch #.	.: 10/06/06 .: P628209	Matrix	.: WG
PARAMETER	RESULT	REPORTI LIMIT	NG UNITS	METHOD	PREPARATION- ANALYSIS DAT	WORK E ORDER #
Prep Batch #.	: 6284023	0 50	mg / T	CMOAC COLOR	10/11/06	JET801AD
Arsenic	ND	0.50	шg/ц	SW846 GUIUD	10/11/00	0110021110
		Dilution Fa	ctor: 1	МДЦ 0.0	045	
Dominum	0 0097 B	10 0	ma/L	SW846 6010B	10/11/06	JFT8Q1AE
Bartum	0.0071	Dilution Fa	ctor: 1	MDL 0.0	032	
		Dilución iu				
Cadmium	ND	0.10	mg/L	SW846 6010B	10/11/06	JFT8Q1AF
ou unit uni		Dilution Fa	ctor: 1	MDL 0.0	00042	
Chromium	0.0036 B	0.50	mg/L	SW846 6010B	10/11/06	JFT8Q1AG
		Dilution Fa	ctor: 1	MDL 0.0	0016	
Lead	0.0029 B	0.50	mg/L	SW846 6010B	10/11/06	JF18Q1AH
		Dilution Fa	ctor: 1	MDL 0.(017	
		0.05			10/11/06	.TET801 D.T
Selenium	ND	0.25	mg/L	SW846 6010B	10/11/00	01100110
		Dilution Fa	ctor: 1	МДЦ: 0.0	1024	
a 1 3	ND	0 5 0	ma /T	SW846 6010B	10/11/06	JFT801AK
Silver	ND	U.SU Dilution Fa	ator: 1	MDL 0 (1021	~
		DIIULION Fa	0001: 1			
Moreauter		0 0020	mcr / L	SW846 7470A	10/11/06	JFT8Q1AL
Mercury		Dilution Fa	ctor: 1	MDL 0.0	000090	
		Diración io				
				N		

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

B Estimated result. Result is less than RL.

Client Sample ID: FWG-1DW-MWDECON06

General Chemistry

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
pH (liquid)	9.0	Dilution Fact	No Units	SW846 9040B	10/06/06	6280038
Flashpoint	>180	Dilution Fact	deg F	SW846 1010	10/25/06	6298508
Reactive Cyanide	ND	200 Dilution Fact	mg/kg tor: 1	SW846 7.3.3 MDL 71	10/18/06	6291546
Reactive Sulfide	ND	500 Dilution Fac	mg/kg tor: 1	SW846 7.3.4 MDL 61	10/18/06	6291394

Chain of Custody Record	SEVER N Severn Trent La	STL boratories, Inc.
STL-4124 (0901)	Acquire Manager Manuello (dr. n. 1)	Chain of Custody Number
Address	Telephone Number (Area Code)/Fax Number	Lab Number Page of
City Rowanna DIA Zip Code	Site Contact A Chowle le (orn 1)	nalysis (Attach list if ore space is needed)
Project Name and Location (State) Facility-wide Groundwater	Carrier/Waytbill Number	Special Instructions/
Contract/Purchase Order/Ouole No.	Matrix Containers &	
Sample I.D. No. and Description (Containers for each sample may be combined on one line) Date	Air Aqueous Sed. Soil Unpres. H2SO4 HNO3 HCI NaOH ZnAc/ NaOH	
FWG- IDW-MWPurgeOlo 10-5-06	16:18 × 4	
FWG-10W-MWDeconOlo 10-5-00	16:18 × 4 4	
	· · · · · · · · · · · · · · · · · · ·	
		· · · ·
Possible Hazard Identification	Sample Disposal	IA fee may be assessed if samples are retained
Non-Hazard Flammable Skin Initiant Poison B Turn Around Time Required	Unknown Return To Client Disposal By Lab Archive For	Months longer than 1 month)
24 Hours 48 Hours 7 Days 14 Days 21 Day		Date Time ST 20
1. Refinquished By	10-5-06 16-25 TIRK T	Band los to los ct
2. Rehushed by RICC ROKICON	10-5-04 TIME 2. Received By Ch. ML	10/6/ac 0645
3. Relinquished By	Date Time ; 3. Heceived by	Nort
Comments		TL 1
DISTRIBUTION: WHITE - Returned to Client with Report: CANARY - Stays	with the Sample: PINK - Field Copy	S'

OTT O Lee Dessint Form Nameting I at Numb	or: AladolaA158						
STL Cooler Receipt Form/Narrative	el. / (0000100	-					
North Canton Facility	Quotetti						
Client: Spec P Project:	hv anth	W(Signature)					
Cooler Received on: <u>10/6/05</u> Opened on: <u>10/6/75</u>	tt	(~~~~,					
Fedx Client Drop OII Ors DILL FAS STD Counter	ΨĘ.						
Sterson US Cargo Gran Box Client Coole	Other						
SIL Cooler Non <u>Sob Arturner</u> round box	Intact? Yes No						
If VES Quantity 24							
Were the custody seals signed and dated?	Yes 🕅 No 🔲 NA 🗌] [
2 Shipper's packing slip attached to this form?	Yes 🔲 No 🗌 NA 🖸						
3 Did custody papers accompany the samples? Yes No	Relinquished by client? Y	'es 🖵 No 🗌					
4 Did you sign the custody papers in the appropriate place?	Yes 🛛 No 🗌						
5 Packing material used: Bubble Wrap X Foam None	Other :	- 10					
6. Cooler temperature upon receipt °C (see back of form for multip	le coolers/temp) See Ar	achor _					
METHOD: Temp Vial Coolant & Sample Against Bottles	$ $ IR \square ICE/H ₂) Slurry 📋					
COOLANT: Wet Ice 😽 Blue Ice 🗌 Dry Ice 🗍 Water	None						
7. Did all bottles arrive in good condition (Unbroken)?	Yes 🔟 No 🔟						
8. Could all bottle labels and/or tags be reconciled with the COC?	Yes No	-					
9. Were samples at the correct pH upon receipt?							
10. Were correct bottles used for the tests indicated?	Yes Yes No	TT					
11. Were air bubbles >6 mm in any VOA vials?		N KA					
12. Sufficient quantity received to perform indicated analyses?							
13. Was a Trip Blank present in the cooler? Yes 🛄 No 🔀 Were VOAs	on the COC? Yes N						
Contacted PM Date: by: via Voice Mail [] Verbal [] Other []							
Concerning:							
1. CHAIN OF CUSTODY							
The following discrepancies occurred:	4						
		· · · · · · · · · · · · · · · · · · ·					
2. SAMPLE CONDITION							
Sample(s) were received after th	e recommended holding t	ime had expired.					
Sample(s) were received in a	proken container.						
3. SAMPLE PRESERVATION							
Sample(s) were further	preserved in sample rece	iving to meet					
recommended pH level(s). Nitric Acid Lot # 122805-HNO3; Sulfuric Acid Lot # 071805-H2SO4; Sodium Hydroxide Lot # -100405 -							
recommended pH level(s). Nitric Acid Lot # 122805-HNO3; Sulfuric Acid Lot # 071	CA CUECOCENTAL-OU	ot # -100405 -					
recommended pH level(s). Nitric Acid Lot # 122805-HNO3; Sulfuric Acid Lot # 071 NaOH; Hydrochloric Acid Lot # 100504-HCI; Sodium Hydroxide and Zinc Acetate Lot # 071	604-CH3COO2ZN/NaOH	ot # -100405 -					
recommended pH level(s). Nitric Acid Lot # 122805-HNO3; Sulfuric Acid Lot # 071 NaOH; Hydrochloric Acid Lot # 100504-HCl; Sodium Hydroxide and Zinc Acetate Lot # 071 Sample(s) were received with bubb	604-CH3COO2ZN/NaOH ie > 6 mm in diameter (cc	et # -100405 - : PM)					
Sample(s)	104-CH3COO2ZN/NaOH le > 6 mm in diameter (cc	: PM)					
Sample(s)	104-CH3COO2ZN/NaOH le > 6 mm in diameter (cc	ot # -100405 - : PM)					
Sample(s)	604-CH3COO2ZN/NaOH le > 6 mm in diameter (cc	et # -100405 - : PM)					
Sample(s)	boo-misor, bound hyperbolic iou - CH3COO2ZN/NaOH le > 6 mm in diameter (cc Date	ot # -100405 - : PM) Initials					
Sample(s)	bol- <i>CH3COO2ZN/NaOH</i> le > 6 mm in diameter (cc Date						
Sample(s)	bol- <i>CH3COO2ZN/NaOH</i> le > 6 mm in diameter (cc Date	ot # -100405 - : PM) Initials					
Sample(s)	bol-nr304, bolan nyheisia i04-cH3COO2ZN/NaOH le > 6 mm in diameter (cc Date						

42

	SIL North C	anton munipi		C - Henry and a
Cooler	Temp	Method	Coolant	Comments
SP-NO#-	5.4%	TR	TCB	NONE
	41.9			
Hol	3 702			
STZ NATE	4.40%	21 - 21 - 21 - 21 - 21 - 21 - 21 - 21 -	l E	
TUUDE	199	· ·		
ST I. Watt	41007			
SILING	2 107		<u>`.</u>	2
ST nott:	39			
JUTUH	4109.			
	2 707,			
	7 400)
	LI GON		1	
	2 100			
	3.0 -			
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43

#### STI North Canton Multiple Cooler Form

STL North Canton

APPENDIX F

MAPS OF FWGWMP STUDY AREAS

Please Note:

The following maps have been reproduced from numerous separate reports. Each map was not been alterered in any way from their original format where they are presented here.





Figure 3-6. Phase II RI Monitoring Well and Test Pit Locations at Load Line 2

RVAAP Load Line 3 Phase II RI Final LL3-200 (TP-1) LL3-201 (TP-2) <u>ک</u>رک 6000 Ø 0000 C., 20 0/LL3MW-237 EA-5 00 LI3MW-236 0 LL3-205 (TP-6) LOAD LINE 3 3MW-232 <u>∐3M</u>₩-235 ≝ EB-803 5 **L**EB-10/10A FR-13/134 0 U3MW-239 FB-- 3 H U3MW-238 LL3MW-242 LI3MW-233 Ø 0 F 113MW-234 ELL3MW-240 113MW-241 TEE-E 0 -113MW-24304 UL3-204 (TP-5) LL3-203 (TP-4) LL3-202 (TP-3) 34224



RVAAP Load Line 4 Phase II RI Final







Figure 2-5. Potentiometric Groundwater Surface at Load Line 12, November 9, 2000







RVAAP RQL Phase I RI Report



Figure 2-4. Ramsdell Quarry Potentiometric Surface, May 2004

## APPENDIX G

Compounds That Cannot Comply with RVAAP QAPP Reporting Limits and Inorganic Analytical Methods Used to Meet RVAAP QAPP Reporting Limits
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		Result			Region 9	
CAS No	Analyte Name	Units	MDL	Stnd RL	PRG	
107-06-2	1,2-Dichloroethane	ug/L	0.16	1.0	0.12	
71-43-2	Benzene	ug/L	0.22	1.0	0.35	
67-66-3	Chloroform	ug/L	0.16	1.0	0.17	
10061-	cis-1,3-					
01-5	Dichloropropene	ug/L	0.12	1.0	0.4	
75-01-4	Vinyl chloride	ug/L	0.21	1.0	0.02	
	1,1,2,2-					
79-34-5	Tetrachloroethane	ug/L	0.22	1.0	0.43	
106-93-4	1,2-Dibromoethane	ug/L	0.24	1.0	0.0053	
79-01-6	Trichloroethene	ug/L	0.28	1.0	0.028	
127-18-4	Tetrachloroethene	ug/L	0.19	1.0	0.1	
75-27-4	Bromodichloromethane	ug/L	0.14	1.0	0.13	
79-00-5	1,1,2-Trichloroethane	ug/L	0.22	1.0	0.2	
124-48-1	Dibromochloromethane	ug/L	0.19	1.0	0.13	
10061-	trans-1,3-					
02-6	Dichloropropene	ug/L	0.17	1.0	0.4	
56-23-5	Carbon tetrachloride	ug/L	0.19	1.0	0.17	

Table G-1. VOCs That Cannot Comply with RVAAP QAPP Reporting Limits

Table G-2. SVOCs That Cannot Comply with RVAAP QAPP Reporting Limits

		Result		Stnd	Region 9
CAS No	Analyte Name	Units	MDL	RL	PRG
111-44-4	Bis(2-Chloroethyl) ether	ug/L	0.088	1.0	0.001
50-32-8	Benzo(a)pyrene	ug/L	0.048	0.20	0.0092
53-70-3	Dibenzo(a,h)anthracene	ug/L	0.039	0.20	0.0093
118-74-1	Hexachlorobenzene	ug/L	0.065	0.20	0.042
205-99-2	Benzo(b)fluoranthene	ug/L	0.049	0.20	0.092
193-39-5	Indeno(1,2,3-cd)pyrene	ug/L	0.065	0.20	0.092
56-55-3	Benzo(a)anthracene	ug/L	0.052	0.20	0.092
91-94-1	3,3'-Dichlorobenzidine	ug/L	0.48	5.0	0.15
106-46-7	1,4-Dichlorobenzene	ug/L	0.52	1.0	0.5
87-86-5	Pentachlorophenol	ug/L	0.48	5.0	0.56
87-68-3	Hexachlorobutadiene	ug/L	0.51	1.0	0.86
207-08-9	Benzo(k)fluoranthene	ug/L	0.049	0.20	0.92
88-06-2	2,4,6-Trichlorophenol	ug/L	1.4	5.0	3.6

		Result		Stnd	Region
CAS No	Analyte Name	Units	MDL	RL	9 PRG
60-57-1	Dieldrin	ug/L	0.0067	0.030	0.0023
309-00-2	Aldrin	ug/L	0.0061	0.030	0.003
1024-57-3	Heptachlor epoxide	ug/L	0.0065	0.030	0.0074
319-84-6	alpha-BHC	ug/L	0.0062	0.030	0.011
76-44-8	Heptachlor	ug/L	0.0062	0.030	0.015

Table G-3. Pesticides That Cannot Comply with RVAAP QAPP Reporting Limits

Table G-4. Inorganics Analytical Methods Used to Meet RVAAP QAPP Reporting Limits.

CAS No	Analyte Name	Result Units	Previous RL as per LCG guidelin e	RL for method 6010B- Trace	RL for metho d 6020	Method To Be Used to Meet QAPP RL	RVAAP published QAPP RL	MCL
7429-90-5	Aluminum	ug/L	200		50	6020	100	NS
7440-36-0	Antimony	ug/L	100		2	6020	5	6
7440-38-2	Arsenic	ug/L	10	5		6010B-T	5	10
7440-39-3	Barium	ug/L	10			6010	10	2000
7440-41-7	Beryllium	ug/L	10		1	6020	1	4
7440-43-9	Cadmium	ug/L	10		0.5	6020	1	5
7440-70-2	Calcium	ug/L	1000			* (6010)	100	NS
7440-47-3	Chromium	ug/L	20	5		6010B-T	5	100
7440-48-4	Cobalt	ug/L	20	5		6010B-T	5	NS
7440-50-8	Copper	ug/L	20	5		6010B-T	5	1300
7439-89-6	Iron	ug/L	1000		100	6020	100	300
7439-92-1	Lead	ug/L	10	3		6010B-T	3	15
7439-95-4	Magnesium	ug/L	1000		100	6020	100	NS
7439-96-5	Manganese	ug/L	100	10		6010B-T	10	50
7440-02-0	Nickel	ug/L	20	10		6010B-T	10	100
7440-09-7	Potassium	ug/L	5000		200	6020	200	NS
7782-49-2	Selenium	ug/L	10	5		6010B-T	5	50
7440-22-4	Silver	ug/L	20	5		6010B-T	5	100
7440-23-5	Sodium	ug/L	1000	1000		* (6010)	200	NS
7440-62-2	Vanadium	ug/L	20	10		6010B-T	10	NS
7440-66-6	Zinc	ug/L	100		10	6020	10	5000
7440-28-0	Thallium	ug/L	1.0		1.0	6020	2	2
7439-97-6	Mercury	ug/L	0.20			7470	0.2	2

Note:

NS = Not Specified

* = The methods that 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.



Bedrock Monitoring Well 0 Unconsolidated Monitoring Well ۲ Unconsolidated / Bedrock Monitoring Well h → General Groundwater Flow Direction

		Well No.	April 2006 Elevations	Well No.	April 2006 Elevations	Well No.	April 2006 Elevations	Well No.	April 2006 Elevations	Well No.	April 2006 Elevations	Well No.	April 2006 Elevations
		BKGmw-004	954.080	LL3mw-234	997.470	LL8mw-004	1107.540	LL12mw-242	973.740	DA2mw-104	1053.950	NTAmw-113	1069.740
		BKGmw-005	1141.863	LL3mw-235	993.880	LL8mw-005	1104.600	LL12mw-243	972.390	DA2mw-105	1042.100	NTAmw-114	1073.510
		BKGmw-006	1006.330	LL3mw-236	995.580	LL8mw-006	1099.420	LL12mw-244	972.040	DA2mw-106	1040.140	NTAmw-115	1076.610
		BKGmw-008	957.367	LL3mw-237	992.070	LL9mw-001	1120.250	LL12mw-245	972.850	DA2mw-107	1034.680	NTAmw-116	1089.690
		BKGmw-010	991.560	LL3mw-238	992.280	LL9mw-002	1117.220	LL12mw-246	969.930	DA2mw-108	1027.330	NTAmw-117	1081.980
		BKGmw-012	992.664	LL3mw-239	979.720	LL9mw-003	1124.500	ASYmw-001	970.280	DA2mw-109	1060.810	NTAmw-118	1073.660
		BKGmw-013	977.350	LL3mw-240	980.330	LL9mw-004	1112.470	ASYmw-002	970.780	DA2mw-110	1058.080	RQLmw-006	960.490
		BKGmw-015	992.017	LL3mw-241	985.370	LL9mw-005	1115.440	ASYmw-003	970.330	DA2mw-111	1037.150	RQLmw-007	959.130
		BKGmw-016	1095.709	LL3mw-242	986.030	LL9mw-006	1112.150	ASYmw-004	971.890	DA2mw-112	1030.420	RQLmw-008	959.690
		BKGmw-017	1119.080	LL3mw-243	979.970	LL9mw-007	1111.990	ASYmw-005	972.810	DA2mw-113	1030.030	RQLmw-009	959.200
		BKGmw-018	1029.820	LL4mw-193	975.890	LL10mw-001	1109.800	ASYmw-006	969.820	EBGmw-123	938.130	RQLmw-010	957.000
		BKGmw-019	1092.670	LL4mw-194	976.900	LL10mw-002	1110.790	ASYmw-007	969.740	EBGmw-124	937.990	RQLmw-011	955.350
		BKGmw-020	1060.281	LL4mw-195	973.850	LL10mw-003	1110.320	ASYmw-008	974.280	EBGmw-125	937.990	RQLmw-012	956.350
		BKGmw-021	956.809	LL4mw-196	971.410	LL10mw-004	1110.760	ASYmw-009	971.100	EBGmw-126	938.280	RQLmw-013	955.850
		LL1mw-063	968.430	LL4mw-197	971.230	LL10mw-005	1111.600	ASYmw-010	969.670	EBGmw-127	938.570	RQLmw-014	954.540
		LL1mw-064	934.400	LL4mw-198	977.160	LL10mw-006	1113.410	B12mw-010	990.490	EBGmw-128	938.480	RQLmw-015	959.760
		LL1mw-065	934.050	LL4mw-199	970.790	L11mw-1	1092.220	B12mw-011	987.150	EBGmw-129	939.420	RQLmw-016	960.970
		LL1mw-067	961.970	LL4mw-200	970.670	L11mw-2	1079.010	B12mw-012	985.940	EBGmw-130	938.300	RQLmw-017	960.880
		LL1mw-078	963.990	LL5mw-001	1110.020	L11mw-3	1087.600	CBLmw-001	1136.740	FBQmw-166	1104.350	WBGmw-005	1050.028
		LL1mw-079	965.750	LL5mw-002	1109.980	L11mw-4	1084.810	CBLmw-002	1136.230	FBQmw-167	1112.170	WBGmw-006	1009.406
		LL1mw-080	986.970	LL5mw-003	1110./10	L11mw-5	10/3.520	CBLmw-003	1137.970	FBQmw-168	1122.790	WBGmw-007	983.761
		LL1mw-081	968.080	LL5mw-004	1110.140	L11mw-6	1081.950	CBLmw-004	1138.150	FBQmw-169	1116.290	WBGmw-008	994.459
		LL1mw-082	978.520	LL5mw-005	1110.020	L11mw-7	1068.640	CBPmw-1	963.841	FBQmw-170	1122.960	WBGmw-009	1036.029
		LL1mw-083	962.270	LL5MW-006	1109.620	L11mw-8	1086.230	CBPmw-2	962.576	FBQMW-171	1124.430	WBGmw-010	1061.880
		LL1mw-084	969.920	LL6MW-001	1112.520	L11mw-9	1088.280	CBPmw-3	963.757	FBQMW-172	1124.190	WBGMW-011	1061.630
		LL1mw-085	961.840	LL6mw-002	1110.350		074.760	CBPmw-4	961.479	FBQMW-173	1122.310	WBGMW-012	1060.690
			955.160		110.960	L12IIIW-000	974.760	CPPmw 6	900.070	EPOmy 175	1122.590		081.260
			1005 180		1109.890	L 12mw 112	972.130	CBPmw 7	901.275	EBOmw 176	1122.550	WBGmw 015	1001.200
			1005.180		1112 850	L 12mw 129	975.190	CBPmw 8		EBOmw 177	1117 550	WBGmw 016	080.310
		LL2IIIW-202	1005.080		1112.880	L 12mw-153	972 600		938.010		1027 680	WBGmw-017	900.010
		LL2mw-264	1007.240	LL 7mw-001	1110.880	L 12mw-154	971 470	CPmw-2	972 720	LNWmw-025	1027.000	MBS-001	1065.670
			953 530	LL 7mw-002	1113 410	L 12mw-182	975 930	CPmw-3	973 250	LNWmw-026	1024.320	MBS-002	1066.320
		<u></u>	1006 780	LI 7mw-003	1111.060	L 12mw-183	972 160	CPmw-4	972.018	LNWmw-027	1021.210	MBS-003	1066.970
$1/_{-}(0)$	23,600	LL2mw-267	1007.080	LL7mw-004	1113.120	L12mw-184	971.940	CPmw-5	953.747	NTAmw-107	1068.610	MBS-004	1066.170
,	20,000	L2mw-268	1004.210	LL7mw-005	1115.990	L12mw-185	974.830	CPmw-6	956.500	NTAmw-108	1068.890	MBS-005	1065.720
	E E E E E E E E E E E E E E E E E E E	LL2mw-269	994.190	LL7mw-006	1114.640	L12mw-186	973.190	DET-1B	1044.470	NTAmw-109	1069.060	MBS-006	1065.620
		LL2mw-270	1003.140	LL8mw-001	1112.630	L12mw-187	971.910	DET-2	1029.010	NTAmw-110	1069.420		
		LL3mw-232	983.670	LL8mw-002	1108.990	L12mw-188	976.640	DET-3	1027.630	NTAmw-111	1077.760		
		LL3mw-233	979.520	LL8mw-003	1109.230	L12mw-189	975.040	DET-4	1028.330	NTAmw-112	1070.410		
	egend									Sp	Environ	mental	

## Property Boundary Building Fence Line _____ Asphalt Road Stream Gravel Road

Railroad Tracks Groundwater Contour, Depression Groundwater Contour, Primary Groundwater Contour, Supplementary ------ Inferred Groundwater Divide

RVAA Surface Monitoring W Potentio of the A SCALE: 1 inch equals CADD/GIS FORMAT: Ravenna, Ohio

SpecPro Services						
Potentiometric						
Vell Locations, April 2006						
ometric Surface Map Aquifer Flow Systems						
ls 1,458 feet						
: ArcGis 9.2 Plate 1.						
DATE: 04/2006						