

**APPENDIX F**  
**DATA QUALITY ASSESSMENT**



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**RVAAP Phase 1 Remedial Investigation  
Quality Control Summary Report**

**November 1996**



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**F.1 Purpose of this Report**

Environmental data must always be interpreted relative to its known limitations and its intended use. As can be expected in environmental media of this type, there are areas and data points where the user needs to be cautioned relative to the quality of the project information presented. The data validation process and this data quality assessment are intended to provide current and future data users assistance throughout the interpretation of this data.

The purpose of this Quality Control Summary Report (QCSR) is: to describe Quality Control (QC) procedures followed to ensure data generated by SAIC during these investigations at RVAAP would meet project requirements; to describe the quality of the data collected; and to describe problems encountered during the course of the study and their solutions. A QA report will be completed by the US Army Corp of Engineers (ACE), Ohio River Division (ORD) Laboratory covering data generated from SAIC collected quality assurance (QA) split samples remanded to their custody.

This report provides an assessment of the analytical information gathered during the course of the RVAAP Phase 1 Remedial Investigation (RI) and documents that the quality of the data employed for the RI report met the objectives. Evaluation of field and laboratory QC measures will constitute the majority of this assessment, however, references will also be directed toward those QA procedures which establish data credibility. The primary intent of this assessment is to illustrate that data generated for the RVAAP Phase 1 RI can withstand scientific scrutiny, are appropriate for their intended purpose, are technically defensible, and are of known and acceptable sensitivity, precision, and accuracy.

Multiple activities must be performed to achieve the desired data quality in this project. As discussed in the text, decisions were made during the initial scoping of the RI to define the quality and quantity of data required. Data Quality Objectives (DQOs) were established to guide the implementation of the field sampling and laboratory analysis (refer to the RVAAP SAP July 1996). A QA program was established to standardize procedures and to document activities (refer to the RVAAP QAPjP July 1996 and Appendix E of this report). This program provided a means to detect and correct any deficiencies in the process. Upon receipt by the project team, data was subjected to a verification and validation review which identified and qualified problems related to the analysis. These review steps contribute to this final Data Quality Assessment (DQA) which defines that data used in the investigation met the criteria and are employed appropriately.

## **F.2 QA Program Input**

A Facility-Wide Quality Assurance Project Plan (QAPjP) and a Phase 1 RI QAPjP Addendum for High Priority Areas of Concern were developed to guide the investigation. These plans are found in Part II of the Facility-Wide Sampling and Analysis Plan (SAP) (SAIC, April 1996) and the Phase 1 RI SAP Addendum for High Priority Areas of Concern (SAP, July 1996), for the RVAAP, Ravenna, Ohio. The purpose of these documents was to enumerate the quantity and type of samples to be taken to inspect the various AOCs, and to define the quantity and type of QA/QC samples to be used to evaluate the quality of the data obtained.

The QAPjP established requirements for both field and laboratory QC procedures. In general: field QC duplicates and QA split samples were required for each environmental sample matrix collected at each of the AOCs being investigated; volatile organic compounds (VOC) trip blanks were to accompany each cooler containing water samples for VOC determinations; and analytical laboratory QC duplicates, matrix spikes, laboratory control samples, and method blanks were required for every 20 samples or less of each matrix and analyte.

A primary goal of the RVAAP QA program is to ensure that the quality of results for all environmental measurements are appropriate for their intended use. To this end, the QAPjP and standardized field procedures were compiled to guide the investigation. Through the process of readiness review, training, equipment calibration, QC implementation, and detailed documentation, the project has successfully accomplished the goals set for the QA Program. Surveillances were conducted to determine the adequacy of field performance as evaluated against the QA plan and procedures. Appendix E, Project Quality Assurance Summary, presents the actions and methodologies pursued through the QA plan to meet the project goals and the results of those efforts.

### **F.2.1 Monthly Progress Reports**

Monthly Progress Reports (MPRs) were completed by the SAIC Project Manager for each month of the project's duration. The MPRs contained the following information: work completed, problems encountered, corrective actions/solutions, summary of findings and upcoming work. These reports were issued to the USACE Nashville District Project Manager with copies forwarded to the Ohio EPA. Access to these reports can be obtained through the Corp Project Manager.

### **F.2.1 Daily Quality Control Reports (DQCRs)**

The Field Team Leader produced all Daily Quality Control Reports. These include information such as, but not limited to; sub-tier contractors on-site, equipment on-site, work performed summaries, QC activities, Health and Safety activities, problems encountered, and corrective actions. The DQCRs were submitted to the USACE Nashville District Project Manager and may be obtained through his office.

## **F.2.2 Laboratory "Definitive" Level Data Reporting**

The QAPjP for this project identified requirements for laboratory data reporting and identified Southwest Laboratory of Oklahoma as the lab for the project. EPA "definitive" data has been reported including the following basic information:

- a. laboratory case narratives
- b. sample results
- c. laboratory method blank results
- d. laboratory control standard results
- e. laboratory sample matrix spike recoveries
- f. laboratory duplicate results
- g. surrogate recoveries (VOCs, SVOCs, Pesticide/PCBs)
- h. sample extraction dates
- i. sample analysis dates

This information from the laboratory along with field information provides the basis for subsequent data evaluation relative to sensitivity, precision, accuracy, representativeness and completeness. These have been presented in Section F.4.

## **F.3 Data Validation**

The objective when evaluating the quality of the project data is to determine its usability. The evaluation is based on the interpretation of laboratory QC measures, field QC measures, and the project DQOs. This project implemented data validation checklists to facilitate laboratory data validation. These checklists were completed by the project designated validation staff and were reviewed by the project laboratory coordinator.

### **F.3.1 Field Data Validation**

DQCRs were completed by the Field Team Leader. The DQCRs and other field generated documents such as sampling logs, boring logs, daily health and safety summaries, daily safety inspections, equipment calibration and maintenance logs, and sample management logs were peer reviewed on-site. These logs and all associated field information has been delivered to the Nashville Corp project manager and can be obtained through his office.

### **F.3.2 Laboratory Data Validation**

Analytical data generated for this project have been subjected to a process of data verification, validation, and review. The following describes this systematic process and the evaluation activities performed. Several criteria have been established against which the data are compared and from which a judgment is rendered regarding the acceptance and qualification of the data. Because it is beyond the scope of this report to cite those criteria, the reader is directed to the following documents for specific detail:

- SAIC Technical Support Contractor QA Technical Procedure (TP-DM-300-7) Data Verification and Validation;
- USEPA Contract Laboratory Program - National Functional Guidelines for Inorganic Data Review, EPA 540/R-94/013, February 1994;
- USEPA Contract Laboratory Program - National Functional Guidelines for Organic Data Review, EPA-540/R-94/012, February 1994; and
- Phase 1 Remedial Investigation Sampling and Analysis Plan Addendum for High Priority Areas of Concern for the Ravenna Army Ammunition Plant, Ravenna, Ohio, SAIC, July 1996.

Upon receipt of field and analytical data, verification staff performed a systematic examination of the reports, following standardized data package checklists to ensure the content, presentation, and administrative validity of the data. Discrepancies identified during this process were recorded and documented utilizing the checklists. QA program Nonconformance Report (NCR) and Corrective Action systems were implemented as required.

In conjunction with the data verification, and if standardized laboratory electronic data diskettes were available, the diskette deliverables were subjected to comprehensive review utilizing SAIC EDD review software. This software performed both a structural and technical assessment of the laboratory-delivered reports. The structural evaluation ensured that all required data had been reported and that they had been accurately transcribed from raw data. This technical evaluation ensured that all contract-specified requirements had been met.

During the validation phase of the review and evaluation process, data were subjected to a systematic technical review by examining all field and analytical QC results and laboratory documentation, following appropriate functional guidelines for laboratory data validation. These EPA data validation guidelines define the technical review criteria, methods for evaluation of the criteria, and actions to be taken resulting from the review of these criteria. The primary objective of this phase was to assess and summarize the quality and reliability of the data for the intended use and to document factors that may affect the usability of the data. Data verification/validation included but was not necessarily limited to the following parameters:

Inorganic	Organic
Data completeness	Data completeness
Holding times	Holding times
Calibration	Calibration
- Initial	- Initial
- Continuing	- Continuing



Inorganic	Organic
Blanks	Blanks
Sample results verification	Surrogate recovery
Matrix spike (MS) recovery	
Field duplicate sample analysis	
Laboratory control sample (LCS) analysis	Internal standards performance
Furnace atomic absorption QC (when implemented)	
Detection limits	Compound quantitation and reported detection limits
Secondary dilutions	Secondary dilutions

As an end result of this phase of the review, the data were qualified based on the technical assessment of the validation criteria. Qualifiers were applied to each field and analytical result to indicate the usability of the data for its intended purpose.

### F.3.3 Definition of Data Qualifiers (Flags)

During the data validation process, all laboratory data were assigned appropriate data validation flags and reason codes. Validation flags are defined as follows:

- "U" When the material was analyzed for, but not detected above the level of the associated value.
- "J" When the associated value is an estimated quantity. Indicating there is cause to question accuracy or precision of the reported value.
- "UJ" When the analyte was analyzed for, but not detected, above the associated value, however, the reported value is an estimate and demonstrates an decreased knowledge of its accuracy or precision.
- "R" When the analyte value reported is unusable. The integrity of the analyte's identification, accuracy, precision, or sensitivity have raised significant question as to the reality of the information presented.

SAIC validation reason codes have been provided as Attachment F-1, while copies of validation checklists and qualified data forms will be documented in the project file.

#### **F.3.4 Data Acceptability**

Over 500 environmental soil, sediment, groundwater, and field QC samples were collected with approximately 29,000 discrete analyses (i.e., analytes) being obtained, reviewed, and integrated into the assessment (these totals do not include field measurements and field descriptions). The project produced acceptable results for over 99% of the sample analyses performed and successfully collected 99% of the investigation samples under the direction of the SAP and the USACE, Nashville District. The 1% of data that were rejected are relegated to a few explosive, VOC, and SVOC analytes, primarily associated with one groundwater sample, while a few groundwater samples were unable to be collected due to insufficient water at the locations.

Table 1 presents a summary of the planned and collected investigation samples. It also tallies the successful collection of all targeted field QC and QA split samples. Copies of the project Chain-of-Custody forms are provided in Attachment F-2 of this Appendix. The project properly performs analysis for all analytical requests, with the exception of an inadvertent omission of some metal parameters for water sample LL1MW-067, where the COC was marked for 11 metals instead of the planned 23 metals. Table 2 provides a summary of rejected analyses grouped by media and analyte category.

For RVAAP Phase 1 RI a total of 48 field duplicates were analyzed for soil and sediment, and two for groundwater. Six equipment rinsates were collected and analyzed, while the site potable water source was sampled and analyzed prior to initiating field work. Trip blanks for volatile organic compounds (VOC) determinations were analyzed relative to each shipment of VOC water samples, totaling six analyses for this report.

Rejected soil data comprised reported values for tetryl (29 data points), acetone (15 data points), and pesticide compounds for a single sample (12 data points). Tetryl values were compromised due to poor laboratory control standard performance. Acetone levels were rejected relative to low continuing calibration response factors, while a low pesticide surrogate recovery caused the data for one sample to be suspect. The four rejected acetone values found in sediments were related to the same continuing calibration issues as determined for soils and two tetryl values were rejected due to low LCS recovery. Groundwater data rejections were attributed to the following: 1 cyanide analysis due to missed analytical holding time; 27 pesticide analysis due to poor duplicate relative percent difference; 73 semivolatile organic compound analysis due to low surrogate recovery in two samples; and 27 volatile organic compound (acetone and 2-butanone) analysis due to initial and continuing calibration issues. All rejected results reflected a tendency to exhibit extreme negative bias and were therefore unable to document the potential for contaminant concentrations.

**Table F-1. RVAAP Phase 1 RI - QCSR  
Samples Planned and Samples Collected**

Location	Environmental		QC Duplicates		QA Splits		Rinsates	Trip Blanks
	planned	collected	planned	collected	planned	collected		
<b>Load Line 1</b>								
Soil	50	50	4	4	2	2	0	0
Sediment	23	23	1	1	2	2	0	0
Groundwater	6	6	1	1	1	1	1	4
<b>Load Line 2</b>								
Soil	48	48	5	5	2	2	0	0
Sediment	11	11	1	1	2	2	0	0
Groundwater	2	2	0	0	0	0	4	2
<b>Load Line 3</b>								
Soil	42	42	3	3	2	2	0	0
Sediment	9	9	1	1	0	0	0	0
Groundwater	0	0	0	0	0	0	0	0
<b>Load Line 4</b>								
Soil	50	50	3	3	1	1	0	0
Sediment	15	15	2	2	2	2	0	0
Groundwater	3	3	0	0	0	0	1	0
<b>Load Line 12</b>								
Soil	33	33	5	5	2	2	0	0
Sediment	19	19	1	1	1	1	0	0
Groundwater	2	2	0	0	0	0	0	0
<b>Winklepeck Burning Ground</b>								
Soil	79	79	7	7	5	5	0	0
Sediment	13	13	2	2	0	0	0	0
Groundwater	0	0	0	0	0	0	0	0

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**Table F-1 (cont.). RVAAP Phase 1 RI - QCSR  
Samples Planned and Samples Collected**

Location	Environmental		QC Duplicates		QA Splits		Rinsates <sup>a</sup>	Trip <sup>b</sup> Blanks
	planned/collected		planned/collected		planned/collected			
<b>Landfill North of Winklepeck Burning Ground</b>								
Soil	9	9	2	2	1	1	0	0
Sediment	7	7	1	1	1	1	0	0
Groundwater	4	2	0	0	0	0	0	1
<b>Building 1200</b>								
Soil	2	2	1	1	1	1	0	0
Sediment	7	7	1	1	1	1	0	0
Groundwater	0	0	0	0	0	0	0	0
<b>Demolition Area No. 2</b>								
Soil	59	59	6	6	3	3	0	0
Sediment	3	3	1	1	1	1	0	0
Groundwater	0	0	0	0	0	0	0	0
<b>Upper and Lower Cobbs Pond</b>								
Soil	0	0	0	0	0	0	0	0
Sediment	10	10	1	1	1	1	0	0
Groundwater	3	3	1	1	0	0	0	2
<b>TOTALS</b>								
Soil/Sediments	489	489	48	48	30	30	0	0
Groundwater	20	18	2	2	2	2	6	9

<sup>a</sup> Rinsate samples were collected from groundwater sampling equipment only.

<sup>b</sup> Trip blank samples accompanied water VOC samples only and were shipped to both the Southwest Laboratory and the USACE ORD Laboratory.

**Table F-2. RVAAP Phase 1 RI - Data Quality Assessment  
Summary of Rejected Analyses  
(grouped by media and analyte category)**

<b>Media</b>	<b>Analyte</b>	<b>Rejected/Total</b>	<b>Percent Rejected</b>
<b>Soil</b>	<b>Metals/Cyanide</b>	<b>0 / 5504</b>	<b>0.0</b>
	<b>Explosives</b>	<b>29 / 4740</b>	<b>0.6</b>
	<b>Pesticides/PCBs</b>	<b>12 / 2212</b>	<b>0.5</b>
	<b>Semivolatile Organics</b>	<b>0 / 4898</b>	<b>0.0</b>
	<b>Volatile Organics</b>	<b>15 / 2880</b>	<b>0.5</b>
	<b>Subtotal</b>	<b>56 / 20,234</b>	<b>0.28</b>
<b>Sediment</b>	<b>Metals/Cyanide</b>	<b>0 / 1671</b>	<b>0.0</b>
	<b>Explosives</b>	<b>2 / 1548</b>	<b>0.1</b>
	<b>Pesticides/PCBs</b>	<b>0 / 558</b>	<b>0.0</b>
	<b>Semivolatile Organics</b>	<b>0 / 1281</b>	<b>0.0</b>
	<b>Volatile Organics</b>	<b>4 / 735</b>	<b>0.5</b>
	<b>Total Organic Carbon</b>	<b>0 / 115</b>	<b>0.0</b>
	<b>Subtotal</b>	<b>6 / 5,929</b>	<b>0.10</b>
<b>Groundwater</b>	<b>Metals/Cyanide</b>	<b>1 / 443</b>	<b>0.2</b>
	<b>Explosives</b>	<b>0 / 228</b>	<b>0.0</b>
	<b>Pesticides/PCBs</b>	<b>27 / 475</b>	<b>5.7</b>
	<b>Semivolatile Organics</b>	<b>73 / 976</b>	<b>7.5</b>
	<b>Volatile Organics</b>	<b>27 / 770</b>	<b>3.5</b>
	<b>Subtotal</b>	<b>128 / 2,892</b>	<b>4.43</b>
<b>TOTAL</b>		<b>190 / 29,055</b>	<b>0.65</b>

## **F.4 Data Evaluation**

### **F.4.1 Accuracy**

Accuracy provides a gauge or measure of the agreement between an observed result and the true value for an analysis. Analytical accuracy is evaluated by measuring the agreement between an analytical result and its known or true value. This is generally determined through use of Laboratory Control Samples (LCSs), Matrix Spike (MS) analysis, and Performance Evaluation (PE) Samples. Accuracy as measured through the use of LCSs determine the method implementation accuracy independent of sample matrix. They document laboratory analytical process control. Accuracy determined by the MS is a function of both matrix and analytical process. Table F-3 lists the average metal and cyanide LCS recovery values, while Table F-4 presents average VOC, SVOC, Explosive compounds, and Pesticide/PCB compounds LCS recovery values. Average method blank matrix spike recoveries for organic parameters are compiled in Table F-5. Table F-6 consolidates the average sample MS recovery values for metal, cyanide, VOC, SVOC, Explosive and Pesticide/PCB parameters.

#### **Metals**

Average LCS percent recovery values for metal analysis of soils ranged from 85.6 for thallium to 95.6 for mercury. Limits for soil LCS recovery are analyte-specific based on the solid reference material employed. All LCS recoveries were within the reference materials assigned variation and within project accuracy goals of 75-125%. None of the soil data required qualification based on the LCS. Average LCS percent recovery values for metal analysis of water were all within 85-110 percent and ranged from 87.1 for potassium to 103.5 for mercury.

Sample MS information for metals produced some estimated values (in particular antimony, arsenic, cadmium, chromium, lead, manganese, selenium and zinc soil values; arsenic chromium, lead, manganese, and selenium sediment values), however, the overall accuracy for these measurements is considered acceptable. Average percent recoveries ranged from 50.9% for antimony to 108.7% for mercury. Results for the water MS data were satisfactory and provide confidence in the accuracy of the measurements. Post-digestion spike analyses and Inductively Coupled Plasma (ICP) Emission Spectroscopy serial dilution analyses provide additional measures of analytical accuracy for metal parameters.

In summary, LCS information demonstrates the analytical laboratory process was in-control and accurate. MS, post-digestion spike analyses, and serial dilutions also provide confidence in the accuracy of elemental metal results.

#### **Volatile Organic Compounds**

VOC LCS recovery, method blank surrogate recovery, and MS recovery information provide measures of accuracy. Recoveries determined for the laboratory volatile organic method blank spike analyses (LCS) indicate the analytical process was in control. Summaries in Table F-4 show

**Table F-3. RVAAP Phase 1 RI - Data Quality Assessment  
Laboratory Control Sample Evaluation - Average Percent Recovery (%Rec)**

Analysis	Soil				Water			
	Average %Rec	Min. %Rec	Max. %Rec	N	Average %Rec	Min. %Rec	Max. %Rec	N
<u>Metals</u>								
ALUMINUM	92.5	85	116	60	97.1	92	100	6
ANTIMONY	89.0	81	113	60	96.2	93	98	6
ARSENIC	94.7	83	118	60	100.6	97	104	6
BARIUM	89.0	82	111	60	92.8	90	95	6
BERYLLIUM	91.5	84	114	60	99.5	95	103	6
CADMIUM	86.9	80	110	60	93.9	91	97	6
CALCIUM	91.2	82	115	60	94.7	92	98	6
CHROMIUM	89.8	83	113	60	93.7	89	97	6
COBALT	88.2	82	111	60	93.7	90	95	6
COPPER	91.1	83	113	60	94.7	90	98	6
IRON	93.9	88	118	60	94.7	91	98	6
LEAD	93.5	84	118	60	93.8	92	95	6
MAGNESIUM	90.0	80	114	60	97.9	94	101	6
MANGANESE	89.2	80	113	60	94.7	91	97	6
MERCURY	95.6	81	109	58	103.5	101	110	6
NICKEL	88.5	81	111	60	93.5	91	95	6
POTASSIUM	88.9	83	110	60	87.1	85	90	6
SELENIUM	87.7	80	110	60	100.4	97	101	6
SILVER	89.2	80	112	60	96.0	91	101	6
SODIUM	91.6	83	111	60	91.7	90	94	6
THALLIUM	85.6	80	110	57	97.8	88	105	6
VANADIUM	87.7	83	112	60	93.3	90	95	6
ZINC	89.9	81	113	60	95.1	94	97	6
<u>Cyanide</u>	90.2	80	108	44	97.1	84	105	6

Table F-4. RVAAP Phase 1 RI - Data Quality Assessment  
 Laboratory Control Sample (LCS) Evaluation - Average Percent Recovery (%Rec)

Analysis	Soil				Water			
	Average %Rec	Min. %Rec	Max. %Rec	N	Average %Rec	Min. %Rec	Max. %Rec	N
<u>Volatile Organic Compounds</u>								
CHLOROMETHANE	96.5	78	109	28	94.3	71	122	12
VINYL CHLORIDE	94.9	80	107	28	96.1	75	120	12
BROMOMETHANE	108.4	89	128	28	101.8	76	120	12
CHLOROETHANE	101.8	83	137	28	96.8	73	122	12
1,1-DICHLOROETHENE	99.0	87	115	28	93.0	75	105	12
ACETONE	115.0	52	204	28	94.3	60	110	12
CARBON DISULFIDE	97.1	84	106	28	93.5	82	101	12
METHYLENE CHLORIDE	96.0	66	125	28	90.9	75	100	12
trans-1,2-DICHLOROETHENE	98.4	88	109	28	93.3	74	106	12
1,1-DICHLOROETHANE	99.6	83	109	28	95.3	83	108	12
cis-1,2-DICHLOROETHENE	98.7	83	110	28	94.3	76	105	12
2-BUTANONE	112.0	50	187	28	101.7	96	120	12
CHLOROFORM	100.7	86	111	28	95.7	80	106	12
1,1,1-TRICHLOROETHANE	101.3	92	111	28	96.4	83	108	12
CARBON TETRACHLORIDE	102.6	96	114	28	98.1	85	110	12
BENZENE	99.8	88	111	28	96.8	86	105	12
1,2-DICHLOROETHANE	103.9	87	118	28	98.0	85	111	12
TRICHLOROETHENE	101.7	93	115	28	95.6	77	106	12
1,2-DICHLOROPROPANE	100.6	83	110	28	98.3	91	106	12
BROMODICHLOROMETHANE	101.9	90	113	28	98.3	87	106	12
cis-1,3-DICHLOROPROPENE	100.1	86	106	28	98.1	91	107	12
4-METHYL-2-PENTANONE	118.3	54	179	28	109.9	94	126	12
TOLUENE	99.5	90	107	28	96.7	85	103	12
trans-1,3-DICHLOROPROPENE	102.5	83	117	28	100.1	91	113	12
1,1,2-TRICHLOROETHANE	104.9	76	126	28	101.6	91	109	12
TETRACHLOROETHENE	98.1	57	105	28	94.0	81	104	12
2-HEXANONE	120.6	53	191	28	111.4	91	140	12
DIBROMOCHLOROMETHANE	101.8	85	118	28	98.8	89	108	12
CHLOROBENZENE	97.8	90	103	28	95.2	85	104	12
ETHYL BENZENE	99.5	93	106	28	96.3	86	105	12
m,p-XYLENES	98.7	90	105	28	94.8	85	102	12
o-XYLENE	98.6	89	104	28	95.4	84	103	12
STYRENE	99.0	89	105	28	96.1	86	104	12
BROMOFORM	105.6	78	132	28	100.3	91	113	12
1,1,2,2-TETRACHLOROETHANE	103.5	43	140	28	105.5	98	122	12



Table F-4 (cont.). RVAAP Phase 1 RI - Data Quality Assessment  
Laboratory Control Sample (LCS) Evaluation - Average Percent Recovery (%Rec)

Analysis	Soil				Water			
	Average %Rec	Min. %Rec	Max. %Rec	N	Average %Rec	Min. %Rec	Max. %Rec	N
<u>Explosive Organic Compounds</u>								
HMX	83.3	56	107	65	67.3	38	97	9
RDX	98.2	70	112	65	60.4	35	90	9
TRINITROBENZENE	83.2	57	109	65	73.4	41	100	9
TETRYL	54.2	8	95	65	100.8	52	148	9
DINITROBENZENE	91.9	68	107	65	69.2	38	97	9
TRINITROTOLUENE	108.0	72	128	65	68.3	38	98	9
NITROBENZENE	105.2	76	121	65	64.9	37	95	9
2,6-DNT	95.2	68	114	65	66.9	36	94	9
2,4-DNT	102.8	75	117	65	68.2	36	92	9
2-NIROBENZENE	92.6	67	103	65	67.9	37	95	9
4-NIROBENZENE	95.1	67	106	65	65.6	35	92	9
3-NIROBENZENE	95.1	72	110	65	66.1	35	92	9
<u>Semivolatile Organic Compounds</u>								
PHENOL	60.6	33	78	44	59.6	38	75	18
2-CHLOROPHENOL	62.2	36	80	44	60.8	29	80	18
1,4-DICHLOROBENZENE	64.3	39	79	44	51.7	31	71	18
N-NITROSO-di-N-PROP.(1)	66.1	40	85	44	51.3	34	64	18
1,2,4-TRICHLOROBENZENE	63.2	35	79	44	50.7	34	64	18
4-CHLORO-3-METHYLPHENOL	64.4	36	78	44	61.1	49	75	18
ACENAPHTHENE	64.1	38	82	44	62.8	54	73	18
4-NITROPHENOL	64.0	34	94	44	71.6	13	115	18
PENTACHLOROPHENOL	65.2	30	98	44	66.9	10	90	18
PYRENE	64.4	36	82	44	64.9	54	76	18

**Table F-4 (cont.). RVAAP Phase 1 RI - Data Quality Assessment  
Laboratory Control Sample (LCS) Evaluation - Average Percent Recovery (%Rec)**

Analysis	Soil				Water			
	Average %Rec	Min. %Rec	Max. %Rec	N	Average %Rec	Min. %Rec	Max. %Rec	N
<b><u>Pesticides/PCBs</u></b>								
ALPHA-BHC	66.2	43	102	30	76.7	43	102	20
BETA-BHC	68.5	48	100	30	75.0	0	122	20
GAMMA-BHC(LINDANE)	65.5	43	100	30	71.6	36	117	20
DELTA-BHC	70.8	49	102	30	82.9	41	168	20
HEPTACHLOR	65.8	44	95	30	77.4	41	107	20
ALDRIN	67.9	46	100	30	74.6	44	107	20
HEPTACHLOR EPOXIDE	69.6	49	99	30	77.3	47	110	20
ENDOSULFAN I	66.6	43	114	30	78.7	42	120	20
4,4'-DDE	70.4	47	95	30	82.1	43	118	20
DIELDRIN	66.5	47	91	30	80.3	49	110	20
ENDRIN	79.3	56	109	30	89.4	57	131	20
ENDOSULFAN II	75.3	52	106	30	99.2	55	233	20
4,4'-DDD	69.1	46	89	30	86.6	46	121	20
ENDOSULFAN SULFATE	72.6	52	100	30	89.0	54	120	20
4,4'-DDT	75.7	50	110	30	90.4	52	134	20
ENDRIN ALDEHYDE	68.0	52	94	30	91.9	59	140	20
METHOXYCHLOR	79.7	50	134	30	99.5	55	134	20
ALPHA-CHLORDANE	73.2	46	190	30	74.3	43	101	20
GAMMA-CHLORDANE	70.5	49	96	30	70.6	42	96	20
ENDRIN KETONE	76.1	53	114	30	95.5	58	130	20

**Table F-5. RVAAP Phase 1 RI - Data Quality Assessment  
Laboratory Control Sample Evaluation - Method Blank Surrogate Percent Recovery (%Rec)**

Analysis	Soil				Water			
	Average %Rec	Min. %Rec	Max. %Rec	N	Average %Rec	Min. %Rec	Max. %Rec	N
<b><u>Volatile Organic Compounds</u></b>								
TOLUENE-d8	100.0	97	104	41	98.0	93	101	6
4-BROMOFLUOROBENZENE	99.9	93	111	41	98.5	92	103	6
DIBROMOFLUOROMETHANE	100.2	96	106	41	100.0	94	112	6
<b><u>Semivolatile Organic Compounds</u></b>								
2,4,6-TRIBROMOPHENOL	61.6	28	87	22	72.7	15	95	9
2-FLUOROBIPHENYL	77.0	45	104	22	63.9	55	76	9
2-FLUOROPHENOL	83.0	48	121	22	69.3	26	86	9
NITROBENZENE-d5	74.6	46	107	22	68.7	55	89	9
PHENOL-d5	77.5	45	91	22	72.1	48	86	9
TERPHENYL-d14	86.2	46	130	22	90.3	76	119	9
<b><u>Pesticides/PCBs</u></b>								
DECACHLOROBIPHENYL(1)	65.1	40	84	18	84.1	60	107	11
DECACHLOROBIPHENYL(2)	68.3	41	90	18	88.3	71	103	11
TETRACHLORO-m-XYLENE(1)	58.7	40	73	18	68.5	51	100	11
TETRACHLORO-m-XYLENE(2)	57.1	38	77	18	73.7	53	110	11

**Table F-6. RVAAP Phase 1 RI - Data Quality Assessment  
Sample Matrix Spike Evaluation - Average Percent Recovery (%Rec)**

Analysis	Soil				Water			
	Average %Rec	Min. %Rec	Max. %Rec	N	Average %Rec	Min. %Rec	Max. %Rec	N
<u>Metals</u>								
ALUMINUM					104.3			1
ANTIMONY	50.9	23	75	8	97.6			1
ARSENIC	107.8	38	255	29	102.2			1
BARIUM	86.7	40	161	31	92.8			1
BERYLLIUM	93.0	74	120	8	99.8			1
CADMIUM	83.2	31	113	30	91.2			1
CALCIUM	97.3	67	210	6	94.5			1
CHROMIUM	90.9	33	188	31	94.4			1
COBALT	89.8	79	115	8	96.8			1
COPPER	89.1	27	130	8	94.6			1
IRON					94.6			1
LEAD	96.4	33	193	18	96.5			1
MAGNESIUM	91.7	41	161	13	98.3			1
MANGANESE	99.7	37	139	4	28.8			1
MERCURY	108.7	52	134	27	78.2			1
NICKEL	88.0	65	115	8	89.5			1
POTASSIUM	101.6	67	95	7	83.6			1
SELENIUM	89.0	51	107	25	95.4			1
SILVER	90.7	78	122	31	96.5			1
SODIUM	87.0	82	93	7	86.6			1
THALLIUM	77.3	64	94	8	104.4			1
VANADIUM	92.0	76	118	8	93.5			1
ZINC	92.5	58	130	24	88.3			1
<u>Cyanide</u>	82.7	64	94	8	87.2			1

Table F-6 (cont.). RVAAP Phase 1 RI - Data Quality Assessment  
 Sample Matrix Spike (MS) Evaluation - Average Percent Recovery (%Rec)

Analysis	Soil				Water			
	Average %Rec	Min. %Rec	Max. %Rec	N	Average %Rec	Min. %Rec	Max. %Rec	N
<u>Volatile Organic Compounds</u>								
CHLOROMETHANE	97.5	82	111	22	92.1	72	120	10
VINYL CHLORIDE	95.1	88	102	22	95.2	80	116	10
BROMOMETHANE	107.1	62	142	22	101.0	78	117	10
CHLOROETHANE	104.9	72	152	22	98.1	77	120	10
1,1-DICHLOROETHENE	100.1	88	111	22	92.9	76	103	10
ACETONE	212.0	57	484	22	82.7	40	108	10
CARBON DISULFIDE	88.5	74	97	22	92.3	83	97	10
METHYLENE CHLORIDE	85.5	58	113	22	80.5	76	85	10
trans-1,2-DICHLOROETHENE	97.4	86	106	22	93.4	76	102	10
1,1-DICHLOROETHANE	102.6	89	113	22	97.0	85	106	10
cis-1,2-DICHLOROETHENE	98.8	92	112	22	94.0	77	102	10
2-BUTANONE	190.1	66	402	22	95.3	73	108	10
CHLOROFORM	102.4	91	115	22	95.7	83	107	10
1,1,1-TRICHLOROETHANE	100.5	90	110	22	97.8	88	107	10
CARBON TETRACHLORIDE	94.7	52	110	22	98.5	89	109	10
BENZENE	99.0	91	112	22	97.0	89	104	10
1,2-DICHLOROETHANE	112.8	96	126	22	99.5	90	114	10
TRICHLOROETHENE	103.7	88	188	22	95.3	78	104	10
1,2-DICHLOROPROPANE	101.8	94	116	22	99.9	93	107	10
BROMODICHLOROMETHANE	99.8	68	114	22	97.8	88	108	10
cis-1,3-DICHLOROPROPENE	89.3	48	110	22	97.2	94	101	10
4-METHYL-2-PENTANONE	163.5	72	245	22	105.3	81	118	10
TOLUENE	106.0	89	215	22	97.7	89	105	10
trans-1,3-DICHLOROPROPENE	91.5	52	119	22	93.9	69	104	10
1,1,2-TRICHLOROETHANE	112.0	91	142	22	102.2	91	111	10
TETRACHLOROETHENE	93.5	79	102	22	94.2	79	103	10
2-HEXANONE	179.2	71	332	22	104.9	76	122	10
DIBROMOCHLOROMETHANE	106.8	76	122	22	96.2	89	108	10
CHLOROBENZENE	95.3	83	105	22	95.5	88	102	10
ETHYL BENZENE	96.4	84	106	22	96.2	87	102	10
m,p-XYLENES	93.3	80	103	22	95.0	87	100	10
o-XYLENE	93.5	82	105	22	95.6	86	103	10
STYRENE	91.0	72	98	22	96.2	91	101	10
BROMOFORM	117.0	79	148	22	96.2	85	112	10
1,1,2,2-TETRACHLOROETHANE	130.9	0	194	22	103.5	92	110	10

Table F-6 (cont.). RVAAP Phase 1 RI - Data Quality Assessment  
 Sample Matrix Spike (MS) Evaluation - Average Percent Recovery (%Rec)

Analysis	Soil				Water			
	Average %Rec	Min. %Rec	Max. %Rec	N	Average %Rec	Min. %Rec	Max. %Rec	N
<b><u>Explosive Organic Compounds</u></b>								
HMX	79.6	35	103	62	55.0	25	85	2
RDX	89.1	50	102	62	51.0	22	80	2
TRINITROBENZENE	89.0	46	111	62	61.5	28	95	2
TETRYL	66.5	13	109	62	82.0	45	119	2
DINITROBENZENE	88.6	45	105	62	54.0	23	85	2
TRINITROTOLUENE	103.0	58	210	61	79.5	42	117	2
NITROBENZENE	100.3	44	116	62	50.0	21	79	2
2,6-DNT	92.7	51	111	62	57.5	30	85	2
2,4-DNT	100.8	57	115	62	63.0	32	94	2
2-NIROBENZENE	91.5	49	105	62	57.5	28	87	2
4-NIROBENZENE	91.8	54	104	62	55.0	27	83	2
3-NIROBENZENE	93.3	50	111	62	55.5	28	83	2
<b><u>Semivolatile Organic Compounds</u></b>								
PHENOL	63.3	41	70	16	65.0	65	65	2
2-CHLOROPHENOL	64.7	43	74	16	62.5	60	65	2
1,4-DICHLOROBENZENE	61.9	43	70	16	62.0	61	63	2
N-NITROSO-di-N-PROP.(1)	70.1	52	78	16	46.5	38	55	2
1,2,4-TRICHLOROBENZENE	63.3	42	74	16	62.0	62	62	2
4-CHLORO-3-METHYLPHENOL	72.1	43	88	16	62.5	60	65	2
ACENAPHTHENE	66.5	10	129	16	65.5	65	66	2
4-NITROPHENOL	79.3	41	101	16	132.5	130	135	2
PENTACHLOROPHENOL	70.7	35	93	16	57.5	55	60	2
PYRENE	58.3	0	72	16	62.0	61	63	2

Table F-6 (cont.). RVAAP Phase 1 RI - Data Quality Assessment  
 Sample Matrix Spike (MS) Evaluation - Average Percent Recovery (%Rec)

Analysis	Soil				Water			
	Average %Rec	Min. %Rec	Max. %Rec	N	Average %Rec	Min. %Rec	Max. %Rec	N
<u>Pesticides/PCBs</u>								
ALPHA-BHC	64.5	39	112	16	69.0	66	72	2
BETA-BHC	57.1	0	99	16	74.5	72	77	2
GAMMA-BHC(LINDANE)	63.3	44	95	16	67.5	65	70	2
DELTA-BHC	55.8	15	101	16	82.0	79	85	2
HEPTACHLOR	62.8	45	99	16	58.5	58	59	2
ALDRIN	63.4	36	122	16	68.5	66	71	2
HEPTACHLOR EPOXIDE	52.7	0	75	16	66.5	60	73	2
ENDOSULFAN I	58.5	23	83	16	74.0	69	76	2
4,4'-DDE	65.3	36	114	16	66.0	61	71	2
DIELDRIN	62.7	42	94	16	73.5	70	77	2
ENDRIN	58.9	0	112	16	121.5	116	127	2
ENDOSULFAN II	64.5	32	92	14	80.0	78	82	2
4,4'-DDD	70.4	41	104	14	99.5	93	106	2
ENDOSULFAN SULFATE	67.8	31	87	16	80.0	77	83	2
4,4'-DDT	59.2	0	105	13	85.0	82	88	2
ENDRIN ALDEHYDE	58.8	39	94	14	82.0	79	85	2
METHOXYCHLOR	76.3	58	116	16	98.0	94	102	2
ALPHA-CHLORDANE	53.9	0	80	16	71.5	69	74	2
GAMMA-CHLORDANE	75.9	52	158	16	72.0	70	74	2
ENDRIN KETONE	72.0	47	204	16	86.5	84	89	2

average soil LCS values range from 94.9% for vinyl chloride to 120.6% for 2-hexanone, while water LCS values range from 93.0% for 1,1-dichloroethene to 111.4% for 2-hexanone. Method blank surrogate recoveries (Table F-5) were all within 90-110% for volatile compounds. These values establish that the analytical process was in-control.

VOC MS recoveries (Table F-6) indicate analytical accuracy for these compounds was in control and the data is usable. Average soil MS recoveries ranged from 85.5% for methylene chloride to 212.0% for acetone, while water MS recoveries ranged from 92.1% for chloromethane to 105.3% for 4-methyl-2-pentanone. Individual sample surrogate recoveries and MS recoveries indicate analytical accuracy for the majority of compounds. However, volatile compound MS recoveries did cause several soil analysis to be qualified "J" or "UJ" during validation. In particular, data for acetone, 2-butanone, 4-methyl-2-pentanone, and 2-hexanone should be interpreted with caution relative to these recoveries.

### **Explosive Compounds**

Nitroaromatic compound measures of accuracy are derived from LCS and MS recovery information. The laboratory overall explosives analytical process was demonstrated to be under control by maintaining a general 50-150 LCS percent recovery for both water and soil matrices. Average soil LCS recoveries ranged from 54.2% for tetryl to 108.0% for trinitrotoluene, with average water LCS recoveries ranging from 60.4 for RDX to 100.8% for trinitrobenzene. Low LCS values for tetryl did cause some data to be rejected and estimated. During data use and interpretation tetryl values present the possibility of providing false negative results and must be interpreted relative to this condition.

Matrix spike information also demonstrates acceptable accuracy control for both soils and waters, with the same caveat attached to tetryl values.

### **Semivolatile Organic and Pesticide/PCB Compounds**

Average LCS percent recovery values for semivolatile analysis of soils are approximately 64%, while water values range from 50-70%. Pesticide/PCB LCS recoveries for soils are in the general range of 65-75%, with water values in the general range of 70-90%. These values are well within the normally accepted advisory limits tabulated in Table F-7. They are also within project accuracy goals of 30-140% for semivolatile compounds and 35-135% for pesticide/PCB compounds. None of the soil data required qualification based on the LCS.

Method blank surrogate recoveries (Table F-5) were all within acceptable ranges for semivolatile compounds. Re-enforcing the analytical process was in-control.

Sample MS information for SVOCs and pesticide/PCBs paralleled LCS data (Table F-6), with the overall accuracy for these measurements being considered acceptable. Average soil percent recoveries ranged from 58.3% for pyrene to 79.3% for 4-nitrophenol in the semivolatile fraction and from 52.7% for heptachlor epoxide to 76.3% for methoxychlor in the pesticide fraction.



**Table F-7. RVAAP Phase 1 RI - Data Quality Assessment  
EPA CLP Organic Surrogate Recovery Advisory Limits - Percent Recovery (%Rec)**

Analysis	Soil		Water	
	Min. %Rec	Max. %Rec	Min. %Rec	Max. %Rec
<b><u>Volatile Organic Compounds</u></b>				
1,2-DICHLOROETHANE-d4	70	121	76	114
BROMOFLUOROBENZENE	59	113	86	115
TOLUENE-d8	84	138	88	110
<b><u>Semivolatile Organic Compounds</u></b>				
1,2-DICHLOROBENZENE-d4	20	130	16	110
2,4,6-TRIBROMOPHENOL	19	122	10	123
2-CHLOROPHENOL-d4	20	130	33	110
2-FLUOROBIPHENYL	30	115	43	116
2-FLUOROPHENOL	25	121	21	110
NITROBENZENE-d5	23	120	35	114
PHENOL-d5	24	113	10	110
TERPHENYL-d14	18	137	33	141
<b><u>Pesticides/PCBs</u></b>				
DECACHLOROBIPHENYL(1)	60	150	60	150
DECACHLOROBIPHENYL(2)	60	150	60	150
TETRACHLORO-m-XYLENE(1)	60	150	60	150
TETRACHLORO-m-XYLENE(2)	60	150	60	150

Results for the water MS data were also satisfactory and provide confidence in the accuracy of the measurements.

#### **F.4.2 Precision**

##### **Laboratory Precision**

As a measure of analytical precision, Table F-8 contains the average relative percent difference (RPD) for laboratory duplicate pairs for metal, cyanide, VOC, SVOC, explosive, and pesticide/PCB parameters where both values meet or exceed five times the practical quantitation limits (PQL) for that analyte. Metal, cyanide, and explosive duplicate pairs evaluate actual sample concentrations while VOC, SVOC, and pesticide/PCB duplicate pairs compare MS and matrix spike duplicate (MSD) values. As the RPD approaches zero, complete agreement is achieved between the duplicate sample pairs. Sample homogeneity, analytical method performance, and the quantity of analyte being measured all contribute to this measure of sample analytical precision.

The goal for laboratory soil precision was set as acceptable when the RPD does not exceed 35. This goal was not exceeded for most metal analyte average RPDs, however, some individual RPDs and average RPDs for antimony and mercury did exceed this goal. Analyses were qualified as estimated "J" through the validation process to indicate data impact. In general, the RPD values are considered good for this medium and reflect great effort on the part of the field and laboratory teams to homogenize the samples prior to aliquotting for analysis. VOC, SVOC, explosive, and pesticide/PCB average RPDs were within this acceptance range for soil duplicate comparisons.

Due to the low number of water samples analyzed during this investigation few duplicate comparisons are available. Of those available, duplicate comparisons proved satisfactory for metals, cyanide, VOC, SVOC, and pesticide/PCB analysis. The single comparison available for explosive analysis is attributed to incorrect spiking in the laboratory, and is not considered indicative of the analytical precision. Therefore, water analytical precision is considered acceptable.

Duplicate comparison for those data within five times the PQL have also been reviewed and evaluated. Acceptance limits for these data were set at  $\pm$  three times the PQL. In all cases, laboratory duplicate comparison at these low levels were in agreement.

Individual data points affected by poor precision measures appear in the data set qualified as estimated, when necessary. The precision for those data is considered acceptable and has been determined to be useable for project objectives.

**Table F-8. RVAAP Phase 1 RI - Data Quality Assessment  
Laboratory Duplicate Evaluation - Relative Percent Difference (RPD)**

Analysis	Soil				Water			
	Average RPD	Min. RPD	Max. RPD	N	Average RPD	Min. RPD	Max. RPD	N
<u>Metals</u>								
ALUMINUM	14.7	1	46	30	24.5			1
ANTIMONY	81.5	33	130	2				
ARSENIC	16.6	1	72	30				
BARIUM	20.1	0	76	30	14.2			1
BERYLLIUM	19.4	2	40	8	12.3			1
CADMIUM	24.9	0	45	7				
CALCIUM	32.0	2	85	8	2.6			1
CHROMIUM	17.8	3	45	30				
COBALT	24.1	3	54	8	15.9			1
COPPER	26.3	1	61	8				
IRON	22.8	1	57	8	9.3			1
LEAD	23.5	0	66	30				
MAGNESIUM	17.2	1	50	8	10.6			1
MANGANESE	25.9	1	98	30	15.8			1
MERCURY	44.5	7	166	7				
NICKEL	22.6	0	52	8	13.6			1
POTASSIUM	24.0	4	46	8	5.7			1
SELENIUM	22.1	0	63	26				
SILVER	8.4	1	16	2				
SODIUM	11.5	2	39	8	2.0			1
THALLIUM	30.7	7	60	8				
VANADIUM	22.3	6	52	8				
ZINC	20.6	1	61	30	21.4			1
<u>Cyanide</u>	22.4	14	29	5	7.3			1

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Table F-8 (cont.). RVAAP Phase 1 RI - Data Quality Assessment  
 Sample Matrix Spike Duplicate (MSD) Evaluation - Average Percent Recovery (%Rec)

Analysis	Soil				Water			
	Average RPD	Min. RPD	Max. RPD	N	Average RPD	Min. RPD	Max. RPD	N
<u>Volatile Organic Compounds</u>								
CHLOROMETHANE	5.2	0	15	11	8.0	1	19	5
VINYL CHLORIDE	3.8	0	13	11	7.6	1	19	5
BROMOMETHANE	13.2	5	30	11	6.8	0	15	5
CHLOROETHANE	11.8	1	30	11	8.6	2	20	5
1,1-DICHLOROETHENE	6.0	1	17	11	3.6	0	7	5
ACETONE	36.2	9	110	11	4.8	2	7	5
CARBON DISULFIDE	6.5	1	19	11	2.4	0	5	5
METHYLENE CHLORIDE	9.2	5	52	11	2.4	0	5	5
trans-1,2-DICHLOROETHENE	5.3	1	17	11	2.2	0	4	5
1,1-DICHLOROETHANE	6.1	0	15	11	3.4	1	5	5
cis-1,2-DICHLOROETHENE	5.5	1	14	11	3.6	0	6	5
2-BUTANONE	30.6	9	101	11	5.4	1	9	5
CHLOROFORM	5.0	1	13	11	4.2	1	10	5
1,1,1-TRICHLOROETHANE	3.8	1	13	11	2.4	1	4	5
CARBON TETRACHLORIDE	6.2	1	13	11	1.8	0	6	5
BENZENE	3.9	0	12	11	2.8	1	6	5
1,2-DICHLOROETHANE	3.7	1	12	11	2.8	0	8	5
TRICHLOROETHENE	10.3	1	47	11	3.0	1	6	5
1,2-DICHLOROPROPANE	4.4	1	12	11	3.0	1	7	5
BROMODICHLOROMETHANE	4.5	1	12	11	2.8	1	5	5
cis-1,3-DICHLOROPROPENE	6.2	0	16	11	1.6	0	6	5
4-METHYL-2-PENTANONE	24.8	0	87	11	2.2	0	6	5
TOLUENE	6.2	1	34	11	2.6	0	6	5
trans-1,3-DICHLOROPROPENE	7.7	2	28	11	7.0	0	24	5
1,1,2-TRICHLOROETHANE	6.5	0	24	11	3.0	1	8	5
TETRACHLOROETHENE	5.8	0	15	11	2.2	0	6	5
2-HEXANONE	27.7	0	99	11	4.2	2	8	5
DIBROMOCHLOROMETHANE	5.3	0	13	11	4.4	1	9	5
CHLOROBENZENE	4.2	0	13	11	3.4	1	7	5
ETHYL BENZENE	4.5	0	16	11	2.6	1	5	5
m,p-XYLENES	4.6	0	15	11	2.2	0	6	5
o-XYLENE	5.0	0	14	11	2.2	1	5	5
STYRENE	5.4	0	15	11	2.0	0	6	5
BROMOFORM	9.2	0	39	11	4.2	1	9	5
1,1,2,2-TETRACHLOROETHANE	31.2	0	200	11	2.6	1	5	5

Table F-8 (cont.). RVAAP Phase 1 RI - Data Quality Assessment  
 Matrix Spike Duplicate (MSD) Evaluation - Average Percent Recovery (%Rec)

Analysis	Soil				Water			
	Average RPD	Min. RPD	Max. RPD	N	Average RPD	Min. RPD	Max. RPD	N
<u>Explosive Organic Compounds</u>								
HMX	10.2	0	71	31	109	-	-	1
RDX	11.1	0	63	31	115	-	-	1
TRINITROBENZENE	8.5	0	54	31	109	-	-	1
TETRYL	18.8	0	90	31	90	-	-	1
DINITROBENZENE	9.4	0	62	31	114	-	-	1
TRINITROTOLUENE	8.8	0	51	30	94	-	-	1
NITROBENZENE	10.1	0	83	31	115	-	-	1
2,6-DNT	9.3	0	62	31	95	-	-	1
2,4-DNT	9.0	0	52	31	98	-	-	1
2-NIROBENZENE	9.5	0	66	31	102	-	-	1
4-NIROBENZENE	9.4	0	56	31	102	-	-	1
3-NIROBENZENE	9.7	0	63	31	100	-	-	1
<u>Semivolatile Organic Compounds</u>								
PHENOL	6.5	0	17	8	0	-	-	1
2-CHLOROPHENOL	4.8	0	22	8	8	-	-	1
1,4-DICHLOROBENZENE	6.4	0	23	8	3	-	-	1
N-NITROSO-di-N-PROP.(1)	5.4	0	30	8	36	-	-	1
1,2,4-TRICHLOROBENZENE	5.3	0	20	8	0	-	-	1
4-CHLORO-3-METHYLPHENOL	6.0	2	16	8	8	-	-	1
ACENAPHTHENE	5.0	2	17	8	2	-	-	1
4-NITROPHENOL	5.9	3	12	8	4	-	-	1
PENTACHLOROPHENOL	6.8	0	16	8	9	-	-	1
PYRENE	5.3	0	20	7	3	-	-	1

**Table F-8 (cont.). RVAAP Phase 1 RI - Data Quality Assessment  
Sample Matrix Spike Duplicate (MSD) Evaluation - Relative Percent Difference (RPD)**

Analysis	Soil				Water			
	Average RPD	Min. RPD	Max. RPD	N	Average RPD	Min. RPD	Max. RPD	N
<b><u>Pesticides/PCBs</u></b>								
ALPHA-BHC	9.9	2	18	8	9	-	-	1
BETA-BHC	12.9	0	29	8	7	-	-	1
GAMMA-BHC(LINDANE)	8.8	0	16	8	7	-	-	1
DELTA-BHC	19.1	0	56	8	7	-	-	1
HEPTACHLOR	12.1	2	26	8	2	-	-	1
ALDRIN	13.5	1	36	8	7	-	-	1
HEPTACHLOR EPOXIDE	8.8	0	21	8	20	-	-	1
ENDOSULFAN I	16.5	2	65	8	10	-	-	1
4,4'-DDE	22.1	0	85	8	15	-	-	1
DIELDRIN	13.6	4	36	8	10	-	-	1
ENDRIN	21.6	0	90	8	9	-	-	1
ENDOSULFAN II	14.6	3	40	7	5	-	-	1
4,4'-DDD	13.9	3	28	7	13	-	-	1
ENDOSULFAN SULFATE	13.0	2	22	8	8	-	-	1
4,4'-DDT	9.0	0	25	6	7	-	-	1
ENDRIN ALDEHYDE	27.1	6	65	7	7	-	-	1
METHOXYCHLOR	12.3	1	24	8	8	-	-	1
ALPHA-CHLORDANE	13.5	0	46	8	7	-	-	1
GAMMA-CHLORDANE	15.5	0	85	8	6	-	-	1
ENDRIN KETONE	25.0	4	76	8	6	-	-	1

## Field Precision

Field duplicate samples were collected to ascertain the contribution to variability (i.e., precision) due to the combination of environmental media, sampling consistency, and analytical precision. Field duplicate samples were collected from the same spatial and temporal conditions as the primary environmental sample. Soil samples were collected from the same sampling device, after homogenization for all analytes except VOCs.

Table F-9 provides a summary of soil field duplicate comparison by analyte by presenting the absolute difference and RPD for field duplicate measurements. RPD was calculated only when both samples were >5 times the PQL. When one or both sample values were between the quantitation level and 5 times the PQL the absolute difference was evaluated. If both samples were not detected for a given analyte, precision was considered acceptable. In order to review this information, this data quality assessment has implemented general criteria for comparison of absolute difference measurements and RPDs. RPD criteria are identified below. Absolute difference criteria were set at three times the PQL.

### RPD Evaluation Categories

Matrix	Good	Fair	Poor	Unacceptable
Water	< 30%	< 60%	< 100%	> 100%
Soil	< 50%	< 90%	< 150%	> 150%

Soil/sediment field duplicate metal RPDs are considered Good, with all comparisons except one being <50% different and absolute differences being predominantly within three times the PQL criteria. Organic analyte field duplicate values did not compare as well, partly due to concentrations not being high enough to provide RPD evaluation. The few values which are available show significant disparity, generally above 100% difference but below 150%. This "Poor" comparison may be attributed to a heterogenic dispersal of the compounds in the soil. This is particularly plausible in the case of nitroaromatic explosive compounds and their propensity to re-crystallize in small deposits.

Groundwater field duplicate sample comparisons are limited to a few metal sample analysis. Within this context the comparison is considered "Good".

**Table F-9. Ravenna Army Ammunition Plant Phase 1 RI  
Summary of Field Duplicate Precision**

Parameter	Method of Calculation*	Average Difference	Limits	Units	Number Pairs Within Limits	Percent Within Limits
<b>Inorganic</b>		<b>Matrix: Soil</b>				
Antimony	Abs. Difference	0.01	0.60	MG/KG	1/ 1	100.0
Cadmium	Abs. Difference	0.04	0.10	MG/KG	8/ 10	80.0
Cyanide	Abs. Difference	0.16	0.20	MG/KG	1/ 2	50.0
Mercury	Abs. Difference	0.02	0.08	MG/KG	8/ 9	88.8
Potassium	Abs. Difference	16.00	414.00	MG/KG	1/ 1	100.0
Selenium	Abs. Difference	0.37	0.70	MG/KG	21/ 23	91.3
Silver	Abs. Difference	0.07	0.44	MG/KG	2/ 2	100.0
Sodium	Abs. Difference	7.00	93.00	MG/KG	1/ 1	100.0
Thallium	Abs. Difference	0.43	0.70	MG/KG	5/ 6	83.3
<b>Organic</b>		<b>Matrix: Soil</b>				
1,3,5-Trinitrobenzene	Abs. Difference	5784.33	500.00	UG/KG	3/ 3	100.0
1,4-Dichlorobenzene	Abs. Difference	140.00	680.00	UG/KG	1/ 1	100.0
2,4,6-Trinitrotoluene	Abs. Difference	1450.00	500.00	UG/KG	6/ 9	66.6
4,4'-DDD	Abs. Difference	80.20	5.60	UG/KG	0/ 1	0.0
4,4'-DDE	Abs. Difference	3.10	5.20	UG/KG	1/ 1	100.0
Acenaphthene	Abs. Difference	2300.00	740.00	UG/KG	0/ 1	0.0
Acetone	Abs. Difference	65.00	10.00	UG/KG	0/ 1	0.0
Alpha Chlordane	Abs. Difference	13.40	2.80	UG/KG	0/ 1	0.0
Anthracene	Abs. Difference	6420.00	740.00	UG/KG	0/ 1	0.0
Aroclor-1254	Abs. Difference	146.50	136.00	UG/KG	1/ 2	50.0
Benzo(a)anthracene	Abs. Difference	60.00	2600.00	UG/KG	1/ 1	100.0
Benzo(a)pyrene	Abs. Difference	40.00	2600.00	UG/KG	1/ 1	100.0
Benzo(b)fluoranthene	Abs. Difference	7500.00	740.00	UG/KG	0/ 1	0.0
Benzo(g,h,i)perylene	Abs. Difference	2300.00	2600.00	UG/KG	1/ 2	50.0
Benzo(k)fluoranthene	Abs. Difference	240.00	2600.00	UG/KG	1/ 1	100.0
Bis(2-ethylhexyl)phthalate	Abs. Difference	213.66	680.00	UG/KG	3/ 3	100.0
Carbazole	Abs. Difference	2800.00	740.00	UG/KG	0/ 1	0.0
Chloroform	Abs. Difference	0.00	10.00	UG/KG	1/ 1	100.0
Chrysene	Abs. Difference	120.00	2600.00	UG/KG	1/ 1	100.0
Di-n-butyl Phthalate	Abs. Difference	140.00	2600.00	UG/KG	1/ 1	100.0
Dibenzo(a,h)anthracene	Abs. Difference	2910.00	740.00	UG/KG	0/ 1	0.0
Dibenzofuran	Abs. Difference	1630.00	740.00	UG/KG	0/ 1	0.0
Endrin	Abs. Difference	26.60	5.60	UG/KG	0/ 1	0.0

\*Rejected analytes and analytes that were not detected in both the sample or duplicate were not included

\*The precision measurement is an absolute difference when either the sample or duplicate results are < 5 times the CRDL, or a relative percent difference (RPD) if >= 5 times the CRDL, or a Duplicate Error Ratio if the parameter is a radiologic compound.

The control limits are 2 times the CRDL



**Table F-9 (cont.). Ravenna Army Ammunition Plant Phase 1 RI  
Summary of Field Duplicate Precision**

Parameter	Method of Calculation*	Average Difference	Limits	Units	Number Pairs Within Limits	Percent Within Limits
Fluoranthene	Abs. Difference	150.00	2600.00	UG/KG	1/ 1	100.0
Fluorene	Abs. Difference	2810.00	740.00	UG/KG	0/ 1	0.0
Heptachlor	Abs. Difference	2.10	2.60	UG/KG	1/ 1	100.0
Indeno(1,2,3-cd)pyrene	Abs. Difference	2570.00	2600.00	UG/KG	1/ 2	50.0
Methylene Chloride	Abs. Difference	1.00	10.00	UG/KG	2/ 2	100.0
Pentachlorophenol	Abs. Difference	800.00	6400.00	UG/KG	1/ 1	100.0
Phenanthrene	Abs. Difference	70.00	2600.00	UG/KG	1/ 1	100.0
Pyrene	Abs. Difference	200.00	2600.00	UG/KG	1/ 1	100.0
<b>Inorganic</b>		<b>Matrix: Sediment</b>				
Antimony	Abs. Difference	0.60	1.68	MG/KG	1/ 1	100.0
Arsenic	Abs. Difference	1.20	1.92	MG/KG	1/ 1	100.0
Cadmium	Abs. Difference	0.02	0.10	MG/KG	5/ 5	100.0
Mercury	Abs. Difference	0.01	0.06	MG/KG	2/ 2	100.0
Selenium	Abs. Difference	0.18	0.80	MG/KG	6/ 6	100.0
Silver	Abs. Difference	0.60	1.06	MG/KG	1/ 1	100.0
Thallium	Abs. Difference	0.55	1.18	MG/KG	2/ 2	100.0
<b>Organic</b>		<b>Matrix: Sediment</b>				
2,4,6-Trinitrotoluene	Abs. Difference	4640.00	500.00	UG/KG	0/ 2	0.0
Benzo(a)anthracene	Abs. Difference	10.00	3600.00	UG/KG	1/ 1	100.0
Benzo(a)pyrene	Abs. Difference	15.00	2200.00	UG/KG	2/ 2	100.0
Benzo(b)fluoranthene	Abs. Difference	190.00	3600.00	UG/KG	1/ 1	100.0
Benzo(g,h,i)perylene	Abs. Difference	30.00	3600.00	UG/KG	1/ 1	100.0
Chrysene	Abs. Difference	15.00	2200.00	UG/KG	2/ 2	100.0
Fluoranthene	Abs. Difference	50.00	3600.00	UG/KG	1/ 1	100.0
Indeno(1,2,3-cd)pyrene	Abs. Difference	30.00	3600.00	UG/KG	1/ 1	100.0
Pyrene	Abs. Difference	25.00	2200.00	UG/KG	2/ 2	100.0
<b>Inorganic</b>		<b>Matrix: Groundwater</b>				
Aluminum	Abs. Difference	5.30	36.00	UG/L	1/ 1	100.0
Arsenic	Abs. Difference	2.30	6.60	UG/L	1/ 1	100.0
Beryllium	Abs. Difference	0.01	0.60	UG/L	1/ 1	100.0
Nickel	Abs. Difference	0.40	1.60	UG/L	1/ 1	100.0

\*Rejected analytes and analytes that were not detected in both the sample or duplicate were not included

\*The precision measurement is an absolute difference when either the sample or duplicate results are < 5 times the CRDL, or a relative percent difference (RPD) if >= 5 times the CRDL, or a Duplicate Error Ratio if the parameter is a radiologic compound.

The control limits are 2 times the CRDL

**Table F-9 (cont.). Ravenna Army Annunition Plant Phase 1 RI  
Summary of Field Duplicate Precision**

Parameter	Method of Calculation*	Average RPD	Limits	Units	Number Pairs Within Limits	Percent Within Limits
<b>Inorganic</b>		<b>Matrix: Soil</b>				
Aluminum	Rel. % Difference	17.94	35.00	%	30/ 32	93.7
Antimony	Rel. % Difference	52.80	35.00	%	0/ 1	0.0
Arsenic	Rel. % Difference	17.76	35.00	%	28/ 32	87.5
Barium	Rel. % Difference	25.84	35.00	%	25/ 32	78.1
Beryllium	Rel. % Difference	12.07	35.00	%	7/ 7	100.0
Cadmium	Rel. % Difference	43.51	35.00	%	8/ 16	50.0
Calcium	Rel. % Difference	43.39	35.00	%	6/ 8	75.0
Chromium	Rel. % Difference	24.95	35.00	%	26/ 32	81.2
Cobalt	Rel. % Difference	19.64	35.00	%	6/ 8	75.0
Copper	Rel. % Difference	26.74	35.00	%	6/ 8	75.0
Cyanide	Rel. % Difference	83.72	35.00	%	0/ 1	0.0
Iron	Rel. % Difference	18.35	35.00	%	8/ 8	100.0
Lead	Rel. % Difference	35.52	35.00	%	21/ 32	65.6
Magnesium	Rel. % Difference	22.30	35.00	%	7/ 8	87.5
Manganese	Rel. % Difference	26.61	35.00	%	27/ 32	84.3
Nickel	Rel. % Difference	26.67	35.00	%	6/ 8	75.0
Potassium	Rel. % Difference	24.24	35.00	%	5/ 7	71.4
Selenium	Rel. % Difference	22.72	35.00	%	2/ 2	100.0
Silver	Rel. % Difference	39.31	35.00	%	0/ 1	0.0
Sodium	Rel. % Difference	10.57	35.00	%	7/ 7	100.0
Thallium	Rel. % Difference	12.16	35.00	%	2/ 2	100.0
Vanadium	Rel. % Difference	14.46	35.00	%	8/ 8	100.0
Zinc	Rel. % Difference	23.84	35.00	%	25/ 32	78.1
<b>Organic</b>		<b>Matrix: Soil</b>				
2,4,6-Trinitrotoluene	Rel. % Difference	144.97	35.00	%	1/ 6	16.6
4,4'-DDE	Rel. % Difference	100.00	35.00	%	0/ 1	0.0
Acetone	Rel. % Difference	58.06	35.00	%	0/ 1	0.0
Aroclor-1254	Rel. % Difference	10.52	35.00	%	1/ 1	100.0
Benzo(a)anthracene	Rel. % Difference	145.67	35.00	%	0/ 1	0.0
Benzo(a)pyrene	Rel. % Difference	138.02	35.00	%	0/ 1	0.0
Benzo(k)fluoranthene	Rel. % Difference	142.85	35.00	%	0/ 1	0.0
Chlorobenzene	Rel. % Difference	86.95	35.00	%	0/ 1	0.0
Chrysene	Rel. % Difference	144.37	35.00	%	0/ 1	0.0

\*Rejected analytes and analytes that were not detected in both the sample or duplicate were not included  
 \*The precision measurement is an absolute difference when either the sample or duplicate results are < 5 times the CRDL, or a relative percent difference (RPD) if >= 5 times the CRDL, or a Duplicate Error Ratio if the parameter is a radiologic compound.  
 The control limits are 35 %

**Table F-9 (cont.). Ravenna Army Ammunition Plant Phase 1 RI  
Summary of Field Duplicate Precision**

Parameter	Method of Calculation*	Average RPD	Limits	Units	Number Pairs Within Limits	Percent Within Limits
Endrin	Rel. % Difference	26.08	35.00	%	1/ 1	100.0
Fluoranthene	Rel. % Difference	136.13	35.00	%	0/ 1	0.0
Gamma Chlordane	Rel. % Difference	27.58	35.00	%	1/ 1	100.0
Phenanthrene	Rel. % Difference	140.74	35.00	%	0/ 1	0.0
Pyrene	Rel. % Difference	144.82	35.00	%	0/ 1	0.0
<b>Inorganic</b>		<b>Matrix: Sediment</b>				
Aluminum	Rel. % Difference	10.46	35.00	%	12/ 12	100.0
Arsenic	Rel. % Difference	20.12	35.00	%	9/ 11	81.8
Barium	Rel. % Difference	9.81	35.00	%	12/ 12	100.0
Beryllium	Rel. % Difference	11.20	35.00	%	2/ 2	100.0
Cadmium	Rel. % Difference	16.54	35.00	%	6/ 6	100.0
Calcium	Rel. % Difference	19.05	35.00	%	2/ 2	100.0
Chromium	Rel. % Difference	17.82	35.00	%	11/ 12	91.6
Cobalt	Rel. % Difference	14.16	35.00	%	2/ 2	100.0
Copper	Rel. % Difference	49.45	35.00	%	1/ 2	50.0
Iron	Rel. % Difference	3.77	35.00	%	2/ 2	100.0
Lead	Rel. % Difference	17.45	35.00	%	9/ 12	75.0
Magnesium	Rel. % Difference	14.09	35.00	%	2/ 2	100.0
Manganese	Rel. % Difference	16.60	35.00	%	10/ 12	83.3
Nickel	Rel. % Difference	15.46	35.00	%	2/ 2	100.0
Potassium	Rel. % Difference	26.82	35.00	%	2/ 2	100.0
Silver	Rel. % Difference	15.66	35.00	%	2/ 2	100.0
Sodium	Rel. % Difference	13.82	35.00	%	2/ 2	100.0
Vanadium	Rel. % Difference	5.47	35.00	%	2/ 2	100.0
Zinc	Rel. % Difference	13.54	35.00	%	11/ 12	91.6
<b>Organic</b>		<b>Matrix: Sediment</b>				
2,4,6-Trinitrotoluene	Rel. % Difference	32.91	35.00	%	1/ 1	100.0
Acetone	Rel. % Difference	54.53	35.00	%	1/ 2	50.0
Organic Carbon	Rel. % Difference	10.89	35.00	%	9/ 9	100.0
<b>Inorganic</b>		<b>Matrix: Groundwater</b>				
Barium	Rel. % Difference	2.68	35.00	%	2/ 2	100.0
Calcium	Rel. % Difference	0.33	35.00	%	2/ 2	100.0
Copper	Rel. % Difference	38.70	35.00	%	0/ 1	0.0
Iron	Rel. % Difference	2.07	35.00	%	1/ 1	100.0

\*Rejected analytes and analytes that were not detected in both the sample or duplicate were not included

\*The precision measurement is an absolute difference when either the sample or duplicate results are < 5 times the CRDL, or a relative percent difference (RPD) if  $\geq 5$  times the CRDL, or a Duplicate Error Ratio if the parameter is a radiologic compound.

The control limits are 35 %

**Table F-9 (cont.). Ravenna Army Ammunition Plant Phase 1 RI  
Summary of Field Duplicate Precision**

<b>Parameter</b>	<b>Method of Calculation*</b>	<b>Average RPD</b>	<b>Limits</b>	<b>Units</b>	<b>Number Pairs Within Limits</b>	<b>Percent Within Limits</b>
Magnesium	Rel. % Difference	0.23	35.00	%	2/ 2	100.0
Manganese	Rel. % Difference	0.18	35.00	%	2/ 2	100.0
Potassium	Rel. % Difference	1.61	35.00	%	2/ 2	100.0
Sodium	Rel. % Difference	2.35	35.00	%	2/ 2	100.0

\*Rejected analytes and analytes that were not detected in both the sample or duplicate were not included

\*The precision measurement is an absolute difference when either the sample or duplicate results are < 5 times the CRDL, or a relative percent difference (RPD) if  $\geq$  5 times the CRDL, or a Duplicate Error Ratio if the parameter is a radiologic compound.

The control limits are 35 %

### F.4.3 Sensitivity

Determination of minimum detectable values allows the investigation to assess the relative confidence which can be placed in a value relative to the magnitude or level of analyte concentration observed. The closer a measured value comes to the minimum detectable concentration, the less confidence and more variation the measurement will have. Project sensitivity goals were expressed as quantitation level goals in the QAPjP. These levels were achieved or exceeded throughout the analytical process. There were individual exceptions which have generated qualification of the data or elevation of detection levels when the original goal was not achieved.

Variations observed are caused by fluctuations in moisture content, the need to dilute high concentration analytes into their linear range for analysis, or in a few instances project blank levels (i.e., methylene chloride, acetone). Variations in the observed detection levels did affect the usability of some of the data for the project. Moisture content and blank levels did not impact data useability, however, high levels of nitroaromatic compounds and general organic content did impact reported detection levels for explosive and other organic compounds. In several instances dilution factors of 1000 and more were required to bring contaminant nitroaromatics into their linear analytical range. General TOC levels also required sample dilutions prior to instrumental analysis, as demonstrated by samples such as CPCsd-007(p)-0656-SD and CPCsd-007(p)-0657-FD. These levels of contamination decreased the analytical sensitivity for the other analytes in that sample fraction.

Pesticide/PCB analyses were also impacted by high levels of TNT and other nitroaromatic compounds. It is believed that high concentrations of these compounds attacked the pesticide GC column material, causing loss of resolution and sensitivity for the targeted analytes. Effective analysis could only be obtained through sample dilution prior to chromatography, thus impacting the detection levels achieved. Table F-10 provides an overview of elevated detection level frequency for the project. Individual data point interpretation must consider the impact of elevated detection levels, however, the low percentages of elevated detection levels produced during this study should minimize these issues. Less than 2% of explosive data exhibit elevated detection levels greater than 2X the norm, with less than 5% of pesticide/PCB data exhibiting elevated detection levels greater than 2X the norm and approximately 1% of SVOC data exhibiting elevated detection levels greater than 10X the norm.

Evaluation of overall project sensitivity can be gain through review of field blank information. These actual sample analysis may provide a comprehensive look at the combined sampling and analysis sensitivity attained by the project. Field QC blanks obtained during sampling activities at RVAAP included samples of VOC trip blank waters and samples of the final equipment decontamination rinse water. Summary information for these blank determinations is presented in Tables F-11 and F-12.

Table F-10.

Ravenna Army Ammunition Plant Phase 1 RI  
Frequency of Elevated Detection Levels

Soil		Detection Level	Total Number of Non-detects	2 - 10 X Detection Level	10 - 100 X Detection Level	> 100 X Detection Level
Analyte	Units					
<b>Explosives</b>						
1,3,5-Trinitrobenzene	UG/KG	250.00	360	1	1	1
1,3-Dinitrobenzene	UG/KG	250.00	394	1	8	2
2,4,6-Trinitrotoluene	UG/KG	250.00	236	0	0	0
2,4-Dinitrotoluene	UG/KG	250.00	385	1	8	1
2,6-Dinitrotoluene	UG/KG	260.00	394	1	8	2
2-Nitrotoluene	UG/KG	250.00	394	1	8	2
3-Nitrotoluene	UG/KG	250.00	394	1	8	2
4-Nitrotoluene	UG/KG	250.00	394	1	8	2
HMX	UG/KG	2000.00	374	1	7	2
Nitrobenzene	UG/KG	260.00	394	1	8	2
RDX	UG/KG	1000.00	370	1	6	2
Tetryl	UG/KG	650.00	362	1	6	2
<b>Pesticides and/or PCBs</b>						
4,4'-DDD	UG/KG	2.50	71	2	2	0
4,4'-DDE	UG/KG	2.50	56	2	1	0
4,4'-DDT	UG/KG	2.50	56	2	1	0
Aldrin	UG/KG	1.30	73	2	3	0
Alpha Chlordane	UG/KG	1.30	66	2	1	0
Alpha-BHC	UG/KG	1.30	78	2	3	0
Aroclor-1016	UG/KG	33.00	79	2	3	0
Aroclor-1221	UG/KG	33.00	79	2	3	0
Aroclor-1232	UG/KG	33.00	79	2	3	0
Aroclor-1242	UG/KG	33.00	79	2	3	0
Aroclor-1248	UG/KG	33.00	79	2	3	0
Aroclor-1254	UG/KG	67.00	56	0	1	0
Aroclor-1260	UG/KG	67.00	74	1	3	0
Beta-BHC	UG/KG	1.30	76	2	3	0
Delta-BHC	UG/KG	1.30	77	2	3	0
Dieldrin	UG/KG	2.50	73	1	3	0
Endosulfan I	UG/KG	1.30	77	2	3	0
Endosulfan II	UG/KG	2.50	74	2	3	0
Endosulfan Sulfate	UG/KG	2.50	78	2	3	0
Endrin	UG/KG	2.50	62	2	3	0
Endrin Aldehyde	UG/KG	2.50	71	2	2	0
Endrin Ketone	UG/KG	2.50	77	2	3	0
Gamma Chlordane	UG/KG	1.30	63	0	0	0
Gamma-BHC (Lindane)	UG/KG	1.30	76	2	3	0
Heptachlor	UG/KG	1.30	72	2	3	0
Heptachlor Epoxide	UG/KG	1.30	74	2	3	0
Methoxychlor	UG/KG	13.00	78	2	3	0
Toxaphene	UG/KG	83.00	79	2	3	0
<b>Semi-Volatile Organics</b>						
1,2,4-Trichlorobenzene	UG/KG	330.00	77	27	0	0
1,2-Dichlorobenzene	UG/KG	330.00	78	28	0	0
1,3-Dichlorobenzene	UG/KG	330.00	78	28	0	0
1,4-Dichlorobenzene	UG/KG	330.00	76	28	0	0
2,2'-oxybis (1-chloropropane)	UG/KG	56.00	78	49	28	0
2,4,5-Trichlorophenol	UG/KG	800.00	78	28	0	0
2,4,6-Trichlorophenol	UG/KG	330.00	78	28	0	0
2,4-Dichlorophenol	UG/KG	330.00	78	28	0	0

Table F-10 (cont.).

Ravenna Army Ammunition Plant Phase 1 RI  
Frequency of Elevated Detection Levels

Soil							
2,4-Dimethylphenol	UG/KG	330.00	78	28	0	0	
2,4-Dinitrophenol	UG/KG	800.00	78	28	0	0	
2-Chloronaphthalene	UG/KG	330.00	78	28	0	0	
2-Chlorophenol	UG/KG	330.00	78	28	0	0	
2-Methylnaphthalene	UG/KG	330.00	71	24	0	0	
2-Methylphenol	UG/KG	330.00	78	28	0	0	
2-Nitroaniline	UG/KG	800.00	78	28	0	0	
2-Nitrophenol	UG/KG	330.00	78	28	0	0	
3,3'-Dichlorobenzidine	UG/KG	800.00	78	28	0	0	
3-Nitroaniline	UG/KG	800.00	78	28	0	0	
4,6-Dinitro-o-Cresol	UG/KG	330.00	78	28	0	0	
4-Bromophenyl-phenyl Ether	UG/KG	330.00	78	28	0	0	
4-Chloroaniline	UG/KG	330.00	78	28	0	0	
4-Chlorophenyl-phenylether	UG/KG	330.00	78	28	0	0	
4-Methylphenol	UG/KG	330.00	78	28	0	0	
4-Nitroaniline	UG/KG	800.00	78	28	0	0	
4-Nitrophenol	UG/KG	800.00	78	28	0	0	
4-chloro-3-methylphenol	UG/KG	330.00	78	28	0	0	
Acenaphthene	UG/KG	67.00	69	43	25	0	
Acenaphthylene	UG/KG	330.00	71	25	0	0	
Anthracene	UG/KG	330.00	65	23	0	0	
Benzo(a)anthracene	UG/KG	330.00	51	18	0	0	
Benzo(a)pyrene	UG/KG	330.00	50	18	0	0	
Benzo(b)fluoranthene	UG/KG	330.00	53	20	0	0	
Benzo(g,h,i)perylene	UG/KG	330.00	55	19	0	0	
Benzo(k)fluoranthene	UG/KG	330.00	49	18	0	0	
Bis(2-chloroethoxy)methane	UG/KG	330.00	78	28	0	0	
Bis(2-chloroethyl)ether	UG/KG	330.00	78	28	0	0	
Bis(2-ethylhexyl)phthalate	UG/KG	330.00	47	21	0	0	
Butyl Benzyl Phthalate	UG/KG	330.00	75	26	0	0	
Carbazole	UG/KG	330.00	65	23	0	0	
Chrysene	UG/KG	330.00	46	16	0	0	
Di-n-butyl Phthalate	UG/KG	330.00	66	24	0	0	
Di-n-octyl Phthalate	UG/KG	330.00	78	28	0	0	
Dibenzo(a,h)anthracene	UG/KG	330.00	61	22	0	0	
Dibenzofuran	UG/KG	330.00	71	25	0	0	
Diethyl Phthalate	UG/KG	330.00	78	28	0	0	
Dimethyl Phthalate	UG/KG	330.00	77	27	0	0	
Fluoranthene	UG/KG	330.00	40	14	0	0	
Fluorene	UG/KG	330.00	67	24	0	0	
Hexachlorobenzene	UG/KG	330.00	78	28	0	0	
Hexachlorobutadiene	UG/KG	330.00	78	28	0	0	
Hexachlorocyclopentadiene	UG/KG	330.00	78	28	0	0	
Hexachloroethane	UG/KG	330.00	78	28	0	0	
Indeno(1,2,3-cd)pyrene	UG/KG	330.00	56	19	0	0	
Isophorone	UG/KG	330.00	78	28	0	0	
N-Nitroso-di-n-propylamine	UG/KG	330.00	78	28	0	0	
N-Nitrosodiphenylamine	UG/KG	330.00	76	26	0	0	
Naphthalene	UG/KG	330.00	70	24	0	0	
Pentachlorophenol	UG/KG	800.00	76	26	0	0	
Phenanthrene	UG/KG	330.00	52	18	0	0	
Phenol	UG/KG	330.00	78	28	0	0	
Pyrene	UG/KG	330.00	46	17	0	0	

Table F-10 (cont.).

Ravenna Army Ammunition Plant Phase 1 RI  
Frequency of Elevated Detection Levels

Sediment						
Analyte	Units	Detection Level	Total Number of Non-detects	2 - 10 X Detection Level	10 - 100 X Detection Level	> 100 X Detection Level
<b>Explosives</b>						
1,3,5-Trinitrobenzene	UG/KG	250.00	126	0	0	0
1,3-Dinitrobenzene	UG/KG	250.00	129	0	0	0
2,4,6-Trinitrotoluene	UG/KG	250.00	95	0	0	0
2,4-Dinitrotoluene	UG/KG	250.00	129	0	0	0
2,6-Dinitrotoluene	UG/KG	260.00	129	0	0	0
2-Nitrotoluene	UG/KG	250.00	129	0	0	0
3-Nitrotoluene	UG/KG	250.00	129	0	0	0
4-Nitrotoluene	UG/KG	250.00	129	0	0	0
HMX	UG/KG	2000.00	127	0	0	0
Nitrobenzene	UG/KG	260.00	127	0	0	0
RDX	UG/KG	1000.00	127	0	0	0
Tetryl	UG/KG	650.00	127	0	0	0
<b>Pesticides and/or PCBs</b>						
4,4'-DDD	UG/KG	2.50	20	3	0	0
4,4'-DDE	UG/KG	2.50	19	3	0	0
4,4'-DDT	UG/KG	2.50	19	3	0	0
Aldrin	UG/KG	1.30	21	3	1	0
Alpha Chlordane	UG/KG	1.30	20	3	1	0
Alpha-BHC	UG/KG	1.30	21	3	1	0
Aroclor-1016	UG/KG	33.00	21	3	1	0
Aroclor-1221	UG/KG	33.00	21	3	1	0
Aroclor-1232	UG/KG	33.00	21	3	1	0
Aroclor-1242	UG/KG	33.00	21	3	1	0
Aroclor-1248	UG/KG	33.00	21	3	1	0
Aroclor-1254	UG/KG	67.00	18	2	0	0
Aroclor-1260	UG/KG	67.00	21	3	1	0
Beta-BHC	UG/KG	1.30	21	3	1	0
Delta-BHC	UG/KG	1.30	21	3	1	0
Dieldrin	UG/KG	2.50	21	3	1	0
Endosulfan I	UG/KG	1.30	21	3	1	0
Endosulfan II	UG/KG	2.50	21	3	1	0
Endosulfan Sulfate	UG/KG	2.50	21	3	1	0
Endrin	UG/KG	2.50	18	3	0	0
Endrin Aldehyde	UG/KG	2.50	20	3	0	0
Endrin Ketone	UG/KG	2.50	21	3	1	0
Gamma Chlordane	UG/KG	1.30	18	3	0	0
Gamma-BHC (Lindane)	UG/KG	1.30	21	3	1	0
Heptachlor	UG/KG	1.30	19	3	1	0
Heptachlor Epoxide	UG/KG	1.30	21	3	1	0
Methoxychlor	UG/KG	13.00	21	3	1	0
Toxaphene	UG/KG	83.00	21	3	1	0
<b>Semi-Volatile Organics</b>						
1,2,4-Trichlorobenzene	UG/KG	330.00	21	13	0	0
1,2-Dichlorobenzene	UG/KG	330.00	21	13	0	0
1,3-Dichlorobenzene	UG/KG	330.00	21	13	0	0
1,4-Dichlorobenzene	UG/KG	330.00	21	13	0	0
2,2'-oxybis (1-chloropropane)	UG/KG	110.00	21	13	7	0
2,4,5-Trichlorophenol	UG/KG	800.00	21	13	0	0
2,4,6-Trichlorophenol	UG/KG	330.00	21	13	0	0
2,4-Dichlorophenol	UG/KG	330.00	21	13	0	0



Table F-10 (cont.).

Ravenna Army Ammunition Plant Phase 1 RI  
Frequency of Elevated Detection Levels

Sediment							
2,4-Dimethylphenol	UG/KG	330.00	21	13	0	0	
2,4-Dinitrophenol	UG/KG	800.00	21	13	0	0	
2-Chloronaphthalene	UG/KG	330.00	21	13	0	0	
2-Chlorophenol	UG/KG	330.00	21	13	0	0	
2-Methylnaphthalene	UG/KG	330.00	20	12	0	0	
2-Methylphenol	UG/KG	330.00	21	13	0	0	
2-Nitroaniline	UG/KG	800.00	21	13	0	0	
2-Nitrophenol	UG/KG	330.00	21	13	0	0	
3,3'-Dichlorobenzidine	UG/KG	800.00	21	13	0	0	
3-Nitroaniline	UG/KG	800.00	21	13	0	0	
4,6-Dinitro-o-Cresol	UG/KG	330.00	21	13	0	0	
4-Bromophenyl-phenyl Ether	UG/KG	330.00	21	13	0	0	
4-Chloroaniline	UG/KG	330.00	21	13	0	0	
4-Chlorophenyl-phenylether	UG/KG	330.00	21	13	0	0	
4-Methylphenol	UG/KG	330.00	21	13	0	0	
4-Nitroaniline	UG/KG	800.00	21	13	0	0	
4-Nitrophenol	UG/KG	800.00	21	13	0	0	
4-chloro-3-methylphenol	UG/KG	330.00	21	13	0	0	
Acenaphthene	UG/KG	330.00	20	12	0	0	
Acenaphthylene	UG/KG	330.00	20	12	0	0	
Anthracene	UG/KG	330.00	18	10	0	0	
Benzo(a)anthracene	UG/KG	330.00	13	6	0	0	
Benzo(a)pyrene	UG/KG	330.00	12	5	0	0	
Benzo(b)fluoranthene	UG/KG	330.00	12	5	0	0	
Benzo(g,h,i)perylene	UG/KG	330.00	14	7	0	0	
Benzo(k)fluoranthene	UG/KG	330.00	14	7	0	0	
Bis(2-chloroethoxy)methane	UG/KG	330.00	21	13	0	0	
Bis(2-chloroethyl)ether	UG/KG	330.00	21	13	0	0	
Bis(2-ethylhexyl)phthalate	UG/KG	330.00	18	11	0	0	
Butyl Benzyl Phthalate	UG/KG	330.00	21	13	0	0	
Carbazole	UG/KG	330.00	19	11	0	0	
Chrysene	UG/KG	330.00	11	4	0	0	
Di-n-butyl Phthalate	UG/KG	330.00	19	11	0	0	
Di-n-octyl Phthalate	UG/KG	330.00	21	13	0	0	
Dibenzo(a,h)anthracene	UG/KG	330.00	17	10	0	0	
Dibenzofuran	UG/KG	330.00	20	12	0	0	
Diethyl Phthalate	UG/KG	330.00	21	13	0	0	
Dimethyl Phthalate	UG/KG	330.00	21	13	0	0	
Fluoranthene	UG/KG	330.00	12	5	0	0	
Fluorene	UG/KG	330.00	20	12	0	0	
Hexachlorobenzene	UG/KG	330.00	21	13	0	0	
Hexachlorobutadiene	UG/KG	330.00	21	13	0	0	
Hexachlorocyclopentadiene	UG/KG	330.00	21	13	0	0	
Hexachloroethane	UG/KG	330.00	21	13	0	0	
Indeno(1,2,3-cd)pyrene	UG/KG	330.00	14	7	0	0	
Isophorone	UG/KG	330.00	21	13	0	0	
N-Nitroso-di-n-propylamine	UG/KG	330.00	21	13	0	0	
N-Nitrosodiphenylamine	UG/KG	330.00	20	12	0	0	
Naphthalene	UG/KG	330.00	21	13	0	0	
Pentachlorophenol	UG/KG	800.00	21	13	0	0	
Phenanthrene	UG/KG	330.00	16	9	0	0	
Phenol	UG/KG	330.00	20	12	0	0	
Pyrene	UG/KG	330.00	11	4	0	0	

**Table F-11. RVAAP Phase 1 RI - Data Quality Assessment  
Field Equipment Rinsate Blank Summary**

Area	Sample ID	Date Collected	Analyte	Results	Units	Qual
Load Line 1	LL1mw-002-0665-ER	08/10/96	Aluminum	23.6	UG/L	J
			Barium	0.41	UG/L	J
			Manganese	0.79	UG/L	J
			Sodium	108	UG/L	J
			Heptachlor	0.04	UG/L	J
			Naphthalene	2	UG/L	J
Load Line 4	LL4wp-001-0664-ER	07/28/96	Aluminum	18.2	UG/L	J
			Barium	0.47	UG/L	J
			Beryllium	0.35	UG/L	J
			Calcium	222	UG/L	J
			Copper	0.71	UG/L	J
			Manganese	2.4	UG/L	J
			Potassium	32.2	UG/L	J
			Sodium	217	UG/L	J
			Methylene Chloride	10	UG/L	J

**Table F-12. RVAAP Phase 1 RI - Data Quality Assessment  
Trip Blank Summary**

Area	Sample ID	Date Collected	Analyte	Results	Units	Qual
Landfill North of Winklepeck	LNW__-001-0444-TB	07/27/96	Methylene Chloride	12	UG/L	J
Load Line 1	LL1__-004-0082-TB	07/26/96	Methylene Chloride	10	UG/L	J
Load Line 2	LL2mw-003-0158-TB	08/19/96	Chloroform	1	UG/L	J
	LL2mw-004-0159-TB	08/21/96	Methylene Chloride	8	UG/L	J
Load Line 3	LL3__-002-0227-TB	07/26/96	Methylene Chloride	11	UG/L	J
Upper and Lower Cobbs Pond	CPC__-002-0663-TB	07/29/96	Methylene Chloride	12	UG/L	J

There were a minimal number of detected VOCs in project trip blanks. These were all near or below their associated Practical Quantitation Levels (PQLs) and only just above the laboratory instrument detection levels. These levels are not considered significant and have not caused data qualification. It is therefore determined that VOC analysis has not been affected through the transportation and storage process, and that the procedures and precautions employed were effective in preserving the integrity of the sample analysis.

Equipment rinsates document that effective decontamination of equipment has been performed for those contaminants of primary interest to the project. No metal, VOC, explosive, SVOC, or pesticide/PCB parameters were observed above their associated PQLs and only minor levels were reported above the laboratory instrument detection levels. There is no indication that cross-contamination has occurred nor has any data been qualified relative to these rinsates.

The potable water source field blank (0001FB), collected prior to initiation of field efforts, exhibited consistent and expected levels for major cation constituents. Metal, VOC, SVOC, explosive, and pesticide/PCB components observed are at levels below quantitation level goal for the project. It is therefore concluded that the potable water source employed for the work had no negative impact on study data.

#### **F.4.4 Representativeness and Comparability**

Representativeness expresses the degree to which data accurately reflect the analyte or parameter of interest for the environmental site and is the qualitative term most concerned with the proper design of the sampling program (EPA 1987). Factors that affect the representativeness of analytical data include proper preservation, holding times, use of standard sampling and analytical methods, and determination of matrix or analyte interferences. Only one data point was rejected based on a missed holding time, while a few explosive analysis required estimation due to extended holding times. Refer to Attachment F-3 for an analytic data status report for the project. Sample preservation, analytical methodologies, and soil sampling methodologies were documented to be adequate and consistently applied.

Cyanide analysis for groundwater sample LL4WP-060-0299-GW missed the 14 day holding time due to an error in assigning the proper analysis. Due to the significant delay (28 days) and lack of cyanide observed, the integrity of the analysis was compromised to the extent requiring rejection. A second cyanide value (soil sample WBGSS-066-0528-SO) was estimated "UJ", because it missed the holding time by six days. Four soil samples for explosive determinations were estimated "UJ" and "J" due to missed holding times of 4-11 days, while a set of pesticide soil samples at Load Line 4, which missed holding time by 1-2 days were accepted. These analytical holding times were missed due to requirements for dilution, re-extraction, and chromatographic interferences. Rejection or estimation of values relative to holding time issues did not impact data interpretation or detract from achieving the project objectives.

Comparability, like representativeness, is a qualitative term relative to a project data set as an individual. These RVAAP AOC investigations employed appropriate sampling methodologies,

site surveillance, use of standard sampling devices, uniform training, documentation of sampling, standard analytical protocols/procedures, QC checks with standard control limits, and universally accepted data reporting units to ensure comparability to other data sets. Through the proper implementation and documentation of these standard practices, the project has established the confidence that the data will be comparable to other project and programmatic information.

#### **F.4.5 Completeness**

Usable data are defined as those data which pass individual scrutiny during the verification and validation process and are accepted for unrestricted application to the human health risk assessment evaluation or equivalent type applications. It has been determined that estimated data are acceptable for RVAAP project objectives.

Objectives for the RVAAP Phase 1 RI have been achieved. The project produced valid results for 99% of the sample analyses performed and successfully collected all the samples planned.

#### **F.5 Data Quality Assessment Summary**

The overall quality of RVAAP Phase 1 RI information meets or exceeds the established project objectives. Through proper implementation of the project data verification, validation, and assessment process, project information has been determined to be acceptable for use.

Data, as presented, have been qualified as usable, but estimated when necessary. Data which have been estimated provide indications of either accuracy, precision, or sensitivity being less than desired but adequate for interpretation.

Data produced for this project demonstrates that it can withstand scientific scrutiny, is appropriate for its intended purpose, is technically defensible, and is of known and acceptable sensitivity, precision, and accuracy. Data integrity has been documented through proper implementation of QA and QC measures. The environmental information presented has an established confidence which allows utilization for the project objectives and provides data for future needs.

**APPENDIX F — ATTACHMENT F-1**

**SAIC Data Validation Flagging Codes**



## DATA VALIDATION FLAGGING CODES

### Organic and Inorganic Analytical Data

#### Holding Times

- A01 Extraction holding times were exceeded.
- A02 Extraction holding times were grossly exceeded.
- A03 Analysis holding times were exceeded.
- A04 Analysis holding times were grossly exceeded.
- A05 Samples were not preserved properly.
- A06 Professional judgement was used to qualify the data.

#### GC/MS Tuning

- B01 Mass calibration was in error, even after applying expanded criteria.
- B02 Mass calibration was not performed every 12 hours.
- B03 Mass calibration did not meet ion abundance criteria.
- B04 Professional judgement was used to qualify the data.

#### Initial/Continuing Calibration - Organics

- C01 Initial calibration RRF was  $< 0.05$ .
- C02 Initial calibration RSD was  $> 30\%$ .
- C03 Initial calibration sequence was not followed as required.
- C04 Continuing calibration RRF was  $< 0.05$ .
- C05 Continuing calibration %D was  $> 25\%$ .
- C06 Continuing calibration was not performed at the required frequency.
- C07 Resolution criteria were not met.
- C08 RPD criteria were not met.
- C09 RSD criteria were not met.
- C10 Retention time of compounds was outside windows.
- C11 Compounds were not adequately resolved.
- C12 Breakdown of endrin or DDT was  $> 20\%$ .
- C13 Combined breakdown of endrin/DDT was  $> 30\%$ .
- C14 Professional judgement was used to qualify the data.

### Initial/Continuing Calibration - Inorganics

- D01 ICV or CCV were not performed for every analyte.
- D02 ICV recovery was above the upper control limit.
- D03 ICV recovery was below the lower control limit.
- D04 CCV recovery was above the upper control limit.
- D05 CCV recovery was below the lower control limit.
- D06 Standard curve was not established with the minimum number of standards.
- D07 Instrument was not calibrated daily or each time the instrument was set up.
- D08 Correlation coefficient was  $< 0.995$ .
- D09 Mid range cyanide standard was not distilled.
- D10 Professional judgement was used to qualify the data.

### ICP and Furnace Requirements

- E01 Interference check sample recovery was outside the control limit.
- E02 Duplicate injections were outside the control limit.
- E03 Post digestion spike recovery was outside the control limit.
- E04 MSA was required but not performed.
- E05 Correlation coefficient was  $< 0.995$ .
- E06 MSA spikes were not at the correct concentration.
- E07 Serial dilution criteria were not met.
- E08 Professional judgement was used to qualify the data.

### Blanks

- F01 Sample data were qualified as a result of the method blank.
- F02 Sample data were qualified as a result of the field blank.
- F03 Sample data were qualified as a result of the equipment rinsate.
- F04 Sample data were qualified as a result of the trip blank.
- F05 Gross contamination exists.
- F06 Concentration of the contaminant was detected at a level below the CRQL.
- F07 Concentration of the contaminant was detected at a level less than the action limit, but greater than the CRQL.
- F08 Concentration of the contaminant was detected at a level that exceeds the action level.
- F09 No laboratory blanks were analyzed.
- F10 Blank had a negative value  $> 5 \times$ 's the IDL.
- F11 Blanks were not analyzed at required frequency.
- F12 Professional judgement was used to qualify the data.

### Surrogate Recovery

- G01 Surrogate recovery was above the upper control limit.
- G02 Surrogate recovery was below the lower control limit.
- G03 Surrogate recovery was  $< 10\%$ .
- G04 Surrogate recovery was zero.
- G05 Surrogate was not present.
- G06 Professional judgement was used to qualify the data.



### Matrix Spike/Matrix Spike Duplicate

- H01 MS/MSD recovery was above the upper control limit.
- H02 MS/MSD recovery was below the lower control limit.
- H03 MS/MSD recovery was < 10%.
- H04 MS/MSD pairs exceed the RPD limit.
- H05 No action was taken on MS/MSD results.
- H06 Professional judgement was used to qualify the data.

### Matrix Spike

- I01 MS recovery was above the upper control limit.
- I02 MS recovery was below the lower control limit.
- I03 MS recovery was < 30%.
- I04 No action was taken on MS data.
- I05 Professional judgement was used to qualify the data.

### Laboratory Duplicate

- J01 Duplicate RPD was outside the control limit.
- J02 Duplicate sample results were  $> 5 \times$  the CRDL.
- J03 Duplicate sample results were  $< 5 \times$  the CRDL.
- J04 Professional judgement was used to qualify the data.

### Internal Area Summary

- K01 Area counts were outside the control limits.
- K02 Extremely low area counts or performance was exhibited by a major drop off.
- K03 IS retention time varied by more than 30 seconds.
- K04 Professional judgement was used to qualify the data.

### Pesticide Cleanup Checks

- L01 10% recovery was obtained during either check.
- L02 Recoveries during either check were  $> 120\%$ .
- L03 GPC Cleanup recoveries were outside the control limits.
- L04 Florisil cartridge cleanup recoveries were outside the control limits.
- L05 Professional judgement was used to qualify the data.

### **Target Compound Identification**

- M01 Incorrect identifications were made.
- M02 Qualitative criteria were not met.
- M03 Cross contamination occurred.
- M04 Confirmatory analysis was not performed.
- M05 No results were provided.
- M06 Analysis occurred outside 12 hr GC/MS window.
- M07 Professional judgement was used to qualify the data.
- M08 The %D between the two pesticide/PCB column checks was > 25%.

### **Compound Quantitation and Reported CRQLs**

- N01 Quantitation limits were affected by large off-scale peaks.
- N02 MDLs reported by the laboratory exceeded corresponding CRQLs.
- N03 Professional judgement used to qualify the data.

### **Tentatively Identified Compounds (TICs)**

- O01 Compound was suspected laboratory contaminant and was not detected in the blank.
- O02 TIC result was not above 10× the level found in the blank.
- O03 Professional judgement was used to qualify analytical data.

### **Laboratory Control Samples (LCSs)**

- P01 LCS recovery was above upper control limit.
- P02 LCS recovery was below lower control limit.
- P03 LCS recovery was < 50%.
- P04 No action was taken on the LCS data.
- P05 LCS was not analyzed at required frequency.

### **Field Duplicate**

- Q01 No action was taken on the basis of field duplicate RPDs.

**APPENDIX F — ATTACHMENT F-2**

**RVAAP Phase 1 RI  
Chain-of-Custody Forms**



PROJECT NAME: Ravenna Army Ammunition Plant (RVAAP) Phase 1 RI				REQUESTED PARAMETERS												LABORATORY NAME: SW Lab of Oklahoma, Inc.			
PROJECT NUMBER: 0010				Explosives 8330 (solid/Liquid)	Metals (11) (solid)	VOC 8260A (solid/Liquid)	SVOC, Pest/PCB, Explosives (solid)	SVOC 8270B (Liquid)	Pest/PCB 8081 (Liquid)	Metals (23) (solid/Liquid)	Cyanide 9013 (Liquid)	Metals (23), Cyanide (solid)	Metals (11), Cyanide (solid)	Geotech (TOC, Grain Size) (solid)	No. of Bottles/Vials:	LABORATORY ADDRESS: 1700 West Albany Suite C Broken Arrow, OK 74012			
PROJECT MANAGER: Steve Selecman																OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS			
Sampler (Signature)		(Printed Name)		Sample ID	Date Collected	Time Collected	Matrix												
<i>Laura M. Morrison</i>		Laura M. Morrison		LL4ss - 02B - 0259 - SO	7/23/96	1455	SOIL	1	1								2		
				LL3ss - 023 - 0187 - SO		1350	SOIL			1	1						3		
				LL3ss - 024 - 0188 - SO		1445	SOIL			1	1						3		
				LL3ss - 025 - 0189 - SO		1525	SOIL			1	1						3		
				LL4wp - 060 - 0299 - GW	7/23/96	1635	WATER	1		2		1	1	1			7		
				LL2 - 002 - 0157 - TB		1635	WATER			2							2		
				B12ss - 001 - 0378 - SO	24 JUL 96	0950	SOIL			1	1						3		
				LL3ss - 010 - 0172 - SO		1018	SOIL	1	1								2		
				B12ss - 002 - 0379 - SO		1035	SOIL	1	1								2		
				B12ss - 002 - 0380 - FD		1035	SOIL	1	1								2		
				<del>B12ss - 002 - LMM 7/24/96</del>															
				LL3ss - 012 - 0175 - SO	24 JUL 96	0909	SOIL	1	1								2		
				LL3ss - 014 - 0177 - SO		0940	SOIL	1	1								2		
RELINQUISHED BY: <i>L.M. Morrison</i>		Date/Time 24 JUL 96	RECEIVED BY: <i>L.M. Morrison</i>	Date/Time 7/25/96	TOTAL NUMBER OF CONTAINERS:						Cooler Temperature:								
COMPANY NAME: SAIC		1530	COMPANY NAME: SWLO	0955	Cooler ID:						FEDEX NUMBER:								
RECEIVED BY:		Date/Time	RELINQUISHED BY:	Date/Time															
COMPANY NAME:			COMPANY NAME:																
RELINQUISHED BY:		Date/Time	RECEIVED BY:	Date/Time															
COMPANY NAME:			COMPANY NAME:																

F-53

2°C, 3°C, 3°C

PROJECT NAME: Ravenna Army Ammunition Plant (RVAAP) Phase 1 RI				REQUESTED PARAMETERS													LABORATORY NAME: SW Lab of Oklahoma, Inc.	
PROJECT NUMBER: 0010				Explosives 8330 (solid/Liquid)	Metals (11) (Solid)	VOC 8260A (solid/Liquid)	SVOC, Pest/PCB, Explosives (Solid)	SVOC 8270B (Liquid)	Pest/PCB 8081 (Liquid)	Metals (23) (Solid/Liquid)	Cyanide 9013 (Liquid)	Metals (23), Cyanide (Solid)	Metals (11), Cyanide (Solid)	Geotech (TOC, Grain Size) (Solid)	TEMP BLANKS	No. of Bottles/Vials:	LABORATORY ADDRESS: 1700 West Albany Suite C Broken Arrow, OK 74012	
PROJECT MANAGER: Steve Selecman																	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS	
Sampler (Signature)		Printed Name		Sample ID	Date Collected	Time Collected	Matrix									PHONE NO: (918) 251-2858		
<i>Laura M. Morrison</i>		LAURA M. MORRISON		LL395 - 016 - 0179 - SO	24 JUL 96	1040	SOIL			1	1							
				LL395 - 015 - 0178 - SO	↓	1117	SOIL	1	1								2	
				LL495 - 014 - 0244 - SO		0910	SOIL	1	1								2	
				LL495 - 015 - 0245 - SO		1003	SOIL			1	1						3	
				LL495 - 016 - 0246 - SO		1202	SOIL	1	1								2	
				LL495 - 017 - 0247 - SO		1225	SOIL	1	1								2	
				LL495 - 018 - 0248 - SO		1115	SOIL	1	1								2	
				LL495 - 019 - 0249 - SO		1033	SOIL	1	1								2	
				LL495 - 020 - 0250 - SO		1130	SOIL	1	1								2	
				CB001 - CB003		LAST ENTRY										3	3	
RELINQUISHED BY: <i>L.M. Morrison</i>				Date/Time 24 JUL 96		RECEIVED BY: <i>[Signature]</i>			Date/Time 7/25/96	TOTAL NUMBER OF CONTAINERS: 56		Cooler Temperature: 5°C						
COMPANY NAME: SAIC				1530	COMPANY NAME: SWLO			0955	Cooler ID: B31, B20, & G18		FEDEX NUMBER: 0944266923							
RECEIVED BY:				Date/Time	RELINQUISHED BY:			Date/Time										
COMPANY NAME:					COMPANY NAME:													
RELINQUISHED BY:				Date/Time	RECEIVED BY:			Date/Time										
COMPANY NAME:					COMPANY NAME:													

F-54

21, 5, 3°C

PROJECT NAME: Ravenna Army Ammunition Plant (RVAAP) Phase 1 RI				REQUESTED PARAMETERS													LABORATORY NAME: SW Lab of Oklahoma, Inc.	
PROJECT NUMBER: 0010				Explosives 8330 (Solid/Liquid)	Metals (11) (Solid)	VOC 8260A (Solid/Liquid)	SVOC, Pest./PCB, Explosives (Solid)	SVOC 8270B (Liquid)	Pest./PCB 8081 (Liquid)	Metals (23) (Solid/Liquid)	Cyanide 9013 (Liquid)	Metals (23), Cyanide (Solid)	Metals (11), Cyanide (Solid)	Geotech (TOC, Grain Size) (Solid)	No. of Bottles/ Vials:	LABORATORY ADDRESS: 1700 West Albany Suite C Broken Arrow, OK 74012		
PROJECT MANAGER: Steve Selecman																OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS		
Sampler (Signature)		(Printed Name)																
<i>Laura M. Morrison</i>		LAURA M. MORRISON																
Sample ID	Date Collected	Time Collected	Matrix															
B12sd-007(d)-0386-SD	24 JUL 96	1415	SOIL	1	1										1		3	
B12sd-006(d)-0385-SD	}	1432	SOIL	1	1									1		3		
B12sd-005(d)-0384-SD		1445	SOIL			1	1							1		4		
B12sd-004(d)-0383-SD		1525	SOIL	1	1									1		3		
B12sd-003(d)-0382-SD		1540	SOIL	1	1									1		3		
LL3ss-009-0171-SO		1417	SOIL	1	1											2		
LL3ss-011-0173-SO		1438	SOIL	1	1											2		
LL3ss-013-0176-SO		1505	SOIL	1	1											2		
LL3ss-002-0162-SO		1555	SOIL			1	1					1				3		
LL3ss-005-0167-SO		1613	SOIL	1	1											2		
LL3ss-007-0169-SO		1642	SOIL	1	1											2		
LL4wp-061-0300-GW	▼	1145	WATER	1		2		1	1	1	1					7		
LL4wp-059-0298-GW	24 JUL 96	1450	WATER	1		2										3		

  

RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time	TOTAL NUMBER OF CONTAINERS:	Cooler Temperature: 2°C, 4°C, 5°C
COMPANY NAME:		COMPANY NAME:		Cooler ID:	FEDEX NUMBER:
RECEIVED BY:	Date/Time	RELINQUISHED BY:	Date/Time		
COMPANY NAME:		COMPANY NAME:			
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time		
COMPANY NAME:		COMPANY NAME:			

P-55

PROJECT NAME: Ravenna Army Ammunition Plant (RVAAP) Phase 1 RI				REQUESTED PARAMETERS													LABORATORY NAME: SW Lab of Oklahoma, Inc.					
PROJECT NUMBER: 0010				Explosives 8330 (Solid/Liquid)	Metals (11) (Solid)	VOC 8260A (Solid/Liquid)	SVOC, Pest/PCB, Explosives (Solid)	SVOC 8270B (Liquid)	Pest/PCB 8081 (Liquid)	Metals (23) (Solid/Liquid)	Cyanide 9013 (Liquid)	Metals (23), Cyanide (Solid)	Metals (11), Cyanide (Solid)	Geotech (TOC, Grain Size) (Solid)	TEMP BLANKS	No. of Bottles/ Vials:	LABORATORY ADDRESS: 1700 West Albany Suite C Broken Arrow, OK 74012					
PROJECT MANAGER: Steve Selecman																	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS					
Sampler (Signature)		(Printed Name)		Sample ID	Date Collected	Time Collected	Matrix									PHONE NO: (918) 251-2858						
<i>Laura M. Morrison</i>		LAURA M. MORRISON																				
<i>LLAwp-059-0298-GW</i>		<i>25 JUL 96</i>	<i>0930</i>	<i>WATER</i>				<i>1</i>	<i>1</i>	<i>1</i>							<i>4</i>					
<i>B12sd-008(p)-0387-SD</i>		<i>3</i>	<i>0855</i>	<i>SOIL</i>	<i>1</i>	<i>1</i>											<i>3</i>					
<i>B12sd-008(p)-0388-FD</i>			<i>0855</i>	<i>SOIL</i>	<i>1</i>	<i>1</i>												<i>3</i>				
<i>B12sd-009(r)-0390-SD</i>			<i>0925</i>	<i>SOIL</i>			<i>1</i>	<i>1</i>				<i>1</i>	<i>1</i>					<i>4</i>				
<i>LL3ss-026-0190-SD</i>			<i>0950</i>	<i>SOIL</i>	<i>1</i>	<i>1</i>												<i>2</i>				
<i>LL3ss-026-0191-FD</i>			<i>0950</i>	<i>SOIL</i>	<i>1</i>	<i>1</i>												<i>2</i>				
<i>LL4ss-033-0266-SD</i>			<i>0955</i>	<i>SOIL</i>	<i>1</i>	<i>1</i>												<i>2</i>				
<i>LL4ss-033-0264-FD</i>			<i>0955</i>	<i>SOIL</i>	<i>1</i>	<i>1</i>												<i>2</i>				
<i>LL4ss-032-0263-SD</i>			<i>1035</i>	<i>SOIL</i>	<i>1</i>	<i>1</i>												<i>2</i>				
<i>LL4ss-031-0262-SD</i>			<i>1130</i>	<i>SOIL</i>	<i>1</i>	<i>1</i>												<i>2</i>				
<i>B12-001-0391-TB</i>			<i>1145</i>	<i>WATER</i>					<i>2</i>									<i>2</i>	<i>TRIP BLANK</i>			
<i>CB005-CB007</i>		<i>NA</i>	<i>NA</i>	<i>NA</i>													<i>3</i>	<i>3</i>	<i>TEMP BLANKS</i>			
<i>LAST ENTRY</i>																						
RELINQUISHED BY: <i>Laura M. Morrison</i>		Date/Time <i>7/25/96</i>	RECEIVED BY: <i>[Signature]</i>		Date/Time <i>7/26/96</i>	TOTAL NUMBER OF CONTAINERS: <i>60</i>		Cooler Temperature: <i>5°C</i>										Cooler ID: <i>B08, B12, B21</i>		FEDEX NUMBER: <i>0944266886</i>		
COMPANY NAME: <i>SAIC</i>		<i>1600</i>	COMPANY NAME: <i>SW Lab of OK</i>		<i>09:25</i>																	
RECEIVED BY:		Date/Time:	RELINQUISHED BY:		Date/Time:																	
COMPANY NAME:			COMPANY NAME:																			
RELINQUISHED BY:		Date/Time:	RECEIVED BY:		Date/Time:																	
COMPANY NAME:			COMPANY NAME:																			

F-56

*21 1°C, 5°C*



PROJECT NAME: Ravenna Army Ammunition Plant (RVAAP) Phase 1 RI				REQUESTED PARAMETERS													LABORATORY NAME: SW Lab of Oklahoma, Inc.	
PROJECT NUMBER: 0010				Explosives 8330 (solid/Liquid)	Metals (11) (Solid)	VOC 8260A (solid/Liquid)	SVOC, Pest/PCB, Explosives (Solid)	SVOC 8270B (Liquid)	Pest/PCB 8081 (Liquid)	Metals (23) (solid/Liquid)	Cyanide 9013 (Liquid)	Metals (23), Cyanide (Solid)	Metals (11), Cyanide (Solid)	Geotech (TOC, Grain Size) (Solid)	No. of Bottles/ Vials:	LABORATORY ADDRESS: 1700 West Albany Suite C Broken Arrow, OK 74012		
PROJECT MANAGER: Steve Selecman																PHONE NO: (918) 251-2858		
Sampler (Signature)		Printed Name		OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS														
Laura M. Morrison		LAURA M. MORRISON																
Sample ID	Date Collected	Time Collected	Matrix															
CPC wp - 011 - 0221 - GW	25 JUL 96	1315	WATER	1		2		1		1		1				7		
CPC wp - 011 - 0224 - FD	}	1315	WATER	1		2		1		1		1				7		
B12 - 002 - 0392 - TB		1315	WATER			2										2		
LL3ss - 001 - 0161 - SO		1150	SOIL	1												2		
LL3ss - 004 - 0166 - SO		1207	SOIL	1												2		
LL3ss - 006 - 0168 - SO		1234	SOIL	1												2		
LL3ss - 008 - 0170 - SO		1256	SOIL	1												2		
LL3ss - 008 - 0174 - FD		1256	SOIL	1												2		
LL3ss - 017 - 0180 - SO		1515	SOIL	1												2		
LL3ss - 018 - 0181 - SO		1450	SOIL	1												2		
LL3ss - 019 - 0182 - SO		1431	SOIL	1												2		
LL3ss - 020 - 0183 - SO		1400	SOIL			1		1					1			3		
LL3ss - 020 - 0184 - FD		1400	SOIL			1		1					1			3		
RELINQUISHED BY:		Date/Time	RECEIVED BY:	Date/Time	TOTAL NUMBER OF CONTAINERS:										Cooler Temperature:			
COMPANY NAME:		COMPANY NAME:		Cooler ID:										FEDEX NUMBER:				
RECEIVED BY:	Date/Time	RELINQUISHED BY:	Date/Time	SW Lab of OK										SW pg. 5				
COMPANY NAME:		COMPANY NAME:		430 10.50										SW pg. 5				
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time	Non														
COMPANY NAME:		COMPANY NAME:																

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4°C, 5°C, 3°C, 5°C

PROJECT NAME: Ravenna Army Ammunition Plant (RVAAP) Phase 1 RI				REQUESTED PARAMETERS													LABORATORY NAME: SW Lab of Oklahoma, Inc.	
PROJECT NUMBER: 0010				Explosives 8330 (Solid/Liquid)	Metals (11) (Solid)	VOC 8260A (Solid/Liquid)	SVOC, Pest/PCB, Explosives (Solid)	SVOC 8270B (Liquid)	Pest/PCB 8081 (Liquid)	Metals (23) (Solid/Liquid)	Cyanide 9013 (Liquid)	Metals (23), Cyanide (Solid)	Metals (11), Cyanide (Solid)	Geotech (TOC, Grain Size) (Solid)	No. of Bottles/Vials:	LABORATORY ADDRESS: 1700 West Albany Suite C Broken Arrow, OK 74012		
PROJECT MANAGER: Steve Selecman																OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS		
Sampler (Signature)		(Printed Name)		Sample ID	Date Collected	Time Collected	Matrix									PHONE NO: (918) 251-2858		
<i>Kaura M. Morrison</i>		LAURA M. MORRISON		LL3ss-021-0185-SO	25 JUL 96	1341	SOIL	1	1								2	
				LL3ss-022-0186-SO	}	1540	SOIL	1	1								2	
				L12ss-016-0325-SO		1400	SOIL	1	1								2	
				L12ss-018-0327-SO		1520	SOIL	1	1								2	
				L12ss-019-0328-SO		1435	SOIL			1	1						3	
				L12ss-020-0329-SO	}	1605	SOIL	1	1								2	
				LL4ss-026-0257-SO		1445	SOIL	1	1								2	
				LL4ss-029-0260-SO		1605	SOIL	1	1								2	
				LL4ss-027-0258-SO		25 JUL 96	1515	SOIL	1	1								2
				LL3ss-003-0163-SO	26 JUL 96	0825	SOIL	1	1								2	
				LL3ss-003-0164-SO	}	0825	SOIL	1	1								2	
				LL3ss-029-0195-SO		1131	SOIL	1	1								2	
				LL3ss-030-0196-SO	26 JUL 96	1020	SOIL			1	1						3	
RELINQUISHED BY:		Date/Time	RECEIVED BY:	Date/Time	TOTAL NUMBER OF CONTAINERS:				Cooler Temperature:									
COMPANY NAME:			<i>[Signature]</i>	7/29/96	Cooler ID: SW P95				FEDEX NUMBER: SW P95									
RECEIVED BY:		Date/Time	COMPANY NAME: SW Lab of OK	10:50														
COMPANY NAME:			RELINQUISHED BY:	Date/Time														
RECEIVED BY:		Date/Time	COMPANY NAME:	Date/Time														
COMPANY NAME:			RELINQUISHED BY:	Date/Time														
RECEIVED BY:		Date/Time	COMPANY NAME:	Date/Time														
COMPANY NAME:			RELINQUISHED BY:	Date/Time														

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4'4, 9, 3'5, 5'

PROJECT NAME: Ravenna Army Ammunition Plant (RVAAP) Phase 1 RI				REQUESTED PARAMETERS													LABORATORY NAME: SW Lab of Oklahoma, Inc.	
PROJECT NUMBER: 0010				Explosives 8330 (Solid/Liquid)	Metals (11) (Solid)	VOC 8260A (Solid/Liquid)	SVOC, Pest/PCB, Explosives (Solid)	SVOC 82708 (Liquid)	Pest/PCB 8081 (Liquid)	Metals (23) (Solid/Liquid)	Cyanide 9013 (Liquid)	Metals (23), Cyanide (Solid)	Metals (11), Cyanide (Solid)	Geotech (TOC, Grain Size) (Solid)	No. of Bottles/ Vials:	LABORATORY ADDRESS: 1700 West Albany Suite C Broken Arrow, OK 74012		
PROJECT MANAGER: Steve Selecman																OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS		
Sampler (Signature)		(Printed Name)																
<i>Laura M. Morrison</i>		LAURA W. MORRISON																
Sample ID	Date Collected	Time Collected	Matrix															
LL355-031-0197-SO	26 JUL 96	1111	SOIL	1	1												2	
LL355-032-0198-SO	}	1050	SOIL	1	1												2	
LL355-033-0199-SO		1000	SOIL	1	1												2	
LL355-034-0200-SO		0940	SOIL	1	1												2	
LL355-036-0203-SO		0905	SOIL	1	1												2	
L1255-021-0332-SO		0910	SOIL	1	1												2	
L1255-021-0330-FD		0910	SOIL	1	1												2	
L1255-014-0322-SO		0957	SOIL	1	1												2	
L1255-015-0324-SO		1035	SOIL	1	1												2	
L1255-015-0323-FD		1035	SOIL	1	1												2	
L1255-008-0313-SO		1115	SOIL	1	1												2	
L1255-008-0314-FD	1115	SOIL	1	1												2		
LL455-034-0267-SO	26 JUL 96	1115	SOIL			1	1					1				3		

  

RELINQUISHED BY: <i>Laura M. Morrison</i>	Date/Time	RECEIVED BY: <i>[Signature]</i>	Date/Time 7/27/96	TOTAL NUMBER OF CONTAINERS:	Cooler Temperature:
COMPANY NAME: SAIC		COMPANY NAME: SW Lab of OK	10:50	Cooler ID: See pg. 5	FEDEX NUMBER: See pg. 5
RECEIVED BY:	Date/Time	RELINQUISHED BY:	Date/Time		
COMPANY NAME:		COMPANY NAME:			
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time		
COMPANY NAME:		COMPANY NAME:			

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*Mon*  
4°C, 3°C, 4°C, 5°C, 3°C

PROJECT NAME: Ravenna Army Ammunition Plant (RVAAP) Phase 1 RI				REQUESTED PARAMETERS													LABORATORY NAME: SW Lab of Oklahoma, Inc.				
PROJECT NUMBER: 0010				Explosives 8330 (Solid/Liquid)	Metals (11) (Solid)	VOC 8260A (Solid/Liquid)	SVOC, Pest/PCB, Explosives (Solid)	SVOC 8270B (Liquid)	Pest/PCB 8081 (Liquid)	Metals (23) (Solid/Liquid)	Cyanide 9013 (Liquid)	Metals (23), Cyanide (Solid)	Metals (11), Cyanide (Solid)	Geotech (TOC, Grain Size) (Solid)	No. of Bottles/ Vials:	LABORATORY ADDRESS: 1700 West Albany Suite C Broken Arrow, OK 74012					
PROJECT MANAGER: Steve Selecman																PHONE NO: (918) 251-2858					
Sampler (Signature)		(Printed Name)															OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS				
Sample ID	Date Collected	Time Collected	Matrix																		
LL4ss-012-024Z-80	26 JUL 96	1210	SOIL	1	1												2				
LL4ss-011-0241-80	}	1312	SOIL	1	1												2				
LL4ss-006-0236-80		1332	SOIL	1	1												2				
LL4ss-001-0231-80		1450	SOIL	1	1												2				
LL4ss-035-0268-80		1505	SOIL	1	1												2				
LNWwp-020-0439-GW		1100	WATER	1	2												3				
LL1-004-0082-TB	26 JUL 96	0930	WATER			2											2	TRIP BLANK			
LNWwp-021-0440-GW	7/26/96	0930	WATER			2											2				
CPCwp-013-0223-TB-GW	}	1350	WATER			2											2				
LL3-002-0227-TB		1350	WATER			2											2	TRIP BLANK			
LL3ss-039(b)-0206-80		1330	SOIL		1												1				
LL3ss-037-0204-80	}	1415	SOIL	1	1												2				
LL3ss-040(b)-0207-80		26 JUL 96	1525	SOIL	1	1											1				
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time	TOTAL NUMBER OF CONTAINERS:										Cooler Temperature:							
COMPANY NAME:		<i>M. Morrison</i>	7/27/96	Cooler ID: see pg. 5										FEDEX NUMBER: see pg. 5							
COMPANY NAME:		SW Lab of OK	10:50																		
RECEIVED BY:	Date/Time	RELINQUISHED BY:	Date/Time																		
COMPANY NAME:		COMPANY NAME:																			
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time																		
COMPANY NAME:		COMPANY NAME:																			

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4°C, 3°C, 5°C, 5°C

**CHAIN OF CUSTODY RECORD**

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COC NO.: ~~009~~ 003 cont

PROJECT NAME: Ravenna Army Ammunition Plant (RVAAP) Phase 1 RI				REQUESTED PARAMETERS												LABORATORY NAME: SW Lab of Oklahoma, Inc.	
PROJECT NUMBER: 0010				Explosives 8330 (solid/Liquid)	Metals (11) (solid)	VOC 8260A (solid/Liquid)	SVOC, Pest/PCB, Explosives (solid)	SVOC 8270B (Liquid)	Pest/PCB 8081 (Liquid)	Metals (23) (solid/Liquid)	Cyanide 9013 (Liquid)	Metals (23), Cyanide (Solid)	Metals (11), Cyanide (Solid)	Geotech (TOC, Grain Size) (Solid)	No. of Bottles/ Vials:	LABORATORY ADDRESS: 1700 West Albany Suite C Broken Arrow, OK 74012	
PROJECT MANAGER: Steve Selecman																OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS	
Sampler (Signature)		(Printed Name)														PHONE NO: (918) 251-2858	
L12SS - 017 - 0326 - SO	26 JUL 96	1335	SOIL	1													
L12SS - 004 - 0309 - SO	2	1450	SOIL	1													
L12SS - 005 - 0310 - SO	2	1525	SOIL	1													
L12SS - 006 - 0311 - SO	2	1555	SOIL	1													
L12SS - 007 - 0312 - SO	26 JUL 96	1415	SOIL			1	1				1						
LAST ENTRY																NOTE: 4 COOLANT BLANKS CB010 - CB012	

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RELINQUISHED BY: <i>Laura M. Morrison</i>	Date/Time 7/26/96	RECEIVED BY: <i>[Signature]</i>	Date/Time 7/27/96	TOTAL NUMBER OF CONTAINERS: 129	Cooler Temperature: 5°C
COMPANY NAME: SAIC	1830	COMPANY NAME: SW Lab of OK	10:50	Cooler ID: B19, B29, B04, B25	FEDEX NUMBER: 0944266864
RECEIVED BY:	Date/Time	RELINQUISHED BY:	Date/Time		
COMPANY NAME:		COMPANY NAME:			
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time		
COMPANY NAME:		COMPANY NAME:			

3°C, 5°C, 4°C, 5°C

800 Oak Ridge Turnpike, Oak Ridge, TN 37831 (423) 481-4600

PROJECT NAME: Ravenna Army Ammunition Plant (RVAAP) Phase 1 RI				REQUESTED PARAMETERS													LABORATORY NAME: SW Lab of Oklahoma, Inc.	
PROJECT NUMBER: 0010				Explosives 8330 (Solid/Liquid)	Metals (11) (Solid)	VOC 8260A (Solid/Liquid)	SVOC, Pest/PCB, Explosives (Solid)	SVOC 8270B (Liquid)	Pest/PCB 8081 (Liquid)	Metals (23) (Solid/Liquid)	Cyanide 9013 (Liquid)	Metals (23), Cyanide (Solid)	Metals (11), Cyanide (Solid)	Geotech (TOC, Grain Size) (Solid)	No. of Bottles/Vials:	LABORATORY ADDRESS: 1700 West Albany Suite C Broken Arrow, OK 74012		
PROJECT MANAGER: Steve Selecman																OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS		
Sampler (Signature)		(Printed Name)																
<i>Laura M. Morrison</i>		LAURA M. MORRISON																
Sample ID	Date Collected	Time Collected	Matrix															
L1255 - 010 - 0317 - 80	27 JUL 96	0830	SOIL	1	1												2	
L1255 - 011 - 0318 - 80	}	0905	SOIL	1	1												2	
L1255 - 012 - 0319 - 80		0950	SOIL			1	1				1						3	
L1255 - 012 - 0320 - 80		0950	SOIL			1	1				1						3	
L1255 - 013 - 0321 - 80		1025	SOIL			1	1				1						3	
L1255 - 024(B) - 0335 - 80		1115	SOIL			1											1	
LL455 - 002 - 0232 - 80		0900	SOIL	1	1													2
LL455 - 003 - 0233 - 80		0925	SOIL			1	1					1						3
LL455 - 004 - 0234 - 80		1135	SOIL	1	1													2
LL455 - 005 - 0235 - 80		0950	SOIL	1	1													2
LL455 - 022 - 0252 - 80		1055	SOIL			1	1					1						3
LL455 - 023 - 0253 - 80	1015	SOIL			1	1					1						3	
LL355 - 027 - 0193 - 80	21 JUL 96	0825	SOIL	1	1												2	
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time	TOTAL NUMBER OF CONTAINERS:										Cooler Temperature:				
		<i>L. Morrison</i>	7/30/96															
COMPANY NAME:		COMPANY NAME:	1025	Cooler ID:										FEDEX NUMBER:				
		SWCO																
RECEIVED BY:	Date/Time	RELINQUISHED BY:	Date/Time															
COMPANY NAME:		COMPANY NAME:																
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time															
COMPANY NAME:		COMPANY NAME:																

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2i 2i 5i 1i  
1i 3i 4i 2i

## CHAIN OF CUSTODY RECORD PAGE 2 OF 8

COC NO.: ~~011~~  
~~007~~ CONT.

PROJECT NAME: Ravenna Army Ammunition Plant (RVAAP) Phase 1 RI					REQUESTED PARAMETERS													LABORATORY NAME: SW Lab of Oklahoma, Inc.	
					Explosives 8330 (Solid/Liquid)	Metals (11) (Solid)	VOC 8260A (Solid/Liquid)	SVOC, Pest/PCB, Explosives (Solid)	SVOC 8270B (Liquid)	Pest/PCB 8081 (Liquid)	Metals (23) (Solid/Liquid)	Cyanide 9013 (Liquid)	Metals (23), Cyanide (Solid)	Metals (11), Cyanide (Solid)	Geotech (TOC, Grain Size) (Solid)				
PROJECT NUMBER: 0010																		LABORATORY ADDRESS: 1700 West Albany Suite C Broken Arrow, OK 74012	
PROJECT MANAGER: Steve Selecman																		PHONE NO: (918) 251-2858	
Sampler (Signature)		(Printed Name)																OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS	
<i>Kawa M. Monahan</i>		Laura U. Harrison																	
Sample ID	Date Collected	Time Collected	Matrix																
LL3sd-047(d)-0214-SD	27JUL96	1025	SOIL	1													3		
LL3ss-028-0194-50	}	0845	SOIL			1	1										3		
LL3ss-038(b)-0205-80		1122	SOIL			1											1		
LL3sd-046(d)-0213-SD		1050	SOIL	1													3		
LL3sd-048(d)-0215-SD		1000	SOIL	1													3		
LL3sd-050(d)-0217-SD		0910	SOIL	1													3		
LL3sd-049(d)-0216-SD		0930	SOIL	1													3		
<del>LL3ss-001-0300-80</del>		<del>1505</del>	<del>SOIL</del>	<del>1</del>			1	1									3		
CFC wp-013-0223-GW			1355	WATER	1			1	1	1	1						5	VOAs shipped 26 JUL 96, COC #3	
LNW wp-019-0430-GW			1545	WATER	1		2		1	1	1						7		Metals @ 350 ml
LNW-001-0444-TB			1545	WATER			2										2	TRIP BLANK	
LL4ss-007-0237-80		1315	SOIL	1												2			
LL4ss-008-0238-50	27JUL96	1340	SOIL	1												2			
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time	TOTAL NUMBER OF CONTAINERS:					Cooler Temperature:										
COMPANY NAME:		<i>[Signature]</i>	7/30/96																
		COMPANY NAME:	1025	Cooler ID:					FEDEX NUMBER:										
		SUXO																	
RECEIVED BY:	Date/Time	RELINQUISHED BY:	Date/Time																
COMPANY NAME:		COMPANY NAME:																	
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time																
COMPANY NAME:		COMPANY NAME:																	

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PROJECT NAME: Ravenna Army Ammunition Plant (RVAAP) Phase 1 RI				REQUESTED PARAMETERS													LABORATORY NAME: SW Lab of Oklahoma, Inc.	
PROJECT NUMBER: 0010				Explosives 8330 (Solid/Liquid)	Metals (11) (Solid)	VOC 8260A (Solid/Liquid)	SVOC, Pest/PCB, Explosives (Solid)	SVOC 8270B (Liquid)	Pest/PCB 8081 (Liquid)	Metals (23) (Solid/Liquid)	Cyanide 9013 (Liquid)	Metals (23), Cyanide (Solid)	Metals (11), Cyanide (Solid)	Geotech (TOC, Grain Size) (Solid)	No. of Bottles/Vials:	LABORATORY ADDRESS: 1700 West Albany Suite C Broken Arrow, OK 74012		
PROJECT MANAGER: Steve Selecman																PHONE NO: (918) 251-2858		
Sampler (Signature)		(Printed Name)															OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS	
Sample ID	Date Collected	Time Collected	Matrix															
LL444 - 009 - 0239 - 60	27 JUL 96	1358	SOIL			1	1					1					3	
LL344 - 051(d) - 0218 - 5D	}	1328	SOIL	1	1								1			3		
LL344 - 052(d) - 0219 - 5D		1408	SOIL	1	1								1			3		
LL344 - 053(d) - 0224 - 5D		1610	SOIL			1	1					1	1			4		
LL344 - 035(d) - 0201 - 5D		1700	SOIL	1	1											2		
LL344 - 035(d) - 0202 - FD		1700	SOIL	1	1											2		
L1244 - 009 - 0316 - 60		1335	SOIL	1	1											2		
L1244 - 002 - 0307 - 50		1412	SOIL	1	1											2		
L1244 - 003 - 0308 - 50		1425	SOIL	1	1											2		
L1244 - 001 - 0306 - 50		1505	SOIL			1	1					1				3		
L1244 - 040 - 0357 - 60		1540	SOIL	1	1											2		
L1244 - 040 - 0352 - FD	1540	SOIL	1	1											2			
L1244 - 041 - 0353 - 60	27 JUL 96	1610	SOIL			1	1					1			3			
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time	TOTAL NUMBER OF CONTAINERS:										Cooler Temperature: 5°				
COMPANY NAME:		COMPANY NAME:		Cooler ID:										FEDEX NUMBER:				
RECEIVED BY:	Date/Time	RELINQUISHED BY:	Date/Time															
COMPANY NAME:		COMPANY NAME:																
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time															
COMPANY NAME:		COMPANY NAME:																

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CHAIN OF CUSTODY RECORD PAGE 4 OF 8

COC NO.: ~~013~~ 004 CONT.

PROJECT NAME: Ravenna Army Ammunition Plant (RVAAP) Phase 1 RI				REQUESTED PARAMETERS														LABORATORY NAME: SW Lab of Oklahoma, Inc.				
				Explosives 8230 (Solid/Liquid)	Metals (11) (Solid)	VOC 8260A (Solid/Liquid)	SVOC, Pest/PCB, Explosives (Solid)	SVOC 8270B (Liquid)	Pest/PCB 8081 (Liquid)	Metals (23) (Solid/Liquid)	Cyanide 9013 (Liquid)	Metals (23), Cyanide (Solid)	Metals (11), Cyanide (Solid)	Geotech (TOC, Grain Size) (Solid)				No. of Bottles/ Vials:	LABORATORY ADDRESS: 1700 West Albany Suite C Broken Arrow, OK 74012			
PROJECT NUMBER: 0010				Sample ID	Date Collected	Time Collected	Matrix															PHONE NO: (918) 251-2858
PROJECT MANAGER: Steve Selecman				Sampler (Signature)	(Printed Name)															OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS		
				<i>Laura M Morrison</i>	LAURA M. MORRISON																	
				CPC wp - 012 - 0222 - GW	28 JUL 96	0945	WATER	1		2		1	1	1						7		
				CPC - 001 - 0662 - TB	}	0945	WATER			2										2		
				LL4ss - 037 - 0271 - SO		1100	SOIL			1						1				3		
				LL4ss - 038 - 0272 - SO		1130	SOIL	1												2		
				LL4ss - 039 - 0273 - SO		1042	SOIL	1												2		
				LL4ss - 040 - 0274 - SO		1115	SOIL	1												2		
				LL1ss - 025 - 0028 - SO		1048	SOIL			1						1				3		
				LL1ss - 026 - 0029 - SO		1024	SOIL			1						1				3		
				LL1ss - 027 - 0030 - SO		1112	SOIL			1						1				3		
				L12sd - 032(d) - 0344 - SD		0925	SOIL	1									1			3		
				L12sd - 034(d) - 0345 - SD		1008	SOIL	1									1			3		
				L12sd - 035(d) - 0346 - SD		1033	SOIL	1									1			3		
				L12sd - 036(d) - 0347 - SD		28 JUL 96	1059	SOIL	1								1			3		
RELINQUISHED BY:		Date/Time	RECEIVED BY:		Date/Time	TOTAL NUMBER OF CONTAINERS:				Cooler Temperature: 52												
COMPANY NAME:			<i>[Signature]</i> COMPANY NAME:		7/30/96	Cooler ID:				FEDEX NUMBER:												
			SWCO		1025																	
RECEIVED BY:		Date/Time	RELINQUISHED BY:		Date/Time																	
COMPANY NAME:			COMPANY NAME:																			
RELINQUISHED BY:		Date/Time	RECEIVED BY:		Date/Time																	
COMPANY NAME:			COMPANY NAME:																			

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PROJECT NAME: Ravenna Army Ammunition Plant (RVAAP) Phase 1 RI				REQUESTED PARAMETERS												LABORATORY NAME: SW Lab of Oklahoma, Inc.		
PROJECT NUMBER: 0010				Explosives 8330 (Solid/Liquid)	Metals (11) (Solid)	VOC 8260A (Solid/Liquid)	SVOC, Pest/PCB, Explosives (Solid)	SVOC 8270B (Liquid)	Pest/PCB 8081 (Liquid)	Metals (23) (Solid/Liquid)	Cyanide 9013 (Liquid)	Metals (23), Cyanide (Solid)	Metals (11), Cyanide (Solid)	Geotech (TOC, Grain Size) (Solid)	No. of Bottles/Vials:	LABORATORY ADDRESS: 1700 West Albany Suite C Broken Arrow, OK 74012		
PROJECT MANAGER: Steve Selecman																PHONE NO: (918) 251-2858		
Sampler (Signature)		(Printed Name)														OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS		
Sample ID	Date Collected	Time Collected	Matrix															
LL4ss - 025 - 0256 - FD	28JUL96	1550	SOIL				1	1					1				3	
LL4ss - 025 - 0255 - SO	}	1550	SOIL				1	1					1				3	
LL4ss - 024 - 0259 - SO		1430	SOIL				1	1					1				3	
LL4ss - 036 - 0269 - SO		1505	SOIL	1	1													2
LL4ss - 036 - 0270 - FD		1505	SOIL	1	1													2
LL2ss - 022(b) - 0333 - SO		1442	SOIL		1													1
LL2ss - 023(b) - 0334 - SO		1340	SOIL		1													1
LL2ss - 026(d) - 0337 - SO		1550	SOIL				1	1					1		1			4
LL4wp - 001 - 0164 - ER		1815	WATER	1			2		1	1	1							7
LL1ss - 037 - 0042 - SO		1410	SOIL	1	1													2
LL1ss - 036 - 0040 - SO <small>cont 7/20/96</small>		1430	SOIL				1	1					1					3
LL1ss - 036 - 0041 - SO FD	1430	SOIL				1	1					1					3	
LL1ss - 034 - 0038 - SO	28JUL96	1531	SOIL	1	1												2	
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time	TOTAL NUMBER OF CONTAINERS:												Cooler Temperature: 5°C		
COMPANY NAME:		COMPANY NAME:	7/30/96	Cooler ID:												FEDEX NUMBER:		
		SWCO	1025															
RECEIVED BY:	Date/Time	RELINQUISHED BY:	Date/Time															
COMPANY NAME:		COMPANY NAME:																
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time															
COMPANY NAME:		COMPANY NAME:																

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PROJECT NAME: Ravenna Army Ammunition Plant (RVAAP) Phase 1 R1				REQUESTED PARAMETERS													LABORATORY NAME: SW Lab of Oklahoma, Inc.	
PROJECT NUMBER: 0010				Explosives 8330 (Solid/Liquid)	Metals (11) (Solid)	VOC 8260A (Solid/Liquid)	SVOC, Pest/PCB, Explosives (Solid)	SVOC 8270B (Liquid)	Pest/PCB 8081 (Liquid)	Metals (23) (Solid/Liquid)	Cyanide 9013 (Liquid)	Metals (23), Cyanide (Solid)	Metals (11), Cyanide (Solid)	Geotech (TOC, Grain Size) (Solid)	No. of Bottles/Vials:	LABORATORY ADDRESS: 1700 West Albany Suite C Broken Arrow, OK 74012		
PROJECT MANAGER: Steve Selecman																OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS		
Sampler (Signature)		(Printed Name)																
<i>Laura M. Morrison</i>		LAURA M. MORRISON																
Sample ID	Date Collected	Time Collected	Matrix															
LL154 - 031 - 0035 - SO	28 JUL 96	1558	SOIL	1	1												2	
LL155 - 033 - 0037 - SO	}	1643	SOIL	1	1												2	
LL156 - 035 - 0039 - SO		1500	SOIL	1	1												2	
LL157 - 032 - 0036 - SO		1615	SOIL	1	1												2	
LL158 - 001 - 0001 - SO		1718	SOIL			1	1					1					3	
L12wp - 057 - 0371 - GW		1510	WATER			2											2	
L11wp - 068 - 0437 - GW		1620	WATER	1		2		1	1	1							7	
LNWup - 022 - 0443 - GW	28 JUL 96	1245	WATER			2											2	
LNWup - 020 - 0439 - GW	26 JUL 96	1100	WATER						1								1	
L12sd - 025(d) - 0336 - SD	29 JUL 96	0910	SOIL	1	1									1			3	
L12sd - 027(d) - 0338 - SD	}	0815	SOIL	1	1									1			3	
L12sd - 028(d) - 0339 - SD		0955	SOIL			1	1					1			1		4	
L12sd - 029(d) - 0340 - SD	29 JUL 96	1030	SOIL	1	1									1			3	
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time	TOTAL NUMBER OF CONTAINERS:										Cooler Temperature:				
COMPANY NAME:		<i>Julius</i>	7/30/96											Cooler ID:				
		SAIC	1025											FEDEX NUMBER:				
RECEIVED BY:	Date/Time	RELINQUISHED BY:	Date/Time															
COMPANY NAME:		COMPANY NAME:																
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time															
COMPANY NAME:		COMPANY NAME:																

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VOA = unpreserved  
collected over 7/26-28/96

PROJECT NAME: Ravenna Army Ammunition Plant (RVAAP) Phase 1 RI				REQUESTED PARAMETERS													LABORATORY NAME: SW Lab of Oklahoma, Inc.	
PROJECT NUMBER: 0010				Explosives 8330 (Solid/Liquid)	Metals (11) (Solid)	VOC 8260A (Solid/Liquid)	SVOC, Pest/PCB, Explosives (Solid)	SVOC 8270B (Liquid)	Pest/PCB 8081 (Liquid)	Metals (23) (Solid/Liquid)	Cyanide 9013 (Liquid)	Metals (23), Cyanide (Solid)	Metals (11), Cyanide (Solid)	Geotech (TOC, Grain Size) (Solid)	No. of Bottles/Vials:	LABORATORY ADDRESS: 1700 West Albany Suite C Broken Arrow, OK 74012		
PROJECT MANAGER: Steve Selecman																OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS		
Sampler (Signature)		(Printed Name)															PHONE NO: (918) 251-2858	
<i>Laura M. Morrison</i>		LAURA M. MORRISON																
Sample ID	Date Collected	Time Collected	Matrix															
LL1 wp - 069 - 0441 - GW	29 Jul 96	0915	WATER			2											2	check vials for bubbles
LL1 wp - 067 - 0436 - GW		0830	WATER	1	1	2											4	
CPC - 002 - 0663 - TB		0830	WATER			2											2	TRIP BLANK
LL4 ss - 056(d) - 0287 - SD		0950	SOIL	1	1								1				3	
LL4 ss - 046 - 0281 - SO		0900	SOIL	1	1												2	
LL4 ss - 047 - 0282 - SO		0922	SOIL	1	1												2	
LL4 ss - 018(d) - 0243 - SD		1045	SOIL	1	1								1				3	
LL4 ss - 021(d) - 0251 - SD		1110	SOIL	1	1								1				3	
LL1 ss - 006 - 0007 - SO		0920	SOIL	1	1												2	
LL1 ss - 007 - 0008 - SO		0850	SOIL	1	1												2	
LL1 ss - 002 - 0002 - SO		0830	SOIL	1	1												2	
LL1 ss - 008 - 0009 - SO		0945	SOIL	1	1												2	
LL1 ss - 017 - 0020 - SO	29 Jul 96	1005	SOIL	1	1												2	
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time	TOTAL NUMBER OF CONTAINERS:											Cooler Temperature:			
		<i>L. Morrison</i>	7/30/96															
COMPANY NAME:		COMPANY NAME:		Cooler ID:											FEDEX NUMBER:			
		SWCO	1025															
RECEIVED BY:	Date/Time	RELINQUISHED BY:	Date/Time															
COMPANY NAME:		COMPANY NAME:																
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time															
COMPANY NAME:		COMPANY NAME:																

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PROJECT NAME: Ravenna Army Ammunition Plant (RVAAP) Phase 1 RI				REQUESTED PARAMETERS											LABORATORY NAME: SW Lab of Oklahoma, Inc.			
PROJECT NUMBER: 0010				Explosives 8330 (Solid/Liquid)	Metals (11) (Solid)	VOC 8260A (Solid/Liquid)	SVOC, Pest/PCB, Explosives (Solid)	SVOC 8270B (Liquid)	Pest/PCB 8081 (Liquid)	Metals (23) (Solid/Liquid)	Cyanide 9013 (Liquid)	Metals (23), Cyanide (Solid)	Metals (11), Cyanide (Solid)	Geotech (TOC, Grain Size) (Solid)	TEMP BLANKS	No. of Bottles/Vials:	LABORATORY ADDRESS: 1700 West Albany Suite C Broken Arrow, OK 74012	
PROJECT MANAGER: Steve Selecman		SAMPLER (SIGNATURE) <i>James Morrison</i>															SAMPLER (PRINTED NAME) LAWA MORRISON	
Sample ID	Date Collected	Time Collected	Matrix												OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS			
LL144-018-0021-50	29 Jul 96	1030	SOIL	1	1												2	
LL144-019-0022-60	↓	1100	SOIL			1	1				1						3	
LL144-021-0024-80	29 JUL 96	1130	SOIL	1	1												2	
COOLANT BLANKS																	9	TEMPERATURE BLANKS
LAST ENTRY																		
RELINQUISHED BY: <i>J. Morrison</i>		Date/Time 1645 7-29-96	RECEIVED BY: <i>J. Morrison</i>	Date/Time 7/30/96 1025	TOTAL NUMBER OF CONTAINERS: 259											Cooler Temperature: 5°C		
COMPANY NAME: SAIC			COMPANY NAME: SWCO		Cooler ID: C02, B06, B24, B17, B05, B13, B32, B27, S15R3											FEDEX NUMBER: 0944Z66470		
RECEIVED BY:		Date/Time	RELINQUISHED BY:	Date/Time														
COMPANY NAME:			COMPANY NAME:															
RELINQUISHED BY:		Date/Time	RECEIVED BY:	Date/Time														
COMPANY NAME:			COMPANY NAME:															

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**ORIGINAL**  
**CHAIN OF CUSTODY RECORD PAGE 1 OF 3**

COC NO. ~~018~~ **005**

PROJECT NAME: Ravenna Army Ammunition Plant (RVAAP) Phase 1 RI				REQUESTED PARAMETERS													LABORATORY NAME: SW Lab of Oklahoma, Inc.	
PROJECT NUMBER: 0010				Explosives 8330 (Solid/Liquid)	Metals (11) (Solid)	VOC 8260A (Solid/Liquid)	SVOC, Pest/PCB, Explosives (Solid)	SVOC 8270B (Liquid)	Pest/PCB 8081 (Liquid)	Metals (23) (Solid/Liquid)	Cyanide 9013 (Liquid)	Metals (23), Cyanide (Solid)	Metals (11), Cyanide (Solid)	Geotech (TOC, Grain Size) (Solid)	No. of Bottles/ Vials:	LABORATORY ADDRESS: 1700 West Albany Suite C Broken Arrow, OK 74012		
PROJECT MANAGER: Steve Selecman																OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS		
Sampler (Signature)		(Printed Name)																
<i>Laura M. Morrison</i>		LAURA M. MORRISON																
Sample ID	Date Collected	Time Collected	Matrix															
LL1wp-067-0436-GW	29 JUL 96	0830	WATER					1	1		1					3	VOA, EXP, MET. SHIPPED 7-29-96 <sup>COC # 009</sup>	
LL1wp-069-0441-GW	29 JUL 96	0915	WATER	1												1	VOA SHIPPED 7-29-96 <sup>COC # 4</sup>	
LL1ss-010-0011-80	29 JUL 96	1407	SOIL			1	1					1				3		
LL1ss-005-0005-80		1445	SOIL	1	1											2		
LL1ss-005-0006-FD		1445	SOIL	1	1											2		
LL1ss-020-0023-80		1615	SOIL	1	1											2		
LL1ss-003-0003-80		1545	SOIL	1	1											2		
LL1ss-009-0010-80		1345	SOIL	1	1											2		
LL1ss-004-0004-80		1515	SOIL	1	1											2		
LL1ss-022-0025-80		1635	SOIL	1	1											2		
L12sd-037(d)-0348-SD		1520	SOIL	1	1									1		3		
L12ss-042-0354-80		1407	SOIL	1	1											2		
L12ss-043-0355-80	29 JUL 96	1325	SOIL	1	1											2		
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time	TOTAL NUMBER OF CONTAINERS:											Cooler Temperature: 5°C, 2°C, 2°C			
COMPANY NAME:		COMPANY NAME:	Date/Time	Cooler ID:											FEDEX NUMBER:			
		<i>M. McComber</i>	7/31/96															
		M. McComber	0850															
RECEIVED BY:	Date/Time	RELINQUISHED BY:	Date/Time															
COMPANY NAME:		COMPANY NAME:																
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time															
COMPANY NAME:		COMPANY NAME:																

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PROJECT NAME: Ravenna Army Ammunition Plant (RVAAP) Phase 1 RI				REQUESTED PARAMETERS													LABORATORY NAME: SW Lab of Oklahoma, Inc.	
PROJECT NUMBER: 0010				Explosives 8330 (Solid/Liquid)	Metals (11) (Solid)	VOC 8260A (Solid/Liquid)	SVOC, Pest/PCB, Explosives (Solid)	SVOC 8270B (Liquid)	Pest/PCB 8081 (Liquid)	Metals (23) (Solid/Liquid)	Cyanide 9013 (Liquid)	Metals (23), Cyanide (Solid)	Metals (11), Cyanide (Solid)	Geotech (TOC, Grain Size) (Solid)	No. of Bottles/ Vials:	LABORATORY ADDRESS: 1700 West Albany Suite C Broken Arrow, OK 74012		
PROJECT MANAGER: Steve Selecman																OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS		
Sampler (Signature)		(Printed Name)															PHONE NO: (918) 251-2858	
<i>Laura M. Morrison</i>		LAURA W. MORRISON																
Sample ID	Date Collected	Time Collected	Matrix															
L1244-044-0356-80	29 JUL 96	1245	SOIL			1											3	
L1244-045-0357-80	}	1445	SOIL	1	1												2	
LL450-050(d)-0297-SD		1550	SOIL	1	1								1				3	
LL450-049(d)-0286-SD		1515	SOIL	1	1								1				3	
LL450-044(d)-0278-SD		1635	SOIL	1	1								1				3	
LL450-044(d)-0279-SD		29 JUL 96	1635	SOIL	1	1							1				3	
LL150-024-0027-SD	30 JUL 96	0820	SOIL	1	1												2	
LL154-012-0013-80	}	1030	SOIL	1	1												2	
LL154-023-0026-80		0848	SOIL	1	1												2	
LL154-040-0047-80		1110	SOIL	1	1												2	
LL154-038-0043-80		0945	SOIL			1	1						1				3	
LL154-039-0044-80		0905	SOIL	1	1												2	
LL154-039-0045-SD	30 JUL 96	0905	SOIL	1	1												2	
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time	TOTAL NUMBER OF CONTAINERS:				Cooler Temperature: 5°C, 2°C, 2°C										
COMPANY NAME:		<i>M. McComber</i>	7/31/96	Cooler ID:				FEDEX NUMBER:										
COMPANY NAME:		M. McComber	0850															
RECEIVED BY:	Date/Time	RELINQUISHED BY:	Date/Time															
COMPANY NAME:		COMPANY NAME:																
RECEIVED BY:	Date/Time	RECEIVED BY:	Date/Time															
COMPANY NAME:		COMPANY NAME:																

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PROJECT NAME: Ravenna Army Ammunition Plant (RVAAP) Phase 1 RI				REQUESTED PARAMETERS													LABORATORY NAME: SW Lab of Oklahoma, Inc.		
				Explosives 8330 (Solid/Liquid)	Metals (11) (Solid)	VOC 8260A (Solid/Liquid)	SVOC, Pest/PCB, Explosives (Solid)	SVOC 8270B (Liquid)	Pest/PCB 8081 (Liquid)	Metals (23) (Solid/Liquid)	Cyanide 9013 (Liquid)	Metals (23), Cyanide (Solid)	Metals (11), Cyanide (Solid)	Geotech (TOC, Grain Size) (Solid)	TEMPERATURE BLANKS	No. of Bottles/ Vials:	LABORATORY ADDRESS: 1700 West Albany Suite C Broken Arrow, OK 74012		
PROJECT NUMBER: 0010																	PHONE NO: (918) 251-2858		
PROJECT MANAGER: Steve Selecman																	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS		
Sampler (Signature)		(Printed Name)																	
<i>Laura M. Morrison</i>		LAURA M. MORRISON																	
Sample ID	Date Collected	Time Collected	Matrix																
WB64-005-0460 SO	30 JUL 96	1055	SOIL	1	1														2
WB64-006-0461 SO	}	1030	SOIL	1	1														2
WB64-004-0459 SO		1115	SOIL	1	1														2
WB64-007-0462 SO		1000	SOIL	1	1														2
WB64-008-0463 SO		0925	SOIL			1	1						1						3
L12SD-030(d)-0341-SD		0815	SOIL	1	1									1					3
L12SD-038(d)-0349-SD		0940	SOIL	1	1									1					3
L12SD-039(d)-0350-SD		0855	SOIL	1	1									1					3
LL4SD-048(d)-0283-SD		1130	SOIL	1	1									1					3
LL4SD-048(d)-0284-SD		1130	SOIL	1	1														2
LL4SD-056(d)-0295-SD		1040	SOIL	1	1									1					3
LL4SD-057(d)-0288-SD	30 JUL 96	1050	SOIL			1	1						1		1			4	
COOLANT BLANKS																		3	3
RELINQUISHED BY: <i>Laura M. Morrison</i>		Date/Time 7:30 96	RECEIVED BY: <i>M. McComber</i>		Date/Time 7/31/96	TOTAL NUMBER OF CONTAINERS: 95		Cooler ID: C03, SC1, SC2		Cooler Temperature: <del>5°C</del> 5°C, 2°C, 2°C		FEDEX NUMBER: 0944266492							
COMPANY NAME: SAIC		1600	COMPANY NAME: M. McComber		0850														
RECEIVED BY:		Date/Time	RELINQUISHED BY:		Date/Time														
COMPANY NAME:			COMPANY NAME:																
RELINQUISHED BY:		Date/Time	RECEIVED BY:		Date/Time														
COMPANY NAME:			COMPANY NAME:																

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PROJECT NAME: Ravenna Army Ammunition Plant (RVAAP) Phase 1 RI				REQUESTED PARAMETERS													LABORATORY NAME: SW Lab of Oklahoma, Inc.	
PROJECT NUMBER: 0010				Explosives 8330 (Solid/Liquid)	Metals (11) (Solid)	VOC 8260A (Solid/Liquid)	SVOC, Pest/PCB, Explosives (Solid)	SVOC 8270B (Liquid)	Pest/PCB 8081 (Liquid)	Metals (23) (Solid/Liquid)	Cyanide 9013 (Liquid)	Metals (23), Cyanide (Solid)	Metals (11), Cyanide (Solid)	Geotech (TOC, Grain Size) (Solid)	No. of Bottles/Vials:	LABORATORY ADDRESS: 1700 West Albany Suite C Broken Arrow, OK 74012		
PROJECT MANAGER: Steve Selecman																OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS		
Sampler (Signature)		Sampler (Printed Name)		Sample ID	Date Collected	Time Collected	Matrix									PHONE NO: (918) 251-2858		
<i>Laura M. Morrison</i>		LAURA M. MORRISON		L12sd - 055(p) - 0369 - SD	30 JUL 96	1550	SOIL	1										
				L12sd - 054(p) - 0368 - SD		1620	SOIL	1										
				LL4sd - 057(p) - 0296 - SD		1550	SOIL	1										
				LL4ss - 041(b) - 0275 - SO		1615	SOIL	1										
				LL4ss - 042(b) - 0276 - SO		1640	SOIL	1										
				LL1ss - 041(b) - 0048 - SO		1530	SOIL	1										
				LL1ss - 042(b) - 0044 - SO		1510	SOIL	1										
				LL1ss - 043(b) - 0050 - SO		1445	SOIL	1										
				LL1sd - 046(d) - 0053 - SD		1553	SOIL	1										
				LL1sd - 057(d) - 0059 - SD	30 JUL 96	1630	SOIL	1										
				LL1wp - 069 - 041 - GW	30 JUL 96	1015	WATER											
				L12sd - 031(d) - 0342 - SD	31 JUL 96	0845	SOIL	1										
				LL4ss - 030 - 0261 - SO	31 JUL 96	0845	SOIL	1										
RELINQUISHED BY:		Date/Time	RECEIVED BY:	Date/Time	TOTAL NUMBER OF CONTAINERS:				Cooler Temperature: 2°C, 2°C									
COMPANY NAME:			<i>M. McComber</i>	8/1/96	Cooler ID:				FEDEX NUMBER:									
RECEIVED BY:		Date/Time	RELINQUISHED BY:	Date/Time														
COMPANY NAME:																		
RELINQUISHED BY:		Date/Time	RECEIVED BY:	Date/Time														
COMPANY NAME:																		

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Cyanide collected 7-31-96/0900

**CHAIN OF CUSTODY RECORD**

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COC NO.: ~~822~~  
000 CONT.

PROJECT NAME: Ravenna Army Ammunition Plant (RVAAP) Phase 1 RI				REQUESTED PARAMETERS													LABORATORY NAME: SW Lab of Oklahoma, Inc.	
PROJECT NUMBER: 0010				Explosives 8330 (Solid/Liquid)	Metals (11) (Solid)	VOC 8260A (Solid/Liquid)	SVOC, Pest/PCB, Explosives (Solid)	SVOC 8270B (Liquid)	Pest/PCB 8081 (Liquid)	Metals (23) (Solid/Liquid)	Cyanide 9013 (Liquid)	Metals (23), Cyanide (Solid)	Metals (11), Cyanide (Solid)	Geotech (TOC, Grain Size) (Solid)	No. of Bottles/Vials:	LABORATORY ADDRESS: 1700 West Albany Suite C Broken Arrow, OK 74012		
PROJECT MANAGER: Steve Selecman																PHONE NO: (918) 251-2858		
Sampler (Signature)		(Printed Name)															OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS	
LL44-0436-0277-SO	31 Jul 96	1005	SOIL															
LL44-045-0280-SO		0855	SOIL			1	1				1							
LL44-010-0290-SO		0940	SOIL	1	1													
WB64-039-0496-SO		1115	SOIL	1	1													
WB64-040-0497-SO	11/15/96	1142	SOIL	1	1													
WB64-040-0498-SO FD		1142	SOIL	1	1													
WB64-041-0499-SO		1205	SOIL	1	1													
WB64-001-0450-SO		1242	SOIL	1	1													
WB64-002-0457-SO		1220	SOIL	1	1													
WB64-003-0458-SO		1150	SOIL	1	1													
LL14-028-0031-SO		0945	SOIL			1	1				1							
LL14-029-0032-SO		0925	SOIL	1	1													
LL14-029-0033-FD		0925	SOIL	1	1													
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time	TOTAL NUMBER OF CONTAINERS:											Cooler Temperature: 2°C, 2°C			
COMPANY NAME:		COMPANY NAME:		Cooler ID:											FEDEX NUMBER:			
RECEIVED BY:	Date/Time	RELINQUISHED BY:	Date/Time															
COMPANY NAME:		COMPANY NAME:																
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time															
COMPANY NAME:		COMPANY NAME:																

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**CHAIN OF CUSTODY RECORD**

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COC NO.: ~~002~~  
006 CONT.

PROJECT NAME: Ravenna Army Ammunition Plant (RVAAP) Phase 1 RI				REQUESTED PARAMETERS													LABORATORY NAME: SW Lab of Oklahoma, Inc.	
PROJECT NUMBER: 0010				Explosives 8330 (solid/Liquid)	Metals (11) (solid)	VOC 8260A (solid/Liquid)	SVOC, Pest/PCB, Explosives (solid)	SVOC 8270B (Liquid)	Pest/PCB 8081 (Liquid)	Metals (23) (solid/Liquid)	Cyanide 9013 (Liquid)	Metals (23), Cyanide (solid)	Metals (11), Cyanide (solid)	Geotech (TOC, Grain Size) (solid)	TEMP BLANKS	No. of Bottles/ Vials:	LABORATORY ADDRESS: 1700 West Albany Suite C Broken Arrow, OK 74012	
PROJECT MANAGER: Steve Selecman																	LABORATORY ADDRESS: 1700 West Albany Suite C Broken Arrow, OK 74012	
Sampler (Signature) <i>Laura M. Morrison</i>		Sampler (Printed Name) Laura M. Morrison															PHONE NO: (918) 251-2858	
Sample ID	Date Collected	Time Collected	Matrix														OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS	
LL144-016-0017-50	31 JUL 96	1115	SOIL	1												2		
LL144-016-0018-50	}	1115	SOIL	1												2		
LL144-015-0016-50		1145	SOIL	1												2		
LL144-011-0012-50		1205	SOIL	1												2		
LL144-030-0034-50		1000	SOIL	1												2		
LL144-014-0015-50	31 JUL 96	1133	SOIL	1												2		
COOLANT BLANKS	NA	NA	SOIL													2	TEMPERATURE BLANKS	
LAST ENTRY																2		

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RELINQUISHED BY: <i>Laura M. Morrison</i>	Date/Time 31 Jul 96	RECEIVED BY: <i>M. McComber</i>	Date/Time 8/1/96	TOTAL NUMBER OF CONTAINERS: 68	Cooler Temperature: 5°C - 2.42°C
COMPANY NAME: SAIC	1600	COMPANY NAME: M. McComber	0910	Cooler ID: B16, B18	FEDEX NUMBER: 0944266820
RECEIVED BY:	Date/Time	RELINQUISHED BY:	Date/Time		
COMPANY NAME:		COMPANY NAME:			
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time		
COMPANY NAME:		COMPANY NAME:			

PROJECT NAME: Ravenna Army Ammunition Plant (RVAAP) Phase 1 RI				REQUESTED PARAMETERS												LABORATORY NAME: SW Lab of Oklahoma, Inc.		
PROJECT NUMBER: 0010				Explosives 8330 (Solid/Liquid)	Metals (11) (Solid)	VOC 8260A (Solid/Liquid)	SVOC, Pest/PCB, Explosives (Solid)	SVOC 8270B (Liquid)	Pest/PCB 8081 (Liquid)	Metals (23) (Solid/Liquid)	Cyanide 9013 (Liquid)	Metals (23), Cyanide (Solid)	Metals (11), Cyanide (Solid)	Geotech (TOC, Grain Size) (Solid)	No. of Bottles/Vials:	LABORATORY ADDRESS: 1700 West Albany Suite C Broken Arrow, OK 74012		
PROJECT MANAGER: Steve Selecman																PHONE NO: (918) 251-2858		
Sampler (Signature)		(Printed Name)														OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS		
WB655-009-046A-SO	5AUG96	1145	SOIL	1	1													
WB655-010-0465-SO		1125	SOIL	1	1													
WB655-011-0466-SO		1115	SOIL	1	1													
WB655-012-0467-SO		1020	SOIL	1	1													
WB655-013-0468-SO		1000	SOIL	1	1													
WB655-015-0469-0470-SO		0925	SOIL	1	1													
LNWtr-001-0393-00		1143	SOIL			1	1					1						
<del>LNWtr-001-0394-00</del>		<del>1210</del>	<del>SOIL</del>			<del>1</del>	<del>1</del>					<del>1</del>					LMM 8.6.96	
<del>LNWtr-001-0395-00</del>		<del>1218</del>	<del>SOIL</del>			<del>1</del>	<del>1</del>					<del>1</del>						LMM 8.6.96
WB655-020-0477-SO		1335	SOIL	1	1													
WB655-021-0478-SO		1355	SOIL			1	1					1						
WB655-022-0479-00		1430	SOIL	1	1													
WB655-023-0480-SO	5AUG96	1500	SOIL	1	1													
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time	TOTAL NUMBER OF CONTAINERS:				Cooler Temperature: 4°C, 4°C, 3°C, 4°C										
COMPANY NAME:		COMPANY NAME:		Cooler ID: See Pg. 5				FEDEX NUMBER: See Pg. 5										
RECEIVED BY:	Date/Time	RELINQUISHED BY:	Date/Time															
COMPANY NAME:		COMPANY NAME:																
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time															
COMPANY NAME:		COMPANY NAME:																

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**CHAIN OF CUSTODY RECORD** *pg 2 of 5*

COC NO.: *055*  
*007 CONT.*

PROJECT NAME: Ravenna Army Ammunition Plant (RVAAP) Phase 1 RI				REQUESTED PARAMETERS													LABORATORY NAME: SW Lab of Oklahoma, Inc.	
PROJECT NUMBER: 0010				Explosives 8330 (solid/Liquid)	Metals (11) (Solid)	VOC 8260A (solid/Liquid)	SVOC, Pest/PCB, Explosives (Solid)	SVOC 8270B (Liquid)	Pest/PCB 8081 (Liquid)	Metals (23) (solid/Liquid)	Cyanide 9013 (Liquid)	Metals (23), Cyanide (solid)	Metals (11), Cyanide (solid)	Geotech (TOC, Grain Size) (solid)	No. of Bottles/ Vials:	LABORATORY ADDRESS: 1700 West Albany Suite C Broken Arrow, OK 74012		
PROJECT MANAGER: Steve Selecman																OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS		
Sampler (Signature)		(Printed Name)		Sample ID	Date Collected	Time Collected	Matrix									PHONE NO: (918) 251-2858		
<i>[Signature]</i>		Laura M. Morrison		WB644-024-0481-SO	5 Aug 96	1520	SOIL	1										
				WB644-025-0482-SO	<i>[Large bracket]</i>	1550	SOIL	1										
				LNWTR-002-0396-SO		1520	SOIL			1								
				LNWTR-002-0397-SO		1540	SOIL			1								
				DAZ50-001-0574-SO		1305	SOIL	1										
				DAZ50-001-0575-SO		1320	SOIL	1										
				DAZ50-002-0576-SO		1345	SOIL	1										
				DAZ50-002-0577-SO		1358	SOIL	1										
				DAZ50-003-0578-SO		1404	SOIL	1										
				DAZ50-003-0579-SO		1450	SOIL	1										
				DAZ50-004-0580-SO		1528	SOIL	1										
				DAZ50-004-0581-SO	1540	SOIL	1											
				DAZ50-006-0586-SO	5 Aug 96	1642	SOIL	1										
RELINQUISHED BY:		Date/Time	RECEIVED BY:	Date/Time	TOTAL NUMBER OF CONTAINERS:				Cooler Temperature: 4°C, 4°C, 3°C, 4°C									
COMPANY NAME:			<i>[Signature]</i>	8/3/96	Cooler ID: see pg. 5				FEDEX NUMBER: see pg. 5									
RECEIVED BY:		Date/Time	RELINQUISHED BY:	Date/Time														
COMPANY NAME:			SW Lab of OK	09115														
RELINQUISHED BY:		Date/Time	RECEIVED BY:	Date/Time														
COMPANY NAME:																		

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PROJECT NAME: Ravenna Army Ammunition Plant (RVAAP) Phase 1 RI				REQUESTED PARAMETERS													LABORATORY NAME: SW Lab of Oklahoma, Inc.		
PROJECT NUMBER: 0010				Explosives 8330 (Solid/Liquid)	Metals (11) (Solid)	VOC 8260A (Solid/Liquid)	SVOC, Pest/PCB, Explosives (Solid)	SVOC 8270B (Liquid)	Pest/PCB 8081 (Liquid)	Metals (23) (Solid/Liquid)	Cyanide 9013 (Liquid)	Metals (23), Cyanide (Solid)	Metals (11), Cyanide (Solid)	Geotech (TOC, Grain Size) (Solid)	No. of Bottles/Vials:	LABORATORY ADDRESS: 1700 West Albany Suite C Broken Arrow, OK 74012			
PROJECT MANAGER: Steve Selecman																PHONE NO: (918) 251-2858			
Sampler (Signature)		Printed Name															OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS		
Sample ID	Date Collected	Time Collected	Matrix																
DAZ50-006-0587-SD	5 AUG 96	1707	SOIL	1	1												2		
LNWtr-003-0399-SD	6 AUG 96	0825	SOIL			1	1				1						3		
LNWtr-003-0400-SD	}	0825	SOIL			1	1				1						3		
LNWtr-003-0402-SD		0825	SOIL			1	1				1						3		
LNWtr-004-0404-SD		1050	SOIL			1	1				1						3		
LNWtr-004-0405-SD		1110	SOIL			1	1				1						3		
LNWtr-004-0407-FD		1110	SOIL			1	1				1						3		
DAZ50-005-0582-SD			0845	SOIL			1	1				1						3	
DAZ50-005-0583-SD			0855	SOIL	1	1												2	
DAZ50-005-0584-FD			0855	SOIL	1	1												2	
DAZ50-007-0588-SD			1000	SOIL	1	1												2	
DAZ50-007-0589-SD			1030	SOIL	1	1												2	
DAZ50-008-0590-SD	6 AUG 96	0925	SOIL	1	1												2		
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time	TOTAL NUMBER OF CONTAINERS:										Cooler Temperature: 4°C, 4°C, 3°C, 4°C					
COMPANY NAME:		COMPANY NAME:		Cooler ID: SEE PG 5										FEDEX NUMBER: SEE PG 5					
RECEIVED BY:	Date/Time	RELINQUISHED BY:	Date/Time																
COMPANY NAME:		COMPANY NAME:																	
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time																
COMPANY NAME:		COMPANY NAME:																	

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PROJECT NAME: Ravenna Army Ammunition Plant (RVAAP) Phase 1 RI				REQUESTED PARAMETERS												LABORATORY NAME: SW Lab of Oklahoma, Inc.	
																LABORATORY ADDRESS: 1700 West Albany Suite C Broken Arrow, OK 74012	
PROJECT NUMBER: 0010																PHONE NO: (918) 251-2858	
PROJECT MANAGER: Steve Selecman																OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS	
Sampler (Signature) <i>Jana M. Morrison</i>		(Printed Name) Laura N. Morrison															
Sample ID	Date Collected	Time Collected	Matrix	Explosives 8330 (solid/Liquid)	Metals (11) (solid)	VOC 8260A (solid/Liquid)	SVOC, Pest/PCB, Explosives (Solid)	SVOC 8270B (Liquid)	Pest/PCB 8081 (Liquid)	Metals (23) (Solid/Liquid)	Cyanide 9013 (Liquid)	Metals (23), Cyanide (Solid)	Metals (11), Cyanide (Solid)	Geotech (TOC, Grain Size) (Solid)	No. of Bottles/ Vials:		
DA250-008-0591-FD	6 AUG 96	0925	SOIL	1	1										2		
DA250-008-0593-SO	}	0930	SOIL	1	1										2		
DA250-017-0611-SO		1016	SOIL	1	1										2		
DA250-017-0612-SO		1055	SOIL	1	1										2		
DA250-018-0613-SO		1116	SOIL	1	1										2		
DA250-018-0614-SO		1133	SOIL			1	1				1				3		
WB655-016-0471-SO		0930	SOIL	1	1										2		
WB655-017-0472-SO		0915	SOIL	1	1										2		
WB655-018-0473-SO		0845	SOIL	1	1										2		
WB655-019-0474-SO		0810	SOIL	1	1										2		
WB655-019-0475-FD		0810	SOIL	1	1										2		
WB655-026-0483-SO	1020	SOIL	1	1										2			
WB655-027-0484-SO	6 AUG 96	0956	SOIL	1	1									2			
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time	TOTAL NUMBER OF CONTAINERS:										Cooler Temperature: 4°C, 4°C, 3°C, 4°C			
COMPANY NAME:		<i>[Signature]</i>	8/7/96	Cooler ID: <i>see pg 5</i>										FEDEX NUMBER: <i>see pg 5</i>			
COMPANY NAME:		SW Lab of OK	09:15														
RECEIVED BY:	Date/Time	RELINQUISHED BY:	Date/Time														
COMPANY NAME:		COMPANY NAME:															
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time														
COMPANY NAME:		COMPANY NAME:															

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PROJECT NAME: Ravenna Army Ammunition Plant (RVAAP) Phase 1 RI				REQUESTED PARAMETERS													LABORATORY NAME: SW Lab of Oklahoma, Inc.	
PROJECT NUMBER: 0010				Explosives 8330 (Solid/Liquid)	Metals (11) (Solid)	VOC 8260A (Solid/Liquid)	SVOC, Pest/PCB, Explosives (Solid)	SVOC 8270B (Liquid)	Pest/PCB 8081 (Liquid)	Metals (23) (Solid/Liquid)	Cyanide 9013 (Liquid)	Metals (23), Cyanide (Solid)	Metals (11), Cyanide (Solid)	Geotech (TOC, Grain Size) (Solid)	TEMP BLANKS	No. of Bottles/Vials:	LABORATORY ADDRESS: 1700 West Albany Suite C Broken Arrow, OK 74012	
PROJECT MANAGER: Steve Selecman																	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS	
Sample (Signature)		(Printed Name)															PHONE NO: (918) 251-2858	
<i>Laura M. Morrison</i>		LAURA W. MORRISON																
Sample ID	Date Collected	Time Collected	Matrix															
WB644 - 038 - 0495 - SO	6 AUG 96	1205	SOIL	1	1												2	
WB644 - 037 - 0494 - SO	}	1225	SOIL	1	1												2	
WB644 - 036 - 0493 - SO		1300	SOIL	1	1												2	
WB644 - 035 - 0492 - SO		1405	SOIL	1	1												2	
WB644 - 034 - 0491 - SO		1425	SOIL	1	1												2	
WB644 - 033 - 0490 - SO		1508	SOIL	1	1												2	
LNW4 - 005 - 0408 - SO	F	1325	SOIL			1	1				1						3	
LNW4 - 005 - 0409 - SO	6 AUG 96	1335	SOIL			1	1				1						3	
COOLANT BLANKS																4	4	
LAST ENTRY																	TEMP BLANKS	
RELINQUISHED BY: <i>L.M. Morrison</i>		Date/Time 6 AUG 96	RECEIVED BY: <i>M. Morrison</i>	Date/Time 8/7/96	TOTAL NUMBER OF CONTAINERS: 134										Cooler Temperature: 5°C, 4°C, 4°C, 3°C			
COMPANY NAME: SAIC		1830	COMPANY NAME: SW Lab of OK	0915	Cooler ID: B13, B06, B21, B32										FEDEX NUMBER: 0944266783			
RECEIVED BY:		Date/Time	RELINQUISHED BY:	Date/Time														
COMPANY NAME:			COMPANY NAME:															
RELINQUISHED BY:		Date/Time	RECEIVED BY:	Date/Time														
COMPANY NAME:			COMPANY NAME:															

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PROJECT NAME: Ravenna Army Ammunition Plant (RVAAP) Phase 1 RI				REQUESTED PARAMETERS													LABORATORY NAME: SW Lab of Oklahoma, Inc.	
PROJECT NUMBER: 0010				Explosives 8330 (Solid/Liquid)	Metals (11) (Solid)	VOC 8260A (Solid/Liquid)	SVOC, Pest/PCB, Explosives (Solid)	SVOC 8270B (Liquid)	Pest/PCB 8081 (Liquid)	Metals (23) (Solid/Liquid)	Cyanide 9013 (Liquid)	Metals (23), Cyanide (Solid)	Metals (11), Cyanide (Solid)	Geotech (TOC, Grain Size) (Solid)	No. of Bottles/Vials:	LABORATORY ADDRESS: 1700 West Albany Suite C Broken Arrow, OK 74012		
PROJECT MANAGER: Steve Selecman																OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS		
Sampler (Signature)		(Printed Name)		Sample ID	Date Collected	Time Collected	Matrix									PHONE NO: (918) 251-2858		
<i>Laura M. Morrison</i>		LAURA W. MORRISON		DA250-009-0594-50	6 AUG 96	1405	SOIL	1	1									
				DA250-019-0615-50	}	1430	SOIL	1	1									
				DA250-019-0616-50		1445	SOIL	1	1									
				DA250-020-0617-50		1511	SOIL	1	1									
				DA250-020-0618-50		1518	SOIL	1	1									
				DA250-027-0633-50		1600	SOIL	1	1									
				DA250-027-0634-50	6 AUG 96	1615	SOIL			1	1							
				LNW50-014(d)-0931-SD	7 AUG 96	0845	SOIL	1	1						1			
				LNW50-014(d)-0932-SD	}	0845	SOIL	1	1						1			
				LNW50-015(d)-0934-SD		1025	SOIL			1	1				1			
				WBG50-028-0985-50	}	0940	SOIL	1	1									
				WBG50-029-0986-50		0920	SOIL	1	1									
				WBG50-030-0987-50		7 AUG 96	0840	SOIL	1	1								
RELINQUISHED BY:		Date/Time		RECEIVED BY:		Date/Time		TOTAL NUMBER OF CONTAINERS:				Cooler Temperature: 3°C, 5°C						
COMPANY NAME:				<i>[Signature]</i>		8/8/96		Cooler ID:				FEDEX NUMBER:						
				COMPANY NAME:		0925		See Pg. 3				See Pg. 3						
RECEIVED BY:		Date/Time		RELINQUISHED BY:		Date/Time												
COMPANY NAME:				COMPANY NAME:														
RELINQUISHED BY:		Date/Time		RECEIVED BY:		Date/Time												
COMPANY NAME:				COMPANY NAME:														

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PROJECT NAME: Ravenna Army Ammunition Plant (RVAAP) Phase 1 RI				REQUESTED PARAMETERS													LABORATORY NAME: SW Lab of Oklahoma, Inc.	
PROJECT NUMBER: 0010				Explosives 8330 (Solid/Liquid)	Metals (11) (Solid)	VOC 8260A (Solid/Liquid)	SVOC, Pest/PCB, Explosives (Solid)	SVOC 82708 (Liquid)	Pest/PCB 8081 (Liquid)	Metals (23) (Solid/Liquid)	Cyanide 9013 (Liquid)	Metals (23), Cyanide (Solid)	Metals (11), Cyanide (Solid)	Geotech (TOC, Grain Size) (Solid)	No. of Bottles/ Vials:	LABORATORY ADDRESS: 1700 West Albany Suite C Broken Arrow, OK 74012		
PROJECT MANAGER: Steve Selecman																OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS		
Sampler (Signature)		(Printed Name)		Sample ID	Date Collected	Time Collected	Matrix									PHONE NO: (918) 251-2858		
<i>Laura M. Moudon</i>		LAURA M. MOUDON		WB64-031-0188-SO	7AUG96	0815	SOIL											
				WB64-032-0189-SO	}	0800	SOIL	1	1								2	
				WB64-042-0500-SO		1010	SOIL	1	1									2
				WB64-043-0501-SO		1035	SOIL	1	1									2
				WB64-044-0502-SO		1055	SOIL	1	1									2
				WB64-045-0503-SO		1115	SOIL	1	1									2
				DA250-023-0623-SO		1145	SOIL	1	1									2
				DA250-023-0624-SO		1155	SOIL	1	1									2
				DA250-024-0625-SO		1120	SOIL	1	1									2
				DA250-024-0626-SO		1130	SOIL	1	1									2
				DA250-025-0627-SO		1005	SOIL	1	1									2
				DA250-025-0628-FD	1005	SOIL	1	1									2	
				DA250-025-0630-SO	7AUG96	1018	SOIL	1	1								2	
RELINQUISHED BY:		Date/Time	RECEIVED BY:	Date/Time	TOTAL NUMBER OF CONTAINERS:				Cooler Temperature: 3°C, 5°C									
COMPANY NAME:			<i>LAURA M. MOUDON</i>	8/8/96	Cooler ID: See pg. 3				FEDEX NUMBER: See pg. 3									
			COMPANY NAME: SW Lab of OK	0925														
RECEIVED BY:		Date/Time	RELINQUISHED BY:	Date/Time														
COMPANY NAME:			COMPANY NAME:															
RELINQUISHED BY:		Date/Time	RECEIVED BY:	Date/Time														
COMPANY NAME:			COMPANY NAME:															

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COC NO.: ~~057~~  
008 CONT.

PROJECT NAME: Ravenna Army Ammunition Plant (RVAAP) Phase 1 RI				REQUESTED PARAMETERS											LABORATORY NAME: SW Lab of Oklahoma, Inc.		
PROJECT NUMBER: 0010				Explosives 8330 (Solid/Liquid)	Metals (11) (Solid)	VOC 8260A (Solid/Liquid)	SVOC, Pest/PCB, Explosives (Solid)	SVOC 8270B (Liquid)	Pest/PCB 8081 (Liquid)	Metals (23) (Solid/Liquid)	Cyanide 9013 (Liquid)	Metals (23), Cyanide (Solid)	Metals (11), Cyanide (Solid)	Geotech (TOC, Grain Size) (Solid)	TEMP BLANKS	No. of Bottles/Vials:	LABORATORY ADDRESS: 1700 West Albany Suite C Broken Arrow, OK 74012
PROJECT MANAGER: Steve Selecman		Sampler (Signature)	(Printed Name)														PHONE NO: (918) 251-2858
		<i>Laura M. Morrison</i>	Laura W. Morrison														OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
Sample ID	Date Collected	Time Collected	Matrix	Explosives 8330 (Solid/Liquid)	Metals (11) (Solid)	VOC 8260A (Solid/Liquid)	SVOC, Pest/PCB, Explosives (Solid)	SVOC 8270B (Liquid)	Pest/PCB 8081 (Liquid)	Metals (23) (Solid/Liquid)	Cyanide 9013 (Liquid)	Metals (23), Cyanide (Solid)	Metals (11), Cyanide (Solid)	Geotech (TOC, Grain Size) (Solid)	TEMP BLANKS	No. of Bottles/Vials:	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
DAZ50 - 026 - 0631 - SO	7 AUG 96	0812	SOIL	1	1										2		
DAZ50 - 026 - 0632 - SO		0825	SOIL	1	1										2		
DAZ50 - 028 - 0635 - SO		0925	SOIL	1	1										2		
DAZ50 - 028 - 0636 - SO		0940	SOIL	1	1										2		
DAZ50 - 028 - 0637 - FD	7 AUG 96	0940	SOIL	1	1										2		
COOLANT BLANKS	NA	NA	NA												2	2	TEMPERATURE BLANK
LAST ENTRY																	
RELINQUISHED BY: <i>L M Morrison</i>		Date/Time 7 AUG 96	RECEIVED BY: <i>[Signature]</i>		Date/Time 8/8/96	TOTAL NUMBER OF CONTAINERS: 70				Cooler Temperature: 3°C, 5°C							
COMPANY NAME: SAIC		1400	COMPANY NAME: SW Lab of OK		0925	Cooler ID: B31, S32				FEDEX NUMBER: 0944266536							
RECEIVED BY:		Date/Time	RELINQUISHED BY:		Date/Time												
COMPANY NAME:			COMPANY NAME:														
RELINQUISHED BY:		Date/Time	RECEIVED BY:		Date/Time												
COMPANY NAME:			COMPANY NAME:														

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PROJECT NAME: Ravenna Army Ammunition Plant (RVAAP) Phase 1 RI				REQUESTED PARAMETERS												LABORATORY NAME: SW Lab of Oklahoma, Inc.	
PROJECT NUMBER: 0010				Explosives 8330 (Solid/Liquid)	Metals (11) (Solid)	VOC 8260A (Solid/Liquid)	SVOC, Pest/PCB, Explosives (Solid)	SVOC 8270B (Liquid)	Pest/PCB 8081 (Liquid)	Metals (23) (Solid/Liquid)	Cyanide 9013 (Liquid)	Metals (23), Cyanide (Solid)	Metals (11), Cyanide (Solid)	Geotech (TOC, Grain Size) (Solid)	No. of Bottles/Vials:	LABORATORY ADDRESS: 1700 West Albany Suite C Broken Arrow, OK 74012	
PROJECT MANAGER: Steve Selecman																OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS	
Sampler (Signature)		(Printed Name)															
<i>Laura M. Mondan</i>		LAURA U. MORRISON															
Sample ID	Date Collected	Time Collected	Matrix														
DAZ50 - 029 - 0638 - SO	7 AUG 96	1050	SOIL	1	1												2
DAZ50 - 029 - 0639 - SO	[Handwritten mark]	1100	SOIL	1	1												2
DAZ50 - 030 - 0640 - SO		0900	SOIL	1	1												2
DAZ50 - 030 - 0641 - FD		0900	SOIL	1	1												2
DAZ50 - 030 - 0642 - SO		0910	SOIL	1	1												2
WB655 - 046 - 0504 - SO		1300	SOIL	1	1												2
WB655 - 047 - 0505 - SO		1330	SOIL	1	1												2
WB655 - 048 - 0506 - SO		1355	SOIL	1	1												2
WB655 - 049 - 0507 - SO		1430	SOIL	1	1												2
WB655 - 050 - 0508 - SO		1500	SOIL	1	1												2
WB655 - 052 - 0512 - SO		1515	SOIL	1	1												2
WB655 - 057 - 0517 - SO		1457	SOIL	1	1												2
WB655 - 058 - 0520 - SO		7 AUG 96	1525	SOIL	1	1											2
RELINQUISHED BY:		Date/Time	RECEIVED BY:	Date/Time	TOTAL NUMBER OF CONTAINERS:				Cooler Temperature:								
COMPANY NAME:		<i>[Signature]</i>	8/9/96	Cooler ID:				FEDEX NUMBER:									
		SWIC	0915	82 PG. 4				82 PG. 4									
RECEIVED BY:	Date/Time	RELINQUISHED BY:	Date/Time														
COMPANY NAME:		COMPANY NAME:															
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time														
COMPANY NAME:		COMPANY NAME:															

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5:  
1:5:

**CHAIN OF CUSTODY RECORD**

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COC NO.: ~~873~~ 809 CONT

PROJECT NAME: Ravenna Army Ammunition Plant (RVAAP) Phase 1 RI				REQUESTED PARAMETERS													LABORATORY NAME: SW Lab of Oklahoma, Inc.	
PROJECT NUMBER: 0010				Explosives 8330 (Solid/Liquid)	Metals (11) (Solid)	VOC 8260A (Solid/Liquid)	SVOC, Pest/PCB, Explosives (Solid)	SVOC 8270B (Liquid)	Pest/PCB 9081 (Liquid)	Metals (23) (Solid/Liquid)	Cyanide 9013 (Liquid)	Metals (23), Cyanide (Solid)	Metals (11), Cyanide (Solid)	Geotech (TOC, Grain Size) (Solid)	No. of Bottles/Vials:	LABORATORY ADDRESS: 1700 West Albany Suite C Broken Arrow, OK 74012		
PROJECT MANAGER: Steve Selecman																OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS		
Sampler (Signature)		(Printed Name)		Sample ID	Date Collected	Time Collected	Matrix									PHONE NO: (918) 251-2858		
<i>Laura M Morrison</i>		LAURA W. MORRISON		WB655 - 063 - 0525 - SO	7 AUG 96	1603	SOIL	1										
				WB655 - 064 - 0526 - SO		1620	SOIL	1										
				LNW50 - 011(d) - 0428 - SD		1305	SOIL	1						1				
				LNW50 - 012(d) - 0429 - SD		1400	SOIL	1						1				
				LNW50 - 013(d) - 0430 - SD		1525	SOIL	1						1				
				DA250 - 016 - 0609 - SO		1620	SOIL	1										
				DA250 - 016 - 0610 - SO		1630	SOIL	1										
				DA250 - 021 - 0619 - SO		1415	SOIL	1										
				DA250 - 021 - 0620 - SO		1418	SOIL	1										
				DA250 - 022 - 0621 - SO		1430	SOIL	1										
				DA250 - 022 - 0622 - SO		1440	SOIL	1										
				DA250 - 017 - 0601 - SO		1540	SOIL	1										
				DA250 - 017 - 0602 - SO	7 AUG 96	1550	SOIL	1										
RELINQUISHED BY:		Date/Time	RECEIVED BY:		Date/Time	TOTAL NUMBER OF CONTAINERS:				Cooler Temperature:								
COMPANY NAME:			<i>L. Morrison</i>		8/19/96	Cooler ID: <i>See pg. 4</i>				FEDEX NUMBER: <i>See pg. 4</i>								
			COMPANY NAME: <i>SIXO</i>		0915													
RECEIVED BY:		Date/Time	RELINQUISHED BY:		Date/Time													
COMPANY NAME:			COMPANY NAME:															
RELINQUISHED BY:		Date/Time	RECEIVED BY:		Date/Time													
COMPANY NAME:			COMPANY NAME:															

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PROJECT NAME: Ravenna Army Ammunition Plant (RVAAP) Phase 1 RI				REQUESTED PARAMETERS												LABORATORY NAME: SW Lab of Oklahoma, Inc.	
PROJECT NUMBER: 0010				Explosives 8330 (Solid/Liquid)	Metals (11) (Solid)	VOC 8260A (Solid/Liquid)	SVOC, Pest/PCB, Explosives (Solid)	SVOC 8270B (Liquid)	Pest/PCB 8081 (Liquid)	Metals (23) (Solid/Liquid)	Cyanide 9013 (Liquid)	Metals (23), Cyanide (Solid)	Metals (11), Cyanide (Solid)	Geotech (TOC, Grain Size) (Solid)	No. of Bottles/ Vials:	LABORATORY ADDRESS: 1700 West Albany Suite C Broken Arrow, OK 74012	
PROJECT MANAGER: Steve Selecman																OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS	
Sampler (Signature)		(Printed Name)														PHONE NO: (918) 251-2858	
Laura M. Morrison		LAURA M. MORRISON															
Sample ID	Date Collected	Time Collected	Matrix														
DA250-015-0607-30	7 AUG 96	1500	SOIL	1	1												2
DA250-015-0608-30	7 AUG 96	1518	SOIL	1	1												2
WB655-051-0509-30	8 AUG 96	0825	SOIL			1	1				1						3
WB655-051-0510-FD		0825	SOIL			1	1				1						3
WB655-054-0514-30		0818	SOIL	1	1												2
WB655-055-0515-30		0900	SOIL	1	1												2
WB655-056-0516-30		0910	SOIL	1	1												2
WB655-059-0521-30		0940	SOIL	1	1												2
WB655-059-0518-FD		0940	SOIL	1	1												2
WB655-060-0522-30		1000	SOIL	1	1												2
WB655-061-0523-30		1040	SOIL	1	1												2
WB655-062-0524-30		1050	SOIL	1	1												2
LL255-027-0118-30	8 AUG 96	0915	SOIL			1	1				1						3
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time	TOTAL NUMBER OF CONTAINERS:				Cooler Temperature:									
COMPANY NAME:		<i>Sublissor</i>	8/9/96	Cooler ID:				FEDEX NUMBER:									
		SWLC	0915	SELPG-4				SELPG-4									
RECEIVED BY:	Date/Time	RELINQUISHED BY:	Date/Time														
COMPANY NAME:		COMPANY NAME:															
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time														
COMPANY NAME:		COMPANY NAME:															

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COC NO. ~~025~~  
 009 CONT.

PROJECT NAME: Ravenna Army Ammunition Plant (RVAAP) Phase 1 RI				REQUESTED PARAMETERS											LABORATORY NAME: SW Lab of Oklahoma, Inc.			
PROJECT NUMBER: 0010				Explosives 8330 (Solid/Liquid)	Metals (11) (Solid)	VOC B260A (Solid/Liquid)	SVOC, Pest/PCB, Explosives (Solid)	SVOC B270B (Liquid)	Pest/PCB 8081 (Liquid)	Metals (23) (Solid/Liquid)	Cyanide 9013 (Liquid)	Metals (23), Cyanide (Solid)	Metals (11), Cyanide (Solid)	Geotech (TOC, Grain Size) (Solid)	TEMP BLANK	No. of Bottles/Vials:	LABORATORY ADDRESS: 1700 West Albany Suite C Broken Arrow, OK 74012	
PROJECT MANAGER: Steve Selecman																	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS	
Sampler (Signature)		(Printed Name)																
<i>Laura M. Morrison</i>		Laura W. Morrison																
Sample ID	Date Collected	Time Collected	Matrix															
LL2ss - 026 - 0117 - 50	8 AUG 96	0855	SOIL															
LL2ss - 025 - 0116 - 90		0830	SOIL															
LL2ss - 024 - 0115 - 80		1035	SOIL															
LL2ss - 023 - 0113 - 90		1020	SOIL															
DA2sd - 031(d) - 0634 - SD		0955	SOIL															
DA2sd - 032(d) - 0644 - SD		0900	SOIL															
DA2sd - 032(d) - 0645 - FD		0900	SOIL															
DA2sd - 033(d) - 0647 - SD		0825	SOIL															
DA2sd - 013 - 0603 - 90		1035	SOIL															
DA2sd - 013 - 0604 - 90		1045	SOIL															
DA2sd - 014 - 0605 - 90		1110	SOIL															
DA2sd - 014 - 0606 - 90		8 AUG 96	1125	SOIL														
COOLANT BLANK		NA	NA	NA														
															4	4	TEMPERATURE BLANK	
RELINQUISHED BY: <i>L.M. Morrison</i>		Date/Time 8 AUG 96	RECEIVED BY: <i>L. Morrison</i>		Date/Time 8/9/96	TOTAL NUMBER OF CONTAINERS: 19					Cooler Temperature: 5°C							
COMPANY NAME: SAIC		1630	COMPANY NAME: SWC		0915	Cooler ID: B01, B12, C05 A02					FEDEX NUMBER: 0944266746							
RECEIVED BY:		Date/Time	RELINQUISHED BY:		Date/Time													
COMPANY NAME:			COMPANY NAME:															
RELINQUISHED BY:		Date/Time	RECEIVED BY:		Date/Time													
COMPANY NAME:			COMPANY NAME:															

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PROJECT NAME: Ravenna Army Ammunition Plant (RVAAP) Phase 1 RI				REQUESTED PARAMETERS												LABORATORY NAME: SW Lab of Oklahoma, Inc.	
PROJECT NUMBER: 0010				Explosives 8330 (Solid/Liquid)	Metals (11) (Solid)	VOC 8260A (Solid/Liquid)	SVOC, Pest/PCB, Explosives (Solid)	SVOC 8270B (Liquid)	Pest/PCB 8081 (Liquid)	Metals (23) (Solid/Liquid)	Cyanide 9013 (Liquid)	Metals (23), Cyanide (Solid)	Metals (11), Cyanide (Solid)	Geotech (TOC, Grain Size) (Solid)	No. of Bottles/Vials:	LABORATORY ADDRESS: 1700 West Albany Suite C Broken Arrow, OK 74012	
PROJECT MANAGER: Steve Selecman																OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS	
Sampler (Signature)		(Printed Name)														PHONE NO: (918) 251-2858	
Sample ID	Date Collected	Time Collected	Matrix														
WB655 - 014 - 0469 - 80	8 AUG 96	1605	SOIL	1	1	X	1	1	1	1	1	1	1	1	1	2	
LL155 - 044 - 0051 - 80	8 AUG 96	1615	SOIL			1	1					1				3	
DA250 - 010 - 0596 - 80	9 AUG 96	0855	SOIL	1	1											2	
DA250 - 010 - 0597 - FD	}	0855	SOIL	1	1											2	
DA250 - 010 - 0598 - 80		0915	SOIL	1	1											2	
DA250 - 011 - 0599 - 80		0830	SOIL	1	1											2	
DA250 - 011 - 0600 - 80		0845	SOIL	1	1											2	
WB655 - 065 - 0527 - 80		0820	SOIL	1	1											2	
WB655 - 066 - 0528 - 80		0835	SOIL			1	1					1				3	
WB655 - 067 - 0529 - 80		0850	SOIL	1	1											2	
WB655 - 067 - 0530 - FD	0850	SOIL	1	1											2		
WB655 - 068 - 0532 - 80	0920	SOIL	1	1											2		
WB655 - 069 - 0533 - 80	9 AUG 96	0940	SOIL	1	1										2		
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time	TOTAL NUMBER OF CONTAINERS:										Cooler Temperature:			
COMPANY NAME:		<i>[Signature]</i>	8/10/96	Cooler ID: see pg. 3										FEDEX NUMBER: see pg. 3			
		SAICO	0830														
RECEIVED BY:	Date/Time	RELINQUISHED BY:	Date/Time														
COMPANY NAME:		COMPANY NAME:															
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time														
COMPANY NAME:		COMPANY NAME:															

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4c



PROJECT NAME: Ravenna Army Ammunition Plant (RVAAP) Phase 1 RI				REQUESTED PARAMETERS													LABORATORY NAME: SW Lab of Oklahoma, Inc.	
PROJECT NUMBER: 0010				Explosives 8330 (Solid/Liquid)	Metals (11) (Solid)	VOC 9260A (Solid/Liquid)	SVOC, Pest/PCB, Explosives (Solid)	SVOC 82708 (Liquid)	Pest/PCB 8081 (Liquid)	Metals (23) (Solid/Liquid)	Cyanide 9013 (Liquid)	Metals (23), Cyanide (Solid)	Metals (11), Cyanide (Solid)	Geotech (TOC, Grain Size) (Solid)	No. of Bottles/ Vials:	LABORATORY ADDRESS: 1700 West Albany Suite C Broken Arrow, OK 74012		
PROJECT MANAGER: Steve Selecman																	PHONE NO: (918) 251-2858	
Sampler (Signature)		Printed Name															OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS	
<i>Laura M. Morrison</i>		Laura M. Morrison																
Sample ID	Date Collected	Time Collected	Matrix	Explosives 8330 (Solid/Liquid)	Metals (11) (Solid)	VOC 9260A (Solid/Liquid)	SVOC, Pest/PCB, Explosives (Solid)	SVOC 82708 (Liquid)	Pest/PCB 8081 (Liquid)	Metals (23) (Solid/Liquid)	Cyanide 9013 (Liquid)	Metals (23), Cyanide (Solid)	Metals (11), Cyanide (Solid)	Geotech (TOC, Grain Size) (Solid)	No. of Bottles/ Vials:	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS		
LL255-031-0123-00	9 AUG 96	0845	SOIL			1	1					1			3			
LL255-032-0124-00	}	1025	SOIL	1	1										2			
LL255-033-0125-00		0905	SOIL	1	1										2			
LL255-034-0126-00		0930	SOIL	1	1										2			
LL255-034-0127-00		0930	SOIL	1	1										2			
LL255-035-0128-00		0955	SOIL	1	1										2			
LL255-036-0129-00		1005	SOIL	1	1										2			
LL255-037-0130-00		1110	SOIL	1	1										2			
WB655-070-0534-00			1020	SOIL	1	1										2		
WB655-071-0535-00			1035	SOIL	1	1										2		
LL150-018(0)0055-00			1430	SOIL	1	1										3		
WB655-072-0536-00		1345	SOIL			1	1					1			3			
WB655-073-0537-00	9 AUG 96	1400	SOIL	1	1										2			
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time	TOTAL NUMBER OF CONTAINERS:											Cooler Temperature:			
COMPANY NAME:		<i>Sullivan</i>	8/10/96	Cooler ID: <i>SEP 9 3</i>											FEDEX NUMBER: <i>SEP 9 3</i>			
RECEIVED BY:	Date/Time	RELINQUISHED BY:	Date/Time															
COMPANY NAME:		<i>Suco</i>	0830															
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time															
COMPANY NAME:																		

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4:

**CHAIN OF CUSTODY RECORD** Page 3 of 3

COC NO.: ~~858~~  
PTD CONT

PROJECT NAME: Ravenna Army Ammunition Plant (RVAAP) Phase 1 RI				REQUESTED PARAMETERS												LABORATORY NAME: SW Lab of Oklahoma, Inc.			
PROJECT NUMBER: 0010				Explosives 8330 (Solid/Liquid)	Metals (11) (Solid)	VOC 8260A (Solid/Liquid)	SVOC, Pest/PCB, Explosives (Solid)	SVOC 82708 (Liquid)	Pest/PCB 8081 (Liquid)	Metals (23) (Solid/Liquid)	Cyanide 9013 (Liquid)	Metals (23), Cyanide (Solid)	Metals (11), Cyanide (Solid)	Geotech (TOC, Grain Size) (Solid)	TEMP BLANK	No. of Bottles/ Vials:	LABORATORY ADDRESS: 1700 West Albany Suite C Broken Arrow, OK 74012		
PROJECT MANAGER: Steve Selecman																	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS		
Sampler (Signature)		(Printed Name)																	
<i>Lawrence M. Mowden</i>		Laura M. Morrison																	
Sample ID	Date Collected	Time Collected	Matrix																
WBG <del>ss</del> - 074 - 0538 - SO	9 AUG 96	1420	SOIL	1															
WBG <del>ss</del> - 075 - 0539 - SO	}	1435	SOIL	1															
WBG <del>ss</del> - 075 - 0540 - FD		1435	SOIL	1															
WBG <del>ss</del> - 076 - 0541 - SO		1455	SOIL			1	1					1							
LL2 <del>ss</del> - 028 - 0119 - SO		1420	SOIL	1															
LL2 <del>ss</del> - 028 - 0120 - FD		1420	SOIL	1															
LL2 <del>ss</del> - 029 - 0121 - SO	1445	SOIL	1																
LL2 <del>ss</del> - 026 - 0136 - SO	9 AUG 96	1555	SOIL	1															
COOLANT BLANK	NA	NA	NA												2	2	TEMPERATURE BLANK		
LAST ENTRY																			
RELINQUISHED BY: <i>L Mowden</i>		Date/Time 9 AUG 96	RECEIVED BY: <i>L Morrison</i>		Date/Time 8/10/96	TOTAL NUMBER OF CONTAINERS: 75		Cooler Temperature: 4°C											
COMPANY NAME: SAIC		Date/Time 1800	COMPANY NAME: SWCO		Date/Time 0830	Cooler ID: B02, B04		FEDEX NUMBER: 0944266551											
RECEIVED BY:		Date/Time	RELINQUISHED BY:		Date/Time														
COMPANY NAME:			COMPANY NAME:																
RELINQUISHED BY:		Date/Time	RECEIVED BY:		Date/Time														
COMPANY NAME:			COMPANY NAME:																

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**CHAIN OF CUSTODY RECORD**

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COC NO.: ~~0259~~  
 011

PROJECT NAME: Ravenna Army Ammunition Plant (RVAAP) Phase 1 RI					REQUESTED PARAMETERS												LABORATORY NAME: SW Lab of Oklahoma, Inc.	
PROJECT NUMBER: 0010					Explosives 8330 (Solid/Liquid)	Metals (11) (Solid)	VOC 8260A (Solid/Liquid)	SVOC, Pest/PCB, Explosives (Solid)	SVOC 8270B (Liquid)	Pest/PCB 8081 (Liquid)	Metals (23) (Solid/Liquid)	Cyanide 9013 (Liquid)	Metals (23), Cyanide (Solid)	Metals (11), Cyanide (Solid)	Geotech (TOC, Grain Size) (Solid)	No. of Bottles/ Vials:	LABORATORY ADDRESS: 1700 West Albany Suite C Broken Arrow, OK 74012	
PROJECT MANAGER: Steve Selecman																	PHONE NO: (918) 251 2858	
Sampler (Signature)		(Printed Name)			OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS													
<i>Laura M. Morrison</i>		Laura M. Morrison																
Sample ID	Date Collected	Time Collected	Matrix															
LL1sd - 047(d) - 005A - SD	9 Aug 96	1650	SOIL	1	1									1		3		
LL1sd - 052(d) - 006A - SD	9 Aug 96	1600	SOIL	1	1									1		3		
LL1ss - 013 - 0014 - SO	10 Aug 96	1345	SOIL	1	1											2		
LL1ss - 045 - 0052 - SO		1445	SOIL	1												1		
LL1ss - 048 - 0059 - SO		0930	SOIL	X	1	1				X	1					3		
LL1ss - 049 - 0062 - SO		1040	SOIL		1	1					1					3		
LL1sd - 050(d) - 0058 - SD		0843	SOIL	1	1								1			3		
LL1sd - 053(d) - 0061 - SD		1105	SOIL	1	1											2		
LL2ss - 048 - 0095 - SO		1625	SOIL			1	1						1			3		
LL2ss - 017 - 0105 - SO		1530	SOIL	1	1											2		
LL2ss - 017 - 0106 - FD		1530	SOIL	1	1											2		
LL2ss - 018 - 0107 - SO		1422	SOIL	1	1											2		
LL2ss - 019 - 0108 - SO		10 Aug 96	1455	SOIL			1	1					1			3		
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time	TOTAL NUMBER OF CONTAINERS:		Cooler Temperature: 3, 5, 3, 2, 4, 3, 2												
COMPANY NAME:		COMPANY NAME:		Cooler ID:		FEDEX NUMBER:												
RECEIVED BY:	Date/Time	RELINQUISHED BY:	Date/Time															
COMPANY NAME:		COMPANY NAME:																
RECEIVED BY:	Date/Time	RELINQUISHED BY:	Date/Time															
COMPANY NAME:		COMPANY NAME:																

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PROJECT NAME: Ravenna Army Ammunition Plant (RVAAP) Phase 1 RI				REQUESTED PARAMETERS													LABORATORY NAME: SW Lab of Oklahoma, Inc.	
PROJECT NUMBER: 0010				Explosives 8330 (solid/Liquid)	Metals (11) (Solid)	VOC 8260A (solid/Liquid)	SVOC, Pest/PCB, Explosives (Solid)	SVOC 8270B (Liquid)	Pest/PCB 8081 (Liquid)	Metals (23) (Solid/Liquid)	Cyanide 9013 (Liquid)	Metals (23), Cyanide (Solid)	Metals (11), Cyanide (Solid)	Geotech (TOC, Grain Size) (solid)	No. of Bottles/ Vials:	LABORATORY ADDRESS: 1700 West Albany Suite C Broken Arrow, OK 74012		
PROJECT MANAGER: Steve Selecman																PHONE NO: (918) 251 2858		
Sampler (Signature)		(Printed Name)		OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS														
<i>Laura M. Moudon</i>		Laura M Moudon																
Sample ID	Date Collected	Time Collected	Matrix															
LL255-φ19-φ109-FD	10 Aug 96	1455	SOIL			1	1										3	
LL255-φ38-φ131-SO	}	1110	SOIL	1	1												2	
LL255-φ39-φ132-SO		1352	SOIL	1	1												2	
LL255-φ41(L)-φ135-SO		φ95φ	SOIL		1												1	
LL255-φ43-φ137-SO		↓	1025	SOIL			1	1					1				3	
LL255-φ34(d)-φ122-SD	10 Aug 96	0832	SOIL			1	1					1					3	
LL15d-φ58(p)-φ068-SD	11 Aug 96	φ94φ	SOIL	1	1								1				3	
LL15d-φ55(p)-φ069-SD	}	φ91φ	SOIL	1	1								1				3	
LL15d-φ60(p)-φ070-SD		103φ	SOIL	1	1								1				3	
LL15d-φ61(p)-φ071-SD		1115	SOIL	1	1								1				3	
LL15d-φ62(p)-φ072-SD		↓	1135	SOIL	1	1							1					3
LL255-φ01-φ087-SD	↓	φ85φ	SOIL	1	1												2	
LL255-φ01-φ088-FD	11 Aug 96	φ855	SOIL	1	1												2	
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time	TOTAL NUMBER OF CONTAINERS:												Cooler Temperature:		
COMPANY NAME: <i>KW 8-13-96</i>		COMPANY NAME:		Cooler ID:												FEDEX NUMBER:		
RECEIVED BY:	Date/Time	RELINQUISHED BY:	Date/Time															
COMPANY NAME:		COMPANY NAME:																
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time															
COMPANY NAME:		COMPANY NAME:																

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PROJECT NAME: Ravenna Army Ammunition Plant (RVAAP) Phase 1 RI

PROJECT NUMBER: 0010

PROJECT MANAGER: Steve Selecman

Sampler (Signature)

(Printed Name)

*Laura M. Morrison* Laura M. Morrison

REQUESTED PARAMETERS

LABORATORY NAME:  
SW Lab of Oklahoma, Inc.

LABORATORY ADDRESS:  
1700 West Albany  
Suite C  
Broken Arrow, OK 74012

PHONE NO: (918) 251-2858

OBSERVATIONS, COMMENTS,  
SPECIAL INSTRUCTIONS

Sample ID	Date Collected	Time Collected	Matrix	Explosives 833D (solid/Liquid)	Metals (11) (solid)	VOC 8280A (solid/Liquid)	SVOC, Pest/PCB, Explosives (solid)	SVOC 8270B (Liquid)	Pest/PCB 8081 (Liquid)	Metals (23) (solid/Liquid)	Cyanide 9013 (Liquid)	Metals (23), Cyanide (solid)	Metals (11), Cyanide (solid)	Geotech (TOC, Grain Size) (solid)	No. of Bottles/Vials
LL255-003-0090-SD	11 Aug 96	0922	SOIL	1	1										2
LL255-007-0094-SD		1045	SOIL	1	1										2
LL255-020-0110-SD		0951	SOIL	1	1										2
LL255-021-0111-SD		1015	SOIL	1	1										2
WB6SD-078-0543-SD		0911	SOIL	1	1								1		3
WB6SD-079-0544-SD		0933	SOIL	1	1								1		3
WB6SD-080-0545-SD		0952	SOIL		1	1					1		1		4
WB6SD-081-0546-SD		1015	SOIL	1	1								1		3
WB6SD-084-0549-SD		1102	SOIL	1	1								1		3
WB6SD-084-0550-FD		1102	SOIL	1	1										2
WB6SD-085-0551-SD		1038	SOIL	1	1								1		3
WB6SD-082-0547-SD	11 Aug 96	1350	SOIL	1	1								1		3
WB6SD-083-0548-SD	11 Aug 96	1330	SOIL	1	1								1		4

RELINQUISHED BY:

Date/Time

RECEIVED BY:

Date/Time

TOTAL NUMBER OF CONTAINERS:

Cooler Temperature:

COMPANY NAME:

COMPANY NAME:

Cooler ID:

FEDEX NUMBER:

RECEIVED BY:  
*A. Johnson*

Date/Time

RELINQUISHED BY:

Date/Time

COMPANY NAME:  
SWCO

8/13/96  
1030

COMPANY NAME:

RELINQUISHED BY:

Date/Time

RECEIVED BY:

Date/Time

COMPANY NAME:

COMPANY NAME:

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PROJECT NAME: Ravenna Army Ammunition Plant (RVAAP) Phase 1 RI				REQUESTED PARAMETERS											LABORATORY NAME: SW Lab of Oklahoma, Inc.			
PROJECT NUMBER: 0010				Explosives 8330 (solid/Liquid)	Metals (11) (solid)	VOC 8260A (solid/Liquid)	SVOC, Pest/PCB, Explosives (solid)	SVOC 8270B (Liquid)	Pest/PCB 8081 (Liquid)	Metals (23) (solid/Liquid)	Cyanide 9013 (Liquid)	Metals (23), Cyanide (solid)	Metals (11), Cyanide (solid)	Geotech (TOC, Grain Size) (solid)	No. of Bottles/Vials:	LABORATORY ADDRESS: 1700 West Albany Suite C Broken Arrow, OK 74012		
PROJECT MANAGER: Steve Selecman																OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS		
Sampler (Signature)		(Printed Name)		Sample ID	Date Collected	Time Collected	Matrix								PHONE NO: (918) 251-2858			
<i>Laura M. Morrison</i>		LAURA M. MORRISON		WB6sd - 086 - 0552 - SD	11AUG96	1300	SOIL	1	1								3	
				WB6sd - 087 - 0553 - SD	}	1410	SOIL	1	1								3	
				WB6sd - 088 - 0554 - SD		1435	SOIL	1	1									3
				WB6sd - 088 - 0555 - FD		1435	SOIL	1	1									2
				WB6sd - 089 - 0556 - SD		1527	SOIL	1	1									3
				WB6sd - 090 - 0557 - SD		1505	SOIL	1	1									3
				LL2ss - 0089 - SO		1445	SOIL	1	1									2
				LL2ss - 004 - 0091 - SO		1425	SOIL	1	1									2
				LL2ss - 005 - 0092 - SO		1410	SOIL	1	1									2
				LL2ss - 006 - 0093 - SO		1345	SOIL	1	1									2
				LL1sd - 053(p) - 0061 - SD		1527	SOIL	1	1									3
				LL1sd - 054(p) - 0062 - SD		1510	SOIL	1	1									3
				LL1sd - 055(p) - 0063 - SD		11AUG96	1425	SOIL	1	1								3
RELINQUISHED BY:		Date/Time	RECEIVED BY:	Date/Time		TOTAL NUMBER OF CONTAINERS:				Cooler Temperature:								
COMPANY NAME:			COMPANY NAME:		Cooler ID:				FEDEX NUMBER:									
RECEIVED BY:		Date/Time	RELINQUISHED BY:	Date/Time														
COMPANY NAME:			COMPANY NAME:															
RELINQUISHED BY:		Date/Time	RECEIVED BY:	Date/Time														
COMPANY NAME:			COMPANY NAME:															

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CHAIN OF STUDY RECORD Page 5 of 6 COC NO.: 011 CONT.

PROJECT NAME: Ravenna Army Ammunition Plant (RVAAP) Phase 1 RI				REQUESTED PARAMETERS												LABORATORY NAME: SW Lab of Oklahoma, Inc.	
PROJECT NUMBER: 0010																LABORATORY ADDRESS: 1700 West Albany Suite C Broken Arrow, OK 74012	
PROJECT MANAGER: Steve Selecman																PHONE NO: (918) 251-2858	
Sampler (Signature) <i>Laura M. Morrison</i>		(Printed Name) Laura M. Morrison														OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS	
Sample ID	Date Collected	Time Collected	Matrix	Explosives 8330 (solid/Liquid)	Metals (11) (solid)	VOC 8280A (solid/Liquid)	SVOC, Pest/PCB, Explosives (solid)	SVOC 8270B (Liquid)	Pest/PCB 8081 (Liquid)	Metals (23) (solid/Liquid)	Cyanide 9013 (Liquid)	Metals (23), Cyanide (solid)	Metals (11), Cyanide (solid)	Geotech (TOC, Grain Size) (solid)	No. of Bottles/Vials		
LL2...-014(b)-0133-SD	12 AUG 96	0810	SOIL														
LL1mw-015-0077-GW	10 AUG 96	1245	WATER	1		2	1	1	1	1					1		
LL1mw-002-0165-EX	}	1020	WATER	1		2	1	1	1	1					7		
LL1mw-011-0079-TP		1245	WATER			2									7		
LL1mw-014-0074-GW		1045	WATER	1		2	1	1	1	1					2	TRIP BLANK	
LL1mw-011-0078-FD	10 AUG 96	1045	WATER	1		2	1	1	1	1					7	containers labeled "0076"	
LL2...-019-0096-SC	12 AUG 96	1052	SOIL	1											7	from 8/13/96	
LL2...-011-0098-SC	}	1035	SOIL	1											2		
LL2...-013-0100-SC		1010	SOIL			1									2		
LL2...-014-0101-SC		0950	SOIL	1								1			3		
LL1SD-019(d)-0050-SD	12 AUG 96	1115	SOIL			1									2		
LL1SD-019(d)-0059-LML	8.12.96														4		
LL2...-0155(p)-0150-SD	12 AUG 96	0815	SOIL	1											3		
RELINQUISHED BY:		Date/Time	RECEIVED BY:		Date/Time	TOTAL NUMBER OF CONTAINERS:				Cooler Temperature:							
COMPANY NAME:			COMPANY NAME:			Cooler ID:				FEDEX NUMBER:							
RECEIVED BY:		Date/Time	RELINQUISHED BY:		Date/Time												
COMPANY NAME:			COMPANY NAME:														
RELINQUISHED BY:		Date/Time	RECEIVED BY:		Date/Time												
COMPANY NAME:			COMPANY NAME:														

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PROJECT NAME: <b>Revenna Army Ammunition Plant (RVAAP) Phase 1 RI</b>				REQUESTED PARAMETERS													LABORATORY NAME: <b>SW Lab of Oklahoma, Inc.</b>	
PROJECT NUMBER: <b>0010</b>				Explosives 8330 (soil/Liquid)	Metals (11) (soil)	VOC 8280A (soil/Liquid)	SVOC, Pestic./PCB, Explosives (soil)	SVOC 8270B (Liquid)	Pestic./PCB 9081 (Liquid)	Metals (23) (soil/Liquid)	Cyanide 9013 (Liquid)	Metals (23), Cyanide (soil)	Metals (11), Cyanide (soil)	Geotech (TOC, Grain Size) (soil)	TEMP BLANK	No. of Bottles/Vials:	LABORATORY ADDRESS: <b>1700 West Albany Suite C Broken Arrow, OK 74012</b>	
PROJECT MANAGER: <b>Steve Sealeman</b>																	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS	
Sampler (Signature)		Printed Name															PHONE NO: <b>(918) 251-2858</b>	
<i>Laura M. Morrison</i>		<b>Laura M. Morrison</b>																
Sample ID	Date Collected	Time Collected	Matrix															
LL2-w - 055(p) - 0157 - FD	12A0696	0845	SOIL	1	1													
LL1-w - 056(p) - 0164 - SD	}	0930	SOIL			1	1				1			1				
LL1-w - 056(p) - 0165 - FD		0930	SOIL			1	1				1			1				
LL1-w - 057(p) - 0167 - SD		0908	SOIL	1	1													
LL1-w - 071 - 0558 - SO		0915	SOIL	1	1													
LL1-w - 072 - 0560 - SO		1020	SOIL	1	1													
LL1-w - 073 - 0563 - SO	12A0696	1100	SOIL	1	1													
LL1-mw - 063 - 0173 - GW	12A0696	1200	WATER	3		6		3	3	3								MS/WSD VOLUME
LL1-mw - 002 - 0180 - TB	12A0696	1200	WATER			2												
COOLANT BLANKS	NA	NA	NA											7				TEMPERATURE BLANK
LAST ENTRY																		

  

RELINQUISHED BY: <i>L Morrison</i>	Date/Time 12A0696	RECEIVED BY:	Date/Time	TOTAL NUMBER OF CONTAINERS: <b>232</b>	Cooler Temperature: <b>5°C</b>
COMPANY NAME: <b>SATC</b>	1630	COMPANY NAME:		Cooler ID: <b>COLP, B28, B29, 35A</b>	FEDEX NUMBER: <b>094426658A</b>
RECEIVED BY: <i>L Morrison</i>	Date/Time 8/13/96	RELINQUISHED BY:	Date/Time		
COMPANY NAME: <b>SATC</b>	1030	COMPANY NAME:			
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time		
COMPANY NAME:		COMPANY NAME:			

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PROJECT NAME: Ravenna Army Ammunition Plant (RVAAP) Phase 1 RI				REQUESTED PARAMETERS											LABORATORY NAME: SW Lab of Oklahoma, Inc.			
PROJECT NUMBER: 0010				Explosives 8330 (solid/Liquid)	Metals (11) (solid)	VOC 8260A (solid/Liquid)	SVOC, Pest/PCB, Explosives (solid)	SVOC 8270B (Liquid)	Pest/PCB 8081 (Liquid)	Metals (23) (solid/Liquid)	Cyanide 9013 (Liquid)	Metals (23), Cyanide (solid)	Metals (11), Cyanide (solid)	Geotech (TOC, Grain Size) (solid)	No. of Bottles/Vials:	LABORATORY ADDRESS: 1700 West Albany Suite C Broken Arrow, OK 74012		
PROJECT MANAGER: Steve Selecman																OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS		
Sampler (Signature)		(Printed Name)		Sample ID	Date Collected	Time Collected	Matrix									PHONE NO: (918) 251-2858		
<i>Laura M. Morrison</i>		LAURA M. MORRISON		LL4ss-062-0595-SO	12AUG96	1335	SOIL	1										
				LL4ss-063-0208-SO	}	1435	SOIL		1									
				LL2ss-044-0138-SO		1435	SOIL	1										
				LL2ss-022-0112-SO		1345	SOIL	1										
				LL2sd-052(p)-0147-SD		1435	SOIL			1								
				LL2sd-053(p)-0148-SD	}	1455	SOIL	1										
				LL2sd-054(p)-0149-SD		1550	SOIL	1										
				LL1ss-074-0671-SO	13AUG96	0915	SOIL		1									
				LL2ss-015-0102-SO	}	1035	SOIL	1										
				LL2ss-015-0103-FD		1035	SOIL	1										
				LL2ss-012-0099-SO	}	1110	SOIL	1										
				LL2ss-010-0097-SO		1135	SOIL	1										
				WB6ss-053-0513-SO	13AUG96	1000	SOIL	1										
RELINQUISHED BY:		Date/Time		RECEIVED BY:		Date/Time		TOTAL NUMBER OF CONTAINERS:				Cooler Temperature:						
COMPANY NAME:				COMPANY NAME:				Cooler ID: <i>SL 79. 2</i>				FEDEX NUMBER: <i>SL 79. 2</i>						
RECEIVED BY:		Date/Time		RELINQUISHED BY:		Date/Time												
<i>A. Sullivan</i>		8/14/96																
COMPANY NAME:		0930		COMPANY NAME:														
SWCO																		
RELINQUISHED BY:		Date/Time		RECEIVED BY:		Date/Time												
COMPANY NAME:				COMPANY NAME:														

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Science Applications International Corporation

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### CHAIN OF CUSTODY RECORD Page 2 of 2

COC NO.: D12 CONT.

PROJECT NAME: Ravenna Army Ammunition Plant (RVAAP) Phase 1 RI				REQUESTED PARAMETERS													LABORATORY NAME: SW Lab of Oklahoma, Inc.	
				Explosives 8330 (solid/Liquid)	Metals (11) (solid)	VOC 8280A (solid/Liquid)	SVOC, Pesticides/PCBs, Explosives (solid)	SVOC 82708 (Liquid)	Pesticides/PCBs 8081 (Liquid)	Metals (23) (solid/Liquid)	Cyanide 9013 (Liquid)	Metals (23), Cyanide (solid)	Metals (11), Cyanide (solid)	Geotech (TOC, Grain Size) (solid)			TEMP BLANK	No. of Bottles/ Vials:
PROJECT NUMBER: 0010																	PHONE NO: (918) 251-2858	
PROJECT MANAGER: Steve Selecman																	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS	
Sampler (Signature)		(Printed Name)																
<i>Laura M. Morrison</i>		Laura M. Morrison																
Sample ID	Date Collected	Time Collected	Matrix															
LNWS0-016(P)-0A35-SD	13AUG96	1050	SOIL	1													3	
LNWS0-023(P)-0670-SD	13AUG96	1145	SOIL	1													3	
COOLANT BLANK	NA	NA	NA														1	
LAST ENTRY																	TEMPERATURE BLANK	
RELINQUISHED BY: <i>L Morrison</i>		Date/Time 13AUG96	RECEIVED BY:	Date/Time	TOTAL NUMBER OF CONTAINERS: 39		Cooler ID: B27		Cooler Temperature:									
COMPANY NAME: SAIC		1530	COMPANY NAME:						FEDEX NUMBER: 0944 266595									
RECEIVED BY: <i>J. Morrison</i>		Date/Time 8/14/96	RELINQUISHED BY:	Date/Time														
COMPANY NAME: SAIC		0930	COMPANY NAME:															
RELINQUISHED BY:		Date/Time	RECEIVED BY:	Date/Time														
COMPANY NAME:			COMPANY NAME:															

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**CHAIN OF CUSTODY RECORD** PAGE 1 OF 2 COC NO.: 013

<b>PROJECT NAME:</b> Ravenna Army Ammunition Plant (RVAAP) Phase 1 RI				<b>REQUESTED PARAMETERS</b>										<b>LABORATORY NAME:</b> SW Lab of Oklahoma, Inc.																							
<b>PROJECT NUMBER:</b> 0010				<table border="1"> <tr> <td>Explosives 6330 (soil/Liquid)</td> <td>Metals (11) (soil)</td> <td>VOC 8260A (soil/Liquid)</td> <td>SVOC, Pest/PCB, Explosives (soil)</td> <td>SVOC 82708 (Liquid)</td> <td>Pest/PCB 8081 (Liquid)</td> <td>Metals (23) (soil/Liquid)</td> <td>Cyanide 9013 (Liquid)</td> <td>Metals (23), Cyanide (soil)</td> <td>Metals (11), Cyanide (soil)</td> <td>Geotech (TOC, Grain Size) (soil)</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>										Explosives 6330 (soil/Liquid)	Metals (11) (soil)	VOC 8260A (soil/Liquid)	SVOC, Pest/PCB, Explosives (soil)	SVOC 82708 (Liquid)	Pest/PCB 8081 (Liquid)	Metals (23) (soil/Liquid)	Cyanide 9013 (Liquid)	Metals (23), Cyanide (soil)	Metals (11), Cyanide (soil)	Geotech (TOC, Grain Size) (soil)												<b>LABORATORY ADDRESS:</b> 1700 West Albany Suite C Broken Arrow, OK 74012	
Explosives 6330 (soil/Liquid)	Metals (11) (soil)	VOC 8260A (soil/Liquid)	SVOC, Pest/PCB, Explosives (soil)											SVOC 82708 (Liquid)	Pest/PCB 8081 (Liquid)	Metals (23) (soil/Liquid)	Cyanide 9013 (Liquid)	Metals (23), Cyanide (soil)	Metals (11), Cyanide (soil)	Geotech (TOC, Grain Size) (soil)																	
<b>PROJECT MANAGER:</b> Steve Seaceman														<b>PHONE NO.:</b> (918) 251-2858																							
<b>Sampler (Signature)</b> <i>Laura M. Morrison</i>		<b>(Printed Name)</b> LAURA M. MORRISON		<b>OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS</b>																																	
Sample ID	Date Collected	Time Collected	Matrix	Explosives 6330 (soil/Liquid)	Metals (11) (soil)	VOC 8260A (soil/Liquid)	SVOC, Pest/PCB, Explosives (soil)	SVOC 82708 (Liquid)	Pest/PCB 8081 (Liquid)	Metals (23) (soil/Liquid)	Cyanide 9013 (Liquid)	Metals (23), Cyanide (soil)	Metals (11), Cyanide (soil)	Geotech (TOC, Grain Size) (soil)	No. of Bottles/Vials:																						
L12-2-051(p)-0303-SD	13 AUG 96	1430	SOIL	1										1	3																						
L12-2-051(p)-0514-SD	[Handwritten squiggle]	1430	SOIL	1										1	3																						
WBG-0517-0512-BC		1435	SOIL	1											2																						
WBG-0517-0514-BC		1505	SOIL	1											2																						
WBG-0517-0514-BC		1525	SOIL			1									1																						
WBG-0517-0514-BC		1510	SOIL			1									1																						
WBG-0517-0514-BC		1310	SOIL			1									1																						
LL2-015-0139-BC		1523	SOIL	1											2																						
LL2-016-0144-BC	1458	SOIL	1											2																							
L12-2-052(p)-0306-SD	1525	SOIL	1										1	3																							
L12-2-053(p)-0307-SD	13 AUG 96	1516	SOIL			1	1				1		1	4																							
LL2-061-0615-BC	14 AUG 96	0905	SOIL								1			2																							
WBG-098-0565-BC	14 AUG 96	0915	SOIL	1										2																							
<b>RELINQUISHED BY:</b>	<b>Date/Time</b>	<b>RECEIVED BY:</b> <i>[Signature]</i>		<b>Date/Time</b> 8/15/96		<b>TOTAL NUMBER OF CONTAINERS:</b>						<b>Cooler Temperature:</b> 4°C, 4°C																									
<b>COMPANY NAME:</b>		<b>COMPANY NAME:</b> SWLO		<b>Date/Time</b> 10:00		<b>Cooler ID:</b> -20-TR-2-						<b>FEDEX NUMBER:</b> -20-TR-2-																									
<b>RECEIVED BY:</b>	<b>Date/Time</b>	<b>RELINQUISHED BY:</b>		<b>Date/Time</b>																																	
<b>COMPANY NAME:</b>		<b>COMPANY NAME:</b>		<b>Date/Time</b>																																	
<b>RELINQUISHED BY:</b>	<b>Date/Time</b>	<b>RECEIVED BY:</b>		<b>Date/Time</b>																																	
<b>COMPANY NAME:</b>		<b>COMPANY NAME:</b>		<b>Date/Time</b>																																	

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PROJECT NAME: Ravenna Army Ammunition Plant (RVAAP) Phase 1 RI				REQUESTED PARAMETERS													LABORATORY NAME: SW Lab of Oklahoma, Inc.				
				Explosives (11) (Solid)	Metal (11) (Solid)	VOC (200A) (Solid/Liquid)	SVOC, Pesticide/PCB, Explosives (Solid)	SVOC (270B) (Liquid)	Pesticide/PCB (Liquid)	Metal (23) (Solid/Liquid)	Cyanide (2013) (Liquid)	Metal (23), Cyanide (Solid)	Metal (11), Cyanide (Solid)	Geotech (TOC, Grain Size) (Solid)	TEMP BLANK	No. of Bottles/Vials:	LABORATORY ADDRESS: 1700 West Albany Suite C Broken Arrow, OK 74012				
PROJECT NUMBER: 0010																	PHONE NO: (918) 251-2858				
PROJECT MANAGER: Steve Balocman																	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS				
Sampler (Signature)		(Printed Name)																			
<i>Laura M. Morrison</i>		Laura M. Morrison																			
Sample ID	Date Collected	Time Collected	Matrix	Explosives (11) (Solid)	Metal (11) (Solid)	VOC (200A) (Solid/Liquid)	SVOC, Pesticide/PCB, Explosives (Solid)	SVOC (270B) (Liquid)	Pesticide/PCB (Liquid)	Metal (23) (Solid/Liquid)	Cyanide (2013) (Liquid)	Metal (23), Cyanide (Solid)	Metal (11), Cyanide (Solid)	Geotech (TOC, Grain Size) (Solid)	TEMP BLANK	No. of Bottles/Vials:	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS				
WB655-098-015206-FD	14 AUG 96	0915	SOIL	1	1											2					
LLA-014-0417-80	Z	0917	SOIL	1	1											2					
LLA-0165-01678-80		0945	SOIL	1	1											2					
LLA-016-01679-80		0840	SOIL	1	1											2					
LLA-0152(p)-0289-8D		1020	SOIL			1	1					1		1		4					
LLA-0153(p)-0290-8D	Z	1032	SOIL	1	1								1			3					
LLA-0153(p)-0291-FD		1032	SOIL	1	1								1			3					
LLA-0159(p)-0293-8D		1050	SOIL	1	1								1			3					
LLA-0155(p)-0294-8D	14 AUG 96	1110	SOIL	1	1								1			3					
COOLANT BLANK	NA	NA	NA												2	TEMPERATURE BLANK					
LAST ENTRY																					
RELINQUISHED BY: <i>L. Morrison</i>		Date/Time 14 AUG 96	RECEIVED BY: <i>[Signature]</i>		Date/Time 8/15/96	TOTAL NUMBER OF CONTAINERS: 51				Cooler Temperature: 5°C, 4°C, 4°C				Cooler ID: B291, CO 2				FEDEX NUMBER: 0194126621			
COMPANY NAME: SAIC		1430	COMPANY NAME: SWLO		10:00																
RECEIVED BY:		Date/Time	RELINQUISHED BY:		Date/Time																
COMPANY NAME:			COMPANY NAME:																		
RELINQUISHED BY:		Date/Time	RECEIVED BY:		Date/Time																
COMPANY NAME:			COMPANY NAME:																		

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PROJECT NAME: Ravenna Army Ammunition Plant (RVAAP) Phase 1 RI				REQUESTED PARAMETERS											LABORATORY NAME: SW Lab of Oklahoma, Inc.				
PROJECT NUMBER: 0010				Explosives 8330 (solid/Liquid)	Metals (11) (solid)	VOC 8260A (solid/Liquid)	SVOC, Pest/PCB, Explosives (solid)	SVOC 8270B (Liquid)	Pest/PCB 8081 (Liquid)	Metals (23) (solid/Liquid)	Cyanide 9013 (Liquid)	Metals (23), Cyanide (solid)	Metals (11), Cyanide (solid)	Geotech (TOC, Grain Size) (solid)	TEMP BLANK	No. of Bottles/Vials:	LABORATORY ADDRESS: 1700 West Albany Suite C Broken Arrow, OK 74012		
PROJECT MANAGER: Steve Selecman																	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS		
Sampler (Signature)		Printed Name		Sample ID	Date Collected	Time Collected	Matrix												
<i>Laura M. Morrison</i>		Laura M. Morrison		LL2mw-059-0607-GW	19 AUG 96	1130	WATER	1		2									
				CPCSD-006(P)-0655-SD	}	1010	SOIL	1										7	
				CPCSD-007(P)-0656-SD		0925	SOIL			1									3
				CPCSD-007(P)-0657-FD		0925	SOIL			1									4
				CPCSD-008(P)-0659-SD		0910	SOIL	1											4
				CPCSD-009(P)-0660-SD		1045	SOIL	1											3
				CPCSD-010(P)-0661-SD	1105	SOIL	1											3	
				LL2mw-001-0156-TB	19 AUG 96	1130	WATER			2								2	
				COOLANT BLANK	NA	NA	NA											1	
				LAST ENTRY														1	
RELINQUISHED BY: <i>L. Morrison</i>		Date/Time 19 AUG 96	RECEIVED BY: <i>[Signature]</i>	Date/Time 8/20/96	TOTAL NUMBER OF CONTAINERS: 30				Cooler Temperature: 5°C										
COMPANY NAME: SAIC		1630	COMPANY NAME: SW Lab of Okla.	09:40	Cooler ID: B19				FEDEX NUMBER: 0944266054										
RECEIVED BY:		Date/Time	RELINQUISHED BY:	Date/Time															
COMPANY NAME:			COMPANY NAME:																
RELINQUISHED BY:		Date/Time	RECEIVED BY:	Date/Time															
COMPANY NAME:			COMPANY NAME:																

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4°C

PROJECT NAME: Ravenna Army Ammunition Plant (RVAAP) Phase 1 RI				REQUESTED PARAMETERS													LABORATORY NAME: SW Lab of Oklahoma, Inc.	
PROJECT NUMBER: 0010				Explosives 8330 (solid/Liquid)	Metals (11) (solid)	VOC 8260A (solid/Liquid)	SVOC, Pest/PCB, Explosives (solid)	SVOC 8270B (Liquid)	Pest/PCB 9081 (Liquid)	Metals (23) (solid/Liquid)	Cyanide 9013 (Liquid)	Metals (23), Cyanide (solid)	Metals (11), Cyanide (solid)	Geotech (TOC, Grain Size) (solid)	No. of Bottles/Vials:	LABORATORY ADDRESS: 1700 West Albany Suite C Broken Arrow, OK 74012		
PROJECT MANAGER: Steve Selecman																PHONE NO: (918) 251-2858		
Sampler (Signature)		Sampler (Printed Name)		OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS														
Sample ID	Date Collected	Time Collected	Matrix															
LL2mw-060-060B-GW	19AUG96	1530	WATER	1		2		1	1	1							7	
LL2mw-003-015B-TB	}	1530	WATER			2											2	
CPCsd-001(p)-0650-SD		1255	SOIL	1									1				3	
CPCsd-002(p)-0651-SD		1330	SOIL	1									1				3	
CPCsd-003(p)-0652-SD		1350	SOIL	1									1				3	
CPCsd-004(p)-0653-SD		1445	SOIL	1									1				3	
CPCsd-005(p)-0654-SD		19AUG96	1505	SOIL	1								1				3	
L12ss-047-0359-80	20AUG96	0930	SOIL	1												2		
L12ss-050-0362-80	}	0950	SOIL			1					1					2		
LL3sd-042-0209-SD		1100	SOIL	1												2		
LL3ss-043-0210-80		1030	SOIL			1					1					2		
LL2sd-047(d)-0141-SD		1115	SOIL	1								1				3		
LL2sd-048(d)-0142-SD	20AUG96	0957	SOIL			1					1		1			4		
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time	TOTAL NUMBER OF CONTAINERS:										Cooler Temperature: 3°C, 4°C				
COMPANY NAME:		COMPANY NAME:	8/21/96	Cooler ID: See pg. 2										FEDEX NUMBER: see pg. 2				
COMPANY NAME:		COMPANY NAME:	0915															
RECEIVED BY:	Date/Time	RELINQUISHED BY:	Date/Time															
COMPANY NAME:		COMPANY NAME:																
RECEIVED BY:	Date/Time	RELINQUISHED BY:	Date/Time															
COMPANY NAME:		COMPANY NAME:																

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PROJECT NAME: Ravenne Army Ammunition Plant (RVAAP) Phase 1 RI				REQUESTED PARAMETERS											LABORATORY NAME: SW Lab of Oklahoma, Inc.					
															LABORATORY ADDRESS: 1700 West Albany Suite C Broken Arrow, OK 74012					
PROJECT NUMBER: 0010				LABORATORY ADDRESS: 1700 West Albany Suite C Broken Arrow, OK 74012																
PROJECT MANAGER: Steve Selecman				PHONE NO: (918) 251-2858																
Sampler (Signature) <i>Jana M. Mauden</i>		(Printed Name) Laura U. Morrison		TEMP BLANK No. of Bottles/Vials:											OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS					
Sample ID		Date Collected	Time Collected												Matrix	Explosives 8330 (solid/Liquid)	Metals (11) (solid)	VOC 8280A (solid/Liquid)	SVOC, Pest/PCB, Explosives (solid)	SVOC 8270B (Liquid)
LL2-J-049(d)-0144-SD	24 AUG 96	0925	SOIL	1															3	
LL2-J-050(d)-0145-SD	20 AUG 96	1147	SOIL	1															3	
COOLANT BLANK	NA	NA	NA																2	TEMPERATURE BLANK
LAST ENTRY																				
RELINQUISHED BY: <i>J. Mauden</i>		Date/Time 8-20-96	RECEIVED BY: <i>M. Morrison</i>		Date/Time 8/21/96	TOTAL NUMBER OF CONTAINERS: 47				Cooler ID: B21, B05		Cooler Temperature: 5°C 3.94°								
COMPANY NAME: SAIC		1630	COMPANY NAME: SW Lab of OK		09:15					FEDEX NUMBER: 0944266713										
RECEIVED BY:		Date/Time	RELINQUISHED BY:		Date/Time															
COMPANY NAME:			COMPANY NAME:																	
RELINQUISHED BY:		Date/Time	RECEIVED BY:		Date/Time															
COMPANY NAME:			COMPANY NAME:																	

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PROJECT NAME: Ravenna Army Ammunition Plant (RVAAP) Phase 1 RI				REQUESTED PARAMETERS											LABORATORY NAME: SW Lab of Oklahoma, Inc.				
PROJECT NUMBER: 0010				Explosives 8330 (Solid/Liquid)	Metals (11) (Solid)	VOC 8260A (Solid/Liquid)	SVOC, Pest/PCB, Explosives (Solid)	SVOC 82708 (Liquid)	Pest/PCB 8081 (Liquid)	Metals (23) (Solid/Liquid)	Cyanide 8013 (Liquid)	Metals (23), Cyanide (Solid)	Metals (11), Cyanide (Solid)	Geotech (TOC, Grain Size) (Solid)	TEMP BLANK	No. of Bottles/Vials:	LABORATORY ADDRESS: 1700 West Albany Suite C Broken Arrow, OK 74012		
PROJECT MANAGER: Steve Selecman																	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS		
Sampler (Signature)		(Printed Name)		Sample ID	Date Collected	Time Collected	Matrix									PHONE NO: (918) 251-2858			
<i>Laura M. Mauldin</i>		LAURA M. MORRISON		LL155-067-0679-50	20 AUG 96	1430	SOIL	1	1										
				LL250-046(d)-0140-5D	}	1410	SOIL	1	1										
				LL250-051(d)-0146-5D		1510	SOIL	1	1										
				LL155-075-0680-50		1645	SOIL	1	1										
				<sup>LAURIE B. 20-96</sup> LL255-062-0681-50	20 AUG 96	1730	SOIL			1	1								
				L1255-049-0361-80	21 AUG 96	1110	SOIL	1	1										
				LL150-077(d)-0685-5D	}	1000	SOIL	1	1										
				LL150-076(d)-0684-5D		0930	SOIL	1	1										
				LL255-063-0683-80	21 AUG 96	1030	SOIL			1	1								
				COOLANT BLANK		NA	NA								1		TEMPERATURE BLANK		
				LAST ENTRY															
RELINQUISHED BY: <i>L.M. Mauldin</i>		Date/Time 21 AUG 96	RECEIVED BY: <i>M. Morrison</i>	Date/Time 8/22/96	TOTAL NUMBER OF CONTAINERS: 23		Cooler ID: B02		Cooler Temperature: <i>5°C</i> 3°C		FEDEX NUMBER: 0944266665								
COMPANY NAME: SAIC		1530	COMPANY NAME: SW Lab of OK	10:15															
RECEIVED BY:		Date/Time	RELINQUISHED BY:	Date/Time															
COMPANY NAME:			COMPANY NAME:																
RELINQUISHED BY:		Date/Time	RECEIVED BY:	Date/Time															
COMPANY NAME:			COMPANY NAME:																

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PROJECT NAME: Ravenna Army Ammunition Plant (RVAAP) Phase 1 RI				REQUESTED PARAMETERS										LABORATORY NAME: SW Lab of Oklahoma, Inc.																										
PROJECT NUMBER: 0010				<table border="1"> <tr> <td>Explosives 8330 (solid/Liquid)</td> <td>Metals (11) (solid)</td> <td>VOC 8260A (solid/Liquid)</td> <td>SVOC, Pest/PCB, Explosives (solid)</td> <td>SVOC 82708 (Liquid)</td> <td>Pest/PCB 8081 (Liquid)</td> <td>Metals (23) (solid/Liquid)</td> <td>Cyanide 9013 (Liquid)</td> <td>Metals (23), Cyanide (solid)</td> <td>Metals (11), Cyanide (solid)</td> <td>Geotech (TOC, Grain Size) (solid)</td> <td>TEMP BLANK</td> <td rowspan="2">No. of Bottles/ Vials:</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>										Explosives 8330 (solid/Liquid)	Metals (11) (solid)	VOC 8260A (solid/Liquid)	SVOC, Pest/PCB, Explosives (solid)	SVOC 82708 (Liquid)	Pest/PCB 8081 (Liquid)	Metals (23) (solid/Liquid)	Cyanide 9013 (Liquid)	Metals (23), Cyanide (solid)	Metals (11), Cyanide (solid)	Geotech (TOC, Grain Size) (solid)	TEMP BLANK	No. of Bottles/ Vials:													LABORATORY ADDRESS: 1700 West Albany Suite C Broken Arrow, OK 74012	
Explosives 8330 (solid/Liquid)	Metals (11) (solid)	VOC 8260A (solid/Liquid)	SVOC, Pest/PCB, Explosives (solid)											SVOC 82708 (Liquid)	Pest/PCB 8081 (Liquid)	Metals (23) (solid/Liquid)	Cyanide 9013 (Liquid)	Metals (23), Cyanide (solid)	Metals (11), Cyanide (solid)	Geotech (TOC, Grain Size) (solid)	TEMP BLANK	No. of Bottles/ Vials:																		
PROJECT MANAGER: Steve Selecman														PHONE NO: (918) 251-2858																										
Sampler (Signature)		(Printed Name)												OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS																										
<i>Laura M. Morrison</i>		Laura M. Morrison																																						
Sample ID	Date Collected	Time Collected	Matrix	Explosives 8330 (solid/Liquid)	Metals (11) (solid)	VOC 8260A (solid/Liquid)	SVOC, Pest/PCB, Explosives (solid)	SVOC 82708 (Liquid)	Pest/PCB 8081 (Liquid)	Metals (23) (solid/Liquid)	Cyanide 9013 (Liquid)	Metals (23), Cyanide (solid)	Metals (11), Cyanide (solid)	Geotech (TOC, Grain Size) (solid)	TEMP BLANK	No. of Bottles/ Vials:																								
LL1mw - 067-066A-GW	21Aug96	1700	WATER	1		2		1		1						7																								
LL2mw-004-0159-TB	21Aug96	1700	WATER			2										2	TRIP BLANK																							
DCNar-001-0686-CS	22Aug96	1200	WATER	1		2		1		1						7	METALS PH=4																							
DCNwr-002-0687-CS	22Aug96	1410	WATER	1		2		1		1						7																								
DCNwr-003-0688-CS	22Aug96	1630	WATER	1		2		1		1						7																								
COOLANT BLANK	NA	NA	NA												2	2	TEMPERATURE BLANK																							
LAST ENTRY																																								
RELINQUISHED BY: <i>L. Morrison</i>		Date/Time 8-22-96	RECEIVED BY: <i>[Signature]</i>		Date/Time 8/23/96	TOTAL NUMBER OF CONTAINERS: 32		Cooler ID: B07, B32		Cooler Temperature: 3°C, 3°C		FEDEX NUMBER: 0944266676																												
COMPANY NAME: SAIC		1830	COMPANY NAME: SW Lab of Okla.		09:15																																			
RECEIVED BY:		Date/Time	RELINQUISHED BY:		Date/Time																																			
COMPANY NAME:			COMPANY NAME:																																					
RELINQUISHED BY:		Date/Time	RECEIVED BY:		Date/Time																																			
COMPANY NAME:			COMPANY NAME:																																					

F-105



**APPENDIX F — ATTACHMENT F-3**

**RVAAP Phase 1 RI  
Analytic Data Status Report**



Ravenna Army Ammunition Plant Phase 1 RI  
Analytic Data Status Report

Laboratory: Southwest Laboratory of Oklahoma, I

SDG Number	Sample ID	Analysis	Date Collected	Date Shipped	Date Received	Date Extracted	Date Analyzed	Data Received	COC
	B12SS-002-0379-SO	Metals (11)	07/24/96	07/24/96	07/25/96		08/10/96	//	001
	B12SS-002-0380-FD	Metals (11)	07/24/96	07/24/96	07/25/96		08/10/96	//	001
26406	LL3SS-010-0172-SO	Metals (11)	07/24/96	07/24/96	07/25/96		08/10/96	//	001
26406	LL3SS-012-0175-SO	Metals (11)	07/24/96	07/24/96	07/25/96		08/10/96	//	001
26406	LL3SS-014-0177-SO	Metals (11)	07/24/96	07/24/96	07/25/96		08/10/96	//	001
26406	LL3SS-015-0178-SO	Metals (11)	07/24/96	07/24/96	07/25/96		08/10/96	//	001
26406	LL4SS-014-0244-SO	Metals (11)	07/24/96	07/24/96	07/25/96		08/10/96	//	001
26406	LL4SS-016-0246-SO	Metals (11)	07/24/96	07/24/96	07/25/96		08/10/96	//	001
26406	LL4SS-017-0247-SO	Metals (11)	07/24/96	07/24/96	07/25/96		08/10/96	//	001
26406	LL4SS-018-0248-SO	Metals (11)	07/24/96	07/24/96	07/25/96		08/10/96	//	001
26406	LL4SS-019-0249-SO	Metals (11)	07/24/96	07/24/96	07/25/96		08/10/96	//	001
26406	LL4SS-020-0250-SO	Metals (11)	07/24/96	07/24/96	07/25/96		08/10/96	//	001
26406	LL4SS-028-0259-SO	Metals (11)	07/23/96	07/24/96	07/25/96		08/10/96	//	001
26406	B12SS-001-0378-SO	Metals (23)	07/24/96	07/24/96	07/25/96		08/10/96	//	001
26406	LL3SS-016-0179-SO	Metals (23)	07/24/96	07/24/96	07/25/96		08/10/96	//	001
26406	LL3SS-023-0187-SO	Metals (23)	07/23/96	07/24/96	07/25/96		08/10/96	//	001
26406	LL3SS-024-0188-SO	Metals (23)	07/23/96	07/24/96	07/25/96		08/10/96	//	001
26406	LL3SS-025-0189-SO	Metals (23)	07/23/96	07/24/96	07/25/96		08/10/96	//	001
26406	LL4SS-015-0245-SO	Metals (23)	07/24/96	07/24/96	07/25/96		08/10/96	//	001
26406	LL4WP-060-0299-GW	Metals (23)	07/23/96	07/24/96	07/25/96		08/09/96	//	001
26406	B12SS-001-0378-SO	Explosives	07/24/96	07/24/96	07/25/96		08/13/96	//	001
26406	B12SS-002-0379-SO	Explosives	07/24/96	07/24/96	07/25/96		08/13/96	//	001
26406	B12SS-002-0380-FD	Explosives	07/24/96	07/24/96	07/25/96		08/13/96	//	001
26406	LL3SS-010-0172-SO	Explosives	07/24/96	07/24/96	07/25/96		08/22/96	//	001
26406	LL3SS-012-0175-SO	Explosives	07/24/96	07/24/96	07/25/96		08/15/96	//	001
26406	LL3SS-014-0177-SO	Explosives	07/24/96	07/24/96	07/25/96		08/13/96	//	001
26406	LL3SS-015-0178-SO	Explosives	07/24/96	07/24/96	07/25/96		08/13/96	//	001
26406	LL3SS-016-0179-SO	Explosives	07/24/96	07/24/96	07/25/96		08/13/96	//	001
26406	LL3SS-023-0187-SO	Explosives	07/23/96	07/24/96	07/25/96		08/12/96	//	001
26406	LL3SS-024-0188-SO	Explosives	07/23/96	07/24/96	07/25/96		08/13/96	//	001
26406	LL3SS-025-0189-SO	Explosives	07/23/96	07/24/96	07/25/96		08/15/96	//	001
26406	LL4SS-014-0244-SO	Explosives	07/24/96	07/24/96	07/25/96		08/13/96	//	001
26406	LL4SS-015-0245-SO	Explosives	07/24/96	07/24/96	07/25/96		08/24/96	//	001
26406	LL4SS-016-0246-SO	Explosives	07/24/96	07/24/96	07/25/96		08/24/96	//	001
26406	LL4SS-017-0247-SO	Explosives	07/24/96	07/24/96	07/25/96		08/13/96	//	001
26406	LL4SS-018-0248-SO	Explosives	07/24/96	07/24/96	07/25/96		08/13/96	//	001
26406	LL4SS-019-0249-SO	Explosives	07/24/96	07/24/96	07/25/96		08/13/96	//	001
26406	LL4SS-020-0250-SO	Explosives	07/24/96	07/24/96	07/25/96		08/13/96	//	001
26406	LL4SS-028-0259-SO	Explosives	07/23/96	07/24/96	07/25/96		08/12/96	//	001
26406	LL4WP-060-0299-GW	Explosives	07/23/96	07/24/96	07/25/96		08/16/96	//	001
26406	B12SS-001-0378-SO	Pest/PCB	07/24/96	07/24/96	07/25/96	07/27/96	08/29/96	//	001
26406	LL3SS-016-0179-SO	Pest/PCB	07/24/96	07/24/96	07/25/96	07/27/96	08/30/96	//	001
26406	LL3SS-023-0187-SO	Pest/PCB	07/23/96	07/24/96	07/25/96	07/27/96	08/30/96	//	001
26406	LL3SS-024-0188-SO	Pest/PCB	07/23/96	07/24/96	07/25/96	07/27/96	08/30/96	//	001
26406	LL3SS-025-0189-SO	Pest/PCB	07/23/96	07/24/96	07/25/96	07/27/96	08/30/96	//	001
26406	LL4SS-015-0245-SO	Pest/PCB	07/24/96	07/24/96	07/25/96	07/27/96	08/30/96	//	001
26406	LL4WP-060-0299-GW	Pest/PCB	07/23/96	07/24/96	07/25/96	07/26/96	08/08/96	//	001
26406	B12SS-001-0378-SO	SVOC	07/24/96	07/24/96	07/25/96	07/27/96	08/12/96	//	001
26406	LL3SS-016-0179-SO	SVOC	07/24/96	07/24/96	07/25/96	07/27/96	08/12/96	//	001
26406	LL3SS-023-0187-SO	SVOC	07/23/96	07/24/96	07/25/96	07/27/96	08/12/96	//	001
26406	LL3SS-024-0188-SO	SVOC	07/23/96	07/24/96	07/25/96	07/27/96	08/12/96	//	001
26406	LL3SS-025-0189-SO	SVOC	07/23/96	07/24/96	07/25/96	07/27/96	08/12/96	//	001
26406	LL4SS-015-0245-SO	SVOC	07/24/96	07/24/96	07/25/96	07/27/96	08/13/96	//	001
26406	LL4WP-060-0299-GW	SVOC	07/23/96	07/24/96	07/25/96	07/26/96	08/12/96	//	001
26406	B12SS-001-0378-SO	VOC	07/24/96	07/24/96	07/25/96		08/01/96	//	001
26406	LL2-002-0157-TB	VOC	07/23/96	07/24/96	07/25/96		08/02/96	//	001
26406	LL3SS-016-0179-SO	VOC	07/24/96	07/24/96	07/25/96		08/01/96	//	001
26406	LL3SS-023-0187-SO	VOC	07/23/96	07/24/96	07/25/96		08/01/96	//	001
26406	LL3SS-024-0188-SO	VOC	07/23/96	07/24/96	07/25/96		08/01/96	//	001

04/21/97

\* Exceeds time limit

## Ravenna Army Ammunition Plant Phase 1 RI

## Analytic Data Status Report

Laboratory: Southwest Laboratory of Oklahoma, I

SDG Number	Sample ID	Analysis	Date Collected	Date Shipped	Date Received	Date Extracted	Date Analyzed	Data Received	COC
26406	LL3SS-025-0189-SO	VOC	07/23/96	07/24/96	07/25/96		08/01/96	//	001
26406	LL4SS-015-0245-SO	VOC	07/24/96	07/24/96	07/25/96		08/01/96	//	001
26406	LL4WP-060-0299-GW	VOC	07/23/96	07/24/96	07/25/96		08/02/96	//	001
26425	B12SD-003(D)-0382-SD	Metals (11)	07/24/96	07/25/96	07/26/96		08/11/96	//	002
26425	B12SD-004(D)-0383-SD	Metals (11)	07/24/96	07/25/96	07/26/96		08/11/96	//	002
26425	B12SD-006(D)-0385-SD	Metals (11)	07/24/96	07/25/96	07/26/96		08/11/96	//	002
26425	B12SD-007(D)-0386-SD	Metals (11)	07/24/96	07/25/96	07/26/96		08/17/96	//	002
26425	B12SD-008(P)-0387-SD	Metals (11)	07/25/96	07/25/96	07/26/96		08/11/96	//	002
26425	B12SD-008(P)-0388-FD	Metals (11)	07/25/96	07/25/96	07/26/96		08/11/96	//	002
26425	LL3SS-005-0167-SO	Metals (11)	07/24/96	07/25/96	07/26/96		08/11/96	//	002
26425	LL3SS-007-0169-SO	Metals (11)	07/24/96	07/25/96	07/26/96		08/11/96	//	002
26425	LL3SS-009-0171-SO	Metals (11)	07/24/96	07/25/96	07/26/96		08/11/96	//	002
26425	LL3SS-011-0173-SO	Metals (11)	07/24/96	07/25/96	07/26/96		08/11/96	//	002
26425	LL3SS-013-0176-SO	Metals (11)	07/24/96	07/25/96	07/26/96		08/11/96	//	002
26425	LL3SS-026-0190-SO	Metals (11)	07/25/96	07/25/96	07/26/96		08/11/96	//	002
26425	LL3SS-026-0191-FD	Metals (11)	07/25/96	07/25/96	07/26/96		08/11/96	//	002
26425	LL4SS-031-0262-SO	Metals (11)	07/25/96	07/25/96	07/26/96		08/11/96	//	002
26425	LL4SS-032-0263-SO	Metals (11)	07/25/96	07/25/96	07/26/96		08/11/96	//	002
26425	LL4SS-033-0264-FD	Metals (11)	07/25/96	07/25/96	07/26/96		08/11/96	//	002
26425	LL4SS-033-0266-SO	Metals (11)	07/25/96	07/25/96	07/26/96		08/11/96	//	002
26425	B12SD-005(D)-0384-SD	Metals (23)	07/24/96	07/25/96	07/26/96		08/11/96	//	002
26425	B12SD-009(P)-0390-SD	Metals (23)	07/25/96	07/25/96	07/26/96		08/11/96	//	002
26425	LL3SS-002-0162-SO	Metals (23)	07/24/96	07/25/96	07/26/96		08/11/96	//	002
26425	LL4WP-059-0298-GW	Metals (23)	07/24/96	07/25/96	07/26/96		08/09/96	//	002
26425	LL4WP-061-0300-GW	Metals (23)	07/24/96	07/25/96	07/26/96		08/09/96	//	002
26425	B12SD-003(D)-0382-SD	Explosives	07/24/96	07/25/96	07/26/96		08/11/96	//	002
26425	B12SD-004(D)-0383-SD	Explosives	07/24/96	07/25/96	07/26/96		08/11/96	//	002
26425	B12SD-005(D)-0384-SD	Explosives	07/24/96	07/25/96	07/26/96		08/11/96	//	002
26425	B12SD-006(D)-0385-SD	Explosives	07/24/96	07/25/96	07/26/96		08/11/96	//	002
26425	B12SD-007(D)-0386-SD	Explosives	07/24/96	07/25/96	07/26/96		08/11/96	//	002
26425	B12SD-008(P)-0387-SD	Explosives	07/25/96	07/25/96	07/26/96		08/11/96	//	002
26425	B12SD-008(P)-0388-FD	Explosives	07/25/96	07/25/96	07/26/96		08/11/96	//	002
26425	B12SD-009(P)-0390-SD	Explosives	07/25/96	07/25/96	07/26/96		08/12/96	//	002
26425	LL3SS-002-0162-SO	Explosives	07/24/96	07/25/96	07/26/96		08/14/96	//	002
26425	LL3SS-005-0167-SO	Explosives	07/24/96	07/25/96	07/26/96		08/11/96	//	002
26425	LL3SS-007-0169-SO	Explosives	07/24/96	07/25/96	07/26/96		08/11/96	//	002
26425	LL3SS-009-0171-SO	Explosives	07/24/96	07/25/96	07/26/96		08/11/96	//	002
26425	LL3SS-011-0173-SO	Explosives	07/24/96	07/25/96	07/26/96		08/14/96	//	002
26425	LL3SS-013-0176-SO	Explosives	07/24/96	07/25/96	07/26/96		08/11/96	//	002
26425	LL3SS-026-0190-SO	Explosives	07/25/96	07/25/96	07/26/96		08/12/96	//	002
26425	LL3SS-026-0191-FD	Explosives	07/25/96	07/25/96	07/26/96		08/12/96	//	002
26425	LL4SS-031-0262-SO	Explosives	07/25/96	07/25/96	07/26/96		08/12/96	//	002
26425	LL4SS-032-0263-SO	Explosives	07/25/96	07/25/96	07/26/96		08/12/96	//	002
26425	LL4SS-033-0264-FD	Explosives	07/25/96	07/25/96	07/26/96		08/15/96	//	002
26425	LL4SS-033-0266-SO	Explosives	07/25/96	07/25/96	07/26/96		08/15/96	//	002
26425	LL4WP-059-0298-GW	Explosives	07/24/96	07/25/96	07/26/96		08/16/96	//	002
26425	LL4WP-061-0300-GW	Explosives	07/24/96	07/25/96	07/26/96		08/16/96	//	002
26425	B12SD-005(D)-0384-SD	Pest/PCB	07/24/96	07/25/96	07/26/96	07/29/96	08/17/96	//	002
26425	B12SD-009(P)-0390-SD	Pest/PCB	07/25/96	07/25/96	07/26/96	07/29/96	08/17/96	//	002
26425	LL3SS-002-0162-SO	Pest/PCB	07/24/96	07/25/96	07/26/96	07/29/96	08/17/96	//	002
26425	LL4WP-059-0298-GW	Pest/PCB	07/24/96	07/25/96	07/26/96	07/29/96	08/09/96	//	002
26425	LL4WP-061-0300-GW	Pest/PCB	07/24/96	07/25/96	07/26/96	07/29/96	08/09/96	//	002
26425	B12SD-005(D)-0384-SD	SVOC	07/24/96	07/25/96	07/26/96	07/29/96	08/12/96	//	002
26425	B12SD-009(P)-0390-SD	SVOC	07/25/96	07/25/96	07/26/96	07/29/96	08/12/96	//	002
26425	LL3SS-002-0162-SO	SVOC	07/24/96	07/25/96	07/26/96	07/29/96	08/12/96	//	002
26425	LL4WP-061-0300-GW	SVOC	07/24/96	07/25/96	07/26/96	07/29/96	08/13/96	//	002
26425	B12SD-003(D)-0382-SD	TOC	07/24/96	07/25/96	07/26/96		08/14/96	//	002
26425	B12SD-004(D)-0383-SD	TOC	07/24/96	07/25/96	07/26/96		08/14/96	//	002
26425	B12SD-005(D)-0384-SD	TOC	07/24/96	07/25/96	07/26/96		08/14/96	//	002

04/21/97

\* Exceeds time limit

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Ravenna Army Ammunition Plant Phase 1 RI  
Analytic Data Status Report

Laboratory: Southwest Laboratory of Oklahoma, I

SDG Number	Sample ID	Analysis	Date Collected	Date Shipped	Date Received	Date Extracted	Date Analyzed	Data Received	COC
26425	B12SD-006(D)-0385-SD	TOC	07/24/96	07/25/96	07/26/96		08/14/96	//	002
26425	B12SD-007(D)-0386-SD	TOC	07/24/96	07/25/96	07/26/96		08/14/96	//	002
26425	B12SD-008(P)-0387-SD	TOC	07/25/96	07/25/96	07/26/96		08/14/96	//	002
26425	B12SD-008(P)-0388-FD	TOC	07/25/96	07/25/96	07/26/96		08/14/96	//	002
26425	B12SD-009(P)-0390-SD	TOC	07/25/96	07/25/96	07/26/96		08/14/96	//	002
26425	B12SD-005(D)-0384-SD	VOC	07/24/96	07/25/96	07/26/96		08/01/96	//	002
26425	B12SD-009(P)-0390-SD	VOC	07/25/96	07/25/96	07/26/96		08/06/96	//	002
26425	B12_-001-0391-TB	VOC	07/25/96	07/25/96	07/26/96		08/02/96	//	002
26425	LL3SS-002-0162-SO	VOC	07/24/96	07/25/96	07/26/96		08/01/96	//	002
26425	LL4WP-059-0298-GW	VOC	07/24/96	07/25/96	07/26/96		08/02/96	//	002
26425	LL4WP-061-0300-GW	VOC	07/24/96	07/25/96	07/26/96		08/02/96	//	002
26442	L12SS-004-0309-SO	Metals (11)	07/26/96	07/26/96	07/27/96		08/16/96	//	003
26442	L12SS-005-0310-SO	Metals (11)	07/26/96	07/26/96	07/27/96		08/16/96	//	003
26442	L12SS-006-0311-SO	Metals (11)	07/26/96	07/26/96	07/27/96		08/16/96	//	003
26442	L12SS-008-0313-SO	Metals (11)	07/26/96	07/26/96	07/27/96		08/15/96	//	003
26442	L12SS-008-0314-FD	Metals (11)	07/26/96	07/26/96	07/27/96		08/15/96	//	003
26442	L12SS-014-0322-SO	Metals (11)	07/26/96	07/26/96	07/27/96		08/15/96	//	003
26442	L12SS-015-0323-FD	Metals (11)	07/26/96	07/26/96	07/27/96		08/15/96	//	003
26442	L12SS-015-0324-SO	Metals (11)	07/26/96	07/26/96	07/27/96		08/15/96	//	003
26442	L12SS-016-0325-SO	Metals (11)	07/25/96	07/26/96	07/27/96		08/12/96	//	003
26442	L12SS-017-0326-SO	Metals (11)	07/26/96	07/26/96	07/27/96		08/16/96	//	003
26442	L12SS-018-0327-SO	Metals (11)	07/25/96	07/26/96	07/27/96		08/12/96	//	003
26442	L12SS-020-0329-SO	Metals (11)	07/25/96	07/26/96	07/27/96		08/12/96	//	003
26442	L12SS-021-0330-FD	Metals (11)	07/26/96	07/26/96	07/27/96		08/15/96	//	003
26442	L12SS-021-0332-SO	Metals (11)	07/26/96	07/26/96	07/27/96		08/15/96	//	003
26442	LL3SS-001-0161-SO	Metals (11)	07/25/96	07/26/96	07/27/96		08/12/96	//	003
26442	LL3SS-003-0163-SO	Metals (11)	07/26/96	07/26/96	07/27/96		08/15/96	//	003
26442	LL3SS-003-0164-FD	Metals (11)	07/26/96	07/26/96	07/27/96		08/15/96	//	003
26442	LL3SS-004-0166-SO	Metals (11)	07/25/96	07/26/96	07/27/96		08/12/96	//	003
26442	LL3SS-006-0168-SO	Metals (11)	07/25/96	07/26/96	07/27/96		08/12/96	//	003
26442	LL3SS-008-0170-SO	Metals (11)	07/25/96	07/26/96	07/27/96		08/12/96	//	003
26442	LL3SS-008-0174-FD	Metals (11)	07/25/96	07/26/96	07/27/96		08/12/96	//	003
26442	LL3SS-017-0180-SO	Metals (11)	07/25/96	07/26/96	07/27/96		08/12/96	//	003
26442	LL3SS-018-0181-SO	Metals (11)	07/25/96	07/26/96	07/27/96		08/12/96	//	003
26442	LL3SS-019-0182-SO	Metals (11)	07/25/96	07/26/96	07/27/96		08/12/96	//	003
26442	LL3SS-021-0185-SO	Metals (11)	07/25/96	07/26/96	07/27/96		08/12/96	//	003
26442	LL3SS-022-0186-SO	Metals (11)	07/25/96	07/26/96	07/27/96		08/12/96	//	003
26442	LL3SS-029-0195-SO	Metals (11)	07/26/96	07/26/96	07/27/96		08/15/96	//	003
26442	LL3SS-031-0197-SO	Metals (11)	07/26/96	07/26/96	07/27/96		08/15/96	//	003
26442	LL3SS-032-0198-SO	Metals (11)	07/26/96	07/26/96	07/27/96		08/15/96	//	003
26442	LI 3SS-033-0199-SO	Metals (11)	07/26/96	07/26/96	07/27/96		08/15/96	//	003
26442	LL3SS-034-0200-SO	Metals (11)	07/26/96	07/26/96	07/27/96		08/15/96	//	003
26442	LL3SS-036-0203-SO	Metals (11)	07/26/96	07/26/96	07/27/96		08/15/96	//	003
26442	LL3SS-037-0204-SO	Metals (11)	07/26/96	07/26/96	07/27/96		08/16/96	//	003
26442	LL3SS-039(B)-0206-SO	Metals (11)	07/26/96	07/26/96	07/27/96		08/16/96	//	003
26442	LL3SS-040(B)-0207-SO	Metals (11)	07/26/96	07/26/96	07/27/96		08/16/96	//	003
26442	LL4SS-001-0231-SO	Metals (11)	07/26/96	07/26/96	07/27/96		08/16/96	//	003
26442	LL4SS-006-0236-SO	Metals (11)	07/26/96	07/26/96	07/27/96		08/16/96	//	003
26442	LL4SS-011-0241-SO	Metals (11)	07/26/96	07/26/96	07/27/96		08/15/96	//	003
26442	LL4SS-012-0242-SO	Metals (11)	07/26/96	07/26/96	07/27/96		08/15/96	//	003
26442	LL4SS-026-0257-SO	Metals (11)	07/25/96	07/26/96	07/27/96		08/12/96	//	003
26442	LL4SS-027-0258-SO	Metals (11)	07/25/96	07/26/96	07/27/96		08/15/96	//	003
26442	LL4SS-029-0260-SO	Metals (11)	07/25/96	07/26/96	07/27/96		08/12/96	//	003
26442	LL4SS-035-0268-SO	Metals (11)	07/26/96	07/26/96	07/27/96		08/16/96	//	003
26442	CPCWP-011-0221-GW	Metals (23)	07/25/96	07/26/96	07/27/96		08/09/96	//	003
26442	CPCWP-011-0224-FD	Metals (23)	07/25/96	07/26/96	07/27/96		08/09/96	//	003
26442	L12SS-007-0312-SO	Metals (23)	07/26/96	07/26/96	07/27/96		08/16/96	//	003
26442	L12SS-019-0328-SO	Metals (23)	07/25/96	07/26/96	07/27/96		08/12/96	//	003
26442	LL3SS-020-0183-SO	Metals (23)	07/25/96	07/26/96	07/27/96		08/12/96	//	003

04/21/97

\* Exceeds time limit

Ravenna Army Ammunition Plant Phase 1 RI  
Analytic Data Status Report

Laboratory: Southwest Laboratory of Oklahoma, I

SDG Number	Sample ID	Analysis	Date Collected	Date Shipped	Date Received	Date Extracted	Date Analyzed	Data Received	COC
26442	LL3SS-020-0184-FD	Metals (23)	07/25/96	07/26/96	07/27/96		08/12/96	//	003
26442	LL3SS-030-0196-SO	Metals (23)	07/26/96	07/26/96	07/27/96		08/15/96	//	003
26442	LL4SS-034-0267-SO	Metals (23)	07/26/96	07/26/96	07/27/96		08/15/96	//	003
26442	CPCWP-011-0221-GW	Explosives	07/25/96	07/26/96	07/27/96		08/16/96	//	003
26442	CPCWP-011-0224-FD	Explosives	07/25/96	07/26/96	07/27/96		08/16/96	//	003
26442	L12SS-004-0309-SO	Explosives	07/26/96	07/26/96	07/27/96		09/09/96*(44)	//	003
26442	L12SS-005-0310-SO	Explosives	07/26/96	07/26/96	07/27/96		08/19/96	//	003
26442	L12SS-006-0311-SO	Explosives	07/26/96	07/26/96	07/27/96		08/19/96	//	003
26442	L12SS-007-0312-SO	Explosives	07/26/96	07/26/96	07/27/96		08/19/96	//	003
26442	L12SS-008-0313-SO	Explosives	07/26/96	07/26/96	07/27/96		08/19/96	//	003
26442	L12SS-008-0314-FD	Explosives	07/26/96	07/26/96	07/27/96		08/19/96	//	003
26442	L12SS-014-0322-SO	Explosives	07/26/96	07/26/96	07/27/96		08/18/96	//	003
26442	L12SS-015-0323-FD	Explosives	07/26/96	07/26/96	07/27/96		08/19/96	//	003
26442	L12SS-015-0324-SO	Explosives	07/26/96	07/26/96	07/27/96		08/18/96	//	003
26442	L12SS-016-0325-SO	Explosives	07/25/96	07/26/96	07/27/96		08/17/96	//	003
26442	L12SS-017-0326-SO	Explosives	07/26/96	07/26/96	07/27/96		08/19/96	//	003
26442	L12SS-018-0327-SO	Explosives	07/25/96	07/26/96	07/27/96		08/17/96	//	003
26442	L12SS-019-0328-SO	Explosives	07/25/96	07/26/96	07/27/96		08/17/96	//	003
26442	L12SS-020-0329-SO	Explosives	07/25/96	07/26/96	07/27/96		08/17/96	//	003
26442	L12SS-021-0330-FD	Explosives	07/26/96	07/26/96	07/27/96		08/18/96	//	003
26442	L12SS-021-0332-SO	Explosives	07/26/96	07/26/96	07/27/96		08/18/96	//	003
26442	LL3SS-001-0161-SO	Explosives	07/25/96	07/26/96	07/27/96		08/16/96	//	003
26442	LL3SS-003-0163-SO	Explosives	07/26/96	07/26/96	07/27/96		08/17/96	//	003
26442	LL3SS-003-0164-FD	Explosives	07/26/96	07/26/96	07/27/96		08/18/96	//	003
26442	LL3SS-004-0166-SO	Explosives	07/25/96	07/26/96	07/27/96		08/16/96	//	003
26442	LL3SS-006-0168-SO	Explosives	07/25/96	07/26/96	07/27/96		08/16/96	//	003
26442	LL3SS-008-0170-SO	Explosives	07/25/96	07/26/96	07/27/96		08/16/96	//	003
26442	LL3SS-008-0174-FD	Explosives	07/25/96	07/26/96	07/27/96		08/17/96	//	003
26442	LL3SS-017-0180-SO	Explosives	07/25/96	07/26/96	07/27/96		08/17/96	//	003
26442	LL3SS-018-0181-SO	Explosives	07/25/96	07/26/96	07/27/96		08/17/96	//	003
26442	LL3SS-019-0182-SO	Explosives	07/25/96	07/26/96	07/27/96		08/17/96	//	003
26442	LL3SS-020-0183-SO	Explosives	07/25/96	07/26/96	07/27/96		08/17/96	//	003
26442	LL3SS-020-0184-FD	Explosives	07/25/96	07/26/96	07/27/96		08/17/96	//	003
26442	LL3SS-021-0185-SO	Explosives	07/25/96	07/26/96	07/27/96		08/17/96	//	003
26442	LL3SS-022-0186-SO	Explosives	07/25/96	07/26/96	07/27/96		08/17/96	//	003
26442	LL3SS-029-0195-SO	Explosives	07/26/96	07/26/96	07/27/96		08/18/96	//	003
26442	LL3SS-030-0196-SO	Explosives	07/26/96	07/26/96	07/27/96		08/18/96	//	003
26442	LL3SS-031-0197-SO	Explosives	07/26/96	07/26/96	07/27/96		08/18/96	//	003
26442	LL3SS-032-0198-SO	Explosives	07/26/96	07/26/96	07/27/96		08/18/96	//	003
26442	LL3SS-033-0199-SO	Explosives	07/26/96	07/26/96	07/27/96		08/18/96	//	003
26442	LL3SS-034-0200-SO	Explosives	07/26/96	07/26/96	07/27/96		08/18/96	//	003
26442	LL3SS-036-0203-SO	Explosives	07/26/96	07/26/96	07/27/96		08/18/96	//	003
26442	LL3SS-037-0204-SO	Explosives	07/26/96	07/26/96	07/27/96		08/19/96	//	003
26442	LL4SS-001-0231-SO	Explosives	07/26/96	07/26/96	07/27/96		08/19/96	//	003
26442	LL4SS-006-0236-SO	Explosives	07/26/96	07/26/96	07/27/96		08/19/96	//	003
26442	LL4SS-011-0241-SO	Explosives	07/26/96	07/26/96	07/27/96		08/19/96	//	003
26442	LL4SS-012-0242-SO	Explosives	07/26/96	07/26/96	07/27/96		08/19/96	//	003
26442	LL4SS-026-0257-SO	Explosives	07/25/96	07/26/96	07/27/96		08/17/96	//	003
26442	LL4SS-027-0258-SO	Explosives	07/25/96	07/26/96	07/27/96		08/17/96	//	003
26442	LL4SS-029-0260-SO	Explosives	07/25/96	07/26/96	07/27/96		08/17/96	//	003
26442	LL4SS-034-0267-SO	Explosives	07/26/96	07/26/96	07/27/96		08/19/96	//	003
26442	LL4SS-035-0268-SO	Explosives	07/26/96	07/26/96	07/27/96		08/19/96	//	003
26442	LNWWP-020-0439-GW	Explosives	07/26/96	07/26/96	07/27/96		08/16/96	//	003
26442	CPCWP-011-0221-GW	Pest/PCB	07/25/96	07/26/96	07/27/96	07/30/96	08/09/96	//	003
26442	CPCWP-011-0224-FD	Pest/PCB	07/25/96	07/26/96	07/27/96	07/30/96	08/09/96	//	003
26442	L12SS-007-0312-SO	Pest/PCB	07/26/96	07/26/96	07/27/96	07/31/96	08/21/96	//	003
26442	L12SS-019-0328-SO	Pest/PCB	07/25/96	07/26/96	07/27/96	07/31/96	08/21/96	//	003
26442	LL3SS-020-0183-SO	Pest/PCB	07/25/96	07/26/96	07/27/96	07/31/96	08/21/96	//	003
26442	LL3SS-020-0184-FD	Pest/PCB	07/25/96	07/26/96	07/27/96	07/31/96	08/21/96	//	003



**Ravenna Army Ammunition Plant Phase 1 RI  
Analytic Data Status Report**

Laboratory: Southwest Laboratory of Oklahoma, I

SDG Number	Sample ID	Analysis	Date Collected	Date Shipped	Date Received	Date Extracted	Date Analyzed	Data Received	COC
26442	LL3SS-030-0196-SO	Pest/PCB	07/26/96	07/26/96	07/27/96	07/31/96	08/21/96	//	003
26442	LL4SS-034-0267-SO	Pest/PCB	07/26/96	07/26/96	07/27/96	07/31/96	08/28/96	//	003
26442	CPCWP-011-0221-GW	SVOC	07/25/96	07/26/96	07/27/96	07/30/96	08/13/96	//	003
26442	CPCWP-011-0224-FD	SVOC	07/25/96	07/26/96	07/27/96	07/30/96	08/13/96	//	003
26442	L12SS-007-0312-SO	SVOC	07/26/96	07/26/96	07/27/96	07/31/96	08/13/96	//	003
26442	L12SS-019-0328-SO	SVOC	07/25/96	07/26/96	07/27/96	07/31/96	08/13/96	//	003
26442	LL3SS-020-0183-SO	SVOC	07/25/96	07/26/96	07/27/96	07/31/96	08/13/96	//	003
26442	LL3SS-020-0184-FD	SVOC	07/25/96	07/26/96	07/27/96	07/31/96	08/13/96	//	003
26442	LL3SS-030-0196-SO	SVOC	07/26/96	07/26/96	07/27/96	07/31/96	08/13/96	//	003
26442	LL4SS-034-0267-SO	SVOC	07/26/96	07/26/96	07/27/96	07/31/96	08/13/96	//	003
26442	B12_-002-0392-TB	VOC	07/25/96	07/26/96	07/27/96		08/02/96	//	003
26442	CPCWP-011-0221-GW	VOC	07/25/96	07/26/96	07/27/96		08/02/96	//	003
26442	CPCWP-011-0224-FD	VOC	07/25/96	07/26/96	07/27/96		08/02/96	//	003
26442	CPCWP-013-0223-GW	VOC	07/26/96	07/26/96	07/27/96		08/05/96	//	003
26442	L12SS-007-0312-SO	VOC	07/26/96	07/26/96	07/27/96		08/01/96	//	003
26442	L12SS-019-0328-SO	VOC	07/25/96	07/26/96	07/27/96		08/01/96	//	003
26442	LL1_-004-0082-TB	VOC	07/26/96	07/26/96	07/27/96		08/05/96	//	003
26442	LL3SS-020-0183-SO	VOC	07/25/96	07/26/96	07/27/96		08/01/96	//	003
26442	LL3SS-020-0184-FD	VOC	07/25/96	07/26/96	07/27/96		08/01/96	//	003
26442	LL3SS-030-0196-SO	VOC	07/26/96	07/26/96	07/27/96		08/01/96	//	003
26442	LL3_-002-0227-TB	VOC	07/26/96	07/26/96	07/27/96		08/05/96	//	003
26442	LL4SS-034-0267-SO	VOC	07/26/96	07/26/96	07/27/96		08/01/96	//	003
26442	LNWWP-020-0439-GW	VOC	07/26/96	07/26/96	07/27/96		08/05/96	//	003
26442	LNWWP-021-0440-GW	VOC	07/26/96	07/26/96	07/27/96		08/05/96	//	003
26446	L12SD-025(D)-0336-SD	Metals (11)	07/29/96	07/29/96	07/30/96		08/17/96	//	004
26446	L12SD-027(D)-0338-SD	Metals (11)	07/29/96	07/29/96	07/30/96		08/17/96	//	004
26446	L12SD-029(D)-0340-SD	Metals (11)	07/29/96	07/29/96	07/30/96		08/17/96	//	004
26446	L12SD-033(D)-0344-SD	Metals (11)	07/28/96	07/29/96	07/30/96		08/15/96	//	004
26446	L12SD-034(D)-0345-SD	Metals (11)	07/28/96	07/29/96	07/30/96		08/15/96	//	004
26446	L12SD-035(D)-0346-SD	Metals (11)	07/28/96	07/29/96	07/30/96		08/15/96	//	004
26446	L12SD-036(D)-0347-SD	Metals (11)	07/28/96	07/29/96	07/30/96		08/15/96	//	004
26446	L12SS-002-0307-SO	Metals (11)	07/27/96	07/29/96	07/30/96		08/15/96	//	004
26446	L12SS-003-0308-SO	Metals (11)	07/27/96	07/29/96	07/30/96		08/15/96	//	004
26446	L12SS-009-0316-SO	Metals (11)	07/27/96	07/29/96	07/30/96		08/16/96	//	004
26446	L12SS-010-0317-SO	Metals (11)	07/27/96	07/29/96	07/30/96		08/16/96	//	004
26446	L12SS-011-0318-SO	Metals (11)	07/27/96	07/29/96	07/30/96		08/16/96	//	004
26446	L12SS-022(B)-0333-SO	Metals (11)	07/28/96	07/29/96	07/30/96		08/20/96	//	004
26446	L12SS-023(B)-0334-SO	Metals (11)	07/28/96	07/29/96	07/30/96		08/20/96	//	004
26446	L12SS-024(B)-0335-SO	Metals (11)	07/27/96	07/29/96	07/30/96		08/16/96	//	004
26446	L12SS-040-0351-SO	Metals (11)	07/27/96	07/29/96	07/30/96		08/15/96	//	004
26446	L12SS-040-0352-FD	Metals (11)	07/27/96	07/29/96	07/30/96		08/15/96	//	004
26446	LL1SS-002-0002-SO	Metals (11)	07/29/96	07/29/96	07/30/96		08/17/96	//	004
26446	LL1SS-006-0007-SO	Metals (11)	07/29/96	07/29/96	07/30/96		08/17/96	//	004
26446	LL1SS-007-0008-SO	Metals (11)	07/29/96	07/29/96	07/30/96		08/17/96	//	004
26446	LL1SS-008-0009-SO	Metals (11)	07/29/96	07/29/96	07/30/96		08/17/96	//	004
26446	LL1SS-017-0020-SO	Metals (11)	07/29/96	07/29/96	07/30/96		08/17/96	//	004
26446	LL1SS-018-0021-SO	Metals (11)	07/29/96	07/29/96	07/30/96		08/17/96	//	004
26446	LL1SS-021-0024-SO	Metals (11)	07/29/96	07/29/96	07/30/96		08/20/96	//	004
26446	LL1SS-031-0035-SO	Metals (11)	07/28/96	07/29/96	07/30/96		08/17/96	//	004
26446	LL1SS-032-0036-SO	Metals (11)	07/28/96	07/29/96	07/30/96		08/17/96	//	004
26446	LL1SS-033-0037-SO	Metals (11)	07/28/96	07/29/96	07/30/96		08/17/96	//	004
26446	LL1SS-034-0038-SO	Metals (11)	07/28/96	07/29/96	07/30/96		08/20/96	//	004
26446	LL1SS-035-0039-SO	Metals (11)	07/28/96	07/29/96	07/30/96		08/17/96	//	004
26446	LL1SS-037-0042-SO	Metals (11)	07/28/96	07/29/96	07/30/96		08/20/96	//	004
26446	LL1WP-067-0436-GW	Metals (11)	07/29/96	07/29/96	07/30/96		08/09/96	//	004
26446	LL3SD-035(D)-0201-SD	Metals (11)	07/27/96	07/29/96	07/30/96		08/16/96	//	004
26446	LL3SD-035(D)-0202-FD	Metals (11)	07/27/96	07/29/96	07/30/96		08/16/96	//	004
26446	LL3SD-046(D)-0213-SD	Metals (11)	07/27/96	07/29/96	07/30/96		08/16/96	//	004
26446	LL3SD-047(D)-0214-SD	Metals (11)	07/27/96	07/29/96	07/30/96		08/16/96	//	004

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\* Exceeds time limit

**Ravenna Army Ammunition Plant Phase 1 RI  
Analytic Data Status Report**

Laboratory: Southwest Laboratory of Oklahoma, I

SDG Number	Sample ID	Analysis	Date Collected	Date Shipped	Date Received	Date Extracted	Date Analyzed	Data Received	COC
26446	LL3SD-048(D)-0215-SD	Metals (11)	07/27/96	07/29/96	07/30/96		08/16/96	//	004
26446	LL3SD-049(D)-0216-SD	Metals (11)	07/27/96	07/29/96	07/30/96		08/16/96	//	004
26446	LL3SD-050(D)-0217-SD	Metals (11)	07/27/96	07/29/96	07/30/96		08/16/96	//	004
26446	LL3SD-051(D)-0218-SD	Metals (11)	07/27/96	07/29/96	07/30/96		08/16/96	//	004
26446	LL3SD-052(D)-0219-SD	Metals (11)	07/27/96	07/29/96	07/30/96		08/16/96	//	004
26446	LL3SS-027-0193-SO	Metals (11)	07/27/96	07/29/96	07/30/96		08/16/96	//	004
26446	LL3SS-038(B)-0205-SO	Metals (11)	07/27/96	07/29/96	07/30/96		08/16/96	//	004
26446	LL4SD-013(D)-0243-SD	Metals (11)	07/29/96	07/29/96	07/30/96		08/17/96	//	004
26446	LL4SD-021(D)-0251-SD	Metals (11)	07/29/96	07/29/96	07/30/96		08/17/96	//	004
26446	LL4SD-050(D)-0287-SD	Metals (11)	07/29/96	07/29/96	07/30/96		08/17/96	//	004
26446	LL4SS-002-0232-SO	Metals (11)	07/27/96	07/29/96	07/30/96		08/16/96	//	004
26446	LL4SS-004-0234-SO	Metals (11)	07/27/96	07/29/96	07/30/96		08/16/96	//	004
26446	LL4SS-005-0235-SO	Metals (11)	07/27/96	07/29/96	07/30/96		08/16/96	//	004
26446	LL4SS-007-0237-SO	Metals (11)	07/27/96	07/29/96	07/30/96		08/16/96	//	004
26446	LL4SS-008-0238-SO	Metals (11)	07/27/96	07/29/96	07/30/96		08/16/96	//	004
26446	LL4SS-036-0269-SO	Metals (11)	07/28/96	07/29/96	07/30/96		08/20/96	//	004
26446	LL4SS-036-0270-FD	Metals (11)	07/28/96	07/29/96	07/30/96		08/20/96	//	004
26446	LL4SS-038-0272-SO	Metals (11)	07/28/96	07/29/96	07/30/96		08/15/96	//	004
26446	LL4SS-039-0273-SO	Metals (11)	07/28/96	07/29/96	07/30/96		08/15/96	//	004
26446	LL4SS-040-0274-SO	Metals (11)	07/28/96	07/29/96	07/30/96		08/15/96	//	004
26446	LL4SS-046-0281-SO	Metals (11)	07/29/96	07/29/96	07/30/96		08/17/96	//	004
26446	LL4SS-047-0282-SO	Metals (11)	07/29/96	07/29/96	07/30/96		08/17/96	//	004
26446	CPCWP-012-0222-GW	Metals (23)	07/28/96	07/29/96	07/30/96		08/09/96	//	004
26446	CPCWP-013-0223-GW	Metals (23)	07/26/96	07/29/96	07/30/96		08/09/96	//	004
26446	L12SD-026(D)-0337-SD	Metals (23)	07/28/96	07/29/96	07/30/96		08/20/96	//	004
26446	L12SD-028(D)-0339-SD	Metals (23)	07/29/96	07/29/96	07/30/96		08/17/96	//	004
26446	L12SS-001-0306-SO	Metals (23)	07/27/96	07/29/96	07/30/96		08/15/96	//	004
26446	L12SS-012-0319-SO	Metals (23)	07/27/96	07/29/96	07/30/96		08/16/96	//	004
26446	L12SS-012-0320-FD	Metals (23)	07/27/96	07/29/96	07/30/96		08/16/96	//	004
26446	L12SS-013-0321-SO	Metals (23)	07/27/96	07/29/96	07/30/96		08/16/96	//	004
26446	L12SS-041-0353-SO	Metals (23)	07/27/96	07/29/96	07/30/96		08/15/96	//	004
26446	LL1SS-001-0001-SO	Metals (23)	07/28/96	07/29/96	07/30/96		08/17/96	//	004
26446	LL1SS-019-0022-SO	Metals (23)	07/29/96	07/29/96	07/30/96		08/20/96	//	004
26446	LL1SS-025-0028-SO	Metals (23)	07/28/96	07/29/96	07/30/96		08/15/96	//	004
26446	LL1SS-026-0029-SO	Metals (23)	07/28/96	07/29/96	07/30/96		08/15/96	//	004
26446	LL1SS-027-0030-SO	Metals (23)	07/28/96	07/29/96	07/30/96		08/15/96	//	004
26446	LL1SS-036-0040-SO	Metals (23)	07/28/96	07/29/96	07/30/96		08/20/96	//	004
26446	LL1SS-036-0041-FD	Metals (23)	07/28/96	07/29/96	07/30/96		08/20/96	//	004
26446	LL1WP-068-0437-GW	Metals (23)	07/28/96	07/29/96	07/30/96		08/09/96	//	004
26446	LL3SD-053(D)-0220-SD	Metals (23)	07/27/96	07/29/96	07/30/96		08/16/96	//	004
26446	LL3SS-028-0194-SO	Metals (23)	07/27/96	07/29/96	07/30/96		08/16/96	//	004
26446	LL4SS-003-0233-SO	Metals (23)	07/27/96	07/29/96	07/30/96		08/16/96	//	004
26446	LL4SS-009-0239-SO	Metals (23)	07/27/96	07/29/96	07/30/96		08/16/96	//	004
26446	LL4SS-022-0252-SO	Metals (23)	07/27/96	07/29/96	07/30/96		08/16/96	//	004
26446	LL4SS-023-0253-SO	Metals (23)	07/27/96	07/29/96	07/30/96		08/16/96	//	004
26446	LL4SS-024-0254-SO	Metals (23)	07/28/96	07/29/96	07/30/96		08/15/96	//	004
26446	LL4SS-025-0255-SO	Metals (23)	07/28/96	07/29/96	07/30/96		08/15/96	//	004
26446	LL4SS-025-0256-FD	Metals (23)	07/28/96	07/29/96	07/30/96		08/15/96	//	004
26446	LL4SS-037-0271-SO	Metals (23)	07/28/96	07/29/96	07/30/96		08/15/96	//	004
26446	LL4WP-001-0664-ER	Metals (23)	07/28/96	07/29/96	07/30/96		08/09/96	//	004
26446	LNWWP-019-0438-GW	Metals (23)	07/27/96	07/29/96	07/30/96		08/09/96	//	004
26446	LNWWP-020-0439-GW	Metals (23)	07/26/96	07/29/96	07/30/96		08/09/96	//	004
26446	CPCWP-012-0222-GW	Explosives	07/28/96	07/29/96	07/30/96		08/16/96	//	004
26446	CPCWP-013-0223-GW	Explosives	07/26/96	07/29/96	07/30/96		08/16/96	//	004
26446	L12SD-025(D)-0336-SD	Explosives	07/29/96	07/29/96	07/30/96		08/19/96	//	004
26446	L12SD-026(D)-0337-SD	Explosives	07/28/96	07/29/96	07/30/96		08/29/96	//	004
26446	L12SD-027(D)-0338-SD	Explosives	07/29/96	07/29/96	07/30/96		08/19/96	//	004
26446	L12SD-028(D)-0339-SD	Explosives	07/29/96	07/29/96	07/30/96		08/19/96	//	004
26446	L12SD-029(D)-0340-SD	Explosives	07/29/96	07/29/96	07/30/96		08/19/96	//	004

04/21/97

\* Exceeds time limit

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Ravenna Army Ammunition Plant Phase 1 RI

Analytic Data Status Report

Laboratory: Southwest Laboratory of Oklahoma, I

SDG Number	Sample ID	Analysis	Date Collected	Date Shipped	Date Received	Date Extracted	Date Analyzed	Data Received	COC
26446	L12SD-033(D)-0344-SD	Explosives	07/28/96	07/29/96	07/30/96		08/29/96	//	004
26446	L12SD-034(D)-0345-SD	Explosives	07/28/96	07/29/96	07/30/96		08/29/96	//	004
26446	L12SD-035(D)-0346-SD	Explosives	07/28/96	07/29/96	07/30/96		08/29/96	//	004
26446	L12SD-036(D)-0347-SD	Explosives	07/28/96	07/29/96	07/30/96		08/29/96	//	004
26446	L12SS-001-0306-SO	Explosives	07/27/96	07/29/96	07/30/96		08/29/96	//	004
26446	L12SS-002-0307-SO	Explosives	07/27/96	07/29/96	07/30/96		08/29/96	//	004
26446	L12SS-003-0308-SO	Explosives	07/27/96	07/29/96	07/30/96		08/29/96	//	004
26446	L12SS-009-0316-SO	Explosives	07/27/96	07/29/96	07/30/96		08/25/96	//	004
26446	L12SS-010-0317-SO	Explosives	07/27/96	07/29/96	07/30/96		09/04/96	//	004
26446	L12SS-011-0318-SO	Explosives	07/27/96	07/29/96	07/30/96		08/24/96	//	004
26446	L12SS-012-0319-SO	Explosives	07/27/96	07/29/96	07/30/96		08/24/96	//	004
26446	L12SS-012-0320-FD	Explosives	07/27/96	07/29/96	07/30/96		08/24/96	//	004
26446	L12SS-013-0321-SO	Explosives	07/27/96	07/29/96	07/30/96		08/24/96	//	004
26446	L12SS-040-0351-SO	Explosives	07/27/96	07/29/96	07/30/96		08/29/96	//	004
26446	L12SS-040-0352-FD	Explosives	07/27/96	07/29/96	07/30/96		08/29/96	//	004
26446	L12SS-041-0353-SO	Explosives	07/27/96	07/29/96	07/30/96		08/29/96	//	004
26446	LL1SS-001-0001-SO	Explosives	07/28/96	07/29/96	07/30/96		08/19/96	//	004
26446	LL1SS-002-0002-SO	Explosives	07/29/96	07/29/96	07/30/96		08/20/96	//	004
26446	LL1SS-006-0007-SO	Explosives	07/29/96	07/29/96	07/30/96		08/20/96	//	004
26446	LL1SS-007-0008-SO	Explosives	07/29/96	07/29/96	07/30/96		08/20/96	//	004
26446	LL1SS-008-0009-SO	Explosives	07/29/96	07/29/96	07/30/96		08/20/96	//	004
26446	LL1SS-017-0020-SO	Explosives	07/29/96	07/29/96	07/30/96		08/20/96	//	004
26446	LL1SS-018-0021-SO	Explosives	07/29/96	07/29/96	07/30/96		08/20/96	//	004
26446	LL1SS-019-0022-SO	Explosives	07/29/96	07/29/96	07/30/96		08/20/96	//	004
26446	LL1SS-021-0024-SO	Explosives	07/29/96	07/29/96	07/30/96		08/20/96	//	004
26446	LL1SS-025-0028-SO	Explosives	07/28/96	07/29/96	07/30/96		08/29/96	//	004
26446	LL1SS-026-0029-SO	Explosives	07/28/96	07/29/96	07/30/96		08/29/96	//	004
26446	LL1SS-031-0035-SO	Explosives	07/28/96	07/29/96	07/30/96		08/19/96	//	004
26446	LL1SS-032-0036-SO	Explosives	07/28/96	07/29/96	07/30/96		08/19/96	//	004
26446	LL1SS-033-0037-SO	Explosives	07/28/96	07/29/96	07/30/96		08/19/96	//	004
26446	LL1SS-034-0038-SO	Explosives	07/28/96	07/29/96	07/30/96		08/29/96	//	004
26446	LL1SS-035-0039-SO	Explosives	07/28/96	07/29/96	07/30/96		08/19/96	//	004
26446	LL1SS-036-0040-SO	Explosives	07/28/96	07/29/96	07/30/96		08/29/96	//	004
26446	LL1SS-036-0041-FD	Explosives	07/28/96	07/29/96	07/30/96		08/29/96	//	004
26446	LL1SS-037-0042-SO	Explosives	07/28/96	07/29/96	07/30/96		08/29/96	//	004
26446	LL1WP-067-0436-GW	Explosives	07/29/96	07/29/96	07/30/96		08/16/96	//	004
26446	LL1WP-068-0437-GW	Explosives	07/28/96	07/29/96	07/30/96		08/16/96	//	004
26446	LL3SD-035(D)-0201-SD	Explosives	07/27/96	07/29/96	07/30/96		08/25/96	//	004
26446	LL3SD-035(D)-0202-FD	Explosives	07/27/96	07/29/96	07/30/96		08/25/96	//	004
26446	LL3SD-046(D)-0213-SD	Explosives	07/27/96	07/29/96	07/30/96		08/25/96	//	004
26446	LL3SD-047(D)-0214-SD	Explosives	07/27/96	07/29/96	07/30/96		08/24/96	//	004
26446	LL3SD-048(D)-0215-SD	Explosives	07/27/96	07/29/96	07/30/96		08/25/96	//	004
26446	LL3SD-049(D)-0216-SD	Explosives	07/27/96	07/29/96	07/30/96		08/25/96	//	004
26446	LL3SD-050(D)-0217-SD	Explosives	07/27/96	07/29/96	07/30/96		08/25/96	//	004
26446	LL3SD-051(D)-0218-SD	Explosives	07/27/96	07/29/96	07/30/96		08/25/96	//	004
26446	LL3SD-052(D)-0219-SD	Explosives	07/27/96	07/29/96	07/30/96		08/25/96	//	004
26446	LL3SD-053(D)-0220-SD	Explosives	07/27/96	07/29/96	07/30/96		08/25/96	//	004
26446	LL3SS-027-0193-SO	Explosives	07/27/96	07/29/96	07/30/96		08/24/96	//	004
26446	LL3SS-028-0194-SO	Explosives	07/27/96	07/29/96	07/30/96		08/25/96	//	004
26446	LL4SD-013(D)-0243-SD	Explosives	07/29/96	07/29/96	07/30/96		08/20/96	//	004
26446	LL4SD-021(D)-0251-SD	Explosives	07/29/96	07/29/96	07/30/96		08/20/96	//	004
26446	LL4SD-050(D)-0287-SD	Explosives	07/29/96	07/29/96	07/30/96		08/19/96	//	004
26446	LL4SS-002-0232-SO	Explosives	07/27/96	07/29/96	07/30/96		08/24/96	//	004
26446	LL4SS-003-0233-SO	Explosives	07/27/96	07/29/96	07/30/96		08/24/96	//	004
26446	LL4SS-004-0234-SO	Explosives	07/27/96	07/29/96	07/30/96		08/24/96	//	004
26446	LL4SS-005-0235-SO	Explosives	07/27/96	07/29/96	07/30/96		08/24/96	//	004
26446	LL4SS-007-0237-SO	Explosives	07/27/96	07/29/96	07/30/96		08/25/96	//	004
26446	LL4SS-008-0238-SO	Explosives	07/27/96	07/29/96	07/30/96		08/25/96	//	004
26446	LL4SS-009-0239-SO	Explosives	07/27/96	07/29/96	07/30/96		08/25/96	//	004

Ravenna Army Ammunition Plant Phase 1 RI  
Analytic Data Status Report

Laboratory: Southwest Laboratory of Oklahoma, I

SDG Number	Sample ID	Analysis	Date Collected	Date Shipped	Date Received	Date Extracted	Date Analyzed	Data Received	COC
26446	LL4SS-022-0252-SO	Explosives	07/27/96	07/29/96	07/30/96		08/24/96	///	004
26446	LL4SS-023-0253-SO	Explosives	07/27/96	07/29/96	07/30/96		08/24/96	///	004
26446	LL4SS-024-0254-SO	Explosives	07/28/96	07/29/96	07/30/96		08/29/96	///	004
26446	LL4SS-025-0255-SO	Explosives	07/28/96	07/29/96	07/30/96		08/29/96	///	004
26446	LL4SS-025-0256-FD	Explosives	07/28/96	07/29/96	07/30/96		08/29/96	///	004
26446	LL4SS-036-0269-SO	Explosives	07/28/96	07/29/96	07/30/96		08/29/96	///	004
26446	LL4SS-036-0270-FD	Explosives	07/28/96	07/29/96	07/30/96		08/29/96	///	004
26446	LL4SS-037-0271-SO	Explosives	07/28/96	07/29/96	07/30/96		08/29/96	///	004
26446	LL4SS-038-0272-SO	Explosives	07/28/96	07/29/96	07/30/96		08/29/96	///	004
26446	LL4SS-039-0273-SO	Explosives	07/28/96	07/29/96	07/30/96		08/29/96	///	004
26446	LL4SS-040-0274-SO	Explosives	07/28/96	07/29/96	07/30/96		08/29/96	///	004
26446	LL4SS-046-0281-SO	Explosives	07/29/96	07/29/96	07/30/96		08/19/96	///	004
26446	LL4SS-047-0282-SO	Explosives	07/29/96	07/29/96	07/30/96		08/20/96	///	004
26446	LL4WP-001-0664-ER	Explosives	07/28/96	07/29/96	07/30/96		08/16/96	///	004
26446	LNWWP-019-0438-GW	Explosives	07/27/96	07/29/96	07/30/96		08/16/96	///	004
26446	CPCWP-012-0222-GW	Pest/PCB	07/28/96	07/29/96	07/30/96	07/31/96	08/10/96	///	004
26446	CPCWP-013-0223-GW	Pest/PCB	07/26/96	07/29/96	07/30/96	07/31/96	08/10/96	///	004
26446	L12SD-026(D)-0337-SD	Pest/PCB	07/28/96	07/29/96	07/30/96	08/02/96	08/20/96	///	004
26446	L12SD-028(D)-0339-SD	Pest/PCB	07/29/96	07/29/96	07/30/96	08/02/96	08/31/96	///	004
26446	L12SS-001-0306-SO	Pest/PCB	07/27/96	07/29/96	07/30/96	08/02/96	08/17/96	///	004
26446	L12SS-012-0319-SO	Pest/PCB	07/27/96	07/29/96	07/30/96	08/03/96	09/07/96	///	004
26446	L12SS-012-0320-FD	Pest/PCB	07/27/96	07/29/96	07/30/96	08/03/96	09/07/96	///	004
26446	L12SS-013-0321-SO	Pest/PCB	07/27/96	07/29/96	07/30/96	08/03/96	09/07/96	///	004
26446	L12SS-041-0353-SO	Pest/PCB	07/27/96	07/29/96	07/30/96	08/02/96	08/18/96	///	004
26446	LL1SS-001-0001-SO	Pest/PCB	07/28/96	07/29/96	07/30/96	08/02/96	08/30/96	///	004
26446	LL1SS-019-0022-SO	Pest/PCB	07/29/96	07/29/96	07/30/96	08/02/96	08/31/96	///	004
26446	LL1SS-025-0028-SO	Pest/PCB	07/28/96	07/29/96	07/30/96	08/02/96	08/18/96	///	004
26446	LL1SS-026-0029-SO	Pest/PCB	07/28/96	07/29/96	07/30/96	08/02/96	08/20/96	///	004
26446	LL1SS-027-0030-SO	Pest/PCB	07/28/96	07/29/96	07/30/96	08/02/96	08/18/96	///	004
26446	LL1SS-036-0040-SO	Pest/PCB	07/28/96	07/29/96	07/30/96	08/02/96	08/21/96	///	004
26446	LL1SS-036-0041-FD	Pest/PCB	07/28/96	07/29/96	07/30/96	08/02/96	08/21/96	///	004
26446	LL1WP-068-0437-GW	Pest/PCB	07/28/96	07/29/96	07/30/96	07/31/96	08/09/96	///	004
26446	LL3SD-053(D)-0220-SD	Pest/PCB	07/27/96	07/29/96	07/30/96	08/03/96	09/10/96*(42)	///	004
26446	LL3SS-028-0194-SO	Pest/PCB	07/27/96	07/29/96	07/30/96	08/03/96	09/09/96*(41)	///	004
26446	LL4SS-003-0233-SO	Pest/PCB	07/27/96	07/29/96	07/30/96	08/03/96	09/09/96*(41)	///	004
26446	LL4SS-009-0239-SO	Pest/PCB	07/27/96	07/29/96	07/30/96	08/03/96	09/10/96*(42)	///	004
26446	LL4SS-022-0252-SO	Pest/PCB	07/27/96	07/29/96	07/30/96	08/03/96	09/10/96*(42)	///	004
26446	LL4SS-023-0253-SO	Pest/PCB	07/27/96	07/29/96	07/30/96	08/03/96	09/10/96*(42)	///	004
26446	LL4SS-024-0254-SO	Pest/PCB	07/28/96	07/29/96	07/30/96	08/02/96	08/20/96	///	004
26446	LL4SS-025-0255-SO	Pest/PCB	07/28/96	07/29/96	07/30/96	08/02/96	08/18/96	///	004
26446	LL4SS-025-0256-FD	Pest/PCB	07/28/96	07/29/96	07/30/96	08/02/96	08/18/96	///	004
26446	LL4SS-037-0271-SO	Pest/PCB	07/28/96	07/29/96	07/30/96	08/02/96	08/18/96	///	004
26446	LL4WP-001-0664-ER	Pest/PCB	07/28/96	07/29/96	07/30/96	07/31/96	08/10/96	///	004
26446	LNWWP-019-0438-GW	Pest/PCB	07/27/96	07/29/96	07/30/96	07/31/96	08/10/96	///	004
26446	CPCWP-012-0222-GW	SVOC	07/28/96	07/29/96	07/30/96	08/01/96	08/14/96	///	004
26446	CPCWP-013-0223-GW	SVOC	07/26/96	07/29/96	07/30/96	08/01/96	08/14/96	///	004
26446	L12SD-026(D)-0337-SD	SVOC	07/28/96	07/29/96	07/30/96	08/02/96	08/14/96	///	004
26446	L12SD-028(D)-0339-SD	SVOC	07/29/96	07/29/96	07/30/96	08/02/96	08/19/96	///	004
26446	L12SS-001-0306-SO	SVOC	07/27/96	07/29/96	07/30/96	08/02/96	08/14/96	///	004
26446	L12SS-012-0319-SO	SVOC	07/27/96	07/29/96	07/30/96	08/03/96	08/13/96	///	004
26446	L12SS-012-0320-FD	SVOC	07/27/96	07/29/96	07/30/96	08/03/96	08/13/96	///	004
26446	L12SS-013-0321-SO	SVOC	07/27/96	07/29/96	07/30/96	08/03/96	08/13/96	///	004
26446	L12SS-041-0353-SO	SVOC	07/27/96	07/29/96	07/30/96	08/02/96	08/14/96	///	004
26446	LL1SS-001-0001-SO	SVOC	07/28/96	07/29/96	07/30/96	08/02/96	08/19/96	///	004
26446	LL1SS-019-0022-SO	SVOC	07/29/96	07/29/96	07/30/96	08/02/96	08/15/96	///	004
26446	LL1SS-025-0028-SO	SVOC	07/28/96	07/29/96	07/30/96	08/02/96	08/14/96	///	004
26446	LL1SS-026-0029-SO	SVOC	07/28/96	07/29/96	07/30/96	08/02/96	08/14/96	///	004
26446	LL1SS-027-0030-SO	SVOC	07/28/96	07/29/96	07/30/96	08/02/96	08/14/96	///	004
26446	LL1SS-036-0040-SO	SVOC	07/28/96	07/29/96	07/30/96	08/02/96	08/14/96	///	004

04/21/97

\* Exceeds time limit

Ravenna Army Ammunition Plant Phase 1 RI

Analytic Data Status Report

Laboratory: Southwest Laboratory of Oklahoma, I

SDG Number	Sample ID	Analysis	Date Collected	Date Shipped	Date Received	Date Extracted	Date Analyzed	Data Received	COC
	LL1SS-036-0041-FD	SVOC	07/28/96	07/29/96	07/30/96	08/02/96	08/14/96	//	004
	LL1WP-068-0437-GW	SVOC	07/28/96	07/29/96	07/30/96	08/01/96	08/14/96	//	004
26446	LL3SD-053(D)-0220-SD	SVOC	07/27/96	07/29/96	07/30/96	08/03/96	08/14/96	//	004
26446	LL3SS-028-0194-SO	SVOC	07/27/96	07/29/96	07/30/96	08/03/96	08/13/96	//	004
26446	LL4SS-003-0233-SO	SVOC	07/27/96	07/29/96	07/30/96	08/03/96	08/13/96	//	004
26446	LL4SS-009-0239-SO	SVOC	07/27/96	07/29/96	07/30/96	08/03/96	08/14/96	//	004
26446	LL4SS-022-0252-SO	SVOC	07/27/96	07/29/96	07/30/96	08/03/96	08/13/96	//	004
26446	LL4SS-023-0253-SO	SVOC	07/27/96	07/29/96	07/30/96	08/03/96	08/13/96	//	004
26446	LL4SS-024-0254-SO	SVOC	07/28/96	07/29/96	07/30/96	08/02/96	08/14/96	//	004
26446	LL4SS-025-0255-SO	SVOC	07/28/96	07/29/96	07/30/96	08/02/96	08/14/96	//	004
26446	LL4SS-025-0256-FD	SVOC	07/28/96	07/29/96	07/30/96	08/02/96	08/14/96	//	004
26446	LL4SS-037-0271-SO	SVOC	07/28/96	07/29/96	07/30/96	08/02/96	08/14/96	//	004
26446	LL4WP-001-0664-ER	SVOC	07/28/96	07/29/96	07/30/96	08/01/96	08/14/96	//	004
26446	LNWWP-019-0438-GW	SVOC	07/27/96	07/29/96	07/30/96	08/01/96	08/14/96	//	004
26446	L12SD-025(D)-0336-SD	TOC	07/29/96	07/29/96	07/30/96		08/21/96	//	004
26446	L12SD-026(D)-0337-SD	TOC	07/28/96	07/29/96	07/30/96		08/21/96	//	004
26446	L12SD-027(D)-0338-SD	TOC	07/29/96	07/29/96	07/30/96		08/21/96	//	004
26446	L12SD-028(D)-0339-SD	TOC	07/29/96	07/29/96	07/30/96		08/21/96	//	004
26446	L12SD-029(D)-0340-SD	TOC	07/29/96	07/29/96	07/30/96		08/21/96	//	004
26446	L12SD-033(D)-0344-SD	TOC	07/28/96	07/29/96	07/30/96		08/21/96	//	004
26446	L12SD-034(D)-0345-SD	TOC	07/28/96	07/29/96	07/30/96		08/21/96	//	004
26446	L12SD-035(D)-0346-SD	TOC	07/28/96	07/29/96	07/30/96		08/21/96	//	004
26446	L12SD-036(D)-0347-SD	TOC	07/28/96	07/29/96	07/30/96		08/21/96	//	004
26446	LL3SD-046(D)-0213-SD	TOC	07/27/96	07/29/96	07/30/96		08/14/96	//	004
26446	LL3SD-047(D)-0214-SD	TOC	07/27/96	07/29/96	07/30/96		08/14/96	//	004
26446	LL3SD-048(D)-0215-SD	TOC	07/27/96	07/29/96	07/30/96		08/14/96	//	004
26446	LL3SD-049(D)-0216-SD	TOC	07/27/96	07/29/96	07/30/96		08/14/96	//	004
26446	LL3SD-050(D)-0217-SD	TOC	07/27/96	07/29/96	07/30/96		08/14/96	//	004
26446	LL3SD-051(D)-0218-SD	TOC	07/27/96	07/29/96	07/30/96		08/14/96	//	004
26446	LL3SD-052(D)-0219-SD	TOC	07/27/96	07/29/96	07/30/96		08/14/96	//	004
26446	LL3SD-053(D)-0220-SD	TOC	07/27/96	07/29/96	07/30/96		08/14/96	//	004
26446	LL4SD-021(D)-0251-SD	TOC	07/29/96	07/29/96	07/30/96		08/21/96	//	004
26446	LL4SD-050(D)-0287-SD	TOC	07/29/96	07/29/96	07/30/96		08/21/96	//	004
26446	CPCWP-012-0222-GW	VOC	07/28/96	07/29/96	07/30/96		08/07/96	//	004
26446	CPC__001-0662-TB	VOC	07/28/96	07/29/96	07/30/96		08/07/96	//	004
26446	CPC__002-0663-TB	VOC	07/29/96	07/29/96	07/30/96		08/07/96	//	004
26446	L12SD-026(D)-0337-SD	VOC	07/28/96	07/29/96	07/30/96		08/07/96	//	004
26446	L12SD-028(D)-0339-SD	VOC	07/29/96	07/29/96	07/30/96		08/07/96	//	004
26446	L12SS-001-0306-SO	VOC	07/27/96	07/29/96	07/30/96		08/06/96	//	004
26446	L12SS-012-0319-SO	VOC	07/27/96	07/29/96	07/30/96		08/05/96	//	004
26446	L12SS-012-0320-FD	VOC	07/27/96	07/29/96	07/30/96		08/07/96	//	004
26446	L12SS-013-0321-SO	VOC	07/27/96	07/29/96	07/30/96		08/07/96	//	004
26446	L12SS-041-0353-SO	VOC	07/27/96	07/29/96	07/30/96		08/06/96	//	004
26446	L12WP-057-0371-GW	VOC	07/28/96	07/29/96	07/30/96		08/07/96	//	004
26446	LL1SS-001-0001-SO	VOC	07/28/96	07/29/96	07/30/96		08/02/96	//	004
26446	LL1SS-019-0022-SO	VOC	07/29/96	07/29/96	07/30/96		08/05/96	//	004
26446	LL1SS-025-0028-SO	VOC	07/28/96	07/29/96	07/30/96		08/07/96	//	004
26446	LL1SS-026-0029-SO	VOC	07/28/96	07/29/96	07/30/96		08/06/96	//	004
26446	LL1SS-027-0030-SO	VOC	07/28/96	07/29/96	07/30/96		08/06/96	//	004
26446	LL1SS-036-0040-SO	VOC	07/28/96	07/29/96	07/30/96		08/07/96	//	004
26446	LL1SS-036-0041-FD	VOC	07/28/96	07/29/96	07/30/96		08/07/96	//	004
26446	LL1WP-067-0436-GW	VOC	07/29/96	07/29/96	07/30/96		08/07/96	//	004
26446	LL1WP-068-0437-GW	VOC	07/28/96	07/29/96	07/30/96		08/07/96	//	004
26446	LL1WP-069-0441-GW	VOC	07/29/96	07/29/96	07/30/96		08/07/96	//	004
26446	LL3SD-053(D)-0220-SD	VOC	07/27/96	07/29/96	07/30/96		08/06/96	//	004
26446	LL3SS-028-0194-SO	VOC	07/27/96	07/29/96	07/30/96		08/07/96	//	004
26446	LL4SS-003-0233-SO	VOC	07/27/96	07/29/96	07/30/96		08/05/96	//	004
26446	LL4SS-009-0239-SO	VOC	07/27/96	07/29/96	07/30/96		08/06/96	//	004
26446	LL4SS-022-0252-SO	VOC	07/27/96	07/29/96	07/30/96		08/07/96	//	004

**Ravenna Army Ammunition Plant Phase 1 RI  
Analytic Data Status Report**

Laboratory: Southwest Laboratory of Oklahoma, I

SDG Number	Sample ID	Analysis	Date Collected	Date Shipped	Date Received	Date Extracted	Date Analyzed	Data Received	COC
26446	LL4SS-023-0253-SO	VOC	07/27/96	07/29/96	07/30/96		08/06/96	//	004
26446	LL4SS-024-0254-SO	VOC	07/28/96	07/29/96	07/30/96		08/08/96	//	004
26446	LL4SS-025-0255-SO	VOC	07/28/96	07/29/96	07/30/96		08/07/96	//	004
26446	LL4SS-025-0256-FD	VOC	07/28/96	07/29/96	07/30/96		08/06/96	//	004
26446	LL4SS-037-0271-SO	VOC	07/28/96	07/29/96	07/30/96		08/07/96	//	004
26446	LL4WP-001-0664-ER	VOC	07/28/96	07/29/96	07/30/96		08/07/96	//	004
26446	LNWWP-019-0438-GW	VOC	07/27/96	07/29/96	07/30/96		08/05/96	//	004
26446	LNWWP-022-0443-GW	VOC	07/28/96	07/29/96	07/30/96		08/07/96	//	004
26446	LNW__001-0444-TB	VOC	07/27/96	07/29/96	07/30/96		08/07/96	//	004
26476	L12SD-030(D)-0341-SD	Metals (11)	07/30/96	07/30/96	07/31/96		08/21/96	//	005
26476	L12SD-037(D)-0348-SD	Metals (11)	07/29/96	07/30/96	07/31/96		08/24/96	//	005
26476	L12SD-038(D)-0349-SD	Metals (11)	07/30/96	07/30/96	07/31/96		08/21/96	//	005
26476	L12SD-039(D)-0350-SD	Metals (11)	07/30/96	07/30/96	07/31/96		08/24/96	//	005
26476	L12SS-042-0354-SO	Metals (11)	07/29/96	07/30/96	07/31/96		08/24/96	//	005
26476	L12SS-043-0355-SO	Metals (11)	07/29/96	07/30/96	07/31/96		08/24/96	//	005
26476	L12SS-045-0357-SO	Metals (11)	07/29/96	07/30/96	07/31/96		08/24/96	//	005
26476	LL1SD-024-0027-SD	Metals (11)	07/30/96	07/30/96	07/31/96		08/21/96	//	005
26476	LL1SS-003-0003-SO	Metals (11)	07/29/96	07/30/96	07/31/96		08/24/96	//	005
26476	LL1SS-004-0004-SO	Metals (11)	07/29/96	07/30/96	07/31/96		08/24/96	//	005
26476	LL1SS-005-0005-SO	Metals (11)	07/29/96	07/30/96	07/31/96		08/24/96	//	005
26476	LL1SS-005-0006-FD	Metals (11)	07/29/96	07/30/96	07/31/96		08/24/96	//	005
26476	LL1SS-009-0010-SO	Metals (11)	07/29/96	07/30/96	07/31/96		08/24/96	//	005
26476	LL1SS-012-0013-SO	Metals (11)	07/30/96	07/30/96	07/31/96		08/21/96	//	005
26476	LL1SS-020-0023-SO	Metals (11)	07/29/96	07/30/96	07/31/96		08/24/96	//	005
26476	LL1SS-022-0025-SO	Metals (11)	07/29/96	07/30/96	07/31/96		08/24/96	//	005
26476	LL1SS-023-0026-SO	Metals (11)	07/30/96	07/30/96	07/31/96		08/21/96	//	005
26476	LL1SS-039-0044-SO	Metals (11)	07/30/96	07/30/96	07/31/96		08/21/96	//	005
26476	LL1SS-039-0045-FD	Metals (11)	07/30/96	07/30/96	07/31/96		08/21/96	//	005
26476	LL1SS-040-0047-SO	Metals (11)	07/30/96	07/30/96	07/31/96		08/21/96	//	005
26476	LL4SD-044(D)-0278-SD	Metals (11)	07/29/96	07/30/96	07/31/96		08/21/96	//	005
26476	LL4SD-044(D)-0279-FD	Metals (11)	07/29/96	07/30/96	07/31/96		08/21/96	//	005
26476	LL4SD-048(D)-0283-SD	Metals (11)	07/30/96	07/30/96	07/31/96		08/24/96	//	005
26476	LL4SD-048(D)-0284-FD	Metals (11)	07/30/96	07/30/96	07/31/96		08/24/96	//	005
26476	LL4SD-049(D)-0286-SD	Metals (11)	07/29/96	07/30/96	07/31/96		08/21/96	//	005
26476	LL4SD-056(D)-0295-SD	Metals (11)	07/30/96	07/30/96	07/31/96		08/24/96	//	005
26476	LL4SD-058(D)-0297-SD	Metals (11)	07/29/96	07/30/96	07/31/96		08/21/96	//	005
26476	WBGSS-004-0459-SO	Metals (11)	07/30/96	07/30/96	07/31/96		08/21/96	//	005
26476	WBGSS-005-0460-SO	Metals (11)	07/30/96	07/30/96	07/31/96		08/21/96	//	005
26476	WBGSS-006-0461-SO	Metals (11)	07/30/96	07/30/96	07/31/96		08/21/96	//	005
26476	WBGSS-007-0462-SO	Metals (11)	07/30/96	07/30/96	07/31/96		08/21/96	//	005
26476	L12SS-044-0356-SO	Metals (23)	07/29/96	07/30/96	07/31/96		08/24/96	//	005
26476	LL1SS-010-0011-SO	Metals (23)	07/29/96	07/30/96	07/31/96		08/24/96	//	005
26476	LL1SS-038-0043-SO	Metals (23)	07/30/96	07/30/96	07/31/96		08/21/96	//	005
26476	LL4SD-051(D)-0288-SD	Metals (23)	07/30/96	07/30/96	07/31/96		08/24/96	//	005
26476	WBGSS-008-0463-SO	Metals (23)	07/30/96	07/30/96	07/31/96		08/21/96	//	005
26476	L12SD-030(D)-0341-SD	Explosives	07/30/96	07/30/96	07/31/96		08/22/96	//	005
26476	L12SD-037(D)-0348-SD	Explosives	07/29/96	07/30/96	07/31/96		08/21/96	//	005
26476	L12SD-038(D)-0349-SD	Explosives	07/30/96	07/30/96	07/31/96		08/22/96	//	005
26476	L12SD-039(D)-0350-SD	Explosives	07/30/96	07/30/96	07/31/96		08/22/96	//	005
26476	L12SS-042-0354-SO	Explosives	07/29/96	07/30/96	07/31/96		08/21/96	//	005
26476	L12SS-043-0355-SO	Explosives	07/29/96	07/30/96	07/31/96		08/21/96	//	005
26476	L12SS-044-0356-SO	Explosives	07/29/96	07/30/96	07/31/96		08/21/96	//	005
26476	L12SS-045-0357-SO	Explosives	07/29/96	07/30/96	07/31/96		08/21/96	//	005
26476	LL1SD-024-0027-SD	Explosives	07/30/96	07/30/96	07/31/96		08/22/96	//	005
26476	LL1SS-003-0003-SO	Explosives	07/29/96	07/30/96	07/31/96		08/21/96	//	005
26476	LL1SS-004-0004-SO	Explosives	07/29/96	07/30/96	07/31/96		08/21/96	//	005
26476	LL1SS-005-0005-SO	Explosives	07/29/96	07/30/96	07/31/96		08/20/96	//	005
26476	LL1SS-005-0006-FD	Explosives	07/29/96	07/30/96	07/31/96		08/20/96	//	005
26476	LL1SS-009-0010-SO	Explosives	07/29/96	07/30/96	07/31/96		08/21/96	//	005

04/21/97

\* Exceeds time limit

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**Ravenna Army Ammunition Plant Phase 1 RI  
Analytic Data Status Report**

Laboratory: Southwest Laboratory of Oklahoma, I

SDG Number	Sample ID	Analysis	Date Collected	Date Shipped	Date Received	Date Extracted	Date Analyzed	Data Received	COC
	LL1SS-010-0011-SO	Explosives	07/29/96	07/30/96	07/31/96		08/23/96	//	005
	LL1SS-012-0013-SO	Explosives	07/30/96	07/30/96	07/31/96		08/21/96	//	005
26476	LL1SS-020-0023-SO	Explosives	07/29/96	07/30/96	07/31/96		08/21/96	//	005
26476	LL1SS-022-0025-SO	Explosives	07/29/96	07/30/96	07/31/96		08/21/96	//	005
26476	LL1SS-023-0026-SO	Explosives	07/30/96	07/30/96	07/31/96		08/21/96	//	005
26476	LL1SS-038-0043-SO	Explosives	07/30/96	07/30/96	07/31/96		08/21/96	//	005
26476	LL1SS-039-0044-SO	Explosives	07/30/96	07/30/96	07/31/96		08/21/96	//	005
26476	LL1SS-039-0045-FD	Explosives	07/30/96	07/30/96	07/31/96		08/21/96	//	005
26476	LL1SS-040-0047-SO	Explosives	07/30/96	07/30/96	07/31/96		08/21/96	//	005
26476	LL1WP-069-0441-GW	Explosives	07/29/96	07/30/96	07/31/96		08/16/96	//	005
26476	LL4SD-044(D)-0278-SD	Explosives	07/29/96	07/30/96	07/31/96		08/21/96	//	005
26476	LL4SD-044(D)-0279-FD	Explosives	07/29/96	07/30/96	07/31/96		08/21/96	//	005
26476	LL4SD-048(D)-0283-SD	Explosives	07/30/96	07/30/96	07/31/96		08/22/96	//	005
26476	LL4SD-048(D)-0284-FD	Explosives	07/30/96	07/30/96	07/31/96		08/22/96	//	005
26476	LL4SD-049(D)-0286-SD	Explosives	07/29/96	07/30/96	07/31/96		08/21/96	//	005
26476	LL4SD-051(D)-0288-SD	Explosives	07/30/96	07/30/96	07/31/96		08/22/96	//	005
26476	LL4SD-056(D)-0295-SD	Explosives	07/30/96	07/30/96	07/31/96		08/22/96	//	005
26476	LL4SD-058(D)-0297-SD	Explosives	07/29/96	07/30/96	07/31/96		08/21/96	//	005
26476	WBGSS-004-0459-SO	Explosives	07/30/96	07/30/96	07/31/96		08/21/96	//	005
26476	WBGSS-005-0460-SO	Explosives	07/30/96	07/30/96	07/31/96		08/21/96	//	005
26476	WBGSS-006-0461-SO	Explosives	07/30/96	07/30/96	07/31/96		08/21/96	//	005
26476	WBGSS-007-0462-SO	Explosives	07/30/96	07/30/96	07/31/96		08/22/96	//	005
26476	WBGSS-008-0463-SO	Explosives	07/30/96	07/30/96	07/31/96		08/22/96	//	005
26476	L12SS-044-0356-SO	Pest/PCB	07/29/96	07/30/96	07/31/96	08/02/96	08/29/96	//	005
26476	LL1SS-010-0011-SO	Pest/PCB	07/29/96	07/30/96	07/31/96	08/02/96	08/29/96	//	005
26476	LL1SS-038-0043-SO	Pest/PCB	07/30/96	07/30/96	07/31/96	08/02/96	08/27/96	//	005
26476	LL1WP-067-0436-GW	Pest/PCB	07/29/96	07/30/96	07/31/96	08/02/96	08/09/96	//	005
26476	LL4SD-051(D)-0288-SD	Pest/PCB	07/30/96	07/30/96	07/31/96	08/02/96	08/31/96	//	005
26476	WBGSS-008-0463-SO	Pest/PCB	07/30/96	07/30/96	07/31/96	08/02/96	08/27/96	//	005
26476	L12SS-044-0356-SO	SVOC	07/29/96	07/30/96	07/31/96	08/02/96	08/15/96	//	005
26476	LL1SS-010-0011-SO	SVOC	07/29/96	07/30/96	07/31/96	08/02/96	08/15/96	//	005
26476	LL1SS-038-0043-SO	SVOC	07/30/96	07/30/96	07/31/96	08/02/96	08/15/96	//	005
26476	LL1WP-067-0436-GW	SVOC	07/29/96	07/30/96	07/31/96	08/02/96	08/14/96	//	005
26476	LL4SD-051(D)-0288-SD	SVOC	07/30/96	07/30/96	07/31/96	08/02/96	08/15/96	//	005
26476	WBGSS-008-0463-SO	SVOC	07/30/96	07/30/96	07/31/96	08/02/96	08/15/96	//	005
26476	L12SD-030(D)-0341-SD	TOC	07/30/96	07/30/96	07/31/96		08/22/96	//	005
26476	L12SD-037(D)-0348-SD	TOC	07/29/96	07/30/96	07/31/96		08/22/96	//	005
26476	L12SD-038(D)-0349-SD	TOC	07/30/96	07/30/96	07/31/96		08/22/96	//	005
26476	L12SD-039(D)-0350-SD	TOC	07/30/96	07/30/96	07/31/96		08/22/96	//	005
26476	LL4SD-044(D)-0278-SD	TOC	07/29/96	07/30/96	07/31/96		08/22/96	//	005
26476	LL4SD-044(D)-0279-FD	TOC	07/29/96	07/30/96	07/31/96		08/22/96	//	005
26476	LL4SD-048(D)-0283-SD	TOC	07/30/96	07/30/96	07/31/96		08/22/96	//	005
26476	LL4SD-049(D)-0286-SD	TOC	07/29/96	07/30/96	07/31/96		08/22/96	//	005
26476	LL4SD-051(D)-0288-SD	TOC	07/30/96	07/30/96	07/31/96		08/22/96	//	005
26476	LL4SD-056(D)-0295-SD	TOC	07/30/96	07/30/96	07/31/96		08/22/96	//	005
26476	LL4SD-058(D)-0297-SD	TOC	07/29/96	07/30/96	07/31/96		08/22/96	//	005
26476	L12SS-044-0356-SO	VOC	07/29/96	07/30/96	07/31/96		08/08/96	//	005
26476	LL1SS-010-0011-SO	VOC	07/29/96	07/30/96	07/31/96		08/07/96	//	005
26476	LL1SS-038-0043-SO	VOC	07/30/96	07/30/96	07/31/96		08/08/96	//	005
26476	LL4SD-051(D)-0288-SD	VOC	07/30/96	07/30/96	07/31/96		08/08/96	//	005
26476	WBGSS-008-0463-SO	VOC	07/30/96	07/30/96	07/31/96		08/08/96	//	005
26494	L12SD-031(D)-0342-SD	Metals (11)	07/31/96	07/31/96	08/01/96		08/22/96	//	006
26494	L12SD-054(P)-0368-SD	Metals (11)	07/30/96	07/31/96	08/01/96		08/22/96	//	006
26494	L12SD-055(P)-0369-SD	Metals (11)	07/30/96	07/31/96	08/01/96		08/22/96	//	006
26494	LL1SD-046(D)-0053-SD	Metals (11)	07/30/96	07/31/96	08/01/96		08/22/96	//	006
26494	LL1SD-051(D)-0059-SD	Metals (11)	07/30/96	07/31/96	08/01/96		08/21/96	//	006
26494	LL1SS-011-0012-SO	Metals (11)	07/31/96	07/31/96	08/01/96		08/21/96	//	006
26494	LL1SS-014-0015-SO	Metals (11)	07/31/96	07/31/96	08/01/96		08/21/96	//	006
26494	LL1SS-015-0016-SO	Metals (11)	07/31/96	07/31/96	08/01/96		08/21/96	//	006

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\* Exceeds time limit

## Ravenna Army Ammunition Plant Phase 1 RI

## Analytic Data Status Report

Laboratory: Southwest Laboratory of Oklahoma, I

SDG Number	Sample ID	Analysis	Date	Date	Date	Date	Date	Data	COC
			Collected	Shipped	Received	Extracted	Analyzed	Received	
26494	LL1SS-016-0017-SO	Metals (11)	07/31/96	07/31/96	08/01/96		08/21/96	//	006
26494	LL1SS-016-0018-FD	Metals (11)	08/31/96	07/31/96	08/01/96		08/21/96	//	006
26494	LL1SS-029-0032-SO	Metals (11)	07/31/96	07/31/96	08/01/96		08/21/96	//	006
26494	LL1SS-029-0033-FD	Metals (11)	07/31/96	07/31/96	08/01/96		08/21/96	//	006
26494	LL1SS-030-0034-SO	Metals (11)	07/31/96	07/31/96	08/01/96		08/21/96	//	006
26494	LL1SS-041(B)-0048-SO	Metals (11)	07/30/96	07/31/96	08/01/96		08/22/96	//	006
26494	LL1SS-042(B)-0049-SO	Metals (11)	07/30/96	07/31/96	08/01/96		08/22/96	//	006
26494	LL1SS-043(B)-0050-SO	Metals (11)	07/30/96	07/31/96	08/01/96		08/22/96	//	006
26494	LL4SD-057(P)-0296-SD	Metals (11)	07/30/96	07/31/96	08/01/96		08/22/96	//	006
26494	LL4SS-010-0240-SO	Metals (11)	07/31/96	07/31/96	08/01/96		08/22/96	//	006
26494	LL4SS-030-0261-SO	Metals (11)	07/31/96	07/31/96	08/01/96		08/22/96	//	006
26494	LL4SS-041(B)-0275-SO	Metals (11)	07/30/96	07/31/96	08/01/96		08/22/96	//	006
26494	LL4SS-042(B)-0276-SO	Metals (11)	07/30/96	07/31/96	08/01/96		08/22/96	//	006
26494	LL4SS-043(B)-0277-SO	Metals (11)	07/31/96	07/31/96	08/01/96		08/22/96	//	006
26494	WBGSS-001-0456-SO	Metals (11)	07/31/96	07/31/96	08/01/96		08/21/96	//	006
26494	WBGSS-002-0457-SO	Metals (11)	07/31/96	07/31/96	08/01/96		08/21/96	//	006
26494	WBGSS-003-0458-SO	Metals (11)	07/31/96	07/31/96	08/01/96		08/21/96	//	006
26494	WBGSS-039-0496-SO	Metals (11)	07/31/96	07/31/96	08/01/96		08/22/96	//	006
26494	WBGSS-040-0497-SO	Metals (11)	07/31/96	07/31/96	08/01/96		08/22/96	//	006
26494	WBGSS-040-0498-FD	Metals (11)	07/31/96	07/31/96	08/01/96		08/21/96	//	006
26494	WBGSS-041-0499-SO	Metals (11)	07/31/96	07/31/96	08/01/96		08/21/96	//	006
26494	LL1SD-028-0031-SD	Metals (23)	07/31/96	07/31/96	08/01/96		08/21/96	//	006
26494	LL1WP-069-0441-GW	Metals (23)	07/29/96	07/31/96	08/01/96		08/22/96	//	006
26494	LL4SS-045-0280-SO	Metals (23)	07/31/96	07/31/96	08/01/96		08/22/96	//	006
26494	L12SD-031(D)-0342-SD	Explosives	07/31/96	07/31/96	08/01/96		08/30/96	//	006
26494	L12SD-054(P)-0368-SD	Explosives	07/30/96	07/31/96	08/01/96		08/30/96	//	006
26494	L12SD-055(P)-0369-SD	Explosives	07/30/96	07/31/96	08/01/96		08/30/96	//	006
26494	LL1SD-028-0031-SD	Explosives	07/31/96	07/31/96	08/01/96		08/31/96	//	006
26494	LL1SD-046(D)-0053-SD	Explosives	07/30/96	07/31/96	08/01/96		08/30/96	//	006
26494	LL1SD-051(D)-0059-SD	Explosives	07/30/96	07/31/96	08/01/96		08/31/96	//	006
26494	LL1SS-011-0012-SO	Explosives	07/31/96	07/31/96	08/01/96		08/31/96	//	006
26494	LL1SS-014-0015-SO	Explosives	07/31/96	07/31/96	08/01/96		08/31/96	//	006
26494	LI 1SS-015-0016-SO	Explosives	07/31/96	07/31/96	08/01/96		08/31/96	//	006
26494	LL1SS-016-0017-SO	Explosives	07/31/96	07/31/96	08/01/96		08/31/96	//	006
26494	LL1SS-016-0018-FD	Explosives	08/31/96	07/31/96	08/01/96		08/31/96	//	006
26446	LL1SS-027-0030-SO	Explosives	07/28/96	07/29/96	07/30/96		08/29/96	//	004
26494		Explosives	07/28/96	07/29/96	07/30/96		08/31/96	//	004
26494	LL1SS-029-0032-SO	Explosives	07/31/96	07/31/96	08/01/96		08/31/96	//	006
26494	LL1SS-029-0033-FD	Explosives	07/31/96	07/31/96	08/01/96		08/31/96		006
26494	LL1SS-030-0034-SO	Explosives	07/31/96	07/31/96	08/01/96		08/31/96	//	006
26494	LL4SD-057(P)-0296-SD	Explosives	07/30/96	07/31/96	08/01/96		08/30/96	//	006
26494	LL4SS-010-0240-SO	Explosives	07/31/96	07/31/96	08/01/96		08/30/96	//	006
26494	LL4SS-030-0261-SO	Explosives	07/31/96	07/31/96	08/01/96		08/30/96	//	006
26494	LL4SS-045-0280-SO	Explosives	07/31/96	07/31/96	08/01/96		08/30/96	//	006
26494	WBGSS-001-0456-SO	Explosives	07/31/96	07/31/96	08/01/96		08/31/96	//	006
26494	WBGSS-002-0457-SO	Explosives	07/31/96	07/31/96	08/01/96		08/31/96	//	006
26494	WBGSS-003-0458-SO	Explosives	07/31/96	07/31/96	08/01/96		08/31/96	//	006
26494	WBGSS-039-0496-SO	Explosives	07/31/96	07/31/96	08/01/96		09/05/96	//	006
26494	WBGSS-040-0497-SO	Explosives	07/31/96	07/31/96	08/01/96		08/30/96	//	006
26494	WBGSS-040-0498-FD	Explosives	07/31/96	07/31/96	08/01/96		08/30/96	//	006
26494	WBGSS-041-0499-SO	Explosives	07/31/96	07/31/96	08/01/96		08/30/96	//	006
26494	LL1SD-028-0031-SD	Pest/PCB	07/31/96	07/31/96	08/01/96	08/02/96	08/30/96	//	006
26494	LL4SS-045-0280-SO	Pest/PCB	07/31/96	07/31/96	08/01/96	08/02/96	08/31/96	//	006
26494	LL1SD-028-0031-SD	SVOC	07/31/96	07/31/96	08/01/96	08/02/96	08/15/96	//	006
26494	LL4SS-045-0280-SO	SVOC	07/31/96	07/31/96	08/01/96	08/02/96	08/15/96	//	006
26494	L12SD-031(D)-0342-SD	TOC	07/31/96	07/31/96	08/01/96		08/22/96	//	006
26494	L12SD-054(P)-0368-SD	TOC	07/30/96	07/31/96	08/01/96		08/22/96	//	006
26494	L12SD-055(P)-0369-SD	TOC	07/30/96	07/31/96	08/01/96		08/22/96	//	006
26494	LL1SD-046(D)-0053-SD	TOC	07/30/96	07/31/96	08/01/96		08/22/96	//	006

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\* Exceeds time limit

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Ravenna Army Ammunition Plant Phase I RI  
Analytic Data Status Report

Laboratory: Southwest Laboratory of Oklahoma, I

SDG Number	Sample ID	Analysis	Date Collected	Date Shipped	Date Received	Date Extracted	Date Analyzed	Data Received	COC
	LL1SD-051(D)-0059-SD	TOC	07/30/96	07/31/96	08/01/96		08/22/96	///	006
26494	LL4SD-057(P)-0296-SD	TOC	07/30/96	07/31/96	08/01/96		08/22/96	///	006
26494	LL1SD-028-0031-SD	VOC	07/31/96	07/31/96	08/01/96		08/08/96	///	006
26494	LL4SS-045-0280-SO	VOC	07/31/96	07/31/96	08/01/96		08/08/96	///	006
26544	DA2SO-001-0574-SO	Metals (11)	08/05/96	08/06/96	08/07/96		08/23/96	///	007
26544	DA2SO-001-0575-SO	Metals (11)	08/05/96	08/06/96	08/07/96		08/23/96	///	007
26544	DA2SO-002-0576-SO	Metals (11)	08/05/96	08/06/96	08/07/96		08/23/96	///	007
26544	DA2SO-002-0577-SO	Metals (11)	08/05/96	08/06/96	08/07/96		08/23/96	///	007
26544	DA2SO-003-0578-SO	Metals (11)	08/05/96	08/06/96	08/07/96		08/23/96	///	007
26544	DA2SO-003-0579-SO	Metals (11)	08/05/96	08/06/96	08/07/96		08/23/96	///	007
26544	DA2SO-004-0580-SO	Metals (11)	08/05/96	08/06/96	08/07/96		08/23/96	///	007
26544	DA2SO-004-0581-SO	Metals (11)	08/05/96	08/06/96	08/07/96		08/23/96	///	007
26544	DA2SO-006-0586-SO	Metals (11)	08/05/96	08/06/96	08/07/96		08/23/96	///	007
26544	WBGSS-009-0464-SO	Metals (11)	08/05/96	08/06/96	08/07/96		08/23/96	///	007
26544	WBGSS-010-0465-SO	Metals (11)	08/05/96	08/06/96	08/07/96		08/23/96	///	007
26544	WBGSS-011-0466-SO	Metals (11)	08/05/96	08/06/96	08/07/96		08/23/96	///	007
26544	WBGSS-012-0467-SO	Metals (11)	08/05/96	08/06/96	08/07/96		08/23/96	///	007
26544	WBGSS-013-0468-SO	Metals (11)	08/05/96	08/06/96	08/07/96		08/23/96	///	007
26544	WBGSS-015-0470-SO	Metals (11)	08/05/96	08/06/96	08/07/96		08/23/96	///	007
26544	WBGSS-020-0477-SO	Metals (11)	08/05/96	08/06/96	08/07/96		08/23/96	///	007
26544	WBGSS-022-0479-SO	Metals (11)	08/05/96	08/06/96	08/07/96		08/23/96	///	007
26544	WBGSS-023-0480-SO	Metals (11)	08/05/96	08/06/96	08/07/96		08/23/96	///	007
26544	WBGSS-024-0481-SO	Metals (11)	08/05/96	08/06/96	08/07/96		08/23/96	///	007
26544	WBGSS-025-0482-SO	Metals (11)	08/05/96	08/06/96	08/07/96		08/23/96	///	007
26544	LNWTR-001-0393-SO	Metals (23)	08/05/96	08/06/96	08/07/96		08/23/96	///	007
26544	LNWTR-002-0396-SO	Metals (23)	08/05/96	08/06/96	08/07/96		08/23/96	///	007
26544	LNWTR-002-0397-SO	Metals (23)	08/05/96	08/06/96	08/07/96		08/23/96	///	007
26544	WBGSS-021-0478-SO	Metals (23)	08/05/96	08/06/96	08/07/96		08/23/96	///	007
26544	DA2SO-001-0574-SO	Explosives	08/05/96	08/06/96	08/07/96		09/02/96	///	007
26544	DA2SO-001-0575-SO	Explosives	08/05/96	08/06/96	08/07/96		09/02/96	///	007
26544	DA2SO-002-0576-SO	Explosives	08/05/96	08/06/96	08/07/96		09/02/96	///	007
26544	DA2SO-002-0577-SO	Explosives	08/05/96	08/06/96	08/07/96		09/02/96	///	007
26544	DA2SO-003-0578-SO	Explosives	08/05/96	08/06/96	08/07/96		09/02/96	///	007
26544	DA2SO-003-0579-SO	Explosives	08/05/96	08/06/96	08/07/96		09/02/96	///	007
26544	DA2SO-004-0580-SO	Explosives	08/05/96	08/06/96	08/07/96		09/02/96	///	007
26544	DA2SO-004-0581-SO	Explosives	08/05/96	08/06/96	08/07/96		09/02/96	///	007
26544	DA2SO-006-0586-SO	Explosives	08/05/96	08/06/96	08/07/96		09/02/96	///	007
26544	LNWTR-001-0393-SO	Explosives	08/05/96	08/06/96	08/07/96		09/01/96	///	007
26544	LNWTR-002-0396-SO	Explosives	08/05/96	08/06/96	08/07/96		09/02/96	///	007
26544	LNWTR-002-0397-SO	Explosives	08/05/96	08/06/96	08/07/96		09/02/96	///	007
26544	WBGSS-009-0464-SO	Explosives	08/05/96	08/06/96	08/07/96		09/01/96	///	007
26544	WBGSS-010-0465-SO	Explosives	08/05/96	08/06/96	08/07/96		09/01/96	///	007
26544	WBGSS-011-0466-SO	Explosives	08/05/96	08/06/96	08/07/96		09/01/96	///	007
26544	WBGSS-012-0467-SO	Explosives	08/05/96	08/06/96	08/07/96		09/01/96	///	007
26544	WBGSS-013-0468-SO	Explosives	08/05/96	08/06/96	08/07/96		09/01/96	///	007
26544	WBGSS-015-0470-SO	Explosives	08/05/96	08/06/96	08/07/96		09/01/96	///	007
26544	WBGSS-020-0477-SO	Explosives	08/05/96	08/06/96	08/07/96		09/02/96	///	007
26544	WBGSS-021-0478-SO	Explosives	08/05/96	08/06/96	08/07/96		09/02/96	///	007
26544	WBGSS-022-0479-SO	Explosives	08/05/96	08/06/96	08/07/96		09/02/96	///	007
26544	WBGSS-023-0480-SO	Explosives	08/05/96	08/06/96	08/07/96		09/02/96	///	007
26544	WBGSS-024-0481-SO	Explosives	08/05/96	08/06/96	08/07/96		09/02/96	///	007
26544	WBGSS-025-0482-SO	Explosives	08/05/96	08/06/96	08/07/96		09/02/96	///	007
26544	LNWTR-001-0393-SO	Pest/PCB	08/05/96	08/06/96	08/07/96	08/09/96	08/28/96	///	007
26544	LNWTR-002-0396-SO	Pest/PCB	08/05/96	08/06/96	08/07/96	08/09/96	08/28/96	///	007
26544	LNWTR-002-0397-SO	Pest/PCB	08/05/96	08/06/96	08/07/96	08/09/96	08/28/96	///	007
26544	WBGSS-021-0478-SO	Pest/PCB	08/05/96	08/06/96	08/07/96	08/09/96	08/28/96	///	007
26544	LNWTR-001-0393-SO	SVOC	08/05/96	08/06/96	08/07/96	08/09/96	08/21/96	///	007
26544	LNWTR-002-0396-SO	SVOC	08/05/96	08/06/96	08/07/96	08/09/96	08/21/96	///	007
26544	LNWTR-002-0397-SO	SVOC	08/05/96	08/06/96	08/07/96	08/09/96	08/21/96	///	007

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\* Exceeds time limit

**Ravenna Army Ammunition Plant Phase 1 RI  
Analytic Data Status Report**

Laboratory: Southwest Laboratory of Oklahoma, I

SDG Number	Sample ID	Analysis	Date Collected	Date Shipped	Date Received	Date Extracted	Date Analyzed	Data Received	COC
26544	WBGSS-021-0478-SO	SVOC	08/05/96	08/06/96	08/07/96	08/09/96	08/21/96	//	007
26544	LNWTR-001-0393-SO	VOC	08/05/96	08/06/96	08/07/96		08/13/96	//	007
26544	LNWTR-002-0396-SO	VOC	08/05/96	08/06/96	08/07/96		08/13/96	//	007
26544	LNWTR-002-0397-SO	VOC	08/05/96	08/06/96	08/07/96		08/12/96	//	007
26544	WBGSS-021-0478-SO	VOC	08/05/96	08/06/96	08/07/96		08/12/96	//	007
26545	DA2SO-005-0583-SO	Metals (11)	08/06/96	08/06/96	08/07/96		08/23/96	//	007
26545	DA2SO-005-0584-FD	Metals (11)	08/06/96	08/06/96	08/07/96		08/23/96	//	007
26545	DA2SO-006-0587-SO	Metals (11)	08/05/96	08/06/96	08/07/96		08/23/96	//	007
26545	DA2SO-007-0588-SO	Metals (11)	08/06/96	08/06/96	08/07/96		08/23/96	//	007
26545	DA2SO-007-0589-SO	Metals (11)	08/06/96	08/06/96	08/07/96		08/23/96	//	007
26545	DA2SO-008-0590-SO	Metals (11)	08/06/96	08/06/96	08/07/96		08/23/96	//	007
26545	DA2SO-008-0591-FD	Metals (11)	08/06/96	08/06/96	08/07/96		08/23/96	//	007
26545	DA2SO-008-0593-SO	Metals (11)	08/06/96	08/06/96	08/07/96		08/23/96	//	007
26545	DA2SO-017-0611-SO	Metals (11)	08/06/96	08/06/96	08/07/96		08/23/96	//	007
26545	DA2SO-017-0612-SO	Metals (11)	08/06/96	08/06/96	08/07/96		08/23/96	//	007
26545	DA2SO-018-0613-SO	Metals (11)	08/06/96	08/06/96	08/07/96		08/23/96	//	007
26545	WBGSS-016-0471-SO	Metals (11)	08/06/96	08/06/96	08/07/96		08/23/96	//	007
26545	WBGSS-017-0472-SO	Metals (11)	08/06/96	08/06/96	08/07/96		08/23/96	//	007
26545	WBGSS-018-0473-SO	Metals (11)	08/06/96	08/06/96	08/07/96		08/23/96	//	007
26545	WBGSS-019-0474-SO	Metals (11)	08/06/96	08/06/96	08/07/96		08/23/96	//	007
26545	WBGSS-019-0475-FD	Metals (11)	08/06/96	08/06/96	08/07/96		08/23/96	//	007
26545	WBGSS-026-0483-SO	Metals (11)	08/06/96	08/06/96	08/07/96		08/23/96	//	007
26545	WBGSS-027-0484-SO	Metals (11)	08/06/96	08/06/96	08/07/96		08/23/96	//	007
26545	WBGSS-033-0490-SO	Metals (11)	08/06/96	08/06/96	08/07/96		08/23/96	//	007
26545	WBGSS-034-0491-SO	Metals (11)	08/06/96	08/06/96	08/07/96		08/23/96	//	007
26545	WBGSS-035-0492-SO	Metals (11)	08/06/96	08/06/96	08/07/96		08/26/96	//	007
26545	WBGSS-036-0493-SO	Metals (11)	08/06/96	08/06/96	08/07/96		08/23/96	//	007
26545	WBGSS-037-0494-SO	Metals (11)	08/06/96	08/06/96	08/07/96		08/23/96	//	007
26545	WBGSS-038-0495-SO	Metals (11)	08/06/96	08/06/96	08/07/96		08/23/96	//	007
26545	DA2SO-005-0582-SO	Metals (23)	08/06/96	08/06/96	08/07/96		08/23/96	//	007
26545	DA2SO-018-0614-SO	Metals (23)	08/06/96	08/06/96	08/07/96		08/23/96	//	007
26545	LNWTR-003-0399-SO	Metals (23)	08/06/96	08/06/96	08/07/96		08/23/96	//	007
26545	LNWTR-003-0400-SO	Metals (23)	08/06/96	08/06/96	08/07/96		08/23/96	//	007
26545	LNWTR-003-0402-FD	Metals (23)	08/06/96	08/06/96	08/07/96		08/23/96	//	007
26545	LNWTR-004-0404-SO	Metals (23)	08/06/96	08/06/96	08/07/96		08/23/96	//	007
26545	LNWTR-004-0405-SO	Metals (23)	08/06/96	08/06/96	08/07/96		08/23/96	//	007
26545	LNWTR-004-0407-FD	Metals (23)	08/06/96	08/06/96	08/07/96		08/23/96	//	007
26545	LNWTR-005-0408-SO	Metals (23)	08/06/96	08/06/96	08/07/96		08/23/96	//	007
26545	LNWTR-005-0409-SO	Metals (23)	08/06/96	08/06/96	08/07/96		08/23/96	//	007
26545	DA2SO-005-0582-SO	Explosives	08/06/96	08/06/96	08/07/96		09/05/96	//	007
26545	DA2SO-005-0583-SO	Explosives	08/06/96	08/06/96	08/07/96		09/05/96	//	007
26545	DA2SO-005-0584-FD	Explosives	08/06/96	08/06/96	08/07/96		09/05/96	//	007
26545	DA2SO-006-0587-SO	Explosives	08/05/96	08/06/96	08/07/96		09/05/96	//	007
26545	DA2SO-007-0588-SO	Explosives	08/06/96	08/06/96	08/07/96		09/05/96	//	007
26545	DA2SO-007-0589-SO	Explosives	08/06/96	08/06/96	08/07/96		09/05/96	//	007
26545	DA2SO-008-0590-SO	Explosives	08/06/96	08/06/96	08/07/96		09/07/96	//	007
26545	DA2SO-008-0591-FD	Explosives	08/06/96	08/06/96	08/07/96		09/07/96	//	007
26545	DA2SO-008-0593-SO	Explosives	08/06/96	08/06/96	08/07/96		09/07/96	//	007
26545	DA2SO-017-0611-SO	Explosives	08/06/96	08/06/96	08/07/96		09/07/96	//	007
26545	DA2SO-017-0612-SO	Explosives	08/06/96	08/06/96	08/07/96		09/07/96	//	007
26545	DA2SO-018-0613-SO	Explosives	08/06/96	08/06/96	08/07/96		09/07/96	//	007
26545	DA2SO-018-0614-SO	Explosives	08/06/96	08/06/96	08/07/96		09/07/96	//	007
26545	LNWTR-003-0399-SO	Explosives	08/06/96	08/06/96	08/07/96		09/05/96	//	007
26545	LNWTR-003-0400-SO	Explosives	08/06/96	08/06/96	08/07/96		09/05/96	//	007
26545	LNWTR-003-0402-FD	Explosives	08/06/96	08/06/96	08/07/96		09/05/96	//	007
26545	LNWTR-004-0404-SO	Explosives	08/06/96	08/06/96	08/07/96		09/05/96	//	007
26545	LNWTR-004-0405-SO	Explosives	08/06/96	08/06/96	08/07/96		09/05/96	//	007
26545	LNWTR-004-0407-FD	Explosives	08/06/96	08/06/96	08/07/96		09/05/96	//	007
26545	LNWTR-005-0408-SO	Explosives	08/06/96	08/06/96	08/07/96		09/07/96	//	007

04/21/97

\* Exceeds time limit

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Ravenna Army Ammunition Plant Phase 1 RI

Analytic Data Status Report

Laboratory: Southwest Laboratory of Oklahoma, I

SDG Number	Sample ID	Analysis	Date Collected	Date Shipped	Date Received	Date Extracted	Date Analyzed	Data Received	COC
26545	LNWTR-005-0409-SO	Explosives	08/06/96	08/06/96	08/07/96		09/07/96	//	007
26545	WBGSS-016-0471-SO	Explosives	08/06/96	08/06/96	08/07/96		09/07/96	//	007
26545	WBGSS-017-0472-SO	Explosives	08/06/96	08/06/96	08/07/96		09/07/96	//	007
26545	WBGSS-018-0473-SO	Explosives	08/06/96	08/06/96	08/07/96		09/07/96	//	007
26545	WBGSS-019-0474-SO	Explosives	08/06/96	08/06/96	08/07/96		09/07/96	//	007
26545	WBGSS-019-0475-FD	Explosives	08/06/96	08/06/96	08/07/96		09/07/96	//	007
26545	WBGSS-026-0483-SO	Explosives	08/06/96	08/06/96	08/07/96		09/07/96	//	007
26545	WBGSS-027-0484-SO	Explosives	08/06/96	08/06/96	08/07/96		09/07/96	//	007
26545	WBGSS-033-0490-SO	Explosives	08/06/96	08/06/96	08/07/96		09/07/96	//	007
26545	WBGSS-034-0491-SO	Explosives	08/06/96	08/06/96	08/07/96		09/07/96	//	007
26545	WBGSS-035-0492-SO	Explosives	08/06/96	08/06/96	08/07/96		09/07/96	//	007
26545	WBGSS-036-0493-SO	Explosives	08/06/96	08/06/96	08/07/96		09/07/96	//	007
26545	WBGSS-037-0494-SO	Explosives	08/06/96	08/06/96	08/07/96		09/07/96	//	007
26545	WBGSS-038-0495-SO	Explosives	08/06/96	08/06/96	08/07/96		09/07/96	//	007
26545	DA2SO-005-0582-SO	Pest/PCB	08/06/96	08/06/96	08/07/96	08/09/96	09/04/96	//	007
26545	DA2SO-018-0614-SO	Pest/PCB	08/06/96	08/06/96	08/07/96	08/09/96	09/04/96	//	007
26545	LNWTR-003-0399-SO	Pest/PCB	08/06/96	08/06/96	08/07/96	08/09/96	09/04/96	//	007
26545	LNWTR-003-0400-SO	Pest/PCB	08/06/96	08/06/96	08/07/96	08/09/96	09/04/96	//	007
26545	LNWTR-003-0402-FD	Pest/PCB	08/06/96	08/06/96	08/07/96	08/09/96	09/04/96	//	007
26545	LNWTR-004-0404-SO	Pest/PCB	08/06/96	08/06/96	08/07/96	08/09/96	09/04/96	//	007
26545	LNWTR-004-0405-SO	Pest/PCB	08/06/96	08/06/96	08/07/96	08/09/96	09/04/96	//	007
26545	LNWTR-004-0407-FD	Pest/PCB	08/06/96	08/06/96	08/07/96	08/09/96	09/04/96	//	007
26545	LNWTR-005-0408-SO	Pest/PCB	08/06/96	08/06/96	08/07/96	08/09/96	09/04/96	//	007
26545	LNWTR-005-0409-SO	Pest/PCB	08/06/96	08/06/96	08/07/96	08/09/96	09/04/96	//	007
26545	DA2SO-005-0582-SO	SVOC	08/06/96	08/06/96	08/07/96	08/09/96	08/21/96	//	007
26545	DA2SO-018-0614-SO	SVOC	08/06/96	08/06/96	08/07/96	08/09/96	08/21/96	//	007
26545	LNWTR-003-0399-SO	SVOC	08/06/96	08/06/96	08/07/96	08/09/96	08/21/96	//	007
26545	LNWTR-003-0400-SO	SVOC	08/06/96	08/06/96	08/07/96	08/09/96	08/21/96	//	007
26545	LNWTR-003-0402-FD	SVOC	08/06/96	08/06/96	08/07/96	08/09/96	08/21/96	//	007
26545	LNWTR-004-0404-SO	SVOC	08/06/96	08/06/96	08/07/96	08/09/96	08/21/96	//	007
26545	LNWTR-004-0405-SO	SVOC	08/06/96	08/06/96	08/07/96	08/09/96	08/21/96	//	007
26545	LNWTR-004-0407-FD	SVOC	08/06/96	08/06/96	08/07/96	08/09/96	08/21/96	//	007
26545	LNWTR-005-0408-SO	SVOC	08/06/96	08/06/96	08/07/96	08/09/96	08/21/96	//	007
26545	LNWTR-005-0409-SO	SVOC	08/06/96	08/06/96	08/07/96	08/09/96	08/21/96	//	007
26545	DA2SO-005-0582-SO	VOC	08/06/96	08/06/96	08/07/96	08/09/96	08/12/96	//	007
26545	DA2SO-018-0614-SO	VOC	08/06/96	08/06/96	08/07/96	08/09/96	08/13/96	//	007
26545	LNWTR-003-0399-SO	VOC	08/06/96	08/06/96	08/07/96	08/09/96	08/12/96	//	007
26545	LNWTR-003-0400-SO	VOC	08/06/96	08/06/96	08/07/96	08/09/96	08/12/96	//	007
26545	LNWTR-003-0402-FD	VOC	08/06/96	08/06/96	08/07/96	08/09/96	08/12/96	//	007
26545	LNWTR-004-0404-SO	VOC	08/06/96	08/06/96	08/07/96	08/09/96	08/12/96	//	007
26545	LNWTR-004-0405-SO	VOC	08/06/96	08/06/96	08/07/96	08/09/96	08/13/96	//	007
26545	LNWTR-004-0407-FD	VOC	08/06/96	08/06/96	08/07/96	08/09/96	08/13/96	//	007
26545	LNWTR-005-0408-SO	VOC	08/06/96	08/06/96	08/07/96	08/09/96	08/14/96	//	007
26545	LNWTR-005-0409-SO	VOC	08/06/96	08/06/96	08/07/96	08/09/96	08/13/96	//	007
26557	DA2SO-009-0594-SO	Metals (11)	08/06/94	08/07/96	08/08/96		08/24/96	//	008
26557	DA2SO-019-0615-SO	Metals (11)	08/06/96	08/07/96	08/08/96		08/27/96	//	008
26557	DA2SO-019-0616-SO	Metals (11)	08/06/96	08/07/96	08/08/96		08/24/96	//	008
26557	DA2SO-020-0617-SO	Metals (11)	08/06/96	08/07/96	08/08/96		08/24/96	//	008
26557	DA2SO-020-0618-SO	Metals (11)	08/06/96	08/07/96	08/08/96		08/24/96	//	008
26557	DA2SO-023-0623-SO	Metals (11)	08/07/96	08/07/96	08/08/96		08/24/96	//	008
26557	DA2SO-023-0624-SO	Metals (11)	08/07/96	08/07/96	08/08/96		08/24/96	//	008
26557	DA2SO-024-0625-SO	Metals (11)	08/07/96	08/07/96	08/08/96		08/24/96	//	008
26557	DA2SO-024-0626-SO	Metals (11)	08/07/96	08/07/96	08/08/96		08/24/96	//	008
26557	DA2SO-025-0627-SO	Metals (11)	08/07/96	08/07/96	08/08/96		08/24/96	//	008
26557	DA2SO-025-0628-FD	Metals (11)	08/07/96	08/07/96	08/08/96		08/24/96	//	008
26557	DA2SO-025-0630-SO	Metals (11)	08/07/96	08/07/96	08/08/96		08/24/96	//	008
26557	DA2SO-026-0631-SO	Metals (11)	08/07/96	08/07/96	08/08/96		08/24/96	//	008
26557	DA2SO-026-0632-SO	Metals (11)	08/07/96	08/07/96	08/08/96		08/24/96	//	008
26557	DA2SO-027-0633-SO	Metals (11)	08/06/96	08/07/96	08/08/96		08/24/96	//	008

Ravenna Army Ammunition Plant Phase 1 RI

Analytic Data Status Report

Laboratory: Southwest Laboratory of Oklahoma, I

SDG Number	Sample ID	Analysis	Date Collected	Date Shipped	Date Received	Date Extracted	Date Analyzed	Data Received	COC
26557	DA2SO-028-0635-SO	Metals (11)	08/07/96	08/07/96	08/08/96		08/24/96	//	008
26557	DA2SO-028-0636-SO	Metals (11)	08/07/96	08/07/96	08/08/96		08/24/96	//	008
26557	DA2SO-028-0637-FD	Metals (11)	08/07/96	08/07/96	08/08/96		08/24/96	//	008
26557	LNWSD-014(D)-0431-SD	Metals (11)	08/07/96	08/07/96	08/08/96		08/24/96	//	008
26557	LNWSD-014(D)-0432-FD	Metals (11)	08/07/96	08/07/96	08/08/96		08/24/96	//	008
26557	WBGSS-028-0485-SO	Metals (11)	08/07/96	08/07/96	08/08/96		08/24/96	//	008
26557	WBGSS-029-0486-SO	Metals (11)	08/07/96	08/07/96	08/08/96		08/24/96	//	008
26557	WBGSS-030-0487-SO	Metals (11)	08/07/96	08/07/96	08/08/96		08/24/96	//	008
26557	WBGSS-032-0489-SO	Metals (11)	08/07/96	08/07/96	08/08/96		08/24/96	//	008
26557	WBGSS-042-0500-SO	Metals (11)	08/07/96	08/07/96	08/08/96		08/24/96	//	008
26557	WBGSS-043-0501-SO	Metals (11)	08/07/96	08/07/96	08/08/96		08/24/96	//	008
26557	WBGSS-044-0502-SO	Metals (11)	08/07/96	08/07/96	08/08/96		08/24/96	//	008
26557	WBGSS-045-0503-SO	Metals (11)	08/07/96	08/07/96	08/08/96		08/24/96	//	008
26557	DA2SO-027-0634-SO	Metals (23)	08/06/96	08/07/96	08/08/96		08/24/96	//	008
26557	LNWSD-015(D)-0434-SD	Metals (23)	08/07/96	08/07/96	08/08/96		08/24/96	//	008
26557	WBGSS-031-0488-SO	Metals (23)	08/07/96	08/07/96	08/08/96		08/24/96	//	008
26557	DA2SO-009-0594-SO	Explosives	08/06/94	08/07/96	08/08/96		09/08/96	//	008
26557	DA2SO-019-0615-SO	Explosives	08/06/96	08/07/96	08/08/96		09/08/96	//	008
26557	DA2SO-019-0616-SO	Explosives	08/06/96	08/07/96	08/08/96		09/08/96	//	008
26557	DA2SO-020-0617-SO	Explosives	08/06/96	08/07/96	08/08/96		09/08/96	//	008
26557	DA2SO-020-0618-SO	Explosives	08/06/96	08/07/96	08/08/96		09/08/96	//	008
26557	DA2SO-023-0623-SO	Explosives	08/07/96	08/07/96	08/08/96		09/09/96	//	008
26557	DA2SO-023-0624-SO	Explosives	08/07/96	08/07/96	08/08/96		09/09/96	//	008
26557	DA2SO-024-0625-SO	Explosives	08/07/96	08/07/96	08/08/96		09/09/96	//	008
26557	DA2SO-024-0626-SO	Explosives	08/07/96	08/07/96	08/08/96		09/09/96	//	008
26557	DA2SO-025-0627-SO	Explosives	08/07/96	08/07/96	08/08/96		09/09/96	//	008
26557	DA2SO-025-0628-FD	Explosives	08/07/96	08/07/96	08/08/96		09/09/96	//	008
26557	DA2SO-025-0630-SO	Explosives	08/07/96	08/07/96	08/08/96		09/09/96	//	008
26557	DA2SO-026-0631-SO	Explosives	08/07/96	08/07/96	08/08/96		09/09/96	//	008
26557	DA2SO-026-0632-SO	Explosives	08/07/96	08/07/96	08/08/96		09/09/96	//	008
26557	DA2SO-027-0633-SO	Explosives	08/06/96	08/07/96	08/08/96		09/08/96	//	008
26557	DA2SO-027-0634-SO	Explosives	08/06/96	08/07/96	08/08/96		09/08/96	//	008
26557	DA2SO-028-0635-SO	Explosives	08/07/96	08/07/96	08/08/96		09/09/96	//	008
26557	DA2SO-028-0636-SO	Explosives	08/07/96	08/07/96	08/08/96		09/09/96	//	008
26557	DA2SO-028-0637-FD	Explosives	08/07/96	08/07/96	08/08/96		09/09/96	//	008
26557	LNWSD-014(D)-0431-SD	Explosives	08/07/96	08/07/96	08/08/96		09/08/96	//	008
26557	LNWSD-014(D)-0432-FD	Explosives	08/07/96	08/07/96	08/08/96		09/08/96	//	008
26557	LNWSD-015(D)-0434-SD	Explosives	08/07/96	08/07/96	08/08/96		09/08/96	//	008
26557	WBGSS-028-0485-SO	Explosives	08/07/96	08/07/96	08/08/96		09/08/96	//	008
26557	WBGSS-029-0486-SO	Explosives	08/07/96	08/07/96	08/08/96		09/08/96	//	008
26557	WBGSS-030-0487-SO	Explosives	08/07/96	08/07/96	08/08/96		09/08/96	//	008
26557	WBGSS-031-0488-SO	Explosives	08/07/96	08/07/96	08/08/96		09/08/96	//	008
26557	WBGSS-032-0489-SO	Explosives	08/07/96	08/07/96	08/08/96		09/08/96	//	008
26557	WBGSS-042-0500-SO	Explosives	08/07/96	08/07/96	08/08/96		09/08/96	//	008
26557	WBGSS-043-0501-SO	Explosives	08/07/96	08/07/96	08/08/96		09/08/96	//	008
26557	WBGSS-044-0502-SO	Explosives	08/07/96	08/07/96	08/08/96		09/09/96	//	008
26557	WBGSS-045-0503-SO	Explosives	08/07/96	08/07/96	08/08/96		09/09/96	//	008
26557	DA2SO-027-0634-SO	Pest/PCB	08/06/96	08/07/96	08/08/96	08/09/96	09/04/96	//	008
26557	LNWSD-015(D)-0434-SD	Pest/PCB	08/07/96	08/07/96	08/08/96	08/09/96	09/04/96	//	008
26557	WBGSS-031-0488-SO	Pest/PCB	08/07/96	08/07/96	08/08/96	08/09/96	09/04/96	//	008
26557	DA2SO-027-0634-SO	SVOC	08/06/96	08/07/96	08/08/96	08/09/96	08/23/96	//	008
26557	LNWSD-015(D)-0434-SD	SVOC	08/07/96	08/07/96	08/08/96	08/09/96	08/23/96	//	008
26557	WBGSS-031-0488-SO	SVOC	08/07/96	08/07/96	08/08/96	08/09/96	08/23/96	//	008
26557	LNWSD-014(D)-0431-SD	TOC	08/07/96	08/07/96	08/08/96		08/22/96	//	008
26557	LNWSD-014(D)-0432-FD	TOC	08/07/96	08/07/96	08/08/96		08/22/96	//	008
26557	LNWSD-015(D)-0434-SD	TOC	08/07/96	08/07/96	08/08/96		08/22/96	//	008
26557	DA2SO-027-0634-SO	VOC	08/06/96	08/07/96	08/08/96		08/09/96	//	008
26557	LNWSD-015(D)-0434-SD	VOC	08/07/96	08/07/96	08/08/96		08/09/96	//	008
26557	WBGSS-031-0488-SO	VOC	08/07/96	08/07/96	08/08/96		08/09/96	//	008

**Ravenna Army Ammunition Plant Phase 1 RI  
Analytic Data Status Report**

Laboratory: Southwest Laboratory of Oklahoma, I

SDG Number	Sample ID	Analysis	Date Collected	Date Shipped	Date Received	Date Extracted	Date Analyzed	Data Received	COC
	DA2SD-032(D)-0644-SD	Metals (11)	08/08/96	08/08/96	08/09/96		08/26/96	//	009
	DA2SD-032(D)-0645-FD	Metals (11)	08/08/96	08/08/96	08/09/96		08/26/96	//	009
26570	DA2SD-033(D)-0647-SD	Metals (11)	08/08/96	08/08/96	08/09/96		08/26/96	//	009
26570	DA2SO-012-0601-SO	Metals (11)	08/07/96	08/08/96	08/09/96		08/26/96	//	009
26570	DA2SO-012-0602-SO	Metals (11)	08/07/96	08/08/96	08/09/96		08/27/96	//	009
26570	DA2SO-013-0603-SO	Metals (11)	08/08/96	08/08/96	08/09/96		08/27/96	//	009
26570	DA2SO-013-0604-SO	Metals (11)	08/08/96	08/08/96	08/09/96		08/27/96	//	009
26570	DA2SO-014-0605-SO	Metals (11)	08/08/96	08/08/96	08/09/96		08/27/96	//	009
26570	DA2SO-014-0606-SO	Metals (11)	08/08/96	08/08/96	08/09/96		08/27/96	//	009
26570	DA2SO-015-0607-SO	Metals (11)	08/07/96	08/08/96	08/09/96		08/27/96	//	009
26570	DA2SO-015-0608-SO	Metals (11)	08/07/96	08/08/96	08/09/96		08/27/96	//	009
26570	DA2SO-016-0609-SO	Metals (11)	08/07/96	08/08/96	08/09/96		08/26/96	//	009
26570	DA2SO-016-0610-SO	Metals (11)	08/07/96	08/08/96	08/09/96		08/26/96	//	009
26570	DA2SO-021-0619-SO	Metals (11)	08/07/96	08/08/96	08/09/96		08/26/96	//	009
26570	DA2SO-021-0620-SO	Metals (11)	08/07/96	08/08/96	08/09/96		08/26/96	//	009
26570	DA2SO-022-0621-SO	Metals (11)	08/07/96	08/08/96	08/09/96		08/26/96	//	009
26570	DA2SO-022-0622-SO	Metals (11)	08/07/96	08/08/96	08/09/96		08/26/96	//	009
26570	DA2SO-029-0638-SO	Metals (11)	08/07/96	08/08/96	08/09/96		08/24/96	//	009
26570	DA2SO-029-0639-SO	Metals (11)	08/07/96	08/08/96	08/09/96		08/24/96	//	009
26570	DA2SO-030-0640-SO	Metals (11)	08/07/96	08/08/96	08/09/96		08/24/96	//	009
26570	DA2SO-030-0641-FD	Metals (11)	08/07/96	08/08/96	08/09/96		08/24/96	//	009
26570	DA2SO-030-0642-SO	Metals (11)	08/07/96	08/08/96	08/09/96		08/24/96	//	009
26570	LL2SS-023-0113-SO	Metals (11)	08/08/96	08/08/96	08/09/96		08/26/96	//	009
26570	LL2SS-024-0115-SO	Metals (11)	08/08/96	08/08/96	08/09/96		08/26/96	//	009
26570	LNWSD-011(D)-0428-SD	Metals (11)	08/07/96	08/08/96	08/09/96		08/26/96	//	009
26570	LNWSD-012(D)-0429-SD	Metals (11)	08/07/96	08/08/96	08/09/96		08/26/96	//	009
26570	LNWSD-013(D)-0430-SD	Metals (11)	08/07/96	08/08/96	08/09/96		08/26/96	//	009
26570	WBGSS-046-0504-SO	Metals (11)	08/07/96	08/08/96	08/09/96		08/24/96	//	009
	WBGSS-047-0505-SO	Metals (11)	08/07/96	08/08/96	08/09/96		08/24/96	//	009
	WBGSS-048-0506-SO	Metals (11)	08/07/96	08/08/96	08/09/96		08/24/96	//	009
26570	WBGSS-049-0507-SO	Metals (11)	08/07/96	08/08/96	08/09/96		08/24/96	//	009
26570	WBGSS-050-0508-SO	Metals (11)	08/07/96	08/08/96	08/09/96		08/24/96	//	009
26570	WBGSS-052-0512-SO	Metals (11)	08/07/96	08/08/96	08/09/96		08/26/96	//	009
26570	WBGSS-054-0514-SO	Metals (11)	08/08/96	08/08/96	08/09/96		08/26/96	//	009
26570	WBGSS-055-0515-SO	Metals (11)	08/08/96	08/08/96	08/09/96		08/26/96	//	009
26570	WBGSS-056-0516-SO	Metals (11)	08/08/96	08/08/96	08/09/96		08/26/96	//	009
26570	WBGSS-057-0517-SO	Metals (11)	08/07/96	08/08/96	08/09/96		08/26/96	//	009
26570	WBGSS-058-0520-SO	Metals (11)	08/07/96	08/08/96	08/09/96		08/26/96	//	009
26570	WBGSS-059-0518-FD	Metals (11)	08/08/96	08/08/96	08/09/96		08/26/96	//	009
26570	WBGSS-059-0521-SO	Metals (11)	08/08/96	08/08/96	08/09/96		08/26/96	//	009
26570	WBGSS-060-0522-SO	Metals (11)	08/08/96	08/08/96	08/09/96		08/26/96	//	009
26570	WBGSS-061-0523-SO	Metals (11)	08/08/96	08/08/96	08/09/96		08/26/96	//	009
26570	WBGSS-062-0524-SO	Metals (11)	08/08/96	08/08/96	08/09/96		08/26/96	//	009
26570	WBGSS-063-0525-SO	Metals (11)	08/07/96	08/08/96	08/09/96		08/26/96	//	009
26570	WBGSS-064-0526-SO	Metals (11)	08/07/96	08/08/96	08/09/96		08/26/96	//	009
26570	DA2SD-031(D)-0634-SD	Metals (23)	08/08/96	08/08/96	08/09/96		08/26/96	//	009
26570	LL2SS-025-0116-SO	Metals (23)	08/08/96	08/08/96	08/09/96		08/26/96	//	009
26570	LL2SS-026-0117-SO	Metals (23)	08/08/96	08/08/96	08/09/96		08/26/96	//	009
26570	LL2SS-027-0118-SO	Metals (23)	08/08/96	08/08/96	08/09/96		08/26/96	//	009
26570	WBGSS-051-0509-SO	Metals (23)	08/08/96	08/08/96	08/09/96		08/26/96	//	009
26570	WBGSS-051-0510-FD	Metals (23)	08/08/96	08/08/96	08/09/96		08/26/96	//	009
26570	DA2SD-031(D)-0634-SD	Explosives	08/08/96	08/08/96	08/09/96		09/12/96	//	009
26570	DA2SD-032(D)-0644-SD	Explosives	08/08/96	08/08/96	08/09/96		09/12/96	//	009
26570	DA2SD-032(D)-0645-FD	Explosives	08/08/96	08/08/96	08/09/96		09/13/96	//	009
26570	DA2SD-033(D)-0647-SD	Explosives	08/08/96	08/08/96	08/09/96		09/13/96	//	009
26570	DA2SO-012-0601-SO	Explosives	08/07/96	08/08/96	08/09/96		09/11/96	//	009
26570	DA2SO-012-0602-SO	Explosives	08/07/96	08/08/96	08/09/96		09/11/96	//	009
26570	DA2SO-013-0603-SO	Explosives	08/08/96	08/08/96	08/09/96		09/13/96	//	009
26570	DA2SO-013-0604-SO	Explosives	08/08/96	08/08/96	08/09/96		09/13/96	//	009

04/21/97

\* Exceeds time limit

**Ravenna Army Ammunition Plant Phase 1 RI  
Analytic Data Status Report**

Laboratory: Southwest Laboratory of Oklahoma, I

SDG Number	Sample ID	Analysis	Date Collected	Date Shipped	Date Received	Date Extracted	Date Analyzed	Data Received	COC
26570	DA2SO-014-0605-SO	Explosives	08/08/96	08/08/96	08/09/96		09/13/96	//	009
26570	DA2SO-014-0606-SO	Explosives	08/08/96	08/08/96	08/09/96		09/13/96	//	009
26570	DA2SO-015-0607-SO	Explosives	08/07/96	08/08/96	08/09/96		09/11/96	//	009
26570	DA2SO-015-0608-SO	Explosives	08/07/96	08/08/96	08/09/96		09/11/96	//	009
26570	DA2SO-016-0609-SO	Explosives	08/07/96	08/08/96	08/09/96		09/11/96	//	009
26570	DA2SO-016-0610-SO	Explosives	08/07/96	08/08/96	08/09/96		09/11/96	//	009
26570	DA2SO-021-0619-SO	Explosives	08/07/96	08/08/96	08/09/96		09/11/96	//	009
26570	DA2SO-021-0620-SO	Explosives	08/07/96	08/08/96	08/09/96		09/11/96	//	009
26570	DA2SO-022-0621-SO	Explosives	08/07/96	08/08/96	08/09/96		09/11/96	//	009
26570	DA2SO-022-0622-SO	Explosives	08/07/96	08/08/96	08/09/96		09/11/96	//	009
26570	DA2SO-029-0638-SO	Explosives	08/07/96	08/08/96	08/09/96		09/10/96	//	009
26570	DA2SO-029-0639-SO	Explosives	08/07/96	08/08/96	08/09/96		09/10/96	//	009
26570	DA2SO-030-0640-SO	Explosives	08/07/96	08/08/96	08/09/96		09/10/96	//	009
26570	DA2SO-030-0641-FD	Explosives	08/07/96	08/08/96	08/09/96		09/10/96	//	009
26570	DA2SO-030-0642-SO	Explosives	08/07/96	08/08/96	08/09/96		09/10/96	//	009
26570	LL2SS-023-0113-SO	Explosives	08/08/96	08/08/96	08/09/96		09/12/96	//	009
26570	LL2SS-024-0115-SO	Explosives	08/08/96	08/08/96	08/09/96		09/12/96	//	009
26570	LL2SS-025-0116-SO	Explosives	08/08/96	08/08/96	08/09/96		09/12/96	//	009
26570	LL2SS-026-0117-SO	Explosives	08/08/96	08/08/96	08/09/96		09/12/96	//	009
26570	LL2SS-027-0118-SO	Explosives	08/08/96	08/08/96	08/09/96		09/12/96	//	009
26570	LNWSD-011(D)-0428-SD	Explosives	08/07/96	08/08/96	08/09/96		09/10/96	//	009
26570	LNWSD-012(D)-0429-SD	Explosives	08/07/96	08/08/96	08/09/96		09/10/96	//	009
26570	LNWSD-013(D)-0430-SD	Explosives	08/07/96	08/08/96	08/09/96		09/11/96	//	009
26570	WBGSS-046-0504-SO	Explosives	08/07/96	08/08/96	08/09/96		09/10/96	//	009
26570	WBGSS-047-0505-SO	Explosives	08/07/96	08/08/96	08/09/96		09/10/96	//	009
26570	WBGSS-048-0506-SO	Explosives	08/07/96	08/08/96	08/09/96		09/10/96	//	009
26570	WBGSS-049-0507-SO	Explosives	08/07/96	08/08/96	08/09/96		09/10/96	//	009
26570	WBGSS-050-0508-SO	Explosives	08/07/96	08/08/96	08/09/96		09/10/96	//	009
26570	WBGSS-051-0509-SO	Explosives	08/08/96	08/08/96	08/09/96		09/11/96	//	009
26570	WBGSS-051-0510-FD	Explosives	08/08/96	08/08/96	08/09/96		09/11/96	//	009
26570	WBGSS-052-0512-SO	Explosives	08/07/96	08/08/96	08/09/96		09/10/96	//	009
26570	WBGSS-054-0514-SO	Explosives	08/08/96	08/08/96	08/09/96		09/11/96	//	009
26570	WBGSS-055-0515-SO	Explosives	08/08/96	08/08/96	08/09/96		09/11/96	//	009
26570	WBGSS-056-0516-SO	Explosives	08/08/96	08/08/96	08/09/96		09/11/96	//	009
26570	WBGSS-057-0517-SO	Explosives	08/07/96	08/08/96	08/09/96		09/10/96	//	009
26570	WBGSS-058-0520-SO	Explosives	08/07/96	08/08/96	08/09/96		09/10/96	//	009
26570	WBGSS-059-0518-FD	Explosives	08/08/96	08/08/96	08/09/96		09/12/96	//	009
26570	WBGSS-059-0521-SO	Explosives	08/08/96	08/08/96	08/09/96		09/11/96	//	009
26570	WBGSS-060-0522-SO	Explosives	08/08/96	08/08/96	08/09/96		09/12/96	//	009
26570	WBGSS-061-0523-SO	Explosives	08/08/96	08/08/96	08/09/96		09/12/96	//	009
26570	WBGSS-062-0524-SO	Explosives	08/08/96	08/08/96	08/09/96		09/12/96	//	009
26570	WBGSS-063-0525-SO	Explosives	08/07/96	08/08/96	08/09/96		09/10/96	//	009
26570	WBGSS-064-0526-SO	Explosives	08/07/96	08/08/96	08/09/96		09/10/96	//	009
26570	DA2SD-031(D)-0634-SD	Pest/PCB	08/08/96	08/08/96	08/09/96	08/10/96	09/04/96	//	009
26570	LL2SS-025-0116-SO	Pest/PCB	08/08/96	08/08/96	08/09/96	08/10/96	09/04/96	//	009
26570	LL2SS-026-0117-SO	Pest/PCB	08/08/96	08/08/96	08/09/96	08/10/96	09/04/96	//	009
26570	LL2SS-027-0118-SO	Pest/PCB	08/08/96	08/08/96	08/09/96	08/10/96	09/04/96	//	009
26570	WBGSS-051-0509-SO	Pest/PCB	08/08/96	08/08/96	08/09/96	08/10/96	09/04/96	//	009
26570	WBGSS-051-0510-FD	Pest/PCB	08/08/96	08/08/96	08/09/96	08/10/96	09/04/96	//	009
26570	DA2SD-031(D)-0634-SD	SVOC	08/08/96	08/08/96	08/09/96	08/10/96	08/19/96	//	009
26570	LL2SS-025-0116-SO	SVOC	08/08/96	08/08/96	08/09/96	08/10/96	08/19/96	//	009
26570	LL2SS-026-0117-SO	SVOC	08/08/96	08/08/96	08/09/96	08/10/96	08/19/96	//	009
26570	LL2SS-027-0118-SO	SVOC	08/08/96	08/08/96	08/09/96	08/10/96	08/20/96	//	009
26570	WBGSS-051-0509-SO	SVOC	08/08/96	08/08/96	08/09/96	08/10/96	08/19/96	//	009
26570	WBGSS-051-0510-FD	SVOC	08/08/96	08/08/96	08/09/96	08/10/96	08/19/96	//	009
26570	DA2SD-032(D)-0644-SD	TOC	08/08/96	08/08/96	08/09/96		08/22/96	//	009
26570	DA2SD-032(D)-0645-FD	TOC	08/08/96	08/08/96	08/09/96		08/22/96	//	009
26570	DA2SD-033(D)-0647-SD	TOC	08/08/96	08/08/96	08/09/96		08/22/96	//	009
26570	LNWSD-011(D)-0428-SD	TOC	08/07/96	08/08/96	08/09/96		08/22/96	//	009

Ravenna Army Ammunition Plant Phase 1 RI

Analytic Data Status Report

Laboratory: Southwest Laboratory of Oklahoma, I

SDG Number	Sample ID	Analysis	Date Collected	Date Shipped	Date Received	Date Extracted	Date Analyzed	Data Received	COC
26570	LNWSD-012(D)-0429-SD	TOC	08/07/96	08/08/96	08/09/96		08/22/96	//	009
26570	LNWSD-013(D)-0430-SD	TOC	08/07/96	08/08/96	08/09/96		08/22/96	//	009
26570	DA2SD-031(D)-0634-SD	VOC	08/08/96	08/08/96	08/09/96		08/14/96	//	009
26570	LL2SS-025-0116-SO	VOC	08/08/96	08/08/96	08/09/96		08/14/96	//	009
26570	LL2SS-026-0117-SO	VOC	08/08/96	08/08/96	08/09/96		08/14/96	//	009
26570	LL2SS-027-0118-SO	VOC	08/08/96	08/08/96	08/09/96		08/15/96	//	009
26570	WBGSS-051-0509-SO	VOC	08/08/96	08/08/96	08/09/96		08/13/96	//	009
26570	WBGSS-051-0510-FD	VOC	08/08/96	08/08/96	08/09/96		08/13/96	//	009
26591	DA2SO-010-0596-SO	Metals (11)	08/09/96	08/09/96	08/10/96		08/25/96	//	010
26591	DA2SO-010-0597-FD	Metals (11)	08/09/96	08/09/96	08/10/96		08/25/96	//	010
26591	DA2SO-010-0598-SO	Metals (11)	08/09/96	08/09/96	08/10/96		08/25/96	//	010
26591	DA2SO-011-0599-SO	Metals (11)	08/09/96	08/09/96	08/10/96		08/25/96	//	010
26591	DA2SO-011-0600-SO	Metals (11)	08/09/96	08/09/96	08/10/96		08/25/96	//	010
26591	LL1SD-048(D)-0055-SD	Metals (11)	08/09/96	08/09/96	08/10/96		08/27/96	//	010
26591	LL2SS-028-0119-SO	Metals (11)	08/09/96	08/09/96	08/10/96		08/27/96	//	010
26591	LL2SS-028-0120-FD	Metals (11)	08/09/96	08/09/96	08/10/96		08/27/96	//	010
26591	LL2SS-029-0121-SO	Metals (11)	08/09/96	08/09/96	08/10/96		08/27/96	//	010
26591	LL2SS-032-0124-SO	Metals (11)	08/09/96	08/09/96	08/10/96		08/25/96	//	010
26591	LL2SS-033-0125-SO	Metals (11)	08/09/96	08/09/96	08/10/96		08/25/96	//	010
26591	LL2SS-034-0126-SO	Metals (11)	08/09/96	08/09/96	08/10/96		08/25/96	//	010
26591	LL2SS-034-0127-SO	Metals (11)	08/09/96	08/09/96	08/10/96		08/25/96	//	010
26591	LL2SS-035-0128-SO	Metals (11)	08/09/96	08/09/96	08/10/96		08/25/96	//	010
26591	LL2SS-036-0129-SO	Metals (11)	08/09/96	08/09/96	08/10/96		08/27/96	//	010
26591	LL2SS-037-0130-SO	Metals (11)	08/09/96	08/09/96	08/10/96		08/27/96	//	010
26591	LL2SS-042(B)-0136-SO	Metals (11)	08/09/96	08/09/96	08/10/96		08/27/96	//	010
26591	WBGSS-014-0469-SO	Metals (11)	08/08/96	08/09/96	08/10/96		08/25/96	//	010
26591	WBGSS-065-0527-SO	Metals (11)	08/09/96	08/09/96	08/10/96		08/25/96	//	010
26591	WBGSS-067-0529-SO	Metals (11)	08/09/96	08/09/96	08/10/96		08/25/96	//	010
26591	WBGSS-067-0530-FD	Metals (11)	08/09/96	08/09/96	08/10/96		08/25/96	//	010
26591	WBGSS-068-0532-SO	Metals (11)	08/09/96	08/09/96	08/10/96		08/25/96	//	010
26591	WBGSS-069-0533-SO	Metals (11)	08/09/96	08/09/96	08/10/96		08/25/96	//	010
26591	WBGSS-070-0534-SO	Metals (11)	08/09/96	08/09/96	08/10/96		08/27/96	//	010
26591	WBGSS-071-0535-SO	Metals (11)	08/09/96	08/09/96	08/10/96		08/27/96	//	010
26591	WBGSS-073-0537-SO	Metals (11)	08/09/96	08/09/96	08/10/96		08/27/96	//	010
26591	WBGSS-074-0538-SO	Metals (11)	08/09/96	08/09/96	08/10/96		08/27/96	//	010
26591	WBGSS-075-0539-SO	Metals (11)	08/09/96	08/09/96	08/10/96		08/27/96	//	010
26591	WBGSS-075-0540-FD	Metals (11)	08/09/96	08/09/96	08/10/96		08/27/96	//	010
26591	LL1SS-044-0051-SO	Metals (23)	08/08/96	08/09/96	08/10/96		08/25/96	//	010
26591	LL2SS-031-0123-SO	Metals (23)	08/09/96	08/09/96	08/10/96		08/25/96	//	010
26591	WBGSS-066-0528-SO	Metals (23)	08/09/96	08/09/96	08/10/96		08/25/96	//	010
26591	WBGSS-072-0536-SO	Metals (23)	08/09/96	08/09/96	08/10/96		08/27/96	//	010
26591	WBGSS-076-0541-SO	Metals (23)	08/09/96	08/09/96	08/10/96		08/27/96	//	010
26591	DA2SO-010-0596-SO	Explosives	08/09/96	08/09/96	08/10/96		09/13/96	//	010
26591	DA2SO-010-0597-FD	Explosives	08/09/96	08/09/96	08/10/96		09/27/96*(48)	//	010
26591	DA2SO-010-0598-SO	Explosives	08/09/96	08/09/96	08/10/96		09/13/96	//	010
26591	DA2SO-011-0599-SO	Explosives	08/09/96	08/09/96	08/10/96		09/13/96	//	010
26591	DA2SO-011-0600-SO	Explosives	08/09/96	08/09/96	08/10/96		09/13/96	//	010
26591	LL1SD-048(D)-0055-SD	Explosives	08/09/96	08/09/96	08/10/96		09/14/96	//	010
26591	LL1SS-044-0051-SO	Explosives	08/08/96	08/09/96	08/10/96		09/13/96	//	010
26591	LL2SS-028-0119-SO	Explosives	08/09/96	08/09/96	08/10/96		09/14/96	//	010
26591	LL2SS-028-0120-FD	Explosives	08/09/96	08/09/96	08/10/96		09/14/96	//	010
26591	LL2SS-029-0121-SO	Explosives	08/09/96	08/09/96	08/10/96		09/14/96	//	010
26591	LL2SS-031-0123-SO	Explosives	08/09/96	08/09/96	08/10/96		09/14/96	//	010
26591	LL2SS-032-0124-SO	Explosives	08/09/96	08/09/96	08/10/96		09/14/96	//	010
26591	LL2SS-033-0125-SO	Explosives	08/09/96	08/09/96	08/10/96		09/14/96	//	010
26591	LL2SS-034-0126-SO	Explosives	08/09/96	08/09/96	08/10/96		09/14/96	//	010
26591	LL2SS-034-0127-SO	Explosives	08/09/96	08/09/96	08/10/96		09/14/96	//	010
26591	LL2SS-035-0128-SO	Explosives	08/09/96	08/09/96	08/10/96		09/14/96	//	010
26591	LL2SS-036-0129-SO	Explosives	08/09/96	08/09/96	08/10/96		09/14/96	//	010

Ravenna Army Ammunition Plant Phase 1 RI

Analytic Data Status Report

Laboratory: Southwest Laboratory of Oklahoma, I

SDG Number	Sample ID	Analysis	Date Collected	Date Shipped	Date Received	Date Extracted	Date Analyzed	Data Received	COC
26591	LL2SS-037-0130-SO	Explosives	08/09/96	08/09/96	08/10/96		09/14/96	//	010
26591	WBGSS-014-0469-SO	Explosives	08/08/96	08/09/96	08/10/96		09/13/96	//	010
26591	WBGSS-065-0527-SO	Explosives	08/09/96	08/09/96	08/10/96		09/13/96	//	010
26591	WBGSS-066-0528-SO	Explosives	08/09/96	08/09/96	08/10/96		09/13/96	//	010
26591	WBGSS-067-0529-SO	Explosives	08/09/96	08/09/96	08/10/96		09/13/96	//	010
26591	WBGSS-067-0530-FD	Explosives	08/09/96	08/09/96	08/10/96		09/13/96	//	010
26591	WBGSS-068-0532-SO	Explosives	08/09/96	08/09/96	08/10/96		09/14/96	//	010
26591	WBGSS-069-0533-SO	Explosives	08/09/96	08/09/96	08/10/96		09/30/96*(51)	//	010
26591	WBGSS-070-0534-SO	Explosives	08/09/96	08/09/96	08/10/96		09/14/96	//	010
26591	WBGSS-071-0535-SO	Explosives	08/09/96	08/09/96	08/10/96		09/14/96	//	010
26591	WBGSS-072-0536-SO	Explosives	08/09/96	08/09/96	08/10/96		09/14/96	//	010
26591	WBGSS-073-0537-SO	Explosives	08/09/96	08/09/96	08/10/96		09/14/96	//	010
26591	WBGSS-074-0538-SO	Explosives	08/09/96	08/09/96	08/10/96		09/17/96	//	010
26591	WBGSS-075-0539-SO	Explosives	08/09/96	08/09/96	08/10/96		09/14/96	//	010
26591	WBGSS-075-0540-FD	Explosives	08/09/96	08/09/96	08/10/96		09/14/96	//	010
26591	WBGSS-076-0541-SO	Explosives	08/09/96	08/09/96	08/10/96		09/14/96	//	010
26591	LL1SS-044-0051-SO	Pest/PCB	08/08/96	08/09/96	08/10/96	08/14/96	09/11/96	//	010
26591	LL2SS-031-0123-SO	Pest/PCB	08/09/96	08/09/96	08/10/96	08/14/96	09/11/96	//	010
26591	WBGSS-066-0528-SO	Pest/PCB	08/09/96	08/09/96	08/10/96	08/14/96	09/11/96	//	010
26591	WBGSS-072-0536-SO	Pest/PCB	08/09/96	08/09/96	08/10/96	08/14/96	09/11/96	//	010
26591	WBGSS-076-0541-SO	Pest/PCB	08/09/96	08/09/96	08/10/96	08/14/96	09/11/96	//	010
26591	LL1SS-044-0051-SO	SVOC	08/08/96	08/09/96	08/10/96	08/14/96	08/26/96	//	010
26591	LL2SS-031-0123-SO	SVOC	08/09/96	08/09/96	08/10/96	08/14/96	08/27/96	//	010
26591	WBGSS-066-0528-SO	SVOC	08/09/96	08/09/96	08/10/96	08/14/96	08/27/96	//	010
26591	WBGSS-072-0536-SO	SVOC	08/09/96	08/09/96	08/10/96	08/14/96	08/27/96	//	010
26591	WBGSS-076-0541-SO	SVOC	08/09/96	08/09/96	08/10/96	08/14/96	08/27/96	//	010
26591	LL1SD-048(D)-0055-SD	TOC	08/09/96	08/09/96	08/10/96		08/22/96	//	010
26591	LL1SS-044-0051-SO	VOC	08/08/96	08/09/96	08/10/96		08/15/96	//	010
26591	LL2SS-031-0123-SO	VOC	08/09/96	08/09/96	08/10/96		08/15/96	//	010
26591	WBGSS-066-0528-SO	VOC	08/09/96	08/09/96	08/10/96		08/15/96	//	010
26591	WBGSS-072-0536-SO	VOC	08/09/96	08/09/96	08/10/96		08/15/96	//	010
26591	WBGSS-076-0541-SO	VOC	08/09/96	08/09/96	08/10/96		08/14/96	//	010
26604	LL1SD-053(P)-0061-SD	Metals (11)	08/11/96	08/12/96	08/13/96		08/27/96	//	011
26604	LL1SD-054(P)-0062-SD	Metals (11)	08/11/96	08/12/96	08/13/96		08/27/96	//	011
26604	LL1SD-055(P)-0063-SD	Metals (11)	08/11/96	08/12/96	08/13/96		08/27/96	//	011
26604	LL2SS-002-0089-SO	Metals (11)	08/11/96	08/12/96	08/13/96		08/27/96	//	011
26604	LL2SS-003-0090-SO	Metals (11)	08/11/96	08/12/96	08/13/96		08/26/96	//	011
26604	LL2SS-004-0091-SO	Metals (11)	08/11/96	08/12/96	08/13/96		08/27/96	//	011
26604	LL2SS-005-0092-SO	Metals (11)	08/11/96	08/12/96	08/13/96		08/27/96	//	011
26604	LL2SS-006-0093-SO	Metals (11)	08/11/96	08/12/96	08/13/96		08/27/96	//	011
26604	LL2SS-007-0094-SO	Metals (11)	08/11/96	08/12/96	08/13/96		08/26/96	//	011
26604	LL2SS-020-0110-SO	Metals (11)	08/11/96	08/12/96	08/13/96		08/26/96	//	011
26604	LL2SS-021-0111-SO	Metals (11)	08/11/96	08/12/96	08/13/96		08/26/96	//	011
26604	WBGSD-078-0543-SD	Metals (11)	08/11/96	08/12/96	08/13/96		08/26/96	//	011
26604	WBGSD-079-0544-SD	Metals (11)	08/11/96	08/12/96	08/13/96		08/26/96	//	011
26604	WBGSD-081-0546-SD	Metals (11)	08/11/96	08/12/96	08/13/96		08/26/96	//	011
26604	WBGSD-082-0547-SD	Metals (11)	08/11/96	08/12/96	08/13/96		08/26/96	//	011
26604	WBGSD-084-0549-SD	Metals (11)	08/11/96	08/12/96	08/13/96		08/26/96	//	011
26604	WBGSD-084-0550-FD	Metals (11)	08/11/96	08/12/96	08/13/96		08/26/96	//	011
26604	WBGSD-085-0551-SD	Metals (11)	08/11/96	08/12/96	08/13/96		08/26/96	//	011
26604	WBGSD-086-0552-SD	Metals (11)	08/11/96	08/12/96	08/13/96		09/05/96	//	011
26604	WBGSD-087-0553-SD	Metals (11)	08/11/96	08/12/96	08/13/96		08/26/96	//	011
26604	WBGSD-088-0554-SD	Metals (11)	08/11/96	08/12/96	08/13/96		08/26/96	//	011
26604	WBGSD-088-0555-FD	Metals (11)	08/11/96	08/12/96	08/13/96		08/26/96	//	011
26604	WBGSD-089-0556-SD	Metals (11)	08/11/96	08/12/96	08/13/96		08/26/96	//	011
26604	WBGSD-090-0557-SD	Metals (11)	08/11/96	08/12/96	08/13/96		08/26/96	//	011
26604	WBGSD-080-0545-SD	Metals (23)	08/11/96	08/12/96	08/13/96		08/26/96	//	011
26604	WBGSD-083-0548-SD	Metals (23)	08/11/96	08/12/96	08/13/96		08/26/96	//	011
26604	LL1SD-053(P)-0061-SD	Explosives	08/11/96	08/12/96	08/13/96		09/18/96	//	011

04/21/97

\* Exceeds time limit

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Ravenna Army Ammunition Plant Phase 1 RI

Analytic Data Status Report

Laboratory: Southwest Laboratory of Oklahoma, I

SDG Number	Sample ID	Analysis	Date Collected	Date Shipped	Date Received	Date Extracted	Date Analyzed	Data Received	COC
26604	LL1SD-054(P)-0062-SD	Explosives	08/11/96	08/12/96	08/13/96		09/18/96	//	011
26604	LL1SD-055(P)-0063-SD	Explosives	08/11/96	08/12/96	08/13/96		09/18/96	//	011
26604	LL2SS-002-0089-SO	Explosives	08/11/96	08/12/96	08/13/96		09/18/96	//	011
26604	LL2SS-003-0090-SO	Explosives	08/11/96	08/12/96	08/13/96		09/17/96	//	011
26604	LL2SS-004-0091-SO	Explosives	08/11/96	08/12/96	08/13/96		09/18/96	//	011
26604	LL2SS-005-0092-SO	Explosives	08/11/96	08/12/96	08/13/96		09/18/96	//	011
26604	LL2SS-006-0093-SO	Explosives	08/11/96	08/12/96	08/13/96		09/18/96	//	011
26604	LL2SS-007-0094-SO	Explosives	08/11/96	08/12/96	08/13/96		09/17/96	//	011
26604	LL2SS-020-0110-SO	Explosives	08/11/96	08/12/96	08/13/96		09/17/96	//	011
26604	LL2SS-021-0111-SO	Explosives	08/11/96	08/12/96	08/13/96		09/17/96	//	011
26604	WBGSD-078-0543-SD	Explosives	08/11/96	08/12/96	08/13/96		09/17/96	//	011
26604	WBGSD-079-0544-SD	Explosives	08/11/96	08/12/96	08/13/96		09/17/96	//	011
26604	WBGSD-080-0545-SD	Explosives	08/11/96	08/12/96	08/13/96		09/17/96	//	011
26604	WBGSD-081-0546-SD	Explosives	08/11/96	08/12/96	08/13/96		09/17/96	//	011
26604	WBGSD-082-0547-SD	Explosives	08/11/96	08/12/96	08/13/96		09/17/96	//	011
26604	WBGSD-083-0548-SD	Explosives	08/11/96	08/12/96	08/13/96		09/17/96	//	011
26604	WBGSD-084-0549-SD	Explosives	08/11/96	08/12/96	08/13/96		09/17/96	//	011
26604	WBGSD-084-0550-FD	Explosives	08/11/96	08/12/96	08/13/96		09/17/96	//	011
26604	WBGSD-085-0551-SD	Explosives	08/11/96	08/12/96	08/13/96		09/17/96	//	011
26604	WBGSD-086-0552-SD	Explosives	08/11/96	08/12/96	08/13/96		09/17/96	//	011
26604	WBGSD-087-0553-SD	Explosives	08/11/96	08/12/96	08/13/96		09/17/96	//	011
26604	WBGSD-088-0554-SD	Explosives	08/11/96	08/12/96	08/13/96		09/17/96	//	011
26604	WBGSD-088-0555-FD	Explosives	08/11/96	08/12/96	08/13/96		09/17/96	//	011
26604	WBGSD-089-0556-SD	Explosives	08/11/96	08/12/96	08/13/96		09/17/96	//	011
26604	WBGSD-090-0557-SD	Explosives	08/11/96	08/12/96	08/13/96		09/17/96	//	011
26604	WBGSD-080-0545-SD	Pest/PCB	08/11/96	08/12/96	08/13/96	08/14/96	09/09/96	//	011
26604	WBGSD-083-0548-SD	Pest/PCB	08/11/96	08/12/96	08/13/96	08/14/96	09/09/96	//	011
26604	WBGSD-080-0545-SD	SVOC	08/11/96	08/12/96	08/13/96	08/14/96	08/27/96	//	011
26604	WBGSD-083-0548-SD	SVOC	08/11/96	08/12/96	08/13/96	08/14/96	08/28/96	//	011
26604	LL1SD-053(P)-0061-SD	TOC	08/11/96	08/12/96	08/13/96		08/26/96	//	011
26604	LL1SD-054(P)-0062-SD	TOC	08/11/96	08/12/96	08/13/96		08/26/96	//	011
26604	LL1SD-055(P)-0063-SD	TOC	08/11/96	08/12/96	08/13/96		08/26/96	//	011
26604	WBGSD-078-0543-SD	TOC	08/11/96	08/12/96	08/13/96		08/26/96	//	011
26604	WBGSD-079-0544-SD	TOC	08/11/96	08/12/96	08/13/96		08/26/96	//	011
26604	WBGSD-081-0546-SD	TOC	08/11/96	08/12/96	08/13/96		08/26/96	//	011
26604	WBGSD-082-0547-SD	TOC	08/11/96	08/12/96	08/13/96		08/26/96	//	011
26604	WBGSD-083-0548-SD	TOC	08/11/96	08/12/96	08/13/96		08/26/96	//	011
26604	WBGSD-084-0549-SD	TOC	08/11/96	08/12/96	08/13/96		08/26/96	//	011
26604	WBGSD-085-0551-SD	TOC	08/11/96	08/12/96	08/13/96		08/26/96	//	011
26604	WBGSD-086-0552-SD	TOC	08/11/96	08/12/96	08/13/96		08/26/96	//	011
26604	WBGSD-087-0553-SD	TOC	08/11/96	08/12/96	08/13/96		08/26/96	//	011
26604	WBGSD-088-0554-SD	TOC	08/11/96	08/12/96	08/13/96		08/26/96	//	011
26604	WBGSD-089-0556-SD	TOC	08/11/96	08/12/96	08/13/96		08/26/96	//	011
26604	WBGSD-090-0557-SD	TOC	08/11/96	08/12/96	08/13/96		08/26/96	//	011
26604	WBGSD-080-0545-SD	VOC	08/11/96	08/12/96	08/13/96		08/15/96	//	011
26604	WBGSD-083-0548-SD	VOC	08/11/96	08/12/96	08/13/96		08/16/96	//	011
26605	LL1SD-047(D)-0054-SD	Metals (11)	08/09/96	08/12/96	08/13/96		08/27/96	//	011
26605	LL1SD-050(D)-0058-SD	Metals (11)	08/10/96	08/12/96	08/13/96		08/27/96	//	011
26605	LL1SD-052(D)-0060-SD	Metals (11)	08/09/96	08/12/96	08/13/96		08/27/96	//	011
26605	LL1SD-058(P)-0068-SD	Metals (11)	08/11/96	08/12/96	08/13/96		08/30/96	//	011
26605	LL1SD-059(P)-0069-SD	Metals (11)	08/11/96	08/12/96	08/13/96		08/30/96	//	011
26605	LL1SD-060(P)-0070-SD	Metals (11)	08/11/96	08/12/96	08/13/96		08/30/96	//	011
26605	LL1SD-061(P)-0071-SD	Metals (11)	08/11/96	08/12/96	08/13/96		08/30/96	//	011
26605	LL1SD-062(P)-0072-SD	Metals (11)	08/11/96	08/12/96	08/13/96		08/30/96	//	011
26605	LL1SD-070(D)-0561-SD	Metals (11)	08/10/96	08/12/96	08/13/96		08/27/96	//	011
2	LL1SS-013-0014-SO	Metals (11)	08/10/96	08/12/96	08/13/96		08/27/96	//	011
2	LL2SS-001-0087-SO	Metals (11)	08/11/96	08/12/96	08/13/96		08/30/96	//	011
26605	LL2SS-001-0088-FD	Metals (11)	08/11/96	08/12/96	08/13/96		08/30/96	//	011
26605	LL2SS-017-0105-SO	Metals (11)	08/10/96	08/12/96	08/13/96		08/27/96	//	011

Ravenna Army Ammunition Plant Phase 1 RI  
Analytic Data Status Report

Laboratory: Southwest Laboratory of Oklahoma, I

SDG Number	Sample ID	Analysis	Date	Date	Date	Date	Date	Data	COC
			Collected	Shipped	Received	Extracted	Analyzed	Received	
26605	LL2SS-017-0106-FD	Metals (11)	08/10/96	08/12/96	08/13/96		08/27/96	//	011
26605	LL2SS-018-0107-SO	Metals (11)	08/10/96	08/12/96	08/13/96		08/27/96	//	011
26605	LL2SS-038-0131-SO	Metals (11)	08/10/96	08/12/96	08/13/96		08/30/96	//	011
26605	LL2SS-039-0132-SO	Metals (11)	08/10/96	08/12/96	08/13/96		08/30/96	//	011
26605	LL2SS-041(B)-0135-SO	Metals (11)	08/10/96	08/12/96	08/13/96		08/30/96	//	011
26605	LL1SS-068-0559-SO	Metals (23)	08/10/96	08/12/96	08/13/96		08/27/96	//	011
26605	LL1SS-069-0562-SO	Metals (23)	08/10/96	08/12/96	08/13/96		08/27/96	//	011
26605	LL2SD-030(D)-0122-SD	Metals (23)	08/10/96	08/12/96	08/13/96		08/30/96	//	011
26605	LL2SS-008-0095-SO	Metals (23)	08/10/96	08/12/96	08/13/96		08/27/96	//	011
26605	LL2SS-019-0108-SO	Metals (23)	08/10/96	08/12/96	08/13/96		08/27/96	//	011
26605	LL2SS-019-0109-FD	Metals (23)	08/10/96	08/12/96	08/13/96		08/30/96	//	011
26605	LL2SS-043-0137-SO	Metals (23)	08/10/96	08/12/96	08/13/96		08/30/96	//	011
26605	LL1SD-047(D)-0054-SD	Explosives	08/09/96	08/12/96	08/13/96		08/31/96	//	011
26605	LL1SD-050(D)-0058-SD	Explosives	08/10/96	08/12/96	08/13/96		08/31/96	//	011
26605	LL1SD-052(D)-0060-SD	Explosives	08/09/96	08/12/96	08/13/96		08/31/96	//	011
26605	LL1SD-058(P)-0068-SD	Explosives	08/11/96	08/12/96	08/13/96		09/01/96	//	011
26605	LL1SD-059(P)-0069-SD	Explosives	08/11/96	08/12/96	08/13/96		09/01/96	//	011
26605	LL1SD-060(P)-0070-SD	Explosives	08/11/96	08/12/96	08/13/96		09/01/96	//	011
26605	LL1SD-061(P)-0071-SD	Explosives	08/11/96	08/12/96	08/13/96		09/01/96	//	011
26605	LL1SD-062(P)-0072-SD	Explosives	08/11/96	08/12/96	08/13/96		09/01/96	//	011
26605	LL1SD-070(D)-0561-SD	Explosives	08/10/96	08/12/96	08/13/96		08/31/96	//	011
26605	LL1SS-013-0014-SO	Explosives	08/10/96	08/12/96	08/13/96		08/31/96	//	011
26605	LL1SS-045-0052-SO	Explosives	08/10/96	08/12/96	08/13/96		08/31/96	//	011
26605	LL1SS-068-0559-SO	Explosives	08/10/96	08/12/96	08/13/96		08/31/96	//	011
26605	LL1SS-069-0562-SO	Explosives	08/10/96	08/12/96	08/13/96		08/31/96	//	011
26605	LL2SD-030(D)-0122-SD	Explosives	08/10/96	08/12/96	08/13/96		09/01/96	//	011
26605	LL2SS-001-0087-SO	Explosives	08/11/96	08/12/96	08/13/96		09/01/96	//	011
26605	LL2SS-001-0088-FD	Explosives	08/11/96	08/12/96	08/13/96		09/01/96	//	011
26605	LL2SS-008-0095-SO	Explosives	08/10/96	08/12/96	08/13/96		08/31/96	//	011
26605	LL2SS-017-0105-SO	Explosives	08/10/96	08/12/96	08/13/96		08/31/96	//	011
26605	LL2SS-017-0106-FD	Explosives	08/10/96	08/12/96	08/13/96		08/31/96	//	011
26605	LL2SS-018-0107-SO	Explosives	08/10/96	08/12/96	08/13/96		09/01/96	//	011
26605	LL2SS-019-0108-SO	Explosives	08/10/96	08/12/96	08/13/96		09/01/96	//	011
26605	LL2SS-019-0109-FD	Explosives	08/10/96	08/12/96	08/13/96		09/01/96	//	011
26605	LL2SS-038-0131-SO	Explosives	08/10/96	08/12/96	08/13/96		09/01/96	//	011
26605	LL2SS-039-0132-SO	Explosives	08/10/96	08/12/96	08/13/96		09/01/96	//	011
26605	LL2SS-043-0137-SO	Explosives	08/10/96	08/12/96	08/13/96		09/01/96	//	011
26605	LL1SS-068-0559-SO	Pest/PCB	08/10/96	08/12/96	08/13/96	08/14/96	09/05/96	//	011
26605	LL1SS-069-0562-SO	Pest/PCB	08/10/96	08/12/96	08/13/96	08/14/96	09/05/96	//	011
26605	LL2SD-030(D)-0122-SD	Pest/PCB	08/10/96	08/12/96	08/13/96	08/14/96	09/05/96	//	011
26605	LL2SS-008-0095-SO	Pest/PCB	08/10/96	08/12/96	08/13/96	08/14/96	09/05/96	//	011
26605	LL2SS-019-0108-SO	Pest/PCB	08/10/96	08/12/96	08/13/96	08/14/96	09/05/96	//	011
26605	LL2SS-019-0109-FD	Pest/PCB	08/10/96	08/12/96	08/13/96	08/14/96	09/05/96	//	011
26605	LL2SS-043-0137-SO	Pest/PCB	08/10/96	08/12/96	08/13/96	08/14/96	09/05/96	//	011
26605	LL1SS-068-0559-SO	SVOC	08/10/96	08/12/96	08/13/96	08/14/96	08/27/96	//	011
26605	LL1SS-069-0562-SO	SVOC	08/10/96	08/12/96	08/13/96	08/14/96	08/27/96	//	011
26605	LL2SD-030(D)-0122-SD	SVOC	08/10/96	08/12/96	08/13/96	08/14/96	08/27/96	//	011
26605	LL2SS-008-0095-SO	SVOC	08/10/96	08/12/96	08/13/96	08/14/96	08/27/96	//	011
26605	LL2SS-019-0108-SO	SVOC	08/10/96	08/12/96	08/13/96	08/14/96	08/27/96	//	011
26605	LL2SS-019-0109-FD	SVOC	08/10/96	08/12/96	08/13/96	08/14/96	08/27/96	//	011
26605	LL2SS-043-0137-SO	SVOC	08/10/96	08/12/96	08/13/96	08/14/96	08/27/96	//	011
26605	LL1SD-047(D)-0054-SD	TOC	08/09/96	08/12/96	08/13/96		08/27/96	//	011
26605	LL1SD-050(D)-0058-SD	TOC	08/10/96	08/12/96	08/13/96		08/27/96	//	011
26605	LL1SD-052(D)-0060-SD	TOC	08/09/96	08/12/96	08/13/96		08/27/96	//	011
26605	LL1SD-058(P)-0068-SD	TOC	08/11/96	08/12/96	08/13/96		08/27/96	//	011
26605	LL1SD-059(P)-0069-SD	TOC	08/11/96	08/12/96	08/13/96		08/27/96	//	011
26605	LL1SD-060(P)-0070-SD	TOC	08/11/96	08/12/96	08/13/96		08/27/96	//	011
26605	LL1SD-061(P)-0071-SD	TOC	08/11/96	08/12/96	08/13/96		08/27/96	//	011
26605	LL1SD-062(P)-0072-SD	TOC	08/11/96	08/12/96	08/13/96		08/27/96	//	011

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\* Exceeds time limit

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## Analytic Data Status Report

Laboratory: Southwest Laboratory of Oklahoma, I

SDG Number	Sample ID	Analysis	Date Collected	Date Shipped	Date Received	Date Extracted	Date Analyzed	Data Received	COC
	LL1SS-068-0559-SO	VOC	08/10/96	08/12/96	08/13/96		08/15/96	//	011
	LL1SS-069-0562-SO	VOC	08/10/96	08/12/96	08/13/96		08/15/96	//	011
26605	LL2SD-030(D)-0122-SD	VOC	08/10/96	08/12/96	08/13/96		08/16/96	//	011
26605	LL2SS-008-0095-SO	VOC	08/10/96	08/12/96	08/13/96		08/15/96	//	011
26605	LL2SS-019-0108-SO	VOC	08/10/96	08/12/96	08/13/96		08/15/96	//	011
26605	LL2SS-019-0109-FD	VOC	08/10/96	08/12/96	08/13/96		08/15/96	//	011
26605	LL2SS-043-0137-SO	VOC	08/10/96	08/12/96	08/13/96		08/16/96	//	011
26606	LL1SD-057(P)-0067-SD	Metals (11)	08/12/96	08/12/96	08/13/96		08/29/96	//	011
26606	LL1SS-071-0558-SO	Metals (11)	08/12/96	08/12/96	08/13/96		08/29/96	//	011
26606	LL1SS-072-0560-SO	Metals (11)	08/12/90	08/12/96	08/13/96		08/29/96	//	011
26606	LL1SS-073-0563-SO	Metals (11)	08/12/96	08/12/96	08/13/96		08/29/96	//	011
26606	LL2SD-055(P)-0150-SD	Metals (11)	08/12/96	08/12/96	08/13/96		08/29/96	//	011
26606	LL2SD-055(P)-0151-FD	Metals (11)	08/12/96	08/12/96	08/13/96		08/29/96	//	011
26606	LL2SS-009-0096-SO	Metals (11)	08/12/96	08/12/96	08/13/96		08/30/96	//	011
26606	LL2SS-011-0098-SO	Metals (11)	08/12/96	08/12/96	08/13/96		08/30/96	//	011
26606	LL2SS-014-0101-SO	Metals (11)	08/12/96	08/12/96	08/13/96		08/30/96	//	011
26606	LL2SS-040(B)-0133-SO	Metals (11)	08/12/96	08/12/96	08/13/96		08/30/96	//	011
26606	LL1MW-002-0665-ER	Metals (23)	08/10/96	08/12/96	08/13/96		08/22/96	//	011
26606	LL1MW-063-0073-GW	Metals (23)	08/12/96	08/12/96	08/13/96		08/22/96	//	011
26606	LL1MW-064-0074-GW	Metals (23)	08/10/96	08/12/96	08/13/96		08/22/96	//	011
26606	LL1MW-064-0078-FD	Metals (23)	08/10/96	08/12/96	08/13/96		08/22/96	//	011
26606	LL1MW-065-0077-GW	Metals (23)	08/10/96	08/12/96	08/13/96		08/22/96	//	011
26606	LL1SD-049(D)-0056-SD	Metals (23)	08/12/96	08/12/96	08/13/96		08/30/96	//	011
26606	LL1SD-056(P)-0064-SD	Metals (23)	08/12/96	08/12/96	08/13/96		09/05/96	//	011
26606	LL1SD-056(P)-0065-FD	Metals (23)	08/12/96	08/12/96	08/13/96		09/05/96	//	011
26606	LL2SS-013-0100-SO	Metals (23)	08/12/96	08/12/96	08/13/96		08/30/96	//	011
26606	LL1MW-002-0665-ER	Explosives	08/10/96	08/16/96	08/17/96		09/17/96	//	013
26606		Explosives	08/10/96	08/12/96	08/13/96		09/17/96	//	011
	LL1MW-063-0073-GW	Explosives	08/12/96	08/12/96	08/13/96		09/17/96	//	011
26606	LL1MW-064-0074-GW	Explosives	08/10/96	08/12/96	08/13/96		09/17/96	//	011
26606	LL1MW-064-0078-FD	Explosives	08/10/96	08/12/96	08/13/96		09/17/96	//	011
26606	LL1MW-065-0077-GW	Explosives	08/10/96	08/12/96	08/13/96		09/17/96	//	011
26606	LL1SD-049(D)-0056-SD	Explosives	08/12/96	08/12/96	08/13/96		09/18/96	//	011
26606	LL1SD-056(P)-0064-SD	Explosives	08/12/96	08/12/96	08/13/96		09/18/96	//	011
26606	LL1SD-056(P)-0065-FD	Explosives	08/12/96	08/12/96	08/13/96		09/18/96	//	011
26606	LL1SD-057(P)-0067-SD	Explosives	08/12/96	08/12/96	08/13/96		09/18/96	//	011
26606	LL1SS-071-0558-SO	Explosives	08/12/96	08/12/96	08/13/96		09/18/96	//	011
26606	LL1SS-072-0560-SO	Explosives	08/12/90	08/12/96	08/13/96		09/18/96	//	011
26606	LL1SS-073-0563-SO	Explosives	08/12/96	08/12/96	08/13/96		09/18/96	//	011
26606	LL2SD-055(P)-0150-SD	Explosives	08/12/96	08/12/96	08/13/96		09/18/96	//	011
26606	LL2SD-055(P)-0151-FD	Explosives	08/12/96	08/12/96	08/13/96		09/18/96	//	011
26606	LL2SS-009-0096-SO	Explosives	08/12/96	08/12/96	08/13/96		09/18/96	//	011
26606	LL2SS-011-0098-SO	Explosives	08/12/96	08/12/96	08/13/96		09/18/96	//	011
26606	LL2SS-013-0100-SO	Explosives	08/12/96	08/12/96	08/13/96		09/18/96	//	011
26606	LL2SS-014-0101-SO	Explosives	08/12/96	08/12/96	08/13/96		09/18/96	//	011
26606	LL1MW-002-0665-ER	Pest/PCB	08/10/96	08/12/96	08/13/96	08/14/96	08/31/96	//	011
26606	LL1MW-063-0073-GW	Pest/PCB	08/12/96	08/12/96	08/13/96	08/14/96	08/31/96	//	011
26606	LL1MW-064-0074-GW	Pest/PCB	08/10/96	08/12/96	08/13/96	08/14/96	08/31/96	//	011
26606	LL1MW-064-0078-FD	Pest/PCB	08/10/96	08/12/96	08/13/96	08/14/96	08/31/96	//	011
26606	LL1MW-065-0077-GW	Pest/PCB	08/10/96	08/12/96	08/13/96	08/14/96	08/31/96	//	011
26606	LL1SD-049(D)-0056-SD	Pest/PCB	08/12/96	08/12/96	08/13/96	08/14/96	09/01/96	//	011
26606	LL1SD-056(P)-0064-SD	Pest/PCB	08/12/96	08/12/96	08/13/96	08/14/96	09/03/96	//	011
26606	LL1SD-056(P)-0065-FD	Pest/PCB	08/12/96	08/12/96	08/13/96	08/14/96	09/04/96	//	011
26606	LL2SS-013-0100-SO	Pest/PCB	08/12/96	08/12/96	08/13/96	08/14/96	09/01/96	//	011
26606	LL1MW-002-0665-ER	SVOC	08/10/96	08/12/96	08/13/96	08/14/96	08/22/96	//	011
26606	LL1MW-063-0073-GW	SVOC	08/12/96	08/12/96	08/13/96	08/14/96	08/22/96	//	011
26606	LL1MW-064-0074-GW	SVOC	08/10/96	08/12/96	08/13/96	08/14/96	08/22/96	//	011
26606	LL1MW-064-0078-FD	SVOC	08/10/96	08/12/96	08/13/96	08/14/96	08/22/96	//	011
26606	LL1MW-065-0077-GW	SVOC	08/10/96	08/12/96	08/13/96	08/14/96	08/22/96	//	011

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\* Exceeds time limit

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Ravenna Army Ammunition Plant Phase 1 RI  
Analytic Data Status Report

Laboratory: Southwest Laboratory of Oklahoma, I

SDG Number	Sample ID	Analysis	Date Collected	Date Shipped	Date Received	Date Extracted	Date Analyzed	Data Received	COC
26606	LL1SD-049(D)-0056-SD	SVOC	08/12/96	08/12/96	08/13/96	08/14/96	08/23/96	//	011
26606	LL1SD-056(P)-0064-SD	SVOC	08/12/96	08/12/96	08/13/96	08/14/96	08/22/96	//	011
26606	LL1SD-056(P)-0065-FD	SVOC	08/12/96	08/12/96	08/13/96	08/14/96	08/22/96	//	011
26606	LL2SS-013-0100-SO	SVOC	08/12/96	08/12/96	08/13/96	08/14/96	08/22/96	//	011
26606	LL1SD-049(D)-0056-SD	TOC	08/12/96	08/12/96	08/13/96		08/27/96	//	011
26606	LL1SD-056(P)-0064-SD	TOC	08/12/96	08/12/96	08/13/96		08/27/96	//	011
26606	LL1SD-056(P)-0065-FD	TOC	08/12/96	08/12/96	08/13/96		08/27/96	//	011
26606	LL1SD-057(P)-0067-SD	TOC	08/12/96	08/12/96	08/13/96		08/27/96	//	011
26606	LL2SD-055(P)-0150-SD	TOC	08/12/96	08/12/96	08/13/96		08/27/96	//	011
26606	LL2SD-055(P)-0151-FD	TOC	08/12/96	08/12/96	08/13/96		08/27/96	//	011
26606	LL1MW-001-0079-TB	VOC	08/10/96	08/12/96	08/13/96		08/22/96	//	011
26606	LL1MW-002-0080-TB	VOC	08/12/96	08/12/96	08/13/96		08/23/96	//	011
26606	LL1MW-002-0665-ER	VOC	08/10/96	08/12/96	08/13/96		08/22/96	//	011
26606	LL1MW-063-0073-GW	VOC	08/12/96	08/12/96	08/13/96		08/23/96	//	011
26606	LL1MW-064-0074-GW	VOC	08/10/96	08/12/96	08/13/96		08/22/96	//	011
26606	LL1MW-064-0078-FD	VOC	08/10/96	08/12/96	08/13/96		08/23/96	//	011
26606	LL1MW-065-0077-GW	VOC	08/10/96	08/12/96	08/13/96		08/22/96	//	011
26606	LL1SD-049(D)-0056-SD	VOC	08/12/96	08/12/96	08/13/96		08/16/96	//	011
26606	LL1SD-056(P)-0064-SD	VOC	08/12/96	08/12/96	08/13/96		08/20/96	//	011
26606	LL1SD-056(P)-0065-FD	VOC	08/12/96	08/12/96	08/13/96		08/16/96	//	011
26606	LL2SS-013-0100-SO	VOC	08/12/96	08/12/96	08/13/96		08/16/96	//	011
26617	LL2SD-053(P)-0148-SD	Metals (11)	08/12/96	08/13/96	08/14/96		08/31/96	//	012
26617	LL2SD-054(P)-0149-SD	Metals (11)	08/12/96	08/13/96	08/14/96		08/31/96	//	012
26617	LL2SS-010-0097-SO	Metals (11)	08/13/96	08/13/96	08/14/96		08/31/96	//	012
26617	LL2SS-012-0099-SO	Metals (11)	08/13/96	08/13/96	08/14/96		08/31/96	//	012
26617	LL2SS-015-0102-SO	Metals (11)	08/13/96	08/13/96	08/14/96		08/31/96	//	012
26617	LL2SS-015-0103-FD	Metals (11)	08/13/96	08/13/96	08/14/96		08/31/96	//	012
26617	LL2SS-022-0112-SO	Metals (11)	08/12/96	08/13/96	08/14/96		08/31/96	//	012
26617	LL2SS-044-0138-SO	Metals (11)	08/12/96	08/13/96	08/14/96		08/31/96	//	012
26617	LL4SS-062-0595-SO	Metals (11)	08/12/96	08/13/96	08/14/96		08/31/96	//	012
26617	LNWSD-016(P)-0435-SD	Metals (11)	08/13/96	08/13/96	08/14/96		08/31/96	//	012
26617	LNWSD-023(P)-0670-SD	Metals (11)	08/13/96	08/13/96	08/14/96		08/31/96	//	012
26617	WBGSS-053-0513-SO	Metals (11)	08/13/96	08/13/96	08/14/96		08/31/96	//	012
26617	LL1SS-074-0671-SO	Metals (23)	08/13/96	08/13/96	08/14/96		08/31/96	//	012
26617	LL2SD-052(P)-0147-SD	Metals (23)	08/12/96	08/13/96	08/14/96		08/31/96	//	012
26617	LL4SS-063-0208-SO	Metals (23)	08/12/96	08/13/96	08/14/96		08/31/96	//	012
26617	LL1SS-074-0671-SO	Explosives	08/13/96	08/13/96	08/14/96		09/20/96	//	012
26617	LL2SD-052(P)-0147-SD	Explosives	08/12/96	08/13/96	08/14/96		09/20/96	//	012
26617	LL2SD-053(P)-0148-SD	Explosives	08/12/96	08/13/96	08/14/96		09/20/96	//	012
26617	LL2SD-054(P)-0149-SD	Explosives	08/12/96	08/13/96	08/14/96		09/20/96	//	012
26617	LL2SS-010-0097-SO	Explosives	08/13/96	08/13/96	08/14/96		09/20/96	//	012
26617	LL2SS-012-0099-SO	Explosives	08/13/96	08/13/96	08/14/96		09/20/96	//	012
26617	LL2SS-015-0102-SO	Explosives	08/13/96	08/13/96	08/14/96		09/20/96	//	012
26617	LL2SS-015-0103-FD	Explosives	08/13/96	08/13/96	08/14/96		09/20/96	//	012
26617	LL2SS-022-0112-SO	Explosives	08/12/96	08/13/96	08/14/96		09/20/96	//	012
26617	LL2SS-044-0138-SO	Explosives	08/12/96	08/13/96	08/14/96		09/28/96*(45)	//	012
26617	LL4SS-062-0595-SO	Explosives	08/12/96	08/13/96	08/14/96		09/20/96	//	012
26617	LL4SS-063-0208-SO	Explosives	08/12/96	08/13/96	08/14/96		09/20/96	//	012
26617	LNWSD-016(P)-0435-SD	Explosives	08/13/96	08/13/96	08/14/96		09/20/96	//	012
26617	LNWSD-023(P)-0670-SD	Explosives	08/13/96	08/13/96	08/14/96		09/20/96	//	012
26617	WBGSS-053-0513-SO	Explosives	08/13/96	08/13/96	08/14/96		09/20/96	//	012
26617	LL1SS-074-0671-SO	Pest/PCB	08/13/96	08/13/96	08/14/96	08/14/96	09/09/96	//	012
26617	LL2SD-052(P)-0147-SD	Pest/PCB	08/12/96	08/13/96	08/14/96	08/14/96	09/09/96	//	012
26617	LL4SS-063-0208-SO	Pest/PCB	08/12/96	08/13/96	08/14/96	08/14/96	09/09/96	//	012
26617	LL1SS-074-0671-SO	SVOC	08/13/96	08/13/96	08/14/96	08/14/96	08/23/96	//	012
26617	LL2SD-052(P)-0147-SD	SVOC	08/12/96	08/13/96	08/14/96	08/14/96	08/26/96	//	012
26617	LL4SS-063-0208-SO	SVOC	08/12/96	08/13/96	08/14/96	08/14/96	08/26/96	//	012
26617	LL2SD-052(P)-0147-SD	TOC	08/12/96	08/13/96	08/14/96		08/27/96	//	012
26617	LL2SD-053(P)-0148-SD	TOC	08/12/96	08/13/96	08/14/96		08/27/96	//	012

**Ravenna Army Ammunition Plant Phase 1 RI  
Analytic Data Status Report**

Laboratory: Southwest Laboratory of Oklahoma, I

SDG Number	Sample ID	Analysis	Date Collected	Date Shipped	Date Received	Date Extracted	Date Analyzed	Data Received	COC
	LL2SD-054(P)-0149-SD	TOC	08/12/96	08/13/96	08/14/96		08/27/96	//	012
26617	LNWSD-016(P)-0435-SD	TOC	08/13/96	08/13/96	08/14/96		08/27/96	//	012
26617	LNWSD-023(P)-0670-SD	TOC	08/13/96	08/13/96	08/14/96		08/27/96	//	012
26617	LL1SS-074-0671-SO	VOC	08/13/96	08/13/96	08/14/96		08/21/96	//	012
26617	LL2SD-052(P)-0147-SD	VOC	08/12/96	08/13/96	08/14/96		08/20/96	//	012
26617	LL4SS-063-0208-SO	VOC	08/12/96	08/13/96	08/14/96		08/16/96	//	012
26617		VOC	08/12/96	08/13/96	08/14/96		08/20/96	//	012
26640	L12SD-051(P)-0363-SD	Metals (11)	08/13/96	08/16/96	08/17/96		08/31/96	//	013
26640	L12SD-051(P)-0364-FD	Metals (11)	08/13/96	08/16/96	08/17/96		08/31/96	//	013
26640		Metals (11)	08/13/96	08/12/96	08/13/96		08/31/96	//	011
26640	L12SD-052(P)-0366-SD	Metals (11)	08/13/96	08/16/96	08/17/96		08/31/96	//	013
26640	LL2SS-016-0104-SO	Metals (11)	08/13/96	08/16/96	08/17/96		08/31/96	//	013
26640	LL2SS-045-0139-SO	Metals (11)	08/13/96	08/16/96	08/17/96		08/31/96	//	013
26640	LL4SD-053(P)-0290-SD	Metals (11)	08/14/96	08/16/96	08/17/96		08/31/96	//	013
26640	LL4SD-053(P)-0291-FD	Metals (11)	08/14/96	08/16/96	08/17/96		08/31/96	//	013
26640	LL4SD-054(P)-0293-SD	Metals (11)	08/14/96	08/16/96	08/17/96		08/31/96	//	013
26640	LL4SD-055(P)-0294-SD	Metals (11)	08/14/96	08/16/96	08/17/96		08/31/96	//	013
26640	LL4SS-064-0677-SO	Metals (11)	08/14/96	08/16/96	08/17/96		08/31/96	//	013
26640	LL4SS-065-0678-SO	Metals (11)	08/14/96	08/16/96	08/17/96		08/31/96	//	013
26640	LL4SS-066-0679-SO	Metals (11)	08/14/96	08/16/96	08/17/96		08/31/96	//	013
26640	WBGSS-077-0542-SO	Metals (11)	08/13/96	08/16/96	08/17/96		08/31/96	//	013
26640	WBGSS-097-0564-SO	Metals (11)	08/13/96	08/16/96	08/17/96		08/31/96	//	013
26640	WBGSS-098-0565-SO	Metals (11)	08/14/96	08/16/96	08/17/96		08/31/96	//	013
26640		Metals (11)	08/14/96	08/16/96	08/17/96		08/31/96	//	013
26640	WBGSS-098-0566-FD	Metals (11)	08/14/96	08/16/96	08/17/96		08/31/96	//	013
26640	L12SD-053(P)-0367-SD	Metals (23)	08/13/96	08/16/96	08/17/96		08/31/96	//	013
26640	LL2SS-061-0675-SO	Metals (23)	08/14/96	08/16/96	08/17/96		08/31/96	//	013
26640	LL4SD-052(P)-0289-SD	Metals (23)	08/14/96	08/16/96	08/17/96		08/31/96	//	013
26640	L12SD-051(P)-0363-SD	Explosives	08/13/96	08/16/96	08/17/96		09/20/96	//	013
26640	L12SD-051(P)-0364-FD	Explosives	08/13/96	08/12/96	08/13/96		09/20/96	//	011
26640		Explosives	08/13/96	08/16/96	08/17/96		09/20/96	//	013
26640	L12SD-052(P)-0366-SD	Explosives	08/13/96	08/16/96	08/17/96		09/20/96	//	013
26640	L12SD-053(P)-0367-SD	Explosives	08/13/96	08/16/96	08/17/96		09/20/96	//	013
26640	LL2SS-016-0104-SO	Explosives	08/13/96	08/16/96	08/17/96		09/20/96	//	013
26640	LL2SS-045-0139-SO	Explosives	08/13/96	08/16/96	08/17/96		09/20/96	//	013
26640	LL2SS-061-0675-SO	Explosives	08/14/96	08/16/96	08/17/96		09/20/96	//	013
26640	LL4SD-052(P)-0289-SD	Explosives	08/14/96	08/16/96	08/17/96		09/21/96	//	013
26640	LL4SD-053(P)-0290-SD	Explosives	08/14/96	08/16/96	08/17/96		09/21/96	//	013
26640	LL4SD-053(P)-0291-FD	Explosives	08/14/96	08/16/96	08/17/96		09/21/96	//	013
26640	LL4SD-054(P)-0293-SD	Explosives	08/14/96	08/16/96	08/17/96		09/21/96	//	013
26640	LL4SD-055(P)-0294-SD	Explosives	08/14/96	08/16/96	08/17/96		09/21/96	//	013
26640	LL4SS-064-0677-SO	Explosives	08/14/96	08/16/96	08/17/96		09/21/96	//	013
26640	LL4SS-065-0678-SO	Explosives	08/14/96	08/16/96	08/17/96		09/21/96	//	013
26640	LL4SS-066-0679-SO	Explosives	08/14/96	08/16/96	08/17/96		09/21/96	//	013
26640	WBGSS-077-0542-SO	Explosives	08/13/96	08/16/96	08/17/96		09/20/96	//	013
26640	WBGSS-097-0564-SO	Explosives	08/13/96	08/16/96	08/17/96		09/20/96	//	013
26640	WBGSS-098-0565-SO	Explosives	08/14/96	08/16/96	08/17/96		09/21/96	//	013
26640		Explosives	08/14/96	08/16/96	08/17/96		09/21/96	//	013
26640	WBGSS-098-0566-FD	Explosives	08/14/96	08/16/96	08/17/96		09/21/96	//	013
26640	L12SD-053(P)-0367-SD	Pest/PCB	08/13/96	08/16/96	08/17/96	08/16/96	09/16/96	//	013
26640	LL2SS-061-0675-SO	Pest/PCB	08/14/96	08/16/96	08/17/96	08/16/96	09/16/96	//	013
26640	LL4SD-052(P)-0289-SD	Pest/PCB	08/14/96	08/16/96	08/17/96	08/16/96	09/16/96	//	013
26640	L12SD-053(P)-0367-SD	SVOC	08/13/96	08/16/96	08/17/96	08/16/96	08/26/96	//	013
26640	LL2SS-061-0675-SO	SVOC	08/14/96	08/16/96	08/17/96	08/16/96	08/26/96	//	013
26640	LL4SD-052(P)-0289-SD	SVOC	08/14/96	08/16/96	08/17/96	08/16/96	08/26/96	//	013
26640	L12SD-051(P)-0363-SD	TOC	08/13/96	08/16/96	08/17/96		08/27/96	//	013
26640	L12SD-051(P)-0364-FD	TOC	08/13/96	08/16/96	08/17/96		08/27/96	//	013
26640	L12SD-052(P)-0366-SD	TOC	08/13/96	08/16/96	08/17/96		08/27/96	//	013
26640	L12SD-053(P)-0367-SD	TOC	08/13/96	08/16/96	08/17/96		08/27/96	//	013

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SDG Number	Sample ID	Analysis	Date Collected	Date Shipped	Date Received	Date Extracted	Date Analyzed	Data Received	COC
26640	LL4SD-052(P)-0289-SD	TOC	08/14/96	08/16/96	08/17/96		08/27/96	//	013
26640	LL4SD-053(P)-0290-SD	TOC	08/14/96	08/16/96	08/17/96		08/27/96	//	013
26640	LL4SD-053(P)-0291-FD	TOC	08/14/96	08/16/96	08/17/96		08/27/96	//	013
26640	LL4SD-054(P)-0293-SD	TOC	08/14/96	08/16/96	08/17/96		08/27/96	//	013
26640	LL4SD-055(P)-0294-SD	TOC	08/14/96	08/16/96	08/17/96		08/27/96	//	013
26640	L12SD-053(P)-0367-SD	VOC	08/13/96	08/16/96	08/17/96		08/21/96	//	013
26640	LL4SD-052(P)-0289-SD	VOC	08/14/96	08/16/96	08/17/96		08/21/96	//	013
26640	WBGSS-004-0672-SO	VOC	08/13/96	08/16/96	08/17/96		08/16/96	//	013
26640	WBGSS-030-0673-SO	VOC	08/13/96	08/16/96	08/17/96		08/16/96	//	013
26640	WBGSS-057-0674-SO	VOC	08/13/96	08/16/96	08/17/96		08/16/96	//	013
26669	CPCSD-006(P)-0655-SD	Metals (11)	08/19/96	08/19/96	08/20/96		09/05/96	//	014
26669	CPCSD-008(P)-0659-SD	Metals (11)	08/19/96	08/19/96	08/20/96		09/05/96	//	014
26669	CPCSD-009(P)-0660-SD	Metals (11)	08/19/96	08/19/96	08/20/96		09/05/96	//	014
26669	CPCSD-010(P)-0661-SD	Metals (11)	08/19/96	08/19/96	08/20/96		09/05/96	//	014
26669	CPCSD-007(P)-0656-SD	Metals (23)	08/19/96	08/19/96	08/20/96		09/05/96	//	014
26669	CPCSD-007(P)-0657-FD	Metals (23)	08/19/96	08/19/96	08/20/96		09/05/96	//	014
26669	LL2MW-059-0667-GW	Metals (23)	08/19/96	08/19/96	08/20/96		09/02/96	//	014
26669	CPCSD-006(P)-0655-SD	Explosives	08/19/96	08/19/96	08/20/96		09/21/96	//	014
26669	CPCSD-007(P)-0656-SD	Explosives	08/19/96	08/19/96	08/20/96		09/21/96	//	014
26669	CPCSD-007(P)-0657-FD	Explosives	08/19/96	08/19/96	08/20/96		09/21/96	//	014
26669	CPCSD-008(P)-0659-SD	Explosives	08/19/96	08/19/96	08/20/96		09/21/96	//	014
26669	CPCSD-009(P)-0660-SD	Explosives	08/19/96	08/19/96	08/20/96		09/21/96	//	014
26669	CPCSD-010(P)-0661-SD	Explosives	08/19/96	08/19/96	08/20/96		09/21/96	//	014
26669	LL2MW-059-0667-GW	Explosives	08/19/96	08/19/96	08/20/96		09/17/96	//	014
26669	CPCSD-007(P)-0656-SD	Pest/PCB	08/19/96	08/19/96	08/20/96	08/21/96	09/14/96	//	014
26669	CPCSD-007(P)-0657-FD	Pest/PCB	08/19/96	08/19/96	08/20/96	08/21/96	09/14/96	//	014
26669	LL2MW-059-0667-GW	Pest/PCB	08/19/96	08/19/96	08/20/96	08/21/96	09/12/96	//	014
26669	CPCSD-007(P)-0656-SD	SVOC	08/19/96	08/19/96	08/20/96	08/21/96	08/29/96	//	014
26669	CPCSD-007(P)-0657-FD	SVOC	08/19/96	08/19/96	08/20/96	08/21/96	08/29/96	//	014
26669	LL2MW-059-0667-GW	SVOC	08/19/96	08/19/96	08/20/96	08/21/96	08/28/96	//	014
26669	CPCSD-006(P)-0655-SD	TOC	08/19/96	08/19/96	08/20/96		08/30/96	//	014
26669	CPCSD-007(P)-0656-SD	TOC	08/19/96	08/19/96	08/20/96		08/30/96	//	014
26669	CPCSD-007(P)-0657-FD	TOC	08/19/96	08/19/96	08/20/96		08/30/96	//	014
26669	CPCSD-008(P)-0659-SD	TOC	08/19/96	08/19/96	08/20/96		08/30/96	//	014
26669	CPCSD-009(P)-0660-SD	TOC	08/19/96	08/19/96	08/20/96		08/30/96	//	014
26669	CPCSD-010(P)-0661-SD	TOC	08/19/96	08/19/96	08/20/96		08/30/96	//	014
26669	CPCSD-007(P)-0656-SD	VOC	08/19/96	08/19/96	08/20/96		08/21/96	//	014
26669	CPCSD-007(P)-0657-FD	VOC	08/19/96	08/19/96	08/20/96		08/21/96	//	014
26669	LL2MW-001-0156-TB	VOC	08/19/96	08/19/96	08/20/96		08/23/96	//	014
26669	LL2MW-059-0667-GW	VOC	08/19/96	08/19/96	08/20/96		08/23/96	//	014
26686	CPCSD-001(P)-0650-SD	Metals (11)	08/19/96	08/20/96	08/21/96		09/05/96	//	015
26686	CPCSD-002(P)-0651-SD	Metals (11)	08/19/96	08/20/96	08/21/96		09/05/96	//	015
26686	CPCSD-003(P)-0652-SD	Metals (11)	08/19/96	08/20/96	08/21/96		09/05/96	//	015
26686	CPCSD-004(P)-0653-SD	Metals (11)	08/19/96	08/20/96	08/21/96		09/05/96	//	015
26686	CPCSD-005(P)-0654-SD	Metals (11)	08/19/96	08/20/96	08/21/96		09/05/96	//	015
26686	L12SS-047-0359-SO	Metals (11)	08/20/96	08/20/96	08/21/96		09/05/96	//	015
26686	L12SS-050-0362-SO	Metals (11)	08/20/96	08/20/96	08/21/96		09/05/96	//	015
26686	LL2SD-047(D)-0141-SD	Metals (11)	08/20/96	08/20/96	08/21/96		09/05/96	//	015
26686	LL2SD-049(D)-0144-SD	Metals (11)	08/20/96	08/20/96	08/21/96		09/05/96	//	015
26686	LL2SD-050(D)-0145-SD	Metals (11)	08/20/96	08/20/96	08/21/96		09/05/96	//	015
26686	LL3SD-042-0209-SD	Metals (11)	08/20/96	08/20/96	08/21/96		09/05/96	//	015
26686	LL2MW-060-0668-GW	Metals (23)	08/19/96	08/20/96	08/21/96		09/01/96	//	015
26686	LL2SD-048(D)-0142-SD	Metals (23)	08/20/96	08/20/96	08/21/96		09/05/96	//	015
26686	LL3SS-043-0210-SO	Metals (23)	08/20/96	08/20/96	08/21/96		09/05/96	//	015
26686	CPCSD-001(P)-0650-SD	Explosives	08/19/96	08/20/96	08/21/96		09/23/96	//	015
26686	CPCSD-002(P)-0651-SD	Explosives	08/19/96	08/20/96	08/21/96		09/23/96	//	015
26686	CPCSD-003(P)-0652-SD	Explosives	08/19/96	08/20/96	08/21/96		09/23/96	//	015
26686	CPCSD-004(P)-0653-SD	Explosives	08/19/96	08/20/96	08/21/96		09/24/96	//	015
26686	CPCSD-005(P)-0654-SD	Explosives	08/19/96	08/20/96	08/21/96		09/24/96	//	015

\* Exceeds time limit

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SDG Number	Sample ID	Analysis	Date Collected	Date Shipped	Date Received	Date Extracted	Date Analyzed	Data Received	COC
26686	LI2SS-047-0359-SO	Explosives	08/20/96	08/20/96	08/21/96		09/24/96	//	015
26686	LI2SS-050-0362-SO	Explosives	08/20/96	08/20/96	08/21/96		09/24/96	//	015
26686	LL2MW-060-0668-GW	Explosives	08/19/96	08/20/96	08/21/96		09/18/96	//	015
26686	LL2SD-047(D)-0141-SD	Explosives	08/20/96	08/20/96	08/21/96		09/24/96	//	015
26686	LL2SD-048(D)-0142-SD	Explosives	08/20/96	08/20/96	08/21/96		09/24/96	//	015
26686	LL2SD-049(D)-0144-SD	Explosives	08/20/96	08/20/96	08/21/96		09/24/96	//	015
26686	LL2SD-050(D)-0145-SD	Explosives	08/20/96	08/20/96	08/21/96		09/24/96	//	015
26686	LL3SD-042-0209-SD	Explosives	08/20/96	08/20/96	08/21/96		09/24/96	//	015
26686	LL3SS-043-0210-SO	Explosives	08/20/96	08/20/96	08/21/96		09/24/96	//	015
26686	LL2MW-060-0668-GW	Pest/PCB	08/19/96	08/20/96	08/21/96	08/22/96	09/13/96	//	015
26686	LL2SD-048(D)-0142-SD	Pest/PCB	08/20/96	08/20/96	08/21/96	08/22/96	09/17/96	//	015
26686	LL3SS-043-0210-SO	Pest/PCB	08/20/96	08/20/96	08/21/96	08/22/96	09/17/96	//	015
26686	LL2MW-060-0668-GW	SVOC	08/19/96	08/20/96	08/21/96	08/22/96	08/30/96	//	015
26686	LL2SD-048(D)-0142-SD	SVOC	08/20/96	08/20/96	08/21/96	08/22/96	08/28/96	//	015
26686	LL3SS-043-0210-SO	SVOC	08/20/96	08/20/96	08/21/96	08/22/96	08/28/96	//	015
26686	CPCSD-001(P)-0650-SD	TOC	08/19/96	08/20/96	08/21/96		09/09/96	//	015
26686	CPCSD-002(P)-0651-SD	TOC	08/19/96	08/20/96	08/21/96		09/09/96	//	015
26686	CPCSD-003(P)-0652-SD	TOC	08/19/96	08/20/96	08/21/96		09/09/96	//	015
26686	CPCSD-004(P)-0653-SD	TOC	08/19/96	08/20/96	08/21/96		09/09/96	//	015
26686	CPCSD-005(P)-0654-SD	TOC	08/19/96	08/20/96	08/21/96		09/09/96	//	015
26686	LL2SD-047(D)-0141-SD	TOC	08/20/96	08/20/96	08/21/96		09/09/96	//	015
26686	LL2SD-048(D)-0142-SD	TOC	08/20/96	08/20/96	08/21/96		09/09/96	//	015
26686	LL2SD-049(D)-0144-SD	TOC	08/20/96	08/20/96	08/21/96		09/09/96	//	015
26686	LL2SD-050(D)-0145-SD	TOC	08/20/96	08/20/96	08/21/96		09/09/96	//	015
26686	LL2MW-003-0158-TB	VOC	08/19/96	08/20/96	08/21/96		08/26/96	//	015
26686	LL2MW-060-0668-GW	VOC	08/19/96	08/20/96	08/21/96		08/23/96	//	015
26686	LL2SD-048(D)-0142-SD	VOC	08/20/96	08/20/96	08/21/96		08/27/96	//	015
26701	LI2SS-049-0361-SO	Metals (11)	08/21/96	08/21/96	08/22/96		10/01/96	//	016
26701	LL1SD-076(D)-0684-SD	Metals (11)	08/21/96	08/21/96	08/22/96		10/01/96	//	016
26701	LL1SD-077(D)-0685-SD	Metals (11)	08/21/96	08/21/96	08/22/96		10/01/96	//	016
26701	LL1SS-075-0680-SO	Metals (11)	08/20/96	08/21/96	08/22/96		10/01/96	//	016
26701	LL2SD-046(D)-0140-SD	Metals (11)	08/20/96	08/21/96	08/22/96		10/01/96	//	016
26701	LL2SD-051(D)-0146-SD	Metals (11)	08/20/96	08/21/96	08/22/96		10/01/96	//	016
26701	LL4SS-067-0679-SO	Metals (11)	08/20/96	08/21/96	08/22/96		09/29/96	//	016
26701	DCNAR-001-0686-CS	Metals (23)	08/22/96	08/22/96	08/23/96		09/02/96	//	017
26701	DCNWR-002-0687-CS	Metals (23)	08/22/96	08/22/96	08/23/96		09/02/96	//	017
26701	DCNWR-003-0688-CS	Metals (23)	08/22/96	08/22/96	08/23/96		09/02/96	//	017
26701	LL1MW-067-0669-GW	Metals (23)	08/21/96	08/22/96	08/23/96		09/02/96	//	017
26701	LL2SS-062-0681-SO	Metals (23)	08/20/96	08/21/96	08/22/96		09/04/96	//	016
26701	LL2SS-063-0683-SO	Metals (23)	08/21/96	08/21/96	08/22/96		09/04/96	//	016
26701	DCNAR-001-0686-CS	Explosives	08/22/96	08/22/96	08/23/96		09/18/96	//	017
26701	DCNWR-002-0687-CS	Explosives	08/22/96	08/22/96	08/23/96		09/18/96	//	017
26701	DCNWR-003-0688-CS	Explosives	08/22/96	08/22/96	08/23/96		09/18/96	//	017
26701	LI2SS-049-0361-SO	Explosives	08/21/96	08/21/96	08/22/96		09/27/96	//	016
26701	LL1MW-067-0669-GW	Explosives	08/21/96	08/22/96	08/23/96		09/18/96	//	017
26701	LL1SD-076(D)-0684-SD	Explosives	08/21/96	08/21/96	08/22/96		09/27/96	//	016
26701	LL1SD-077(D)-0685-SD	Explosives	08/21/96	08/21/96	08/22/96		09/27/96	//	016
26701	LL1SS-075-0680-SO	Explosives	08/20/96	08/21/96	08/22/96		09/27/96	//	016
26701	LL2SD-046(D)-0140-SD	Explosives	08/20/96	08/21/96	08/22/96		09/27/96	//	016
26701	LL2SD-051(D)-0146-SD	Explosives	08/20/96	08/21/96	08/22/96		09/27/96	//	016
26701	LL2SS-062-0681-SO	Explosives	08/20/96	08/21/96	08/22/96		09/27/96	//	016
26701	LL2SS-063-0683-SO	Explosives	08/21/96	08/21/96	08/22/96		09/27/96	//	016
26701	LL4SS-067-0679-SO	Explosives	08/20/96	08/21/96	08/22/96		09/27/96	//	016
26701	DCNAR-001-0686-CS	Pest/PCB	08/22/96	08/22/96	08/23/96	08/26/96	09/15/96	//	017
26701	DCNWR-002-0687-CS	Pest/PCB	08/22/96	08/22/96	08/23/96	08/26/96	09/18/96	//	017
26701	DCNWR-003-0688-CS	Pest/PCB	08/22/96	08/22/96	08/23/96	08/26/96	09/18/96	//	017
26701	LL1MW-067-0669-GW	Pest/PCB	08/21/96	08/22/96	08/23/96	08/26/96	09/15/96	//	017
26701	LL2SS-062-0681-SO	Pest/PCB	08/20/96	08/21/96	08/22/96	08/27/96	09/17/96	//	016
26701	LL2SS-063-0683-SO	Pest/PCB	08/21/96	08/21/96	08/22/96	08/27/96	09/17/96	//	016

04/21/97

\* Exceeds time limit

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**Ravenna Army Ammunition Plant Phase 1 RI  
Analytic Data Status Report**

Laboratory: Southwest Laboratory of Oklahoma, I

SDG Number	Sample ID	Analysis	Date Collected	Date Shipped	Date Received	Date Extracted	Date Analyzed	Data Received	COC
26701	DCNAR-001-0686-CS	SVOC	08/22/96	08/22/96	08/23/96	08/25/96	09/05/96	//	017
26701	DCNWR-002-0687-CS	SVOC	08/22/96	08/22/96	08/23/96	08/25/96	09/05/96	//	017
26701	DCNWR-003-0688-CS	SVOC	08/22/96	08/22/96	08/23/96	08/25/96	09/05/96	//	017
26701	LL1MW-067-0669-GW	SVOC	08/21/96	08/22/96	08/23/96	08/25/96	09/05/96	//	017
26701	LL2SS-062-0681-SO	SVOC	08/20/96	08/21/96	08/22/96	08/27/96	09/04/96	//	016
26701	LL2SS-063-0683-SO	SVOC	08/21/96	08/21/96	08/22/96	08/27/96	09/04/96	//	016
26701	LL2SD-046(D)-0140-SD	TOC	08/20/96	08/21/96	08/22/96		09/09/96	//	016
26701	LL2SD-051(D)-0146-SD	TOC	08/20/96	08/21/96	08/22/96		09/09/96	//	016
26701	DCNAR-001-0686-CS	VOC	08/22/96	08/22/96	08/23/96		08/26/96	//	017
26701	DCNWR-002-0687-CS	VOC	08/22/96	08/22/96	08/23/96		08/26/96	//	017
26701	DCNWR-003-0688-CS	VOC	08/22/96	08/22/96	08/23/96		08/26/96	//	017
26701	LL1MW-067-0669-GW	VOC	08/21/96	08/22/96	08/23/96		08/26/96	//	017
26701	LL2MW-004-0159-TB	VOC	08/21/96	08/22/96	08/23/96		08/26/96	//	017
26701	LL2SS-062-0681-SO	VOC	08/20/96	08/21/96	08/22/96		08/27/96	//	016
26701	LL2SS-063-0683-SO	VOC	08/21/96	08/21/96	08/22/96		08/27/96	//	016