APPENDIX G

QUALITY ASSURANCE REPORT FOR ANALYTICAL DATA

Quality Assurance Report
For Site Investigation Performed at Range 24 Lower
Parcel HR-81Q
IT Project No 796887
Fort McClellan Quality Assurance Report

1.0 Overview

Thirteen soil samples, three depositional soil samples, one sediment sample, one surface water sample and three groundwater samples were collected in support of the investigation at Fort McClellan (FTMC) Parcel HR-81Q, Range 24 Lower. Samples were submitted to EMAX Laboratories, Inc. for analysis. QC samples consisted of the following types and quantities: 2 field duplicates, 2 matrix spike/matrix spike duplicate (MS/MSD) pairs and 7 equipment rinsates. An analytical summary table cross-referencing sample location, sample number, and contaminants of concern is presented in Attachment A.

One hundred (100) percent of samples collected were validated and reviewed in accordance with the *USEPA Contract Laboratory Program National Functional Guidelines for Evaluating Inorganic Data Review (EPA, February 1994)* and *USEPA Contract Laboratory Program National Functional Guidelines for Organic Review (EPA, October 1999)* for all areas except blanks. Region III *Laboratory Data Validation Functional Guidelines for Inorganic Analyses (EPA, April 1993)* and Region III *National Functional Guidelines for Organic Data Review (EPA, June 1992)* were applied to the areas associated with blank contamination. Data qualifiers assigned to results were based on guidance outlined in the referenced documents and the *Installation-Wide Sampling and Analysis Plan (IT, March 2000)* for FTMC. Table 1.0-1 and Table 1.0-2 define laboratory applied and validation applied data qualifiers assigned to analytical results, respectively.

Table 1.0-1
Laboratory Data Qualifier Definitions

Data Qualifier	Laboratory Data Qualifier Definition
B	Analyte detected in method blank at concentration greater than the reporting limit (and greater than zero).
C	Confirming data obtained using second GC column or GC/MS.
E	Analyte concentration exceeded calibration range.
I	Analyte identification suspect. See narrative for explanation.
J	Result is less than or equal to specified reporting limit but greater than the method detection limit (MDL).
P	Analyte not confirmed. Results from primary and secondary GC columns differ by greater than 10 percent
S	Analyte concentration obtained using Method of Standard Additions (MSA).
U	Not detected. The value represented indicates the reporting limit for the analysis.
D	Sample analyzed as a dilution. The result reported has been calculated using the appropriate dilution factor.
No Code	Confirmed identification.

Table 1.0-2
Validation Data Qualifier Definitions

Validation Qualifier	Validation Data Qualifier Definition
U	Not detected. The associated number indicates approximate sample concentration necessary to be detected.
No Code	Confirmed identification.
B	Not detected substantially above the level reported in laboratory or field blanks.
R	Unusable result. Analyte may or may not be present in the sample.
N	Tentative identification. Consider present. Special methods may be needed to confirm its presence or absence in future sampling efforts.
J	Analyte present. Reported value may not be accurate or precise. Considered an estimate.
NJ	Qualitative identification questionable due to poor resolution. Presumptively present at approximate quantity.

The Data Validation Summary Report is presented in Attachment B.

2.0 Summary

Data were evaluated to verify compliance with precision, accuracy, representativeness, comparability, completeness, and sensitivity. To verify that project data quality objectives (DQOs) were met, laboratory analytical results and data packages were examined for compliance with SW846 SW6010B/SW7000 Series, SW8330, and SW9060 quality control (QC) method criteria. Laboratory nonconformances and discrepancies in the data were also examined to determine their impact on the data. The results of this review are presented in the following sections.

2.1 Sample Receipt and Analytical Holding Times

All sample results generated by the laboratory during this investigation have been reviewed with respect to condition of samples as received by the laboratory, chain-of-custody, and analysis holding times. All coolers were received by EMAX in good condition under proper chain-of-custody.

All extraction and analysis holding times were met.

2.2 Rejected Data

No data were rejected ("R" flagged) due to laboratory anomalies or data validation findings.

2.3 Blank Results

Descriptions of the types of blank samples, which were collected, processed, and evaluated for background and/or process contamination during this sampling are as follows:

- Equipment rinsates (ER) are samples of analyte-free deionized water poured into, over, or pumped through the sampling device, collected in a sample container, and transported to the laboratory for analysis. Equipment rinsates are used to assess the effectiveness of equipment decontamination procedures.

- Method blanks (MB) are used in the laboratory to assess and document any possible contamination resulting from the analytical process. A method blank is an analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank shall be carried through the complete sample preparation and analytical procedure.

- Initial and continuing calibration blanks (ICB and CCB) are instrument blanks consisting of an analyte-free matrix. ICBs and CCBs are analyzed to verify the analysis system is free of contamination and are analyzed immediately after the initial and continuing calibrations are performed.

Field sample concentrations were evaluated to determine if the sample results could have been biased by the presence of any contamination measured in equipment rinsate blanks, method blanks and/or initial/continuing calibration blanks. Sample data affected by blank contamination are summarized in Table 2.3-1.

Table 2.3-1
Summary of Blank Contamination

Sample Delivery Group	Sample Number	Contaminant	Action
1081Q-01	QD0002	Beryllium	Beryllium result for sample QD0002 was "B" qualified due to ICB/CCB contamination.
1081Q-03	QD3005	Copper Selenium Vanadium	Copper, selenium and vanadium results for samples QD3005 were "B" qualified due to ICB/CCB and ER contamination.
1081Q-04	QD3001 and QD3002	Magnesium	Magnesium results for samples QD3001 and QD3002 were "B" qualified due to ICB/CCB and ER contamination.
	QD3001	Beryllium Chromium Copper Vanadium Cobalt	Beryllium, chromium, copper, vanadium and cobalt results for sample QD3001 were "B" qualified due to ICB/CCB and ER contamination.

Table 2.3-1 (Continued)
Summary of Blank Contamination

Sample Delivery Group	Sample Number	Contaminant	Action
1081Q-04 (Continued)	QD3002	Barium Aluminum	Barium and aluminum results for sample QD3002 was "B" qualified due to ICB/CCB and ER contamination.
1081Q-05	QD0011R and QD0013R	Mercury Potassium	Mercury and potassium results for samples QD0011R and QD0013R were "B" qualified due to ICB/CCB contamination.
1081Q-06	QD0014, QD0015, QD0016 and QD2001	Beryllium	Beryllium results for samples QD0014, QD0015, QD0016 and QD2001 were "B" qualified due to ICB/CCB contamination.
1081Q-08	QD0004 and QD0012	Calcium Sodium	Calcium and sodium results for samples QD0004 and QD0012 were "B" qualified due to MB and ICB/CCB contamination.
	QD0004	Cobalt	Cobalt result for sample QD0004 was "B" qualified due to ICB/CCB contamination.
	QD0012	Magnesium	Magnesium result for sample QD0012 was "B" qualified due to ICB/CCB contamination.

2.4 Analytical Precision

Precision is defined as a measurement of mutual agreement among individual measurements of the same property, usually under "prescribed similar conditions." Analytical precision is calculated as relative percent difference (%RPD) based on the following formula:

$$\%RPD = \left| \frac{(A-B)}{(A+B)/2} \right| \times 100$$

where:

%RPD = Relative Percent Difference
A = original result
B = duplicate result

A high RPD between an original sample and its field duplicate may be attributable to the difference in sample matrix or distribution of the contaminant within the sample, rather than the precision of the collection process. Also, when "estimated" results are reported, there is a potential for increased variability between the primary and duplicate sample results. This occurs because, at low concentrations, the relative difference in results is magnified by the RPD

calculation even though the results are comparable in absolute terms. There is also increased uncertainty in the results as the lower limit of detection is approached, due to decreasing analytical accuracy. The RPD calculation cannot be performed in cases where non-detected results are reported with corresponding samples that contain detectable concentrations.

Laboratory precision was assessed by laboratory control sample/laboratory control sample duplicate (LCS/LCSD) and MS/MSD recoveries. Results indicate that an acceptable analytical precision was achieved. Table 2.4-1 lists precision acceptance criteria for LCS/LCSD, MS/MSD organic and inorganic analyses and field duplicate comparisons. Table 2.4-2 lists all field duplicate, LCS/LCSD and MS/MSD RPDs, which exceeded QC criteria.

Table 2.4-1 Precision Acceptance Criteria

Field/Laboratory QC Type	Matrix	
	Aqueous	Soil
Field Duplicate (Both Organic & Inorganic)	RPD < 35%	RPD < 50%
Nitroaromatic and Nitramine Explosives LCS/LCSD and MS/MSD	Refer to Table 8-1 of FTMC "Installation Wide Sample and Analysis Plan"	Refer to Table 8-1 of FTMC "Installation Wide Sample and Analysis Plan"
Metals LCS/LCSD and MS/MSD	RPD < 20%	RPD < 20%
Total Organic Carbon LCS/LCSD and MS/MSD	NA	RPD < 20%

Table 2.4-2 Summary of Field Duplicate, LCS/LCSD & MS/MSD RPD Anomalies

Sample Delivery Group	Sample Number	Contaminant	Assigned Validation Qualifier
1081Q-01	QD0007 MS/MSD	Antimony (29%) Copper (26%) Manganese (66%)	Antimony, copper and manganese results for samples QD0001, QD0002, QD0005 through QD0010 were "J" / "UJ" qualified due to MS/MSD RPD exceeding QC criteria.

2.5 Analytical Accuracy Assessment

Accuracy is a measure of the degree of agreement of a result against an accepted reference or true value. Accuracy is expressed as a percent recovery (%R) calculated by the ratio of the measurement and accepted true value as shown in the following equation:

$$\%R = (|X_s - X_u|/K) \times 100$$

where:

X_s = measured value of the spiked sample
X_u = measured value of the unspiked sample
K = known amount of the spike in the sample

Surrogate recoveries, MS/MSD and LCS/LCSD were used to measure analytical accuracy as described in the following SW846 methodology: TAL Metals by SW6010B/SW7000 Series, nitroaromatic-nitramine explosives by SW8330, and Total Organic Carbon by SW9060. Reported results indicate that an acceptable level of analytical accuracy was achieved. Surrogate, LCS/LCSD and MS/MSD spike recoveries which exceed QC criteria are summarized in Table 2.5-1.

Table 2.5-1
Summary of Surrogate, LCS/LCSD and MS/MSD Spike Recovery Criteria Exceedances

Sample Delivery Group	Sample Number	Contaminant	Action
1081Q-01	QD0007 MS/MSD	Antimony (LB) Manganese (HB)	Antimony and manganese results for samples QD0001, QD0002 and QD0005 through QD0010 were "J" / "UJ" qualified due to MS/MSD spike recoveries exceeding QC criteria.
1081Q-06	QD1002 MS/MSD	Antimony (LB) Manganese (LB)	Antimony and manganese results for samples QD0014 through QD0016 and QD1001 were "J" / "UJ" qualified due to MS/MSD spike recoveries exceeding QC criteria.

LB - Low bias
HB - High bias

2.6 Data Representativeness

Representativeness is a qualitative parameter that expresses the degree to which sample data actually represent the matrix conditions. Sample locations selected for this investigation outline contaminant releases into the environment, that may have occurred and will confirm whether contaminated soil exists at this site. Depositional soil, sediment and surface water locations were selected to determine if contaminant releases have occurred from runoff of Parcel HR-81Q. Groundwater samples provided information on groundwater quality in the residuum aquifier.

Standardized requirements and procedures for sample collection and handling were employed to maximize sample representativeness.

2.7 Data Comparability

Comparability is a qualitative parameter expressing the confidence with which one data set can be compared with another. By employing well-recognized techniques and accepted standardized methods for sampling and analysis, data comparability was achieved during this sampling event.

2.8 Data Completeness

Completeness is calculated for the aggregation of data for each analyte measured during the investigation of Parcel HR-81Q, Range 24 Lower. The formula for calculating completeness is listed below:

$$\% \text{ Completeness} = (X_V / X_T) \times 100$$

where:

X_V = number of valid (i.e., non-"R"-flagged) results
X_T = number of possible results

Parcel HR-81Q goal for completeness is 95% for both aqueous and soil samples. The % Completeness for this task is calculated to be 100%.

- % Completeness = (778 / 778) x 100 = 100%

2.9 Sensitivity

Sensitivity is defined as the ability of the laboratory's established method detection limits (MDL)/method reporting limits (MRL or RL) to meet project-specific DQOs or site-specific screening levels (SSSL) and or ecological screening values (ESV).

MDL is the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero. MDLs are determined from an analysis of a sample in a given matrix containing the target analyte of interest. The MRL is a threshold value based upon the sensitivity capability of method and instrument. MRLs are normally set at a minimum of two times the MDL. MRLs are adjusted based on the sample matrix, moisture (solids only), and any necessary sample dilutions. The laboratory cannot reliably quantitate values reported above the MDL but below the MRL. Therefore, these analyte values must be flagged as estimated quantities ("J"-flagged).

To evaluate method sensitivity, a general comparison of the laboratory's MDLs/MRLs and the site investigation screening levels (background values, human health SSSL for residential reuse, and [ESV]) was performed and presented to the FTMC Base Realignment and Closure Team (BCT) (November 1999). The comparison summarized the relationship between the MDL/MRLs and SSSL/ESVs for each parameter typically reported for all of the major analytical methods used at FTMC. The few cases identified where the MDL and/or MRL values exceeded their corresponding human health SSSL and/or ESV were specifically highlighted and explained. It was understood that for these cases, the standard analytical method of analysis was not going to provide MDLs/MRLs, which met human health SSSLs or ESVs without significant uncertainty and the possibility of reporting false negatives. It was generally accepted that standard EPA SW846 analytical methods would provide sufficient sensitivity for data reported and used in the site screening process at FTMC.

3.0 Data Usability

Data quality indicators (DQI) provide an internal guide for control and review to verify that data are scientifically sound, defensible, and of known and acceptable quality. Factors such as precision, accuracy, representativeness, comparability, completeness, and sensitivity were evaluated to determine if the project's DQOs were met. A review of the data revealed that the majority of QA/QC indicators were within acceptable control limits. Any data anomalies encountered during data validation and overall site evaluations have been summarized in the previous sections of this document.

Based on the results of data validation and QA review, IT has concluded that representative samples were collected and analyzed and that the results are indicative of the media analyzed. The data are to be considered representative of site conditions and are usable for their intended purpose.

4.0 Attachments

Attachment A - Analytical Summary Table
Attachment B - Data Validation Summary Report

ATTACHMENT A

ANALYTICAL SUMMARY TABLE

Ft. McClellan
Parcel HR-81Q
Range 24 Lower
Analytical Summary
Project No. 796887

HR-81Q Soil Sampling

Sample Location	Sample Name	Sample Number	Date Sampled	Analytical Suite
HR-81Q-GP01	HR-81Q-GP01-SS-QD0011R-REG	QD0011R	09-Aug-01	TAL Metals by SW6010B/SW7471and Nitroaromatic-Nitramine Explosives by SW8330.
	HR-81Q-GP01-SS-QD0013R-FD	QD0013R	09-Aug-01	TAL Metals by SW6010B/SW7471and Nitroaromatic-Nitramine Explosives by SW8330.
	HR-81Q-GP01-DS-QD0012-REG	QD0012	08-Oct-01	TAL Metals by SW6010B/SW7471and Nitroaromatic-Nitramine Explosives by SW8330.
HR-81Q-GP02	HR-81Q-GP02-SS-QD0003-REG	QD0003	28-Jun-01	TAL Metals by SW6010B/SW7471and Nitroaromatic-Nitramine Explosives by SW8330.
	HR-81Q-GP02-DS-QD0004-REG	QD0004	08-Oct-01	TAL Metals by SW6010B/SW7471and Nitroaromatic-Nitramine Explosives by SW8330.
HR-81Q-GP03	HR-81Q-GP03-SS-QD0005-REG	QD0005	19-Jun-01	TAL Metals by SW6010B/SW7471and Nitroaromatic-Nitramine Explosives by SW8330.
	HR-81Q-GP03-DS-QD0006-REG	QD0006	19-Jun-01	TAL Metals by SW6010B/SW7471and Nitroaromatic-Nitramine Explosives by SW8330.
HR-81Q-MW01	HR-81Q-MW01-SS-QD0007-REG	QD0007	19-Jun-01	TAL Metals by SW6010B/SW7471and Nitroaromatic-Nitramine Explosives by SW8330.
	HR-81Q-MW01-DS-QD0007-MS	QD0007-MS	19-Jun-01	TAL Metals by SW6010B/SW7471and Nitroaromatic-Nitramine Explosives by SW8330.
	HR-81Q-MW01-DS-QD0007-MSD	QD0007-MSD	19-Jun-01	TAL Metals by SW6010B/SW7471and Nitroaromatic-Nitramine Explosives by SW8330.
	HR-81Q-MW01-DS-QD0008-REG	QD0008	19-Jun-01	TAL Metals by SW6010B/SW7471and Nitroaromatic-Nitramine Explosives by SW8330.
HR-81Q-MW02	HR-81Q-MW02-SS-QD0009-REG	QD0009	19-Jun-01	TAL Metals by SW6010B/SW7471and Nitroaromatic-Nitramine Explosives by SW8330.
	HR-81Q-MW02-DS-QD0010-REG	QD0010	19-Jun-01	TAL Metals by SW6010B/SW7471and Nitroaromatic-Nitramine Explosives by SW8330.
HR-81Q-MW03	HR-81Q-MW03-SS-QD0001-REG	QD0001	19-Jun-01	TAL Metals by SW6010B/SW7471and Nitroaromatic-Nitramine Explosives by SW8330.
	HR-81Q-MW03-DS-QD0002-REG	QD0002	19-Jun-01	TAL Metals by SW6010B/SW7471and Nitroaromatic-Nitramine Explosives by SW8330.
HR-81Q-DEP01	HR-81Q-DEP01-SS-QD0014-REG	QD0014	27-Aug-01	TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 and Total Organic Carbon by SW9060.
HR-81Q-DEP02	HR-81Q-DEP02-DS-QD0015-REG	QD0015	27-Aug-01	TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 and Total Organic Carbon by SW9060.
	HR-81Q-DEP02-DS-QD0016-FD	QD0016	27-Aug-01	TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 and Total Organic Carbon by SW9060.

HR-81Q Groundwater Sampling

Sample Location	Sample Name	Sample Number	Date Sampled	Analytical Suite
HR-81Q-MW01	HR-81Q-MW01-GW-QD3001-REG	QD3001	08-Aug-01	TAL Metals by SW6010B/SW7471and Nitroaromatic-Nitramine Explosives by SW8330.
	HR-81Q-MW01-GW-QD3001-MS	QD3001-MS	08-Aug-01	TAL Metals by SW6010B/SW7471and Nitroaromatic-Nitramine Explosives by SW8330.
	HR-81Q-MW01-GW-QD3001-MSD	QD3001-MSD	08-Aug-01	TAL Metals by SW6010B/SW7471and Nitroaromatic-Nitramine Explosives by SW8330.
HR-81Q-MW02	HR-81Q-MW02-GW-QD3002-REG	QD3002	08-Aug-01	TAL Metals by SW6010B/SW7471and Nitroaromatic-Nitramine Explosives by SW8330.
BK-G06	BK-G06-GW-QD3005-REG	QD3005	12-Jul-01	TAL Metals by SW6010B/SW7471and Nitroaromatic-Nitramine Explosives by SW8330.

HR-81Q Sediment / Surface Water Sampling

Sample Location	Sample Name	Sample Number	Date Sampled	Analytical Suite
HR-81Q-SW/SD01	HR-81Q-SW/SD01-SW-QD2001-REG	QD2001	27-Aug-01	TAL Metals by SW6010B/SW7471and Nitroaromatic-Nitramine Explosives by SW8330.
	HR-81Q-SW/SD01-SD-QD1001-REG	QD1001	27-Aug-01	TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 and Total Organic Carbon by SW9060.

ATTACHMENT B

DATA VALIDATION SUMMARY REPORT

Data Validation Summary Report
For the Site Investigation Performed at
HR-81Q Range 24, Lower (Parcel 81Q)
Fort McClellan, Calhoun County, Alabama

1.0 Introduction

Level III data validation was performed on 100 percent of the environmental samples collected for parcel 81Q. The analytical data consisted of delivery groups (SDGs) 1081Q-01 through 1081Q-08, which were analyzed by EMAX Laboratories. Soil and water matrices were validated. The chemical parameters for which the samples were analyzed, are identified below:

Parameter (Method)
Metals by SW846 6010B and 7471A/7470A
Nitroaromatic and Nitramine Explosives by SW846 8330
Total Organic Carbon SW846 9060

2.0 Procedures

The sample data were validated following the logic identified in the 1994 *EPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review* and the 1999 *EPA Contract Laboratory Program National Functional Guidelines for Organic Review* for all areas except blanks. *EPA Region III Laboratory Data Validation Functional Guidelines for Evaluating Inorganic Analyses* (April 1993) and *Region III National Functional Guidelines for Organic Data Review* (June 1992) were applied to the areas associated with blank contamination. Specific quality control (QC) criteria as identified in the quality assurance plan (QAP), analytical methods, and laboratory standard operating procedures (SOP) were applied to all sample results. As a result of the use of Update III SW846 test methods for the analytical data and the application of the Contract Laboratory Program (CLP) guidelines during the validation process, there were instances where specific QC requirements for all target compounds were not defined. This primarily occurred in the organic, gas chromatography (GC) and GC/mass spectrometry (MS) calibration areas and is due to the fact that the analytical methods are performance-based and allow the use of average calibration responses in lieu of individual responses, which are defined by CLP protocol. In light of applying CLP guidelines to SW846 methods and evaluating the usability of the data during the validation process, specific QC criteria were determined to address all target compounds and are identified in this report for each parameter, as well as in the validation checklists, which function as worksheets. All completed validation checklists are on file in the Knoxville office. For those analytical methods not addressed by the CLP and Region III guidelines, the validation was based on the method

requirements (i.e., SW846, Code of Federal Regulations, SOPs) and technical judgement, following the logic of the CLP validation guidelines.

3.0 Summary of Data Validation Findings

The overall quality of the data was determined to be acceptable with minimal qualifications. No data were rejected.

Individual validation reports have been prepared for each parameter, and the overall results of the validation findings are summarized in this report. The validation qualifier data entry verification report (Attachment A) is also provided. This is a complete listing of all of the analytical results and the validation qualifiers assigned for the site investigation at 81Q. It also identifies the "use" column, which indicates which result to use in the event of a reanalysis. A listing of the validation qualifiers and the reason codes, along with their definitions, is also found in Attachment A. The following section highlights the key findings of the data validation for each analysis.

4.0 Analysis-Specific Data Validation Summaries

4.1 Metals by SW846 6010B/7471A/7470A

Overall, the data are of good quality and are usable as reported by the laboratory with the exceptions noted below. Data were reviewed for the following:

Holding Times

Technical holding time criteria were met for all samples.

Initial and Continuing Calibrations

All initial and continuing calibrations associated with the project samples met QC criteria.

Blanks

The 5X rule for contaminants found in the associated equipment rinse, calibration, and method blanks was applied to all sample results. All were acceptable with the following exception(s):

SDG	Samples Affected	Compound(s)	Blank Contaminant	Validation Qualifier
1081Q-01	QD0002	Beryllium	ICB/CCB	B
1081Q-03	QD3005	Copper, Selenium, Vanadium	ICB/CCB/ER	B
1081Q-04	QD3001, QD3002	Magnesium	ICB/CCB/ER	B
	QD3001	Beryllium, Chromium, Copper, Vanadium, Cobalt	ICB/CCB/ER	B
	QD3002	Barium, Aluminum	ICB/CCB/ER	B
1081Q-05	QD0011R, QD0013R	Mercury, Potassium	ICB/CCB	B
1081Q-06	All Samples	Beryllium	ICB/CCB	B
1081Q-08	QD0004, QD0012	Calcium, Sodium	Method/ICB/CCB	B
	QD0004	Cobalt	ICB/CCB	B
	QD0012	Magnesium	ICB/CCB	B

Matrix Spike / Matrix Spike Duplicate

MS/MSD analysis was performed for the project samples, and all QC criteria were met with the following exception(s):

SDG	Samples Affected	Compound(s)	Validation Qualifier
1081Q-01	All Samples	Antimony, Manganese, Copper	J/UJ
1081Q-06	All Samples	Antimony, Manganese	J/UJ

Laboratory Control Sample

LCS analysis was performed for the project samples, and all QC criteria were met.

Interference Check Sample

All Interference Check Sample (ICS) percent recoveries were acceptable. All QC criteria were met.

Inductively Coupled Plasma Serial Dilutions

All QC criteria were met for the serial dilutions associated with the project samples with the following exception(s):

SDG	Samples Affected	Compound(s)	Validation Qualifier
1081Q-01	All Samples	Calcium, Cobalt	J

Field Duplicates

Original and field duplicate results were evaluated, and no problems were identified.

Quantitation

Results quantified between the Method detection limit (MDL) and the Reporting limits (RL), which the lab qualified as "J", were qualified as estimated "J" unless blank contamination was present or the results were rejected. Results rejected in favor of a preferred result (e.g., due to dilution or reanalysis) were qualified as rejected "R".

4.2 Nitroaromatic and Nitramine Explosives by SW846 8330

Overall, the data are of good quality and are usable as reported by the laboratory. Data were reviewed for the following:

Holding Times

Technical holding time criteria were met for all samples.

Initial and Continuing Calibration

All initial and continuing calibrations associated with the project samples met QC criteria.

Blanks

The 5X rule for contaminants found in the associated equipment rinses and method blanks was applied to all sample results. All were found to be acceptable.

Surrogate Recoveries

All surrogate recoveries were within QC criteria.

Matrix Spike / Matrix Spike Duplicate

MS/MSD analysis was performed for the project samples, and all QC criteria were met.

Laboratory Control Sample

LCS analysis was performed for the project samples, and all QC criteria were met.

2ND Column Confirmation

The percent difference QC criteria between columns for analyte concentrations were met.

Field Duplicates

Original and field duplicate results were evaluated, and no problems were identified.

Quantitation

Results quantified between the MDL and the RL, which the lab qualified as "J", were qualified as estimated "J" unless blank contamination was present or the results were rejected. Results rejected in favor of a preferred result (e.g., due to dilution or reanalysis) were qualified as rejected "R".

4.3 Total Organic Carbon by SW846 9060

Overall, the data are of good quality and are usable as reported by the laboratory. Data were reviewed for the following:

Holding Times

Technical holding time criteria were met for all samples.

Initial and Continuing Calibration

All initial and continuing calibrations associated with the project samples met QC criteria.

Blanks

The 5X rule for contaminants found in the associated equipment rinses and method blanks was applied to all sample results. All were found to be acceptable.

Matrix Spike / Matrix Spike Duplicate

MS/MSD analysis was performed for the project samples, and all QC criteria were met.

Laboratory Control Sample

LCS analysis was performed for the project samples, and all QC criteria were met.

Field Duplicates

Original and field duplicate results were evaluated, and no problems were identified.

Quantitation

Results quantified between the MDL and the RL, which the lab qualified as "J", were qualified as estimated "J" unless blank contamination was present or the results were rejected. Results rejected in favor of a preferred result (e.g., due to dilution or reanalysis) were qualified as rejected "R".

Attachment A:

Data Validation Qualifier Entry Verification Report

Validation Qualifiers

U Not detected. The compound/analyte was analyzed for, but not detected above the associated reporting limit.

J The compound/analyte was positively identified; the reported value is the estimated concentration of the constituent detected in the sample analyzed.

B The concentration reported was detected significantly above the levels reported in the associated equipment rinse samples and/or laboratory method and trip blanks. (5X/10X Rule was applied).

R The reported sample results are rejected due to the following:

1. Severe deficiencies in the supporting quality control data.
2. Anomalies noted in the sampling and/or analysis process which could affect the validity of the reported data.
3. The presence or absence of the constituent cannot be verified based on the data provided.
4. To indicate not to use a particular result in the event of a reanalysis.

UJ The compound/analyte was analyzed for, but not detected above the established reporting limit. However, review and evaluation of supporting QC data and/or sampling and analysis process have indicated that the 'non-detect' maybe inaccurate or imprecise. The non-detect result should be estimated.

Validation Reason Code Definitions

Reason Code	Description
01	Sample received outside of 4+/-2 degrees Celsius
01A	Improper sample preservation
02	Holding time exceeded
02A	Extraction
02B	Analysis
03	Instrument performance – outside criteria
03A	BFB
03B	DFTPP
03C	DDT and/or Endrin % breakdown exceeds criteria
03D	Retention time windows
03E	Resolution
04	Initial calibration results outside specified criteria
04A	Compound mean RRF QC criteria not met
04B	Individual % RSD criteria not met
04C	Correlation coefficient >0.995
05	Continuing calibration results outside specified criteria
05A	Compound mean RRF QC criteria not met
05B	Compound % D QC criteria not met
06	Result qualified as a result of the 5x/10x blank correction
06A	Method or preparation blank
06B	ICB or CCB
06C	ER
06D	TB
06E	FB
07	Surrogate recoveries outside control limits
07A	Sample
07B	Associated method blank or LCS
08	MS/MSD/Duplicate results outside criteria
08A	MS and/or MSD recovery not within control limits (accuracy)
08B	% RPD outside acceptance criteria (precision)
09	Post digestion spike outside criteria (GFAA)
10	Internal standards outside specified control limits
10A	Recovery
10B	Retention time
11	Laboratory control sample recoveries outside specified limits
11A	Recovery
11B	% RPD (if run in duplicate)
12	Interference check standard
13	Serial dilution
14	Tentatively identified compounds
15	Quantitation
16	Multiple results available; alternate analysis preferred
17	Field duplicate RPD criteria is exceeded
18	Percent difference between original and second column exceeds QC criteria
19	Professional judgement was used to qualify the data
20	Pesticide clean-up checks
21	Target compound identification
22	Radiological calibration
23	Radiological quantitation
24	Reported result and/or lab qualifier revised to reflect validation findings

Validation Qualifier Data Entry Verification

Fort McClellan

Sample Number:	Analytical/Extraction Method:		Flt REX Dil:	Parameter:	Result:	Units:	Qlfr:	Hit Use BCF	Val Qlfr	Val Code:	Reason Codes 1 2 3 4	Lab Sample:	Analysi Time:
QD0001	D2216	NONE	N 0 1	PERCENT MOISTURE				Y Y P				EFAT1S	00:00
	SW6010	SW3050	N 0 1	ALUMINUM	10600	mg/kg		Y Y P				EFAT1S	12:09
				ANTIMONY	6.8	mg/kg	U	N Y U	UJ		08A 08B	EFAT1S	12:09
				ARSENIC	3.6	mg/kg		Y Y P				EFAT1S	12:09
				BARIUM	52.3	mg/kg		Y Y P				EFAT1S	12:09
				BERYLLIUM	0.48	mg/kg	B	Y Y P	J		15	EFAT1S	12:09
				CADMIUM	0.56	mg/kg	U	N Y U	U			EFAT1S	12:09
				CALCIUM	161	mg/kg	B	Y Y P	J		13 15	EFAT1S	12:09
				CHROMIUM	10.9	mg/kg		Y Y P				EFAT1S	12:09
				COBALT	4.1	mg/kg	B	Y Y P	J		13 15	EFAT1S	12:09
				COPPER	5.6	mg/kg		Y Y P	J		08B	EFAT1S	12:09
				IRON	21900	mg/kg		Y Y P				EFAT1S	12:09
				LEAD	6.4	mg/kg		Y Y P				EFAT1S	12:09
				MAGNESIUM	325	mg/kg	B	Y Y P	J		15	EFAT1S	12:09
				MANGANESE	52.8	mg/kg		Y Y P	J		08A 08B	EFAT1S	12:09
				NICKEL	6.3	mg/kg		Y Y P				EFAT1S	12:09
				POTASSIUM	301	mg/kg	B	Y Y P	J		15	EFAT1S	12:09
				SELENIUM	0.56	mg/kg	U	N Y U	U			EFAT1S	12:09
				SILVER	1.1	mg/kg	U	N Y U	U			EFAT1S	12:09
				SODIUM	564	mg/kg	U	N Y U	U			EFAT1S	12:09
				THALLIUM	0.79	mg/kg	B	Y Y P	J		15	EFAT1S	12:09
				VANADIUM	18.6	mg/kg		Y Y P				EFAT1S	12:09
				ZINC	15.4	mg/kg		Y Y P				EFAT1S	12:09
	SW7471	TOTAL	N 0 1	MERCURY	0.045	mg/kg		Y Y P				EFAT1S	12:51
	SW8330	SW3550	N 0 1	1,3,5-TRINITROBENZENE	0.25	mg/kg	U	N Y U	U			EFAT1S	02:25
				1,3-DINITROBENZENE	0.25	mg/kg	U	N Y U	U			EFAT1S	02:25
				2,4,6-TRINITROTOLUENE	0.25	mg/kg	U	N Y U	U			EFAT1S	02:25
				2,4-DINITROTOLUENE	0.25	mg/kg	U	N Y U	U			EFAT1S	02:25
				2,6-DINITROTOLUENE	0.25	mg/kg	U	N Y U	U			EFAT1S	02:25
				2-AMINO-4,6-DINITROTOLUENE	0.25	mg/kg	U	N Y U	U			EFAT1S	02:25
				2-NITROTOLUENE	0.25	mg/kg	U	N Y U	U			EFAT1S	02:25
				3-NITROTOLUENE	0.25	mg/kg	U	N Y U	U			EFAT1S	02:25
				4-AMINO-2,6-DINITROTOLUENE	0.25	mg/kg	U	N Y U	U			EFAT1S	02:25
				4-NITROTOLUENE	0.25	mg/kg	U	N Y U	U			EFAT1S	02:25
				HMX	0.50	mg/kg	U	N Y U	U			EFAT1S	02:25
				NITROBENZENE	0.25	mg/kg	U	N Y U	U			EFAT1S	02:25
				RDX	0.50	mg/kg	U	N Y U	U			EFAT1S	02:25
				TETRYL	0.65	mg/kg	U	N Y U	U			EFAT1S	02:25
QD0002	D2216	NONE	N 0 1	PERCENT MOISTURE				Y Y P				EFAVCS	00:00
	SW6010	SW3050	N 0 1	ALUMINUM	10400	mg/kg		Y Y P				EFAVCS	12:13
				ANTIMONY	0.70	mg/kg	B	Y Y P	J		08A 08B 15	EFAVCS	12:13
				ARSENIC	5.9	mg/kg		Y Y P				EFAVCS	12:13
				BARIUM	38.8	mg/kg		Y Y P				EFAVCS	12:13

Validation Qualifier Data Entry Verification

Fort McClellan

Sample Number:	Analytical/Extraction Method:		Flt REX Dil:	Parameter:	Result:	Units:	Qlfr:	Hit Use BCF	Val Qlfr	Val Code:	Reason Codes 1 2 3 4	Lab Sample:	Analysi Time:
QD0002	SW6010	SW3050	N 0 1	BERYLLIUM	0.24	mg/kg	B	Y Y F	B		06B 15	EFAVCS	12:13
				CADMIUM	0.60	mg/kg	U	N Y U	U			EFAVCS	12:13
				CALCIUM	11.0	mg/kg	B	Y Y P	J		13 15	EFAVCS	12:13
				CHROMIUM	15.5	mg/kg		Y Y P				EFAVCS	12:13
				COBALT	1.0	mg/kg	B	Y Y P	J		13 15	EFAVCS	12:13
				COPPER	13.0	mg/kg		Y Y P	J		08B	EFAVCS	12:13
				IRON	23800	mg/kg		Y Y P				EFAVCS	12:13
				LEAD	4.4	mg/kg		Y Y P				EFAVCS	12:13
				MAGNESIUM	121	mg/kg	B	Y Y P	J		15	EFAVCS	12:13
				MANGANESE	2.7	mg/kg		Y Y P	J		08A 08B	EFAVCS	12:13
				NICKEL	0.77	mg/kg	B	Y Y P	J		15	EFAVCS	12:13
				POTASSIUM	865	mg/kg		Y Y P				EFAVCS	12:13
				SELENIUM	0.60	mg/kg	U	N Y U	U			EFAVCS	12:13
				SILVER	1.2	mg/kg	U	N Y U	U			EFAVCS	12:13
				SODIUM	604	mg/kg	U	N Y U	U			EFAVCS	12:13
				THALLIUM	1.2	mg/kg	U	N Y U	U			EFAVCS	12:13
				VANADIUM	33.2	mg/kg		Y Y P				EFAVCS	12:13
				ZINC	2.6	mg/kg		Y Y P				EFAVCS	12:13
	SW7471	TOTAL	N 0 1	MERCURY	0.016	mg/kg	B	Y Y P	J		15	EFAVCS	12:54
	SW8330	SW3550	N 0 1	1,3,5-TRINITROBENZENE	0.25	mg/kg	U	N Y U	U			EFAVCS	02:41
				1,3-DINITROBENZENE	0.25	mg/kg	U	N Y U	U			EFAVCS	02:41
				2,4,6-TRINITROTOLUENE	0.25	mg/kg	U	N Y U	U			EFAVCS	02:41
				2,4-DINITROTOLUENE	0.25	mg/kg	U	N Y U	U			EFAVCS	02:41
				2,6-DINITROTOLUENE	0.25	mg/kg	U	N Y U	U			EFAVCS	02:41
				2-AMINO-4,6-DINITROTOLUENE	0.25	mg/kg	U	N Y U	U			EFAVCS	02:41
				2-NITROTOLUENE	0.25	mg/kg	U	N Y U	U			EFAVCS	02:41
				3-NITROTOLUENE	0.25	mg/kg	U	N Y U	U			EFAVCS	02:41
				4-AMINO-2,6-DINITROTOLUENE	0.25	mg/kg	U	N Y U	U			EFAVCS	02:41
				4-NITROTOLUENE	0.25	mg/kg	U	N Y U	U			EFAVCS	02:41
				HMX	0.50	mg/kg	U	N Y U	U			EFAVCS	02:41
				NITROBENZENE	0.25	mg/kg	U	N Y U	U			EFAVCS	02:41
				RDX	0.50	mg/kg	U	N Y U	U			EFAVCS	02:41
				TETRYL	0.65	mg/kg	U	N Y U	U			EFAVCS	02:41
QD0003	SW6010B	SW3050	N 0 1	ALUMINUM	8770	mg/kg		Y Y P				F245-01	23:12
				ANTIMONY	11.5	mg/kg	U	N Y U	U			F245-01	23:12
				ARSENIC	2.17	mg/kg		Y Y P				F245-01	23:37
				BARIUM	53.5	mg/kg		Y Y P				F245-01	23:12
				BERYLLIUM	.358	mg/kg	J	Y Y P	J		15	F245-01	23:12
				CADMIUM	.574	mg/kg	U	N Y U	U			F245-01	23:12
				CALCIUM	71.3	mg/kg	J	Y Y P	J		15	F245-01	23:12
				CHROMIUM	6.68	mg/kg		Y Y P				F245-01	23:12
				COBALT	3.28	mg/kg		Y Y P				F245-01	23:12
				COPPER	3.24	mg/kg		Y Y P				F245-01	23:12

Sample Number:	Analytical/Extraction Method:		Flt REX Dil:	Parameter:	Result:	Units:	Qlfr:	Hit Use BCF	Val Qlfr	Val Code:	Reason Codes 1 2 3 4	Lab Sample:	Analysi Time:
QD0003	SW6010B	SW3050	N 0 1	IRON	19600	mg/kg		Y Y P				F245-01	23:12
				LEAD	5.57	mg/kg		Y Y P				F245-01	23:37
				MAGNESIUM	302	mg/kg		Y Y P				F245-01	23:12
				MANGANESE	33.2	mg/kg		Y Y P				F245-01	23:12
				NICKEL	5.77	mg/kg		Y Y P				F245-01	23:12
				POTASSIUM	290	mg/kg	J	Y Y P	J		15	F245-01	23:12
				SELENIUM	1.27	mg/kg		Y Y P				F245-01	23:37
				SILVER	1.15	mg/kg	U	N Y U	U			F245-01	23:12
				SODIUM	115	mg/kg	U	N Y U	U			F245-01	23:12
				THALLIUM	2.3	mg/kg	U	N Y U	U			F245-01	23:37
				VANADIUM	11.2	mg/kg		Y Y P				F245-01	23:12
				ZINC	11.6	mg/kg		Y Y P				F245-01	23:12
	SW7471A	TOTAL	N 0 1	MERCURY	.024	mg/kg	J	Y Y P	J		15	F245-01	10:32
	SW8330	METHOD	N 0 1	1,3,5-TNB	.4	mg/kg	U	N Y U	U			F245-01	04:03
				1,3-DNB	.4	mg/kg	U	N Y U	U			F245-01	04:03
				2,4,6-TNT	.4	mg/kg	U	N Y U	U			F245-01	04:03
				2,4-DNT	.4	mg/kg	U	N Y U	U			F245-01	04:03
				2,6-DNT	.4	mg/kg	U	N Y U	U			F245-01	04:03
				2-AM-4,6-DNT	.4	mg/kg	U	N Y U	U			F245-01	04:03
				2-NITROTOLUENE	.4	mg/kg	U	N Y U	U			F245-01	04:03
				3-NITROTOLUENE	.4	mg/kg	U	N Y U	U			F245-01	04:03
				4-AM-2,6-DNT	.4	mg/kg	U	N Y U	U			F245-01	04:03
				4-NITROTOLUENE	.4	mg/kg	U	N Y U	U			F245-01	04:03
				HMX	.4	mg/kg	U	N Y U	U			F245-01	04:03
				NITROBENZENE	.4	mg/kg	U	N Y U	U			F245-01	04:03
				RDX	.4	mg/kg	U	N Y U	U			F245-01	04:03
				TETRYL	.4	mg/kg	U	N Y U	U			F245-01	04:03
QD0004	SW6010B	SW3050	N 0 1	ALUMINUM	6520	mg/kg		Y Y P				J076-02	20:48
				ANTIMONY	11	mg/kg	U	N Y U	U			J076-02	20:48
				ARSENIC	1.84	mg/kg		Y Y P				J076-02	12:35
				BARIUM	27.6	mg/kg		Y Y P				J076-02	20:48
				BERYLLIUM	1.1	mg/kg	U	N Y U	U			J076-02	20:48
				CADMIUM	1.1	mg/kg	U	N Y U	U			J076-02	20:48
				CALCIUM	44.6	mg/kg	J	Y Y F	B		06A 06B 15	J076-02	20:48
				CHROMIUM	4.03	mg/kg		Y Y P				J076-02	20:48
				COBALT	2.06	mg/kg	J	Y Y F	B		06B 15	J076-02	20:48
				COPPER	4.19	mg/kg		Y Y P				J076-02	20:48
				IRON	9730	mg/kg		Y Y P				J076-02	20:48
				LEAD	5.12	mg/kg		Y Y P				J076-02	12:35
				MAGNESIUM	160	mg/kg		Y Y P				J076-02	20:48
				MANGANESE	18	mg/kg		Y Y P				J076-02	20:48
				NICKEL	3.47	mg/kg		Y Y P				J076-02	20:48
				POTASSIUM	481	mg/kg	J	Y Y P	J		15	J076-02	20:48

Sample Number:	Analytical/Extraction Method:		Flt	REX	Dil:	Parameter:	Result:	Units:	Qlfr:	Hit	Use	BCF	Val Qlfr	Val Code:	Reason Codes 1	2	3	4	Lab Sample:	Analysi Time:
QD0004	SW6010B	SW3050	N	0	1	SELENIUM	1.1	mg/kg	U	N	Y	U	U						J076-02	12:35
						SILVER	2.2	mg/kg	U	N	Y	U	U						J076-02	20:48
						SODIUM	42.9	mg/kg	J	Y	Y	F	B		06B	15			J076-02	20:48
						THALLIUM	2.2	mg/kg	U	N	Y	U	U						J076-02	12:35
						VANADIUM	7.74	mg/kg		Y	Y	P							J076-02	20:48
						ZINC	7.93	mg/kg		Y	Y	P							J076-02	20:48
	SW7471A	TOTAL	N	0	1	MERCURY	.11	mg/kg	U	N	Y	U	U						J076-02	14:45
	SW8330	METHOD	N	0	1	1,3,5-TNB	.4	mg/kg	U	N	Y	U	U						J076-02	06:10
						1,3-DNB	.4	mg/kg	U	N	Y	U	U						J076-02	06:10
						2,4,6-TNT	.4	mg/kg	U	N	Y	U	U						J076-02	06:10
						2,4-DNT	.4	mg/kg	U	N	Y	U	U						J076-02	06:10
						2,6-DNT	.4	mg/kg	U	N	Y	U	U						J076-02	06:10
						2-AM-4,6-DNT	.4	mg/kg	U	N	Y	U	U						J076-02	06:10
						2-NITROTOLUENE	.4	mg/kg	U	N	Y	U	U						J076-02	06:10
						3-NITROTOLUENE	.4	mg/kg	U	N	Y	U	U						J076-02	06:10
						4-AM-2,6-DNT	.4	mg/kg	U	N	Y	U	U						J076-02	06:10
						4-NITROTOLUENE	.4	mg/kg	U	N	Y	U	U						J076-02	06:10
						HMX	.4	mg/kg	U	N	Y	U	U						J076-02	06:10
						NITROBENZENE	.4	mg/kg	U	N	Y	U	U						J076-02	06:10
						RDX	.4	mg/kg	U	N	Y	U	U						J076-02	06:10
						TETRYL	.4	mg/kg	U	N	Y	U	U						J076-02	06:10
QD0005	D2216	NONE	N	0	1	PERCENT MOISTURE				Y	Y	P							EFAVDS	00:00
	SW6010	SW3050	N	0	1	ALUMINUM	6770	mg/kg		Y	Y	P							EFAVDS	12:18
						ANTIMONY	0.65	mg/kg	B	Y	Y	P	J		08A	08B	15		EFAVDS	12:18
						ARSENIC	4.6	mg/kg		Y	Y	P							EFAVDS	12:18
						BARIUM	82.5	mg/kg		Y	Y	P							EFAVDS	12:18
						BERYLLIUM	0.60	mg/kg		Y	Y	P							EFAVDS	12:18
						CADMIUM	0.58	mg/kg	U	N	Y	U	U						EFAVDS	12:18
						CALCIUM	137	mg/kg	B	Y	Y	P	J		13	15			EFAVDS	12:18
						CHROMIUM	10.2	mg/kg		Y	Y	P							EFAVDS	12:18
						COBALT	4.4	mg/kg	B	Y	Y	P	J		13	15			EFAVDS	12:18
						COPPER	5.6	mg/kg		Y	Y	P	J		08B				EFAVDS	12:18
						IRON	18400	mg/kg		Y	Y	P							EFAVDS	12:18
						LEAD	7.4	mg/kg		Y	Y	P							EFAVDS	12:18
						MAGNESIUM	258	mg/kg	B	Y	Y	P	J		15				EFAVDS	12:18
						MANGANESE	164	mg/kg		Y	Y	P	J		08A	08B			EFAVDS	12:18
						NICKEL	4.4	mg/kg	B	Y	Y	P	J		15				EFAVDS	12:18
						POTASSIUM	728	mg/kg		Y	Y	P							EFAVDS	12:18
						SELENIUM	0.58	mg/kg	U	N	Y	U	U						EFAVDS	12:18
						SILVER	1.2	mg/kg	U	N	Y	U	U						EFAVDS	12:18
						SODIUM	578	mg/kg	U	N	Y	U	U						EFAVDS	12:18
						THALLIUM	1.2	mg/kg	U	N	Y	U	U						EFAVDS	12:18
						VANADIUM	12.4	mg/kg		Y	Y	P							EFAVDS	12:18

Sample Number:	Analytical/Extraction Method:		Flt REX Dil:	Parameter:	Result:	Units:	Qlfr:	Hit Use BCF	Val Qlfr	Val Code:	Reason Codes 1 2 3 4	Lab Sample:	Analysi Time:
QD0005	SW6010	SW3050	N 0 1	ZINC	13.0	mg/kg		Y Y P				EFAVDS	12:18
	SW7471	TOTAL	N 0 1	MERCURY	0.029	mg/kg	B	Y Y P	J		15	EFAVDS	13:00
	SW8330	SW3550	N 0 1	1,3,5-TRINITROBENZENE	0.25	mg/kg	U	N Y U	U			EFAVDS	02:57
				1,3-DINITROBENZENE	0.25	mg/kg	U	N Y U	U			EFAVDS	02:57
				2,4,6-TRINITROTOLUENE	0.25	mg/kg	U	N Y U	U			EFAVDS	02:57
				2,4-DINITROTOLUENE	0.25	mg/kg	U	N Y U	U			EFAVDS	02:57
				2,6-DINITROTOLUENE	0.25	mg/kg	U	N Y U	U			EFAVDS	02:57
				2-AMINO-4,6-DINITROTOLUENE	0.25	mg/kg	U	N Y U	U			EFAVDS	02:57
				2-NITROTOLUENE	0.25	mg/kg	U	N Y U	U			EFAVDS	02:57
				3-NITROTOLUENE	0.25	mg/kg	U	N Y U	U			EFAVDS	02:57
				4-AMINO-2,6-DINITROTOLUENE	0.25	mg/kg	U	N Y U	U			EFAVDS	02:57
				4-NITROTOLUENE	0.25	mg/kg	U	N Y U	U			EFAVDS	02:57
				HMX	0.50	mg/kg	U	N Y U	U			EFAVDS	02:57
				NITROBENZENE	0.25	mg/kg	U	N Y U	U			EFAVDS	02:57
				RDX	0.50	mg/kg	U	N Y U	U			EFAVDS	02:57
				TETRYL	0.65	mg/kg	U	N Y U	U			EFAVDS	02:57
QD0006	D2216	NONE	N 0 1	PERCENT MOISTURE				Y Y P				EFAVES	00:00
	SW6010	SW3050	N 0 1	ALUMINUM	3730	mg/kg		Y Y P				EFAVES	12:22
				ANTIMONY	6.5	mg/kg	U	N Y U	UJ		08A 08B	EFAVES	12:22
				ARSENIC	2.6	mg/kg		Y Y P				EFAVES	12:22
				BARIUM	79.2	mg/kg		Y Y P				EFAVES	12:22
				BERYLLIUM	0.51	mg/kg	B	Y Y P	J		15	EFAVES	12:22
				CADMIUM	0.54	mg/kg	U	N Y U	U			EFAVES	12:22
				CALCIUM	72.7	mg/kg	B	Y Y P	J		13 15	EFAVES	12:22
				CHROMIUM	7.3	mg/kg		Y Y P				EFAVES	12:22
				COBALT	14.7	mg/kg		Y Y P	J		13	EFAVES	12:22
				COPPER	9.2	mg/kg		Y Y P	J		08B	EFAVES	12:22
				IRON	18000	mg/kg		Y Y P				EFAVES	12:22
				LEAD	3.2	mg/kg		Y Y P				EFAVES	12:22
				MAGNESIUM	92.2	mg/kg	B	Y Y P	J		15	EFAVES	12:22
				MANGANESE	260	mg/kg		Y Y P	J		08A 08B	EFAVES	12:22
				NICKEL	4.6	mg/kg		Y Y P				EFAVES	12:22
				POTASSIUM	980	mg/kg		Y Y P				EFAVES	12:22
				SELENIUM	0.54	mg/kg	U	N Y U	U			EFAVES	12:22
				SILVER	1.1	mg/kg	U	N Y U	U			EFAVES	12:22
				SODIUM	545	mg/kg	U	N Y U	U			EFAVES	12:22
				THALLIUM	1.1	mg/kg	U	N Y U	U			EFAVES	12:22
				VANADIUM	7.1	mg/kg		Y Y P				EFAVES	12:22
				ZINC	9.8	mg/kg		Y Y P				EFAVES	12:22
	SW7471	TOTAL	N 0 1	MERCURY	0.036	mg/kg	U	N Y U	U			EFAVES	13:02
	SW8330	SW3550	N 0 1	1,3,5-TRINITROBENZENE	0.25	mg/kg	U	N Y U	U			EFAVES	03:14
				1,3-DINITROBENZENE	0.25	mg/kg	U	N Y U	U			EFAVES	03:14

Validation Qualifier Data Entry Verification

Fort McClellan

Sample Number:	Analytical/Extraction Method:		Flt REX Dil:	Parameter:	Result:	Units:	Qlfr:	Hit Use BCF	Val Qlfr	Val Code:	Reason Codes 1 2 3 4	Lab Sample:	Analysi Time:
QD0006	SW8330	SW3550	N 0 1	2,4,6-TRINITROTOLUENE	0.25	mg/kg	U	N Y U	U			EFAVES	03:14
				2,4-DINITROTOLUENE	0.25	mg/kg	U	N Y U	U			EFAVES	03:14
				2,6-DINITROTOLUENE	0.25	mg/kg	U	N Y U	U			EFAVES	03:14
				2-AMINO-4,6-DINITROTOLUENE	0.25	mg/kg	U	N Y U	U			EFAVES	03:14
				2-NITROTOLUENE	0.25	mg/kg	U	N Y U	U			EFAVES	03:14
				3-NITROTOLUENE	0.25	mg/kg	U	N Y U	U			EFAVES	03:14
				4-AMINO-2,6-DINITROTOLUENE	0.25	mg/kg	U	N Y U	U			EFAVES	03:14
				4-NITROTOLUENE	0.25	mg/kg	U	N Y U	U			EFAVES	03:14
				HMX	0.50	mg/kg	U	N Y U	U			EFAVES	03:14
				NITROBENZENE	0.25	mg/kg	U	N Y U	U			EFAVES	03:14
				RDX	0.50	mg/kg	U	N Y U	U			EFAVES	03:14
				TETRYL	0.65	mg/kg	U	N Y U	U			EFAVES	03:14
QD0007	D2216	NONE	N 0 1	PERCENT MOISTURE				Y Y P				EFAVFS	00:00
	SW6010	SW3050	N 0 1	ALUMINUM	5260	mg/kg		Y Y P				EFAVFS	12:27
				ANTIMONY	6.3	mg/kg	U	N Y U	UJ		08A 08B	EFAVFS	12:27
				ARSENIC	2.0	mg/kg		Y Y P				EFAVFS	12:27
				BARIUM	44.7	mg/kg		Y Y P				EFAVFS	12:27
				BERYLLIUM	0.39	mg/kg	B	Y Y P	J		15	EFAVFS	12:27
				CADMIUM	0.53	mg/kg	U	N Y U	U			EFAVFS	12:27
				CALCIUM	162	mg/kg	B	Y Y P	J		13 15	EFAVFS	12:27
				CHROMIUM	6.0	mg/kg		Y Y P				EFAVFS	12:27
				COBALT	4.5	mg/kg	B	Y Y P	J		13 15	EFAVFS	12:27
				COPPER	4.5	mg/kg		Y Y P	J		08B	EFAVFS	12:27
				IRON	13800	mg/kg		Y Y P				EFAVFS	12:27
				LEAD	4.7	mg/kg		Y Y P				EFAVFS	12:27
				MAGNESIUM	196	mg/kg	B	Y Y P	J		15	EFAVFS	12:27
				MANGANESE	72.7	mg/kg		Y Y P	J		08A 08B	EFAVFS	12:27
				NICKEL	3.4	mg/kg	B	Y Y P	J		15	EFAVFS	12:27
				POTASSIUM	544	mg/kg		Y Y P				EFAVFS	12:27
				SELENIUM	0.53	mg/kg	U	N Y U	U			EFAVFS	12:27
				SILVER	1.1	mg/kg	U	N Y U	U			EFAVFS	12:27
				SODIUM	529	mg/kg	U	N Y U	U			EFAVFS	12:27
				THALLIUM	1.1	mg/kg	U	N Y U	U			EFAVFS	12:27
				VANADIUM	8.8	mg/kg		Y Y P				EFAVFS	12:27
				ZINC	9.7	mg/kg		Y Y P				EFAVFS	12:27
	SW7471	TOTAL	N 0 1	MERCURY	0.021	mg/kg	B	Y Y P	J		15	EFAVFS	13:04
	SW8330	SW3550	N 0 1	1,3,5-TRINITROBENZENE	0.25	mg/kg	U	N Y U	U			EFAVFS	03:30
				1,3-DINITROBENZENE	0.25	mg/kg	U	N Y U	U			EFAVFS	03:30
				2,4,6-TRINITROTOLUENE	0.25	mg/kg	U	N Y U	U			EFAVFS	03:30
				2,4-DINITROTOLUENE	0.25	mg/kg	U	N Y U	U			EFAVFS	03:30
				2,6-DINITROTOLUENE	0.25	mg/kg	U	N Y U	U			EFAVFS	03:30
				2-AMINO-4,6-DINITROTOLUENE	0.25	mg/kg	U	N Y U	U			EFAVFS	03:30
				2-NITROTOLUENE	0.25	mg/kg	U	N Y U	U			EFAVFS	03:30

Sample Number:	Analytical/Extraction Method:		Flt REX Dil:	Parameter:	Result:	Units:	Qlfr:	Hit Use BCF	Val Qlfr	Val Code:	Reason Codes 1 2 3 4	Lab Sample:	Analysi Time:
QD0007	SW8330	SW3550	N 0 1	3-NITROTOLUENE	0.25	mg/kg	U	N Y U	U			EFAVFS	03:30
				4-AMINO-2,6-DINITROTOLUENE	0.25	mg/kg	U	N Y U	U			EFAVFS	03:30
				4-NITROTOLUENE	0.25	mg/kg	U	N Y U	U			EFAVFS	03:30
				HMX	0.50	mg/kg	U	N Y U	U			EFAVFS	03:30
				NITROBENZENE	0.25	mg/kg	U	N Y U	U			EFAVFS	03:30
				RDX	0.50	mg/kg	U	N Y U	U			EFAVFS	03:30
				TETRYL	0.65	mg/kg	U	N Y U	U			EFAVFS	03:30
QD0008	D2216	NONE	N 0 1	PERCENT MOISTURE				Y Y P				EFAVHS	00:00
	SW6010	SW3050	N 0 1	ALUMINUM	5160	mg/kg		Y Y P				EFAVHS	12:54
				ANTIMONY	6.7	mg/kg	U	N Y U	UJ		08A 08B	EFAVHS	12:54
				ARSENIC	4.9	mg/kg		Y Y P				EFAVHS	12:54
				BARIUM	29.8	mg/kg		Y Y P				EFAVHS	12:54
				BERYLLIUM	0.52	mg/kg	B	Y Y P	J		15	EFAVHS	12:54
				CADMIUM	0.56	mg/kg	U	N Y U	U			EFAVHS	12:54
				CALCIUM	10.6	mg/kg	B	Y Y P	J		13 15	EFAVHS	12:54
				CHROMIUM	6.3	mg/kg		Y Y P				EFAVHS	12:54
				COBALT	11.6	mg/kg		Y Y P	J		13	EFAVHS	12:54
				COPPER	8.3	mg/kg		Y Y P	J		08B	EFAVHS	12:54
				IRON	31300	mg/kg		Y Y P				EFAVHS	12:54
				LEAD	4.1	mg/kg		Y Y P				EFAVHS	12:54
				MAGNESIUM	127	mg/kg	B	Y Y P	J		15	EFAVHS	12:54
				MANGANESE	188	mg/kg		Y Y P	J		08A 08B	EFAVHS	12:54
				NICKEL	3.0	mg/kg	B	Y Y P	J		15	EFAVHS	12:54
				POTASSIUM	1450	mg/kg		Y Y P				EFAVHS	12:54
				SELENIUM	0.56	mg/kg	U	N Y U	U			EFAVHS	12:54
				SILVER	1.1	mg/kg	U	N Y U	U			EFAVHS	12:54
				SODIUM	558	mg/kg	U	N Y U	U			EFAVHS	12:54
				THALLIUM	1.1	mg/kg	U	N Y U	U			EFAVHS	12:54
				VANADIUM	13.3	mg/kg		Y Y P				EFAVHS	12:54
				ZINC	8.8	mg/kg		Y Y P				EFAVHS	12:54
	SW7471	TOTAL	N 0 1	MERCURY	0.037	mg/kg	U	N Y U	U			EFAVHS	13:09
	SW8330	SW3550	N 0 1	1,3,5-TRINITROBENZENE	0.25	mg/kg	U	N Y U	U			EFAVHS	04:46
				1,3-DINITROBENZENE	0.25	mg/kg	U	N Y U	U			EFAVHS	04:46
				2,4,6-TRINITROTOLUENE	0.25	mg/kg	U	N Y U	U			EFAVHS	04:46
				2,4-DINITROTOLUENE	0.25	mg/kg	U	N Y U	U			EFAVHS	04:46
				2,6-DINITROTOLUENE	0.25	mg/kg	U	N Y U	U			EFAVHS	04:46
				2-AMINO-4,6-DINITROTOLUENE	0.25	mg/kg	U	N Y U	U			EFAVHS	04:46
				2-NITROTOLUENE	0.25	mg/kg	U	N Y U	U			EFAVHS	04:46
				3-NITROTOLUENE	0.25	mg/kg	U	N Y U	U			EFAVHS	04:46
				4-AMINO-2,6-DINITROTOLUENE	0.25	mg/kg	U	N Y U	U			EFAVHS	04:46
				4-NITROTOLUENE	0.25	mg/kg	U	N Y U	U			EFAVHS	04:46
				HMX	0.50	mg/kg	U	N Y U	U			EFAVHS	04:46
				NITROBENZENE	0.25	mg/kg	U	N Y U	U			EFAVHS	04:46

Sample Number:	Analytical/Extraction Method:		Flt REX Dil:	Parameter:	Result:	Units:	Qlfr:	Hit Use BCF	Val Qlfr	Val Code:	Reason Codes 1 2 3 4	Lab Sample:	Analysi Time:
QD0008	SW8330	SW3550	N 0 1	RDX	0.50	mg/kg	U	N Y U	U			EFAVHS	04:46
				TETRYL	0.65	mg/kg	U	N Y U	U			EFAVHS	04:46
QD0009	D2216	NONE	N 0 1	PERCENT MOISTURE				Y Y P				EFAVMS	00:00
	SW6010	SW3050	N 0 1	ALUMINUM	5870	mg/kg		Y Y P				EFAVMS	12:58
				ANTIMONY	6.6	mg/kg	U	N Y U	UJ		08A 08B	EFAVMS	12:58
				ARSENIC	2.1	mg/kg		Y Y P				EFAVMS	12:58
				BARIUM	23.8	mg/kg		Y Y P				EFAVMS	12:58
				BERYLLIUM	0.28	mg/kg	B	Y Y P	J		15	EFAVMS	12:58
				CADMIUM	0.55	mg/kg	U	N Y U	U			EFAVMS	12:58
				CALCIUM	29.7	mg/kg	B	Y Y P	J		13 15	EFAVMS	12:58
				CHROMIUM	8.3	mg/kg		Y Y P				EFAVMS	12:58
				COBALT	2.4	mg/kg	B	Y Y P	J		13 15	EFAVMS	12:58
				COPPER	3.9	mg/kg		Y Y P	J		08B	EFAVMS	12:58
				IRON	12200	mg/kg		Y Y P				EFAVMS	12:58
				LEAD	3.2	mg/kg		Y Y P				EFAVMS	12:58
				MAGNESIUM	160	mg/kg	B	Y Y P	J		15	EFAVMS	12:58
				MANGANESE	42.3	mg/kg		Y Y P	J		08A 08B	EFAVMS	12:58
				NICKEL	3.2	mg/kg	B	Y Y P	J		15	EFAVMS	12:58
				POTASSIUM	273	mg/kg	B	Y Y P	J		15	EFAVMS	12:58
				SELENIUM	0.55	mg/kg	U	N Y U	U			EFAVMS	12:58
				SILVER	1.1	mg/kg	U	N Y U	U			EFAVMS	12:58
				SODIUM	550	mg/kg	U	N Y U	U			EFAVMS	12:58
				THALLIUM	1.1	mg/kg	U	N Y U	U			EFAVMS	12:58
				VANADIUM	11.0	mg/kg		Y Y P				EFAVMS	12:58
				ZINC	8.1	mg/kg		Y Y P				EFAVMS	12:58
	SW7471	TOTAL	N 0 1	MERCURY	0.014	mg/kg	B	Y Y P	J		15	EFAVMS	13:11
	SW8330	SW3550	N 0 1	1,3,5-TRINITROBENZENE	0.25	mg/kg	U	N Y U	U			EFAVMS	05:02
				1,3-DINITROBENZENE	0.25	mg/kg	U	N Y U	U			EFAVMS	05:02
				2,4,6-TRINITROTOLUENE	0.25	mg/kg	U	N Y U	U			EFAVMS	05:02
				2,4-DINITROTOLUENE	0.25	mg/kg	U	N Y U	U			EFAVMS	05:02
				2,6-DINITROTOLUENE	0.25	mg/kg	U	N Y U	U			EFAVMS	05:02
				2-AMINO-4,6-DINITROTOLUENE	0.25	mg/kg	U	N Y U	U			EFAVMS	05:02
				2-NITROTOLUENE	0.25	mg/kg	U	N Y U	U			EFAVMS	05:02
				3-NITROTOLUENE	0.25	mg/kg	U	N Y U	U			EFAVMS	05:02
				4-AMINO-2,6-DINITROTOLUENE	0.25	mg/kg	U	N Y U	U			EFAVMS	05:02
				4-NITROTOLUENE	0.25	mg/kg	U	N Y U	U			EFAVMS	05:02
				HMX	0.50	mg/kg	U	N Y U	U			EFAVMS	05:02
				NITROBENZENE	0.25	mg/kg	U	N Y U	U			EFAVMS	05:02
				RDX	0.50	mg/kg	U	N Y U	U			EFAVMS	05:02
				TETRYL	0.65	mg/kg	U	N Y U	U			EFAVMS	05:02
QD0010	D2216	NONE	N 0 1	PERCENT MOISTURE				Y Y P				EFAV1S	00:00
	SW6010	SW3050	N 0 1	ALUMINUM	4310	mg/kg		Y Y P				EFAV1S	13:03
				ANTIMONY	6.6	mg/kg	U	N Y U	UJ		08A 08B	EFAV1S	13:03

Validation Qualifier Data Entry Verification

Run Date: December 28, 2001

Fort McClellan

Sample Number:	Analytical/Extraction Method:		Flt REX Dil:	Parameter:	Result:	Units:	Qlfr:	Hit Use BCF	Val Qlfr	Val Code:	Reason Codes 1 2 3 4	Lab Sample:	Analysi Time:
QD0010	SW6010	SW3050	N 0 1	ARSENIC	2.4	mg/kg		Y Y P				EFAV1S	13:03
				BARIUM	14.9	mg/kg	B	Y Y P	J		15	EFAV1S	13:03
				BERYLLIUM	0.64	mg/kg		Y Y P				EFAV1S	13:03
				CADMIUM	0.55	mg/kg	U	N Y U	U			EFAV1S	13:03
				CALCIUM	9.9	mg/kg	B	Y Y P	J		13 15	EFAV1S	13:03
				CHROMIUM	11.0	mg/kg		Y Y P				EFAV1S	13:03
				COBALT	1.5	mg/kg	B	Y Y P	J		13 15	EFAV1S	13:03
				COPPER	26.5	mg/kg		Y Y P	J		08B	EFAV1S	13:03
				IRON	23100	mg/kg		Y Y P				EFAV1S	13:03
				LEAD	5.8	mg/kg		Y Y P				EFAV1S	13:03
				MAGNESIUM	28.6	mg/kg	B	Y Y P	J		15	EFAV1S	13:03
				MANGANESE	24.2	mg/kg		Y Y P	J		08A 08B	EFAV1S	13:03
				NICKEL	3.8	mg/kg	B	Y Y P	J		15	EFAV1S	13:03
				POTASSIUM	832	mg/kg		Y Y P				EFAV1S	13:03
				SELENIUM	0.55	mg/kg	U	N Y U	U			EFAV1S	13:03
				SILVER	1.1	mg/kg	U	N Y U	U			EFAV1S	13:03
				SODIUM	550	mg/kg	U	N Y U	U			EFAV1S	13:03
				THALLIUM	1.1	mg/kg	U	N Y U	U			EFAV1S	13:03
				VANADIUM	10.5	mg/kg		Y Y P				EFAV1S	13:03
				ZINC	21.6	mg/kg		Y Y P				EFAV1S	13:03
	SW7471	TOTAL	N 0 1	MERCURY	0.036	mg/kg	U	N Y U	U			EFAV1S	13:13
	SW8330	SW3550	N 0 1	1,3,5-TRINITROBENZENE	0.25	mg/kg	U	N Y U	U			EFAV1S	05:18
				1,3-DINITROBENZENE	0.25	mg/kg	U	N Y U	U			EFAV1S	05:18
				2,4,6-TRINITROTOLUENE	0.25	mg/kg	U	N Y U	U			EFAV1S	05:18
				2,4-DINITROTOLUENE	0.25	mg/kg	U	N Y U	U			EFAV1S	05:18
				2,6-DINITROTOLUENE	0.25	mg/kg	U	N Y U	U			EFAV1S	05:18
				2-AMINO-4,6-DINITROTOLUENE	0.25	mg/kg	U	N Y U	U			EFAV1S	05:18
				2-NITROTOLUENE	0.25	mg/kg	U	N Y U	U			EFAV1S	05:18
				3-NITROTOLUENE	0.25	mg/kg	U	N Y U	U			EFAV1S	05:18
				4-AMINO-2,6-DINITROTOLUENE	0.25	mg/kg	U	N Y U	U			EFAV1S	05:18
				4-NITROTOLUENE	0.25	mg/kg	U	N Y U	U			EFAV1S	05:18
				HMX	0.50	mg/kg	U	N Y U	U			EFAV1S	05:18
				NITROBENZENE	0.25	mg/kg	U	N Y U	U			EFAV1S	05:18
				RDX	0.50	mg/kg	U	N Y U	U			EFAV1S	05:18
				TETRYL	0.65	mg/kg	U	N Y U	U			EFAV1S	05:18
QD0011R	SW6010B	SW3050	N 0 1	ALUMINUM	11000	mg/kg		Y Y P				H105-01	03:07
				ANTIMONY	11.1	mg/kg	U	N Y U	U			H105-01	03:07
				ARSENIC	2.22	mg/kg		Y Y P				H105-01	15:46
				BARIUM	34.2	mg/kg		Y Y P				H105-01	03:07
				BERYLLIUM	.208	mg/kg	J	Y Y P	J		15	H105-01	03:07
				CADMIUM	.554	mg/kg	U	N Y U	U			H105-01	03:07
				CALCIUM	164	mg/kg		Y Y P				H105-01	03:07
				CHROMIUM	7.82	mg/kg		Y Y P				H105-01	03:07

Validation Qualifier Data Entry Verification

Fort McClellan

Sample Number:	Analytical/Extraction Method:		Flt REX Dil:	Parameter:	Result:	Units:	Qlfr:	Hit Use BCF	Val Qlfr	Val Code:	Reason Codes 1 2 3 4	Lab Sample:	Analysi Time:
QD0011R	SW6010B	SW3050	N 0 1	COBALT	2.03	mg/kg	J	Y Y P	J		15	H105-01	03:07
				COPPER	3.71	mg/kg		Y Y P				H105-01	03:07
				IRON	10500	mg/kg		Y Y P				H105-01	03:07
				LEAD	5.52	mg/kg		Y Y P				H105-01	15:46
				MAGNESIUM	414	mg/kg		Y Y P				H105-01	03:07
				MANGANESE	31.6	mg/kg		Y Y P				H105-01	03:07
				NICKEL	4.19	mg/kg		Y Y P				H105-01	03:07
				POTASSIUM	324	mg/kg	J	Y Y F	B		06B 15	H105-01	03:07
				SELENIUM	1.11	mg/kg	U	N Y U	U			H105-01	15:46
				SILVER	.623	mg/kg	J	Y Y P	J		15	H105-01	03:07
				SODIUM	111	mg/kg	U	N Y U	U			H105-01	03:07
				THALLIUM	2.21	mg/kg	U	N Y U	U			H105-01	15:46
				VANADIUM	14.6	mg/kg		Y Y P				H105-01	03:07
				ZINC	12.3	mg/kg		Y Y P				H105-01	03:07
	SW7471A	TOTAL	N 0 1	MERCURY	.032	mg/kg	J	Y Y F	B		06B 15	H105-01	10:32
	SW8330	METHOD	N 0 1	1,3,5-TNB	.4	mg/kg	U	N Y U	U			H105-01	21:00
				1,3-DNB	.4	mg/kg	U	N Y U	U			H105-01	21:00
				2,4,6-TNT	.4	mg/kg	U	N Y U	U			H105-01	21:00
				2,4-DNT	.4	mg/kg	U	N Y U	U			H105-01	21:00
				2,6-DNT	.4	mg/kg	U	N Y U	U			H105-01	21:00
				2-AM-4,6-DNT	.4	mg/kg	U	N Y U	U			H105-01	21:00
				2-NITROTOLUENE	.4	mg/kg	U	N Y U	U			H105-01	21:00
				3-NITROTOLUENE	.4	mg/kg	U	N Y U	U			H105-01	21:00
				4-AM-2,6-DNT	.4	mg/kg	U	N Y U	U			H105-01	21:00
				4-NITROTOLUENE	.4	mg/kg	U	N Y U	U			H105-01	21:00
				HMX	.4	mg/kg	U	N Y U	U			H105-01	21:00
				NITROBENZENE	.4	mg/kg	U	N Y U	U			H105-01	21:00
				RDX	.4	mg/kg	U	N Y U	U			H105-01	21:00
				TETRYL	.4	mg/kg	U	N Y U	U			H105-01	21:00
QD0012	SW6010B	SW3050	N 0 1	ALUMINUM	3240	mg/kg		Y Y P				J076-01	20:43
				ANTIMONY	10.6	mg/kg	U	N Y U	U			J076-01	20:43
				ARSENIC	1.01	mg/kg	J	Y Y P	J		15	J076-01	12:29
				BARIUM	7.72	mg/kg		Y Y P				J076-01	20:43
				BERYLLIUM	1.06	mg/kg	U	N Y U	U			J076-01	20:43
				CADMIUM	1.06	mg/kg	U	N Y U	U			J076-01	20:43
				CALCIUM	56.8	mg/kg	J	Y Y F	B		06A 06B 15	J076-01	20:43
				CHROMIUM	3.73	mg/kg		Y Y P				J076-01	20:43
				COBALT	2.13	mg/kg	U	N Y U	U			J076-01	20:43
				COPPER	3.26	mg/kg		Y Y P				J076-01	20:43
				IRON	5910	mg/kg		Y Y P				J076-01	20:43
				LEAD	2.32	mg/kg		Y Y P				J076-01	12:29
				MAGNESIUM	87.8	mg/kg	J	Y Y F	B		06B 15	J076-01	20:43
				MANGANESE	6.58	mg/kg		Y Y P				J076-01	20:43

Validation Qualifier Data Entry Verification

Fort McClellan

Sample Number:	Analytical/Extraction Method:		Flt REX Dil:	Parameter:	Result:	Units:	Qlfr:	Hit Use BCF	Val Qlfr	Val Code:	Reason Codes 1 2 3 4	Lab Sample:	Analysi Time:
QD0012	SW6010B	SW3050	N 0 1	NICKEL	1.54	mg/kg	J	Y Y P	J		15	J076-01	20:43
				POTASSIUM	165	mg/kg	J	Y Y P	J		15	J076-01	20:43
				SELENIUM	1.06	mg/kg	U	N Y U	U			J076-01	12:29
				SILVER	2.13	mg/kg	U	N Y U	U			J076-01	20:43
				SODIUM	40.7	mg/kg	J	Y Y F	B		06B 15	J076-01	20:43
				THALLIUM	2.13	mg/kg	U	N Y U	U			J076-01	12:29
				VANADIUM	6	mg/kg		Y Y P				J076-01	20:43
				ZINC	3.96	mg/kg		Y Y P				J076-01	20:43
	SW7471A	TOTAL	N 0 1	MERCURY	.106	mg/kg	U	N Y U	U			J076-01	14:38
	SW8330	METHOD	N 0 1	1,3,5-TNB	.4	mg/kg	U	N Y U	U			J076-01	05:31
				1,3-DNB	.4	mg/kg	U	N Y U	U			J076-01	05:31
				2,4,6-TNT	.4	mg/kg	U	N Y U	U			J076-01	05:31
				2,4-DNT	.4	mg/kg	U	N Y U	U			J076-01	05:31
				2,6-DNT	.4	mg/kg	U	N Y U	U			J076-01	05:31
				2-AM-4,6-DNT	.4	mg/kg	U	N Y U	U			J076-01	05:31
				2-NITROTOLUENE	.4	mg/kg	U	N Y U	U			J076-01	05:31
				3-NITROTOLUENE	.4	mg/kg	U	N Y U	U			J076-01	05:31
				4-AM-2,6-DNT	.4	mg/kg	U	N Y U	U			J076-01	05:31
				4-NITROTOLUENE	.4	mg/kg	U	N Y U	U			J076-01	05:31
				HMX	.4	mg/kg	U	N Y U	U			J076-01	05:31
				NITROBENZENE	.4	mg/kg	U	N Y U	U			J076-01	05:31
				RDX	.4	mg/kg	U	N Y U	U			J076-01	05:31
				TETRYL	.4	mg/kg	U	N Y U	U			J076-01	05:31
QD0013R	SW6010B	SW3050	N 0 1	ALUMINUM	11100	mg/kg		Y Y P				H105-02	03:11
				ANTIMONY	11	mg/kg	U	N Y	U			H105-02	03:11
				ARSENIC	2.68	mg/kg		Y Y P				H105-02	15:52
				BARIUM	36.5	mg/kg		Y Y P				H105-02	03:11
				BERYLLIUM	.21	mg/kg	J	Y Y P	J		15	H105-02	03:11
				CADMIUM	.552	mg/kg	U	N Y	U			H105-02	03:11
				CALCIUM	175	mg/kg		Y Y P				H105-02	03:11
				CHROMIUM	8.38	mg/kg		Y Y P				H105-02	03:11
				COBALT	1.26	mg/kg	J	Y Y P	J		15	H105-02	03:11
				COPPER	3.73	mg/kg		Y Y P				H105-02	03:11
				IRON	10800	mg/kg		Y Y P				H105-02	03:11
				LEAD	5.95	mg/kg		Y Y P				H105-02	15:52
				MAGNESIUM	417	mg/kg		Y Y P				H105-02	03:11
				MANGANESE	32.6	mg/kg		Y Y P				H105-02	03:11
				NICKEL	4.77	mg/kg		Y Y P				H105-02	03:11
				POTASSIUM	294	mg/kg	J	Y Y F	B		06B 15	H105-02	03:11
				SELENIUM	1.1	mg/kg	U	N Y	U			H105-02	15:52
				SILVER	1.1	mg/kg	U	N Y	U			H105-02	03:11
				SODIUM	110	mg/kg	U	N Y	U			H105-02	03:11
				THALLIUM	2.21	mg/kg	U	N Y	U			H105-02	15:52

Validation Qualifier Data Entry Verification

Run Date: December 28, 2001

Fort McClellan

Sample Number:	Analytical/Extraction Method:		Flt REX Dil:	Parameter:	Result:	Units:	Qlfr:	Hit Use BCF	Val Qlfr	Val Code:	Reason Codes 1 2 3 4	Lab Sample:	Analysi Time:
QD0013R	SW6010B	SW3050	N 0 1	VANADIUM	14.2	mg/kg		Y Y P				H105-02	03:11
				ZINC	12.9	mg/kg		Y Y P				H105-02	03:11
	SW7471A	TOTAL	N 0 1	MERCURY	.022	mg/kg	J	Y Y F	B		06B 15	H105-02	10:34
	SW8330	METHOD	N 0 1	1,3,5-TNB	.4	mg/kg	U	N Y	U			H105-02	21:39
				1,3-DNB	.4	mg/kg	U	N Y	U			H105-02	21:39
				2,4,6-TNT	.4	mg/kg	U	N Y	U			H105-02	21:39
				2,4-DNT	.4	mg/kg	U	N Y	U			H105-02	21:39
				2,6-DNT	.4	mg/kg	U	N Y	U			H105-02	21:39
				2-AM-4,6-DNT	.4	mg/kg	U	N Y	U			H105-02	21:39
				2-NITROTOLUENE	.4	mg/kg	U	N Y	U			H105-02	21:39
				3-NITROTOLUENE	.4	mg/kg	U	N Y	U			H105-02	21:39
				4-AM-2,6-DNT	.4	mg/kg	U	N Y	U			H105-02	21:39
				4-NITROTOLUENE	.4	mg/kg	U	N Y	U			H105-02	21:39
				HMX	.4	mg/kg	U	N Y	U			H105-02	21:39
				NITROBENZENE	.4	mg/kg	U	N Y	U			H105-02	21:39
				RDX	.4	mg/kg	U	N Y	U			H105-02	21:39
				TETRYL	.4	mg/kg	U	N Y	U			H105-02	21:39
QD0014	SW6010B	SW3050	N 0 1	ALUMINUM	7210	mg/kg		Y Y P				H251-01	23:43
				ANTIMONY	10.5	mg/kg	U	N Y U	UJ		08A	H251-01	23:43
				ARSENIC	4.39	mg/kg		Y Y P				H251-01	00:48
				BARIUM	75.5	mg/kg		Y Y P				H251-01	23:43
				BERYLLIUM	.816	mg/kg	J	Y Y F	B		06B 15	H251-01	23:43
				CADMIUM	.527	mg/kg	U	N Y U	U			H251-01	23:43
				CALCIUM	502	mg/kg		Y Y P				H251-01	23:43
				CHROMIUM	15	mg/kg		Y Y P				H251-01	23:43
				COBALT	5.65	mg/kg		Y Y P				H251-01	23:43
				COPPER	29.8	mg/kg		Y Y P				H251-01	23:43
				IRON	25100	mg/kg		Y Y P				H251-01	23:43
				LEAD	10.1	mg/kg		Y Y P				H251-01	00:48
				MAGNESIUM	489	mg/kg		Y Y P				H251-01	23:43
				MANGANESE	410	mg/kg		Y Y P	J		08A	H251-01	23:43
				NICKEL	6.38	mg/kg		Y Y P				H251-01	23:43
				POTASSIUM	1500	mg/kg		Y Y P				H251-01	23:43
				SELENIUM	1.05	mg/kg	U	N Y U	U			H251-01	00:48
				SILVER	1.25	mg/kg		Y Y P				H251-01	23:43
				SODIUM	105	mg/kg	U	N Y U	U			H251-01	23:43
				THALLIUM	2.11	mg/kg	U	N Y U	U			H251-01	00:48
				VANADIUM	17	mg/kg		Y Y P				H251-01	23:43
				ZINC	22.6	mg/kg		Y Y P				H251-01	23:43
	SW7471A	TOTAL	N 0 1	MERCURY	.105	mg/kg	U	N Y U	U			H251-01	10:19
	SW8330	METHOD	N 0 1	1,3,5-TNB	.4	mg/kg	U	N Y U	U			H251-01	21:32
				1,3-DNB	.4	mg/kg	U	N Y U	U			H251-01	21:32
				2,4,6-TNT	.4	mg/kg	U	N Y U	U			H251-01	21:32

Sample Number:	Analytical/Extraction Method:		Flt REX Dil:	Parameter:	Result:	Units:	Qlfr:	Hit Use BCF	Val Qlfr	Val Code:	Reason Codes 1 2 3 4	Lab Sample:	Analysi Time:
QD0014	SW8330	METHOD	N 0 1	2,4-DNT	.4	mg/kg	U	N Y U	U			H251-01	21:32
				2,6-DNT	.4	mg/kg	U	N Y U	U			H251-01	21:32
				2-AM-4,6-DNT	.4	mg/kg	U	N Y U	U			H251-01	21:32
				2-NITROTOLUENE	.4	mg/kg	U	N Y U	U			H251-01	21:32
				3-NITROTOLUENE	.4	mg/kg	U	N Y U	U			H251-01	21:32
				4-AM-2,6-DNT	.4	mg/kg	U	N Y U	U			H251-01	21:32
				4-NITROTOLUENE	.4	mg/kg	U	N Y U	U			H251-01	21:32
				HMX	.4	mg/kg	U	N Y U	U			H251-01	21:32
				NITROBENZENE	.4	mg/kg	U	N Y U	U			H251-01	21:32
				RDX	.4	mg/kg	U	N Y U	U			H251-01	21:32
				TETRYL	.4	mg/kg	U	N Y U	U			H251-01	21:32
QD0015	SW6010B	SW3050	N 0 1	ALUMINUM	4600	mg/kg		Y Y P				H251-02	23:48
				ANTIMONY	11.1	mg/kg	U	N Y U	UJ		08A	H251-02	23:48
				ARSENIC	2.72	mg/kg		Y Y P				H251-02	00:54
				BARIUM	51.8	mg/kg		Y Y P				H251-02	23:48
				BERYLLIUM	.784	mg/kg	J	Y Y F	B		06B 15	H251-02	23:48
				CADMIUM	.556	mg/kg	U	N Y U	U			H251-02	23:48
				CALCIUM	344	mg/kg		Y Y P				H251-02	23:48
				CHROMIUM	7.25	mg/kg		Y Y P				H251-02	23:48
				COBALT	4.4	mg/kg		Y Y P				H251-02	23:48
				COPPER	6.98	mg/kg		Y Y P				H251-02	23:48
				IRON	20800	mg/kg		Y Y P				H251-02	23:48
				LEAD	4.76	mg/kg		Y Y P				H251-02	00:54
				MAGNESIUM	369	mg/kg		Y Y P				H251-02	23:48
				MANGANESE	196	mg/kg		Y Y P	J		08A	H251-02	23:48
				NICKEL	4.3	mg/kg		Y Y P				H251-02	23:48
				POTASSIUM	1630	mg/kg		Y Y P				H251-02	23:48
				SELENIUM	1.11	mg/kg	U	N Y U	U			H251-02	00:54
				SILVER	1.47	mg/kg		Y Y P				H251-02	23:48
				SODIUM	111	mg/kg	U	N Y U	U			H251-02	23:48
				THALLIUM	2.22	mg/kg	U	N Y U	U			H251-02	00:54
				VANADIUM	7.65	mg/kg		Y Y P				H251-02	23:48
				ZINC	11.3	mg/kg		Y Y P				H251-02	23:48
	SW7471A	TOTAL	N 0 1	MERCURY	.111	mg/kg	U	N Y U	U			H251-02	10:21
	SW8330	METHOD	N 0 1	1,3,5-TNB	.4	mg/kg	U	N Y U	U			H251-02	22:11
				1,3-DNB	.4	mg/kg	U	N Y U	U			H251-02	22:11
				2,4,6-TNT	.4	mg/kg	U	N Y U	U			H251-02	22:11
				2,4-DNT	.4	mg/kg	U	N Y U	U			H251-02	22:11
				2,6-DNT	.4	mg/kg	U	N Y U	U			H251-02	22:11
				2-AM-4,6-DNT	.4	mg/kg	U	N Y U	U			H251-02	22:11
				2-NITROTOLUENE	.4	mg/kg	U	N Y U	U			H251-02	22:11
				3-NITROTOLUENE	.4	mg/kg	U	N Y U	U			H251-02	22:11
				4-AM-2,6-DNT	.4	mg/kg	U	N Y U	U			H251-02	22:11

Validation Qualifier Data Entry Verification

Fort McClellan

Sample Number:	Analytical/Extraction Method:		Flt REX Dil:	Parameter:	Result:	Units:	Qlfr:	Hit Use BCF	Val Qlfr	Val Code:	Reason Codes 1 2 3 4	Lab Sample:	Analysi Time:
QD0015	SW8330	METHOD	N 0 1	4-NITROTOLUENE	.4	mg/kg	U	N Y U	U			H251-02	22:11
				HMX	.4	mg/kg	U	N Y U	U			H251-02	22:11
				NITROBENZENE	.4	mg/kg	U	N Y U	U			H251-02	22:11
				RDX	.4	mg/kg	U	N Y U	U			H251-02	22:11
				TETRYL	.4	mg/kg	U	N Y U	U			H251-02	22:11
QD0016	SW6010B	SW3050	N 0 1	ALUMINUM	4380	mg/kg		Y Y P				H251-03	23:52
				ANTIMONY	11.1	mg/kg	U	N Y	UJ		08A	H251-03	23:52
				ARSENIC	3.06	mg/kg		Y Y P				H251-03	00:59
				BARIUM	48.2	mg/kg		Y Y P				H251-03	23:52
				BERYLLIUM	.578	mg/kg	J	Y Y F	B		06B 15	H251-03	23:52
				CADMIUM	.554	mg/kg	U	N Y	U			H251-03	23:52
				CALCIUM	259	mg/kg		Y Y P				H251-03	23:52
				CHROMIUM	6.13	mg/kg		Y Y P				H251-03	23:52
				COBALT	3.77	mg/kg		Y Y P				H251-03	23:52
				COPPER	4.87	mg/kg		Y Y P				H251-03	23:52
				IRON	15800	mg/kg		Y Y P				H251-03	23:52
				LEAD	4.69	mg/kg		Y Y P				H251-03	00:59
				MAGNESIUM	249	mg/kg		Y Y P				H251-03	23:52
				MANGANESE	200	mg/kg		Y Y P	J		08A	H251-03	23:52
				NICKEL	2.68	mg/kg		Y Y P				H251-03	23:52
				POTASSIUM	1230	mg/kg		Y Y P				H251-03	23:52
				SELENIUM	1.11	mg/kg	U	N Y	U			H251-03	00:59
				SILVER	1.11	mg/kg	U	N Y	U			H251-03	23:52
				SODIUM	111	mg/kg	U	N Y	U			H251-03	23:52
				THALLIUM	2.22	mg/kg	U	N Y	U			H251-03	00:59
				VANADIUM	8.08	mg/kg		Y Y P				H251-03	23:52
				ZINC	7.82	mg/kg		Y Y P				H251-03	23:52
	SW7471A	TOTAL	N 0 1	MERCURY	.111	mg/kg	U	N Y	U			H251-03	10:24
	SW8330	METHOD	N 0 1	1,3,5-TNB	.4	mg/kg	U	N Y	U			H251-03	22:50
				1,3-DNB	.4	mg/kg	U	N Y	U			H251-03	22:50
				2,4,6-TNT	.4	mg/kg	U	N Y	U			H251-03	22:50
				2,4-DNT	.4	mg/kg	U	N Y	U			H251-03	22:50
				2,6-DNT	.4	mg/kg	U	N Y	U			H251-03	22:50
				2-AM-4,6-DNT	.4	mg/kg	U	N Y	U			H251-03	22:50
				2-NITROTOLUENE	.4	mg/kg	U	N Y	U			H251-03	22:50
				3-NITROTOLUENE	.4	mg/kg	U	N Y	U			H251-03	22:50
				4-AM-2,6-DNT	.4	mg/kg	U	N Y	U			H251-03	22:50
				4-NITROTOLUENE	.4	mg/kg	U	N Y	U			H251-03	22:50
				HMX	.4	mg/kg	U	N Y	U			H251-03	22:50
				NITROBENZENE	.4	mg/kg	U	N Y	U			H251-03	22:50
				RDX	.4	mg/kg	U	N Y	U			H251-03	22:50
				TETRYL	.4	mg/kg	U	N Y	U			H251-03	22:50
QD1001	SW6010B	SW3050	N 0 1	ALUMINUM	5400	mg/kg		Y Y P				H251-04	23:57

Validation Qualifier Data Entry Verification

Fort McClellan

Sample Number:	Analytical/Extraction Method:		Flt REX Dil:	Parameter:	Result:	Units:	Qlfr:	Hit Use BCF	Val Qlfr	Val Code:	Reason Codes 1 2 3 4	Lab Sample:	Analysi Time:
QD1001	SW6010B	SW3050	N 0 1	ANTIMONY	12.5	mg/kg	U	N Y U	UJ		08A	H251-04	23:57
				ARSENIC	4.22	mg/kg		Y Y P				H251-04	01:05
				BARIUM	52.7	mg/kg		Y Y P				H251-04	23:57
				BERYLLIUM	.637	mg/kg	J	Y Y F	B		06B 15	H251-04	23:57
				CADMIUM	.625	mg/kg	U	N Y U	U			H251-04	23:57
				CALCIUM	190	mg/kg		Y Y P				H251-04	23:57
				CHROMIUM	8.36	mg/kg		Y Y P				H251-04	23:57
				COBALT	8.3	mg/kg		Y Y P				H251-04	23:57
				COPPER	5.35	mg/kg		Y Y P				H251-04	23:57
				IRON	21400	mg/kg		Y Y P				H251-04	23:57
				LEAD	5.63	mg/kg		Y Y P				H251-04	01:05
				MAGNESIUM	462	mg/kg		Y Y P				H251-04	23:57
				MANGANESE	371	mg/kg		Y Y P	J		08A	H251-04	23:57
				NICKEL	5.17	mg/kg		Y Y P				H251-04	23:57
				POTASSIUM	1310	mg/kg		Y Y P				H251-04	23:57
				SELENIUM	1.25	mg/kg	U	N Y U	U			H251-04	01:05
				SILVER	1.06	mg/kg	J	Y Y P	J		15	H251-04	23:57
				SODIUM	125	mg/kg	U	N Y U	U			H251-04	23:57
				THALLIUM	2.5	mg/kg	U	N Y U	U			H251-04	01:05
				VANADIUM	15.1	mg/kg		Y Y P				H251-04	23:57
				ZINC	12.3	mg/kg		Y Y P				H251-04	23:57
	SW7471A	TOTAL	N 0 1	MERCURY	.125	mg/kg	U	N Y U	U			H251-04	10:26
	SW8330	METHOD	N 0 1	1,3,5-TNB	.4	mg/kg	U	N Y U	U			H251-04	23:29
				1,3-DNB	.4	mg/kg	U	N Y U	U			H251-04	23:29
				2,4,6-TNT	.4	mg/kg	U	N Y U	U			H251-04	23:29
				2,4-DNT	.4	mg/kg	U	N Y U	U			H251-04	23:29
				2,6-DNT	.4	mg/kg	U	N Y U	U			H251-04	23:29
				2-AM-4,6-DNT	.4	mg/kg	U	N Y U	U			H251-04	23:29
				2-NITROTOLUENE	.4	mg/kg	U	N Y U	U			H251-04	23:29
				3-NITROTOLUENE	.4	mg/kg	U	N Y U	U			H251-04	23:29
				4-AM-2,6-DNT	.4	mg/kg	U	N Y U	U			H251-04	23:29
				4-NITROTOLUENE	.4	mg/kg	U	N Y U	U			H251-04	23:29
				HMX	.4	mg/kg	U	N Y U	U			H251-04	23:29
				NITROBENZENE	.4	mg/kg	U	N Y U	U			H251-04	23:29
				RDX	.4	mg/kg	U	N Y U	U			H251-04	23:29
				TETRYL	.4	mg/kg	U	N Y U	U			H251-04	23:29
	SW9060	NONE	N 0 1	TOC	28.9	mg/kg		Y Y P				H251-04	13:25
QD2001	SW6010B	SW3010	N 0 1	ALUMINUM	.2	mg/L	U	N Y U	U			H253-01	21:43
				ANTIMONY	.1	mg/L	U	N Y U	U			H253-01	21:43
				ARSENIC	.01	mg/L	U	N Y U	U			H253-01	18:04
				BARIUM	.0223	mg/L		Y Y P				H253-01	21:43
				BERYLLIUM	.001	mg/L	U	N Y U	U			H253-01	21:43
				CADMIUM	.01	mg/L	U	N Y U	U			H253-01	21:43

Validation Qualifier Data Entry Verification

Fort McClellan

Sample Number:	Analytical/Extraction Method:		Flt REX Dil:	Parameter:	Result:	Units:	Qlfr:	Hit Use BCF	Val Qlfr	Val Code:	Reason Codes 1 2 3 4	Lab Sample:	Analysi Time:
QD2001	SW6010B	SW3010	N 0 1	CALCIUM	.844	mg/L	J	Y Y P	J		15	H253-01	21:43
				CHROMIUM	.01	mg/L	U	N Y U	U			H253-01	21:43
				COBALT	.02	mg/L	U	N Y U	U			H253-01	21:43
				COPPER	.02	mg/L	U	N Y U	U			H253-01	21:43
				IRON	.0698	mg/L	J	Y Y P	J		15	H253-01	21:43
				LEAD	.01	mg/L	U	N Y U	U			H253-01	18:04
				MAGNESIUM	.595	mg/L	J	Y Y P	J		15	H253-01	21:43
				MANGANESE	.00992	mg/L	J	Y Y P	J		15	H253-01	21:43
				NICKEL	.02	mg/L	U	N Y U	U			H253-01	21:43
				POTASSIUM	5	mg/L	U	N Y U	U			H253-01	21:43
				SELENIUM	.00201	mg/L	J	Y Y P	J		15	H253-01	18:04
				SILVER	.01	mg/L	U	N Y U	U			H253-01	21:43
				SODIUM	1.06	mg/L		Y Y P				H253-01	21:43
				THALLIUM	.01	mg/L	U	N Y U	U			H253-01	18:04
				VANADIUM	.01	mg/L	U	N Y U	U			H253-01	21:43
				ZINC	.02	mg/L	U	N Y U	U			H253-01	21:43
	SW7470A	TOTAL	N 0 1	MERCURY	.0005	mg/L	U	N Y U	U			H253-01	10:06
	SW8330	METHOD	N 0 1	1,3,5-TNB	.0004	mg/L	U	N Y U	U			H253-01	14:59
				1,3-DNB	.0004	mg/L	U	N Y U	U			H253-01	14:59
				2,4,6-TNT	.0004	mg/L	U	N Y U	U			H253-01	14:59
				2,4-DNT	.0004	mg/L	U	N Y U	U			H253-01	14:59
				2,6-DNT	.0004	mg/L	U	N Y U	U			H253-01	14:59
				2-AM-4,6-DNT	.0004	mg/L	U	N Y U	U			H253-01	14:59
				2-NITROTOLUENE	.0004	mg/L	U	N Y U	U			H253-01	14:59
				3-NITROTOLUENE	.0006	mg/L	U	N Y U	U			H253-01	14:59
				4-AM-2,6-DNT	.0004	mg/L	U	N Y U	U			H253-01	14:59
				4-NITROTOLUENE	.0006	mg/L	U	N Y U	U			H253-01	14:59
				HMX	.0004	mg/L	U	N Y U	U			H253-01	14:59
				NITROBENZENE	.0004	mg/L	U	N Y U	U			H253-01	14:59
				RDX	.0004	mg/L	U	N Y U	U			H253-01	14:59
				TETRYL	.0004	mg/L	U	N Y U	U			H253-01	14:59
QD3001	SW6010B	SW3010	N 0 1	ALUMINUM	.691	mg/L		Y Y P				H097-01	14:29
				ANTIMONY	.1	mg/L	U	N Y U	U			H097-01	14:29
				ARSENIC	.01	mg/L	U	N Y U	U			H097-01	01:19
				BARIUM	.0317	mg/L		Y Y P				H097-01	14:29
				BERYLLIUM	.00248	mg/L		Y Y F	B		06B 06C	H097-01	14:29
				CADMIUM	.01	mg/L	U	N Y U	U			H097-01	14:29
				CALCIUM	1.21	mg/L		Y Y P				H097-01	14:29
				CHROMIUM	.00735	mg/L	J	Y Y F	B		06B 06C 15	H097-01	14:29
				COBALT	.0456	mg/L		Y Y F	B		06C	H097-01	14:29
				COPPER	.00502	mg/L	J	Y Y F	B		06B 06C 15	H097-01	14:29
				IRON	1.76	mg/L		Y Y P				H097-01	14:29
				LEAD	.01	mg/L	U	N Y U	U			H097-01	01:19

Validation Qualifier Data Entry Verification

Fort McClellan

Sample Number:	Analytical/Extraction Method:		Flt REX Dil:	Parameter:	Result:	Units:	Qlfr:	Hit Use BCF	Val Qlfr	Val Code:	Reason Codes 1 2 3 4	Lab Sample:	Analysi Time:
QD3001	SW6010B	SW3010	N 0 1	MAGNESIUM	.866	mg/L	J	Y Y F	B		06C 15	H097-01	14:29
				MANGANESE	1.36	mg/L		Y Y P				H097-01	14:29
				NICKEL	.00936	mg/L	J	Y Y P	J		15	H097-01	14:29
				POTASSIUM	5.03	mg/L		Y Y P				H097-01	14:29
				SELENIUM	.01	mg/L	U	N Y U	U			H097-01	01:19
				SILVER	.01	mg/L	U	N Y U	U			H097-01	14:29
				SODIUM	1.49	mg/L		Y Y P				H097-01	14:29
				THALLIUM	.01	mg/L	U	N Y U	U			H097-01	01:19
				VANADIUM	.00626	mg/L	J	Y Y F	B		06B 15	H097-01	14:29
				ZINC	.02	mg/L	U	N Y U	U			H097-01	14:29
	SW7470A	TOTAL	N 0 1	MERCURY	.0005	mg/L	U	N Y U	U			H097-01	11:32
	SW8330	METHOD	N 0 1	1,3,5-TNB	.0004	mg/L	U	N Y U	U			H097-01	04:12
				1,3-DNB	.0004	mg/L	U	N Y U	U			H097-01	04:12
				2,4,6-TNT	.0004	mg/L	U	N Y U	U			H097-01	04:12
				2,4-DNT	.0004	mg/L	U	N Y U	U			H097-01	04:12
				2,6-DNT	.0004	mg/L	U	N Y U	U			H097-01	04:12
				2-AM-4,6-DNT	.0004	mg/L	U	N Y U	U			H097-01	04:12
				2-NITROTOLUENE	.0004	mg/L	U	N Y U	U			H097-01	04:12
				3-NITROTOLUENE	.0006	mg/L	U	N Y U	U			H097-01	04:12
				4-AM-2,6-DNT	.0004	mg/L	U	N Y U	U			H097-01	04:12
				4-NITROTOLUENE	.0006	mg/L	U	N Y U	U			H097-01	04:12
				HMX	.0004	mg/L	U	N Y U	U			H097-01	04:12
				NITROBENZENE	.0004	mg/L	U	N Y U	U			H097-01	04:12
				RDX	.0004	mg/L	U	N Y U	U			H097-01	04:12
				TETRYL	.0004	mg/L	U	N Y U	U			H097-01	04:12
QD3002	SW6010B	SW3010	N 0 1	ALUMINUM	.133	mg/L	J	Y Y F	B		06C 15	H097-02	14:38
				ANTIMONY	.1	mg/L	U	N Y U	U			H097-02	14:38
				ARSENIC	.01	mg/L	U	N Y U	U			H097-02	01:31
				BARIUM	.0164	mg/L		Y Y F	B		06B	H097-02	14:38
				BERYLLIUM	.001	mg/L	U	N Y U	U			H097-02	14:38
				CADMIUM	.01	mg/L	U	N Y U	U			H097-02	14:38
				CALCIUM	1.57	mg/L		Y Y P				H097-02	14:38
				CHROMIUM	.01	mg/L	U	N Y U	U			H097-02	14:38
				COBALT	.02	mg/L	U	N Y U	U			H097-02	14:38
				COPPER	.02	mg/L	U	N Y U	U			H097-02	14:38
				IRON	.109	mg/L	J	Y Y P	J		15	H097-02	14:38
				LEAD	.01	mg/L	U	N Y U	U			H097-02	01:31
				MAGNESIUM	.658	mg/L	J	Y Y F	B		06B 06C 15	H097-02	14:38
				MANGANESE	.0693	mg/L		Y Y P				H097-02	14:38
				NICKEL	.02	mg/L	U	N Y U	U			H097-02	14:38
				POTASSIUM	4.81	mg/L	J	Y Y P	J		15	H097-02	14:38
				SELENIUM	.01	mg/L	U	N Y U	U			H097-02	01:31
				SILVER	.01	mg/L	U	N Y U	U			H097-02	14:38

Validation Qualifier Data Entry Verification

Fort McClellan

Sample Number:	Analytical/Extraction Method:		Flt REX Dil:	Parameter:	Result:	Units:	Qlfr:	Hit Use BCF	Val Qlfr	Val Code:	Reason Codes 1 2 3 4	Lab Sample:	Analysi Time:
QD3002	SW6010B	SW3010	N 0 1	SODIUM	1.56	mg/L		Y Y P				H097-02	14:38
				THALLIUM	.01	mg/L	U	N Y U	U			H097-02	01:31
				VANADIUM	.01	mg/L	U	N Y U	U			H097-02	14:38
				ZINC	.02	mg/L	U	N Y U	U			H097-02	14:38
	SW7470A	TOTAL	N 0 1	MERCURY	.0005	mg/L	U	N Y U	U			H097-02	11:45
	SW8330	METHOD	N 0 1	1,3,5-TNB	.0004	mg/L	U	N Y U	U			H097-02	06:10
				1,3-DNB	.0004	mg/L	U	N Y U	U			H097-02	06:10
				2,4,6-TNT	.0004	mg/L	U	N Y U	U			H097-02	06:10
				2,4-DNT	.0004	mg/L	U	N Y U	U			H097-02	06:10
				2,6-DNT	.0004	mg/L	U	N Y U	U			H097-02	06:10
				2-AM-4,6-DNT	.0004	mg/L	U	N Y U	U			H097-02	06:10
				2-NITROTOLUENE	.00039	mg/L	J	Y Y P	J		15	H097-02	06:10
				3-NITROTOLUENE	.0006	mg/L	U	N Y U	U			H097-02	06:10
				4-AM-2,6-DNT	.0004	mg/L	U	N Y U	U			H097-02	06:10
				4-NITROTOLUENE	.0006	mg/L	U	N Y U	U			H097-02	06:10
				HMX	.0004	mg/L	U	N Y U	U			H097-02	06:10
				NITROBENZENE	.0004	mg/L	U	N Y U	U			H097-02	06:10
				RDX	.0004	mg/L	U	N Y U	U			H097-02	06:10
				TETRYL	.0004	mg/L	U	N Y U	U			H097-02	06:10
QD3005	SW6010B	SW3010	N 0 1	ALUMINUM	2.95	mg/L		Y Y P				G066-03	20:16
				ANTIMONY	.1	mg/L	U	N Y U	U			G066-03	20:16
				ARSENIC	.01	mg/L	U	N Y U	U			G066-03	15:32
				BARIUM	.0781	mg/L		Y Y P				G066-03	20:16
				BERYLLIUM	.001	mg/L	U	N Y U	U			G066-03	20:16
				CADMIUM	.01	mg/L	U	N Y U	U			G066-03	20:16
				CALCIUM	15.6	mg/L		Y Y P				G066-03	20:16
				CHROMIUM	.0103	mg/L		Y Y P				G066-03	20:16
				COBALT	.02	mg/L	U	N Y U	U			G066-03	20:16
				COPPER	.00613	mg/L	J	Y Y F	B		06B 06C	G066-03	20:16
				IRON	5.97	mg/L		Y Y P				G066-03	20:16
				LEAD	.01	mg/L	U	N Y U	U			G066-03	15:32
				MAGNESIUM	.679	mg/L	J	Y Y P	J		15	G066-03	20:16
				MANGANESE	.057	mg/L		Y Y P				G066-03	20:16
				NICKEL	.02	mg/L	U	N Y U	U			G066-03	20:16
				POTASSIUM	13.1	mg/L		Y Y P				G066-03	20:16
				SELENIUM	.00202	mg/L	J	Y Y F	B		06C	G066-03	15:32
				SILVER	.01	mg/L	U	N Y U	U			G066-03	20:16
				SODIUM	9.58	mg/L		Y Y P				G066-03	20:16
				THALLIUM	.01	mg/L	U	N Y U	U			G066-03	15:32
				VANADIUM	.00805	mg/L	J	Y Y F	B		06C	G066-03	20:16
				ZINC	.0916	mg/L		Y Y P				G066-03	20:16
	SW7470A	TOTAL	N 0 1	MERCURY	.0005	mg/L	U	N Y U	U			G066-03	15:15
	SW8330	METHOD	N 0 1	1,3,5-TNB	.0004	mg/L	U	N Y U	U			G066-03	22:46

Validation Qualifier Data Entry Verification

Fort McClellan

Sample Number:	Analytical/Extraction Method:		Flt REX Dil:	Parameter:	Result:	Units:	Qlfr:	Hit Use BCF	Val Qlfr	Val Code:	Reason Codes 1 2 3 4	Lab Sample:	Analysi Time:
QD3005	SW8330	METHOD	N 0 1	1,3-DNB	.0004	mg/L	U	N Y U	U			G066-03	22:46
				2,4,6-TNT	.0004	mg/L	U	N Y U	U			G066-03	22:46
				2,4-DNT	.0004	mg/L	U	N Y U	U			G066-03	22:46
				2,6-DNT	.0004	mg/L	U	N Y U	U			G066-03	22:46
				2-AM-4,6-DNT	.0004	mg/L	U	N Y U	U			G066-03	22:46
				2-NITROTOLUENE	.0004	mg/L	U	N Y U	U			G066-03	22:46
				3-NITROTOLUENE	.0004	mg/L	U	N Y U	U			G066-03	22:46
				4-AM-2,6-DNT	.0004	mg/L	U	N Y U	U			G066-03	22:46
				4-NITROTOLUENE	.0004	mg/L	U	N Y U	U			G066-03	22:46
				HMX	.001	mg/L	U	N Y U	U			G066-03	22:46
				NITROBENZENE	.0004	mg/L	U	N Y U	U			G066-03	22:46
				RDX	.0004	mg/L	U	N Y U	U			G066-03	22:46
				TETRYL	.0004	mg/L	U	N Y U	U			G066-03	22:46