# Final
# Site Investigation Report
# Ranges West of Iron Mountain Road
# Parcels 73Q-X, 91Q-X, 115Q, 116Q-X, 117Q-X, 129Q-X, 151Q, 181(7), 194(7)/518(7), 200Q, 201Q, 228Q, 229Q-X, 231Q, 232Q-X, Washington Tank Range, and 1950 Rocket Launcher Range

## Volume IV of IV: Appendices G through J

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# APPENDIX G

# QUALITY ASSURANCE REPORTS FOR ANALYTICAL DATA

***Quality Assurance Report***
***For Ranges West of Iron Mountain Road***
***Parcel HR-73Q***
***IT Project No 796887***
***Fort McClellan Quality Assurance Report***

## *1.0 Overview*

Ten soil samples, 1 sediment sample, 1 surface water sample, and 3 groundwater samples were collected in support of the investigation at Fort McClellan (FTMC) Parcel HR-73Q, Ranges West of Iron Mountain Road. All samples were submitted to EMAX Laboratories, Inc. for analysis. Soil, sediment, and surface water samples were analyzed for target analyte list (TAL) metals, nitroaromatic-nitramine explosives, and perchlorate. Groundwater samples were analyzed for (TAL) metals, nitroaromatic-nitramine explosives, perchlorate, and target compound list (TCL) volatiles. QC samples consisted of the following types and quantities: 1 field duplicate, 2 matrix spike/matrix spike duplicates (MS/MSD), 3 trip blanks, 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 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 data and validation 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 (DQO) were met, laboratory analytical results and data packages were examined for compliance with SW846 SW6010B/SW7000 Series, SW8330, SW8260B, and U.S. Environmental Protection Agency (EPA) 314.0 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 analytical holding times were met.

## *2.2 Rejected Data*

Table 2.2-1 lists all rejected analytical data for soil and aqueous samples. Sample re-collection at this time is not warranted due to all rejected results being reported as non-detect.

**Table 2.2-1 Rejected Analytical Results**

| Sample Delivery Group | Sample Number | Contaminant | Reason |
|---|---|---|---|
| 1073Q-06 | JF3005 | Acetone | Calibration Relative Response Factor (RRF) <0.05. |

## *2.3 Blank Results*

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

- Trip blanks (TBs) consist of a VOC sample vial filled in the laboratory with ASTM Type II reagent grade water, transported to the sampling site, handled like an environmental sample and returned to the laboratory for analysis. Trip blanks are prepared only when VOC samples are collected and analyzed. Trip blanks are used to assess the potential introduction of contaminants from sample containers during the transportation and/or storage procedures. Trip blanks were sent with all aqueous samples shipped to the laboratory requiring volatile analysis.

- Equipment rinsates (ER) are samples of analyte-free deionized water poured into, or 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 an analyte-free matrix which is analyzed to verify the analysis system is free of contamination. ICBs and CCBs are analyzed immediately after the initial and continuing calibration is performed.

Field sample concentrations were evaluated to determine if the sample results could have been biased by the presence of any contamination measured in trip blanks, 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 |
|---|---|---|---|
| 1073Q-03 | JF0002 & JF0004 | Cobalt | Cobalt results for samples JF0002 & JF0004 were "B" qualified. |
| | JF0009 | Antimony | Antimony result for sample JF0009 was "B" qualified. |
| 1073Q-04 | JF0005 & JF0006 | Potassium | Potassium results for samples JF0005 & JF0006 were "B" qualified. |
| 1073Q-05 | JF0007 | Silver<br>Potassium | Silver and potassium results for sample JF0007 were "B" qualified. |
| 1073Q-06 | JF3005 | Aluminum<br>Copper<br>Nickel<br>Vanadium<br>Calcium<br>Magnesium<br>Zinc | Aluminum, copper, nickel, vanadium, calcium, magnesium and zinc results for sample JF3005 were "B" qualified. |

## *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.

Overall sampling and analysis precision for this task was assessed using field duplicate (FD) samples. Laboratory precision was assessed by laboratory control sample/laboratory control sample duplicate (LCS/LCSD) and matrix spike/matrix spike duplicate (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 list field duplicate, LCS/LCSD and MS/MSD RPD anomalies.

**Table 2.4-1 Precision Acceptance Criteria**

| **Field/Laboratory QC Type** | **Matrix** | |
|---|---|---|
| | **Aqueous** | **Soil** |
| Field Duplicate (Both Organic & Inorganic) | RPD < 35% | RPD < 50% |
| Perchlorate LCS/LCSD and MS/MSD | RPD < 10% | RPD < 20% |
| TCL Volatiles LCS/LCSD and MS/MSD | Refer to Table 8-1of FTMC "Installation Wide Sample and Analysis Plan" | Refer to Table 8-1of FTMC "Installation Wide Sample and Analysis Plan" |
| Nitroaromatic and Nitramine Explosives LCS/LCSD and MS/MSD | Refer to Table 8-1of FTMC "Installation Wide Sample and Analysis Plan" | Refer to Table 8-1of FTMC "Installation Wide Sample and Analysis Plan" |
| Metals LCS/LCSD and MS/MSD | RPD < 20% | 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 |
|---|---|---|---|
| 1073Q-01 | JF1001 (MS/MSD) | Aluminum (41%)<br>Iron (749%)<br>Vanadium (30%) | Aluminum., iron and vanadium results for sample JF1001 were "J" qualified due to MS/MSD RPD exceeding QC criteria. |
| 1073Q-03 | JF0009 (MS/MSD) | Antimony (24%)<br>Chromium (24%) | Antimony and chromium results for samples JF0001, JF0002, JF0003, JF0004, JF0009 and JF0010 were "J" / "UJ" qualified due to MS/MSD RPD exceeding QC criteria. |
| 1073Q-07 | JF3002 (Parent) / JF3003 (FD) | Zinc (76.6%) | Zinc results for samples JF3002 and JF3003 were "J" qualified due to RPD between parent sample and its corresponding field duplicate 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 SW846 SW6010B/SW7000 Series methodology, nitroaromatic-nitramine explosives by SW8330, perchlorate by EPA 314.0 and TCL volatiles by SW8260B. Reported results indicate that an acceptable level of analytical accuracy was achieved. Surrogate, LCS/LCSD and MS/MSD spike recoveries, which exceed QA criteria are summarized in Table 2.5-1.

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

| Sample Delivery Group | Sample Number | Contaminant | Action |
|---|---|---|---|
| 1073Q-01 | JF1001 MS/MSD | Aluminum (HB)<br>Iron (HB)<br>Vanadium (HB) | Aluminum, iron and vanadium results for sample JF1001 were "J" qualified due to MS/MSD spike recoveries exceeding QC criteria. |
| 1073Q-03 | JF0009 MS/MSD | Antimony (LB)<br>Copper (LB)<br>Chromium (HB) | Antimony, copper and chromium results for samples JF0001, JF0002, JF0003, JF0004, JF0009 and JF0010 were "J" / "UJ" qualified due to MS/MSD spike recoveries exceeding QC criteria.<br><br>Antimony result for sample JF0009 was "B" qualified due to blank contamination, which takes precedence over "J" qualification 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. Soil sample data are being used to assess potential impacts to terrestrial biota that might use the site for food and/or habitat purposes. Monitoring well locations where chosen to establish groundwater flow direction and site-specific geology, and provide 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-73Q Ranges West of Iron Mountain Road. 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-73Q requirement for completeness is 95% for both aqueous and soil samples. The % Completeness for this task is calculated to be 99.9%

- % Completeness = (762 / 763) x 100 = 99.9%.

## *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-73Q
# Ranges West of Iron Mountain Road
# Analytical Summary
# Project No. 796887

## HR-73Q Soil Sampling

| Sample Location | Sample Name | Sample Number | Date Sampled | Analytical Suite |
|---|---|---|---|---|
| HR-73Q-MW01 | HR-73Q-MW01-SS-JF0001-REG | JF0001 | 30-Mar-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-73Q-MW01-DS-JF0002-REG | JF0002 | 30-Mar-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-73Q-MW02 | HR-73Q-MW02-SS-JF0003-REG | JF0003 | 30-Mar-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-73Q-MW02-DS-JF0004-REG | JF0004 | 30-Mar-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-73Q-MW03 | HR-73Q-MW03-SS-JF0005-REG | JF0005 | 06-Apr-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-73Q-MW03-DS-JF0006-REG | JF0006 | 06-Apr-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-73Q-MW04 | HR-73Q-MW04-SS-JF0007-REG | JF0007 | 10-Apr-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-73Q-MW04-DS-JF0008-REG | JF0008 | 10-Apr-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-73Q-GP01 | HR-73Q-GP01-SS-JF0009-REG | JF0009 | 30-Mar-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-73Q-GP01-SS-JF0009-MS | JF0009-MS | 30-Mar-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-73Q-GP01-SS-JF0009-MSD | JF0009-MSD | 30-Mar-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-73Q-GP01-DS-JF0010-REG | JF0010 | 30-Mar-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |

## HR-73Q Groundwater Sampling

| Sample Location | Sample Name | Sample Number | Date Sampled | Analytical Suite |
|---|---|---|---|---|
| HR-73Q-MW01 | HR-73Q-MW01-GW-JF3001-REG | JF3001 | Not Sampled | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-73Q-MW02 | HR-73Q-MW02-GW-JF3002-REG | JF3002 | 10-May-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-73Q-MW02-GW-JF3003-FD | JF3003 | 10-May-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-73Q-MW03 | HR-73Q-MW03-GW-JF3005-REG | JF3005 | 18-Apr-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-73Q-MW04 | HR-73Q-MW04-GW-JF3006-REG | JF3006 | Not Sampled | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |

## HR-73Q Sediment-Surface Water Sampling

| Sample Location | Sample Name | Sample Number | Date Sampled | Analytical Suite |
|---|---|---|---|---|
| HR-73Q-SW/SD01 | HR-73Q-SW/SD01-SD-JF1001-REG | JF1001 | 06-Mar-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330, Perchlorate by EPA 314.0, TOC by SW9060 and Grain size by ASTM 421/422. |
| | HR-73Q-SW/SD01-SD-JF1001-MS | JF1001-MS | 06-Mar-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330, Perchlorate by EPA 314.0, TOC by SW9060 and Grain size by ASTM 421/422. |
| | HR-73Q-SW/SD01-SD-JF1001-MSD | JF1001-MSD | 06-Mar-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330, Perchlorate by EPA 314.0, TOC by SW9060 and Grain size by ASTM 421/422. |
| | HR-73Q-SW/SD01-SW-JF2001-REG | JF2001 | 06-Mar-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |

# ATTACHMENT B

# DATA VALIDATION SUMMARY REPORT

***Data Validation Summary Report***
***for the Site Investigation Performed at the***
***Ranges West of Iron Mountain (Parcel 73Q)***
***Fort McCellan***

## *1.0 Introduction*

Level III data validation was performed on 100% of the environmental samples collected at Parcel HR-73Q. The analytical data consisted of seven sample delivery groups (SDG) 1073Q-01, -02, -03, -04, -05, -06, and -07, 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 |
| Perchlorate by EPA 314.0 and TOC by SW846 9060 |
| Volatiles by SW846 8260B |

## *2.0 Procedures*

The sample data were validated following the logic identified in the *USEPA Contract Laboratory Program (CLP) National Functional Guidelines For Inorganic Data Review (February 1994)* and *USEPA Contract Laboratory Program National Functional Guidelines For Organic Review (October 1999)* for all areas except Blanks. *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's) were applied to all sample results. As the result of the use of Update III SW846 test methods for the analytical data and the application of the 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 Chromatograph (GC) and Gas Chromatograph/Mass Spectra (GC/MS) calibration areas and is due to the fact that the analytical methods are "performance-based", and allows 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, CFR, SOP's, QAP) 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 qualification. The only rejected data ('R' qualified) were due to "poor performing" volatile compounds (ketones, some halogenated hydrocarbons, e.g.), which exhibited poor calibration responses in the associated calibration data.

Individual validation reports have been prepared for each parameter in each SDG 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 Parcel HR-73Q. 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*

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:

<u>Holding Times</u>

Technical holding time criteria were met for all samples.

<u>Initial and Continuing calibrations</u>

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 exceptions noted below:

Note: 'B' Qualifiers were applied to all of the following sample results.

| SDG | Samples Affected | Element/Elements | Associated Blank Contamination |
|---|---|---|---|
| 1073Q-03 | JF0002, JF0004 | Calcium | Calibration |
| | JF0009 | Antimony | Calibration |
| 1073Q-04 | JF0005, JF0006 | Potassium | Calibration |
| 1073Q-05 | JF0007 | Silver, Potassium | Method/Calibration |
| 1073Q-06 | JF3005 | Aluminum, Copper, Nickel, Vanadium, Calcium, Magnesium, Zinc | Method/Calibration/ER |

Matrix Spike / Matrix Spike Duplicate

Batch QC was performed for the project samples and all QC criteria were met with the exception of the following:

| SDG | Samples Affected | Analyte/Analytes | Validation Qualifier |
|---|---|---|---|
| 1073Q-01 | JF1001 | Aluminum, Iron, Vanadium | J |
| 1073Q-03 | JF0001, JF0002, JF0003, JF0004, JF0009, JF0010 | Antimony, Copper, Chromium | J/B/UJ |

Laboratory Control Sample (LCS)

All QC criteria were met for the LCS associated with the project sample analyses.

Interference Check Sample (ICS)

All ICS % recoveries for the project samples were acceptable.

ICP Serial Dilutions

All QC criteria were met with the exception of the following:

| SDG | Samples Affected | Analyte/Analytes | Validation Qualifier |
|---|---|---|---|
| 1073Q-01 | JF1001 | Vanadium, Zinc | J |
| 1073Q-03 | JF0001, JF0002, JF0003, JF0004, JF0009, JF0010 | Arsenic | J |

Field Duplicates

Field duplicates were performed for the project samples and all QC criteria were met with the exception of the following:

| SDG | Samples Affected | Analyte/Analytes | Validation Qualifier |
|---|---|---|---|
| 1073Q-07 | JF3002 (original), JF3003 (duplicate) | Zinc | J |

Sample Quantitation

Results quantified between the IDL and the RL ("J" flagged by the laboratory) were qualified as estimated (J).

### *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 are within acceptable QC ranges.

Matrix Spike / Matrix Spike Duplicate

Batch QC was performed for the project samples and all QC criteria were met.

Laboratory Control Sample (LCS)

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

Field Duplicates

Field duplicates were performed for the project samples and all QC criteria were met.

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.

### *4.3 Perchlorate by EPA 314.0 and TOC 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

Batch QC was performed for the project samples and all QC criteria were met.

Laboratory Control Sample (LCS)

All QC criteria were met for the LCS associated with the project sample analyses.

Field Duplicates

Field duplicates were performed for the project samples and all QC criteria were met.

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.

### *4.4 Volatile Organics by GC/MS SW846 8260B*

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 Calibration

The initial calibration and continuing calibrations associated with the project samples met QC criteria, with the exception of the following:

- The following exhibited individual RRF < 0.1:

| SDG Number | Samples Affected | Compound(s) | Validation Qualifier |
|---|---|---|---|
| 1073Q-06 | JF3005 | Acetone | R |

- The following exhibited individual CCAL %D's > 20%:

| SDG Number | Samples Affected | Compound(s) | Validation Qualifier |
|---|---|---|---|
| 1073Q-06 | JF3005 | Bromomethane | UJ |
| 1073Q-07 | JF3002, JF3003 | Dichlorodifluoromethane | UJ |

Blanks

The 5X/10X rule for contaminants found in the associated equipment rinses, trip blanks, and method blanks was applied to all sample results. All were found to be acceptable.

Surrogate Recoveries

All surrogate recoveries are within acceptable QC limits.

Matrix Spike / Matrix Spike Duplicate

No MS/MSD were performed for the project samples.

Laboratory Control Sample (LCS)

LCS 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.

Internal Standards

All internal standards met QC criteria

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.

## *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 "nondetect" may be inaccurate or imprecise. The nondetect result should be estimated.

## Validation Reason Code Definitions

| Reason Code | Definition |
|---|---|
| 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

Run Date: September 26, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1073Q-01** | | | | | | | | | | | | | | | | | | |
| JF1001 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 4110 | mg/kg | | Y | Y | P | J | | 08A | 08B | | | C085-01 | 23:04 |
| | | | | ANTIMONY | 13.7 | mg/kg | U | N | Y | U | U | | | | | | C085-01 | 23:04 |
| | | | | ARSENIC | 1.37 | mg/kg | | Y | Y | P | | | | | | | C085-01 | 18:01 |
| | | | | BARIUM | 28 | mg/kg | | Y | Y | P | | | | | | | C085-01 | 23:04 |
| | | | | BERYLLIUM | .36 | mg/kg | J | Y | Y | P | J | | 15 | | | | C085-01 | 23:04 |
| | | | | CADMIUM | .684 | mg/kg | U | N | Y | U | U | | | | | | C085-01 | 23:04 |
| | | | | CALCIUM | 210 | mg/kg | | Y | Y | P | | | | | | | C085-01 | 23:04 |
| | | | | CHROMIUM | 6.73 | mg/kg | | Y | Y | P | | | | | | | C085-01 | 23:04 |
| | | | | COBALT | 2.55 | mg/kg | J | Y | Y | P | J | | 15 | | | | C085-01 | 23:04 |
| | | | | COPPER | 4.83 | mg/kg | | Y | Y | P | | | | | | | C085-01 | 23:04 |
| | | | | IRON | 5270 | mg/kg | | Y | Y | P | J | | 08A | 08B | | | C085-01 | 23:04 |
| | | | | LEAD | 7.8 | mg/kg | | Y | Y | P | | | | | | | C085-01 | 18:01 |
| | | | | MAGNESIUM | 220 | mg/kg | | Y | Y | P | | | | | | | C085-01 | 23:04 |
| | | | | MANGANESE | 106 | mg/kg | | Y | Y | P | | | | | | | C085-01 | 23:04 |
| | | | | NICKEL | 2.62 | mg/kg | J | Y | Y | P | J | | 15 | | | | C085-01 | 23:04 |
| | | | | POTASSIUM | 541 | mg/kg | J | Y | Y | P | J | | 15 | | | | C085-01 | 23:04 |
| | | | | SELENIUM | 1.37 | mg/kg | U | N | Y | U | U | | | | | | C085-01 | 18:01 |
| | | | | SILVER | 1.37 | mg/kg | U | N | Y | U | U | | | | | | C085-01 | 23:04 |
| | | | | SODIUM | 137 | mg/kg | U | N | Y | U | U | | | | | | C085-01 | 23:04 |
| | | | | THALLIUM | 2.74 | mg/kg | U | N | Y | U | U | | | | | | C085-01 | 18:01 |
| | | | | VANADIUM | 12.9 | mg/kg | | Y | Y | P | J | | 08A | 08B | 13 | | C085-01 | 23:04 |
| | | | | ZINC | 13.9 | mg/kg | | Y | Y | P | J | | 13 | | | | C085-01 | 23:04 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .137 | mg/kg | U | N | Y | U | U | | | | | | C085-01 | 15:14 |
| JF1001 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C085-01 | 03:42 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C085-01 | 03:42 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C085-01 | 03:42 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C085-01 | 03:42 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C085-01 | 03:42 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C085-01 | 03:42 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C085-01 | 03:42 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C085-01 | 03:42 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C085-01 | 03:42 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C085-01 | 03:42 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | C085-01 | 03:42 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C085-01 | 03:42 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | C085-01 | 03:42 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | C085-01 | 03:42 |
| JF1001 | E314.0 | NONE | N 0 1 | PERCHLORATE | .0684 | mg/kg | U | N | Y | U | U | | | | | | C085-01 | 18:41 |
| JF1001 | SW9060 | NONE | N 0 1 | TOC | 91 | mg/kg | | Y | Y | P | | | | | | | C085-01 | 16:00 |

# Validation Qualifier Data Entry Verification

Run Date: September 26, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1073Q-02** | | | | | | | | | | | | | | | | | | |
| JF2001 | SW6010B | SW3010 | N 0 1 | ALUMINUM | .088 | mg/L | J | Y | Y | P | J | | 15 | | | | C086-01 | 19:22 |
| | | | | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | C086-01 | 19:22 |
| | | | | ARSENIC | .01 | mg/L | U | N | Y | U | U | | | | | | C086-01 | 17:22 |
| | | | | BARIUM | .0216 | mg/L | | Y | Y | P | | | | | | | C086-01 | 19:22 |
| | | | | BERYLLIUM | .001 | mg/L | U | N | Y | U | U | | | | | | C086-01 | 19:22 |
| | | | | CADMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | C086-01 | 19:22 |
| | | | | CALCIUM | .549 | mg/L | J | Y | Y | P | J | | 15 | | | | C086-01 | 19:22 |
| | | | | CHROMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | C086-01 | 19:22 |
| | | | | COBALT | .02 | mg/L | U | N | Y | U | U | | | | | | C086-01 | 19:22 |
| | | | | COPPER | .02 | mg/L | U | N | Y | U | U | | | | | | C086-01 | 19:22 |
| | | | | IRON | .0589 | mg/L | J | Y | Y | P | J | | 15 | | | | C086-01 | 19:22 |
| | | | | LEAD | .01 | mg/L | U | N | Y | U | U | | | | | | C086-01 | 17:22 |
| | | | | MAGNESIUM | .546 | mg/L | J | Y | Y | P | J | | 15 | | | | C086-01 | 19:22 |
| | | | | MANGANESE | .0236 | mg/L | | Y | Y | P | | | | | | | C086-01 | 19:22 |
| | | | | NICKEL | .02 | mg/L | U | N | Y | U | U | | | | | | C086-01 | 19:22 |
| | | | | POTASSIUM | 5 | mg/L | U | N | Y | U | U | | | | | | C086-01 | 19:22 |
| | | | | SELENIUM | .01 | mg/L | U | N | Y | U | U | | | | | | C086-01 | 17:22 |
| | | | | SILVER | .01 | mg/L | U | N | Y | U | U | | | | | | C086-01 | 19:22 |
| | | | | SODIUM | .859 | mg/L | J | Y | Y | P | J | | 15 | | | | C086-01 | 19:22 |
| | | | | THALLIUM | .01 | mg/L | U | N | Y | U | U | | | | | | C086-01 | 17:22 |
| | | | | VANADIUM | .01 | mg/L | U | N | Y | U | U | | | | | | C086-01 | 19:22 |
| | | | | ZINC | .02 | mg/L | U | N | Y | U | U | | | | | | C086-01 | 19:22 |
| | SW7470A | TOTAL | N 0 1 | MERCURY | .0005 | mg/L | U | N | Y | U | U | | | | | | C086-01 | 19:39 |
| JF2001 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | U | U | | | | | | C086-01 | 23:51 |
| | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | U | U | | | | | | C086-01 | 23:51 |
| | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | U | U | | | | | | C086-01 | 23:51 |
| | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | C086-01 | 23:51 |
| | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | C086-01 | 23:51 |
| | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | C086-01 | 23:51 |
| | | | | 2-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | C086-01 | 23:51 |
| | | | | 3-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | C086-01 | 23:51 |
| | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | C086-01 | 23:51 |
| | | | | 4-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | C086-01 | 23:51 |
| | | | | HMX | .001 | mg/L | U | N | Y | U | U | | | | | | C086-01 | 23:51 |
| | | | | NITROBENZENE | .0004 | mg/L | U | N | Y | U | U | | | | | | C086-01 | 23:51 |
| | | | | RDX | .0004 | mg/L | U | N | Y | U | U | | | | | | C086-01 | 23:51 |
| | | | | TETRYL | .0004 | mg/L | U | N | Y | U | U | | | | | | C086-01 | 23:51 |
| JF2001 | E314.0 | NONE | N 0 1 | PERCHLORATE | .005 | mg/L | U | N | Y | U | U | | | | | | C086-01 | 23:30 |
| **1073Q-03** | | | | | | | | | | | | | | | | | | |

# Validation Qualifier Data Entry Verification

Run Date: September 26, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1073Q-03** | | | | | | | | | | | | | | | | | | |
| JF0001 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 16300 | mg/kg | | Y | Y | P | | | | | | | C273-01 | 17:10 |
| | | | | ANTIMONY | 12.2 | mg/kg | U | N | Y | U | UJ | | 08A | 08B | | | C273-01 | 17:10 |
| | | | | ARSENIC | 5.56 | mg/kg | | Y | Y | P | J | | 13 | | | | C273-01 | 01:40 |
| | | | | BARIUM | 114 | mg/kg | | Y | Y | P | | | | | | | C273-01 | 17:10 |
| | | | | BERYLLIUM | .869 | mg/kg | J | Y | Y | P | J | | 15 | | | | C273-01 | 17:10 |
| | | | | CADMIUM | .61 | mg/kg | U | N | Y | U | U | | | | | | C273-01 | 17:10 |
| | | | | CALCIUM | 220 | mg/kg | | Y | Y | P | | | | | | | C273-01 | 17:10 |
| | | | | CHROMIUM | 17.3 | mg/kg | | Y | Y | P | J | | 08B | | | | C273-01 | 17:10 |
| | | | | COBALT | 13.5 | mg/kg | | Y | Y | P | | | | | | | C273-01 | 17:10 |
| | | | | COPPER | 12.2 | mg/kg | | Y | Y | P | J | | 08A | | | | C273-01 | 17:10 |
| | | | | IRON | 19900 | mg/kg | | Y | Y | P | | | | | | | C273-01 | 17:10 |
| | | | | LEAD | 15.4 | mg/kg | | Y | Y | P | | | | | | | C273-01 | 01:40 |
| | | | | MAGNESIUM | 1060 | mg/kg | | Y | Y | P | | | | | | | C273-01 | 17:10 |
| | | | | MANGANESE | 730 | mg/kg | | Y | Y | P | | | | | | | C273-01 | 17:10 |
| | | | | NICKEL | 11.7 | mg/kg | | Y | Y | P | | | | | | | C273-01 | 17:10 |
| | | | | POTASSIUM | 884 | mg/kg | | Y | Y | P | | | | | | | C273-01 | 17:10 |
| | | | | SELENIUM | 1.22 | mg/kg | U | N | Y | U | U | | | | | | C273-01 | 01:40 |
| | | | | SILVER | 1.22 | mg/kg | U | N | Y | U | U | | | | | | C273-01 | 17:10 |
| | | | | SODIUM | 122 | mg/kg | U | N | Y | U | U | | | | | | C273-01 | 17:10 |
| | | | | THALLIUM | .932 | mg/kg | J | Y | Y | P | J | | 15 | | | | C273-01 | 01:40 |
| | | | | VANADIUM | 22.6 | mg/kg | | Y | Y | P | | | | | | | C273-01 | 17:10 |
| | | | | ZINC | 37.4 | mg/kg | | Y | Y | P | | | | | | | C273-01 | 17:10 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .031 | mg/kg | J | Y | Y | P | J | | 15 | | | | C273-01 | 14:21 |
| JF0002 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 10800 | mg/kg | | Y | Y | P | | | | | | | C273-02 | 17:15 |
| | | | | ANTIMONY | 8.9 | mg/kg | J | Y | Y | P | J | | 08A | 08B | 15 | | C273-02 | 17:15 |
| | | | | ARSENIC | 12.1 | mg/kg | | Y | Y | P | J | | 13 | | | | C273-02 | 01:45 |
| | | | | BARIUM | 66.7 | mg/kg | | Y | Y | P | | | | | | | C273-02 | 17:15 |
| | | | | BERYLLIUM | 1.44 | mg/kg | | Y | Y | P | | | | | | | C273-02 | 17:15 |
| | | | | CADMIUM | .62 | mg/kg | U | N | Y | U | U | | | | | | C273-02 | 17:15 |
| | | | | CALCIUM | 28.8 | mg/kg | J | Y | Y | F | B | | 06B | 15 | | | C273-02 | 17:15 |
| | | | | CHROMIUM | 24.4 | mg/kg | | Y | Y | P | J | | 08B | | | | C273-02 | 17:15 |
| | | | | COBALT | 5.17 | mg/kg | | Y | Y | P | | | | | | | C273-02 | 17:15 |
| | | | | COPPER | 49.3 | mg/kg | | Y | Y | P | J | | 08A | | | | C273-02 | 17:15 |
| | | | | IRON | 87800 | mg/kg | | Y | Y | P | | | | | | | C273-02 | 17:15 |
| | | | | LEAD | 26 | mg/kg | | Y | Y | P | | | | | | | C273-02 | 01:45 |
| | | | | MAGNESIUM | 633 | mg/kg | | Y | Y | P | | | | | | | C273-02 | 17:15 |
| | | | | MANGANESE | 129 | mg/kg | | Y | Y | P | | | | | | | C273-02 | 17:15 |
| | | | | NICKEL | 14 | mg/kg | | Y | Y | P | | | | | | | C273-02 | 17:15 |
| | | | | POTASSIUM | 1210 | mg/kg | | Y | Y | P | | | | | | | C273-02 | 17:15 |
| | | | | SELENIUM | 1.24 | mg/kg | U | N | Y | U | U | | | | | | C273-02 | 01:45 |

# Validation Qualifier Data Entry Verification

Run Date: September 26, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1073Q-03** | | | | | | | | | | | | | | | | | | |
| JF0002 | SW6010B | SW3050 | N 0 1 | SILVER | 1.24 | mg/kg | U | N | Y | U | U | | | | | | C273-02 | 17:15 |
| | | | | SODIUM | 124 | mg/kg | U | N | Y | U | U | | | | | | C273-02 | 17:15 |
| | | | | THALLIUM | 1.27 | mg/kg | J | Y | Y | P | J | | 15 | | | | C273-02 | 01:45 |
| | | | | VANADIUM | 25.6 | mg/kg | | Y | Y | P | | | | | | | C273-02 | 17:15 |
| | | | | ZINC | 35 | mg/kg | | Y | Y | P | | | | | | | C273-02 | 17:15 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .124 | mg/kg | U | N | Y | U | U | | | | | | C273-02 | 14:32 |
| JF0003 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 16200 | mg/kg | | Y | Y | P | | | | | | | C273-03 | 17:20 |
| | | | | ANTIMONY | 4.92 | mg/kg | J | Y | Y | P | J | | 08A | 08B | 15 | | C273-03 | 17:20 |
| | | | | ARSENIC | 6.79 | mg/kg | | Y | Y | P | J | | 13 | | | | C273-03 | 01:50 |
| | | | | BARIUM | 29.7 | mg/kg | | Y | Y | P | | | | | | | C273-03 | 17:20 |
| | | | | BERYLLIUM | .467 | mg/kg | J | Y | Y | P | J | | 15 | | | | C273-03 | 17:20 |
| | | | | CADMIUM | .59 | mg/kg | U | N | Y | U | U | | | | | | C273-03 | 17:20 |
| | | | | CALCIUM | 630 | mg/kg | | Y | Y | P | | | | | | | C273-03 | 17:20 |
| | | | | CHROMIUM | 55.8 | mg/kg | | Y | Y | P | J | | 08B | | | | C273-03 | 17:20 |
| | | | | COBALT | 7.85 | mg/kg | | Y | Y | P | | | | | | | C273-03 | 17:20 |
| | | | | COPPER | 16.1 | mg/kg | | Y | Y | P | J | | 08A | | | | C273-03 | 17:20 |
| | | | | IRON | 26400 | mg/kg | | Y | Y | P | | | | | | | C273-03 | 17:20 |
| | | | | LEAD | 10.9 | mg/kg | | Y | Y | P | | | | | | | C273-03 | 01:50 |
| | | | | MAGNESIUM | 1110 | mg/kg | | Y | Y | P | | | | | | | C273-03 | 17:20 |
| | | | | MANGANESE | 142 | mg/kg | | Y | Y | P | | | | | | | C273-03 | 17:20 |
| | | | | NICKEL | 10.5 | mg/kg | | Y | Y | P | | | | | | | C273-03 | 17:20 |
| | | | | POTASSIUM | 633 | mg/kg | | Y | Y | P | | | | | | | C273-03 | 17:20 |
| | | | | SELENIUM | 1.18 | mg/kg | U | N | Y | U | U | | | | | | C273-03 | 01:50 |
| | | | | SILVER | 1.18 | mg/kg | U | N | Y | U | U | | | | | | C273-03 | 17:20 |
| | | | | SODIUM | 118 | mg/kg | U | N | Y | U | U | | | | | | C273-03 | 17:20 |
| | | | | THALLIUM | 1.06 | mg/kg | J | Y | Y | P | J | | 15 | | | | C273-03 | 01:50 |
| | | | | VANADIUM | 30.5 | mg/kg | | Y | Y | P | | | | | | | C273-03 | 17:20 |
| | | | | ZINC | 37.3 | mg/kg | | Y | Y | P | | | | | | | C273-03 | 17:20 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .034 | mg/kg | J | Y | Y | P | J | | 15 | | | | C273-03 | 14:35 |
| JF0004 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 12500 | mg/kg | | Y | Y | P | | | | | | | C273-04 | 17:25 |
| | | | | ANTIMONY | 8.09 | mg/kg | J | Y | Y | P | J | | 08A | 08B | 15 | | C273-04 | 17:25 |
| | | | | ARSENIC | 10.6 | mg/kg | | Y | Y | P | J | | 13 | | | | C273-04 | 01:55 |
| | | | | BARIUM | 21.9 | mg/kg | | Y | Y | P | | | | | | | C273-04 | 17:25 |
| | | | | BERYLLIUM | .935 | mg/kg | J | Y | Y | P | J | | 15 | | | | C273-04 | 17:25 |
| | | | | CADMIUM | .617 | mg/kg | U | N | Y | U | U | | | | | | C273-04 | 17:25 |
| | | | | CALCIUM | 29.6 | mg/kg | J | Y | Y | F | B | | 06B | 15 | | | C273-04 | 17:25 |
| | | | | CHROMIUM | 29.4 | mg/kg | | Y | Y | P | J | | 08B | | | | C273-04 | 17:25 |
| | | | | COBALT | 3.04 | mg/kg | | Y | Y | P | | | | | | | C273-04 | 17:25 |
| | | | | COPPER | 25.8 | mg/kg | | Y | Y | P | J | | 08A | | | | C273-04 | 17:25 |
| | | | | IRON | 53300 | mg/kg | | Y | Y | P | | | | | | | C273-04 | 17:25 |

# Validation Qualifier Data Entry Verification

Run Date: September 26, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1073Q-03** | | | | | | | | | | | | | | | | | | |
| JF0004 | SW6010B | SW3050 | N 0 1 | LEAD | 15.7 | mg/kg | | Y | Y | P | | | | | | | C273-04 | 01:55 |
| | | | | MAGNESIUM | 519 | mg/kg | | Y | Y | P | | | | | | | C273-04 | 17:25 |
| | | | | MANGANESE | 105 | mg/kg | | Y | Y | P | | | | | | | C273-04 | 17:25 |
| | | | | NICKEL | 11.6 | mg/kg | | Y | Y | P | | | | | | | C273-04 | 17:25 |
| | | | | POTASSIUM | 1620 | mg/kg | | Y | Y | P | | | | | | | C273-04 | 17:25 |
| | | | | SELENIUM | 1.23 | mg/kg | U | N | Y | U | U | | | | | | C273-04 | 01:55 |
| | | | | SILVER | 1.23 | mg/kg | U | N | Y | U | U | | | | | | C273-04 | 17:25 |
| | | | | SODIUM | 123 | mg/kg | U | N | Y | U | U | | | | | | C273-04 | 17:25 |
| | | | | THALLIUM | 1.03 | mg/kg | J | Y | Y | P | J | | 15 | | | | C273-04 | 01:55 |
| | | | | VANADIUM | 30.6 | mg/kg | | Y | Y | P | | | | | | | C273-04 | 17:25 |
| | | | | ZINC | 39 | mg/kg | | Y | Y | P | | | | | | | C273-04 | 17:25 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .123 | mg/kg | U | N | Y | U | U | | | | | | C273-04 | 14:37 |
| JF0009 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 19900 | mg/kg | | Y | Y | P | | | | | | | C273-05 | 18:01 |
| | | | | ANTIMONY | 6.92 | mg/kg | J | Y | Y | F | B | | 06B | 08A | 08B | 15 | C273-05 | 18:01 |
| | | | | ARSENIC | 7.61 | mg/kg | | Y | Y | P | J | | 13 | | | | C273-05 | 02:28 |
| | | | | BARIUM | 170 | mg/kg | | Y | Y | P | | | | | | | C273-05 | 18:01 |
| | | | | BERYLLIUM | 2.04 | mg/kg | | Y | Y | P | | | | | | | C273-05 | 18:01 |
| | | | | CADMIUM | .671 | mg/kg | U | N | Y | U | U | | | | | | C273-05 | 18:01 |
| | | | | CALCIUM | 361 | mg/kg | | Y | Y | P | | | | | | | C273-05 | 18:01 |
| | | | | CHROMIUM | 18 | mg/kg | | Y | Y | P | J | | 08B | | | | C273-05 | 18:01 |
| | | | | COBALT | 36 | mg/kg | | Y | Y | P | | | | | | | C273-05 | 18:01 |
| | | | | COPPER | 61.4 | mg/kg | | Y | Y | P | J | | 08A | | | | C273-05 | 18:01 |
| | | | | IRON | 22300 | mg/kg | | Y | Y | P | | | | | | | C273-05 | 18:01 |
| | | | | LEAD | 3180 | mg/kg | | Y | Y | P | | | | | | | C273-05 | 02:28 |
| | | | | MAGNESIUM | 1320 | mg/kg | | Y | Y | P | | | | | | | C273-05 | 18:01 |
| | | | | MANGANESE | 3430 | mg/kg | | Y | Y | P | | | | | | | C273-05 | 18:01 |
| | | | | NICKEL | 29.4 | mg/kg | | Y | Y | P | | | | | | | C273-05 | 18:01 |
| | | | | POTASSIUM | 1500 | mg/kg | | Y | Y | P | | | | | | | C273-05 | 18:01 |
| | | | | SELENIUM | 1.34 | mg/kg | U | N | Y | U | U | | | | | | C273-05 | 02:28 |
| | | | | SILVER | 1.34 | mg/kg | U | N | Y | U | U | | | | | | C273-05 | 18:01 |
| | | | | SODIUM | 134 | mg/kg | U | N | Y | U | U | | | | | | C273-05 | 18:01 |
| | | | | THALLIUM | .887 | mg/kg | J | Y | Y | P | J | | 15 | | | | C273-05 | 02:28 |
| | | | | VANADIUM | 21.4 | mg/kg | | Y | Y | P | | | | | | | C273-05 | 18:01 |
| | | | | ZINC | 68.4 | mg/kg | | Y | Y | P | | | | | | | C273-05 | 18:01 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .042 | mg/kg | J | Y | Y | P | J | | 15 | | | | C273-05 | 14:10 |
| JF0010 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 4740 | mg/kg | | Y | Y | P | | | | | | | C273-06 | 18:06 |
| | | | | ANTIMONY | 13.5 | mg/kg | U | N | Y | U | UJ | | 08A | 08B | | | C273-06 | 18:06 |
| | | | | ARSENIC | 2.63 | mg/kg | | Y | Y | P | J | | 13 | | | | C273-06 | 02:33 |
| | | | | BARIUM | 52 | mg/kg | | Y | Y | P | | | | | | | C273-06 | 18:06 |
| | | | | BERYLLIUM | 2.54 | mg/kg | | Y | Y | P | | | | | | | C273-06 | 18:06 |

# Validation Qualifier Data Entry Verification

Run Date: September 26, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1073Q-03** | | | | | | | | | | | | | | | | | | |
| JF0010 | SW6010B | SW3050 | N 0 1 | CADMIUM | .675 | mg/kg | U | N | Y | U | U | | | | | | C273-06 | 18:06 |
| | | | | CALCIUM | 47.7 | mg/kg | J | Y | Y | P | J | | 15 | | | | C273-06 | 18:06 |
| | | | | CHROMIUM | 6.9 | mg/kg | | Y | Y | P | J | | 08B | | | | C273-06 | 18:06 |
| | | | | COBALT | 11.6 | mg/kg | | Y | Y | P | | | | | | | C273-06 | 18:06 |
| | | | | COPPER | 26.7 | mg/kg | | Y | Y | P | J | | 08A | | | | C273-06 | 18:06 |
| | | | | IRON | 31100 | mg/kg | | Y | Y | P | | | | | | | C273-06 | 18:06 |
| | | | | LEAD | 14 | mg/kg | | Y | Y | P | | | | | | | C273-06 | 02:33 |
| | | | | MAGNESIUM | 363 | mg/kg | | Y | Y | P | | | | | | | C273-06 | 18:06 |
| | | | | MANGANESE | 342 | mg/kg | | Y | Y | P | | | | | | | C273-06 | 18:06 |
| | | | | NICKEL | 23.6 | mg/kg | | Y | Y | P | | | | | | | C273-06 | 18:06 |
| | | | | POTASSIUM | 991 | mg/kg | | Y | Y | P | | | | | | | C273-06 | 18:06 |
| | | | | SELENIUM | 1.35 | mg/kg | U | N | Y | U | U | | | | | | C273-06 | 02:33 |
| | | | | SILVER | 1.35 | mg/kg | U | N | Y | U | U | | | | | | C273-06 | 18:06 |
| | | | | SODIUM | 135 | mg/kg | U | N | Y | U | U | | | | | | C273-06 | 18:06 |
| | | | | THALLIUM | 2.7 | mg/kg | U | N | Y | U | U | | | | | | C273-06 | 02:33 |
| | | | | VANADIUM | 5.76 | mg/kg | | Y | Y | P | | | | | | | C273-06 | 18:06 |
| | | | | ZINC | 75.7 | mg/kg | | Y | Y | P | | | | | | | C273-06 | 18:06 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .062 | mg/kg | J | Y | Y | P | J | | 15 | | | | C273-06 | 14:40 |
| JF0001 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C273-01 | 19:45 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C273-01 | 19:45 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C273-01 | 19:45 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C273-01 | 19:45 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C273-01 | 19:45 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C273-01 | 19:45 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C273-01 | 19:45 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C273-01 | 19:45 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C273-01 | 19:45 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C273-01 | 19:45 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | C273-01 | 19:45 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C273-01 | 19:45 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | C273-01 | 19:45 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | C273-01 | 19:45 |
| JF0002 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C273-02 | 20:24 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C273-02 | 20:24 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C273-02 | 20:24 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C273-02 | 20:24 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C273-02 | 20:24 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C273-02 | 20:24 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C273-02 | 20:24 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C273-02 | 20:24 |

# Validation Qualifier Data Entry Verification

Run Date: September 26, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1073Q-03** | | | | | | | | | | | | | | | | | |
| JF0002 | SW8330 | METHOD N 0 1 | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C273-02 | 20:24 |
| | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C273-02 | 20:24 |
| | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | C273-02 | 20:24 |
| | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C273-02 | 20:24 |
| | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | C273-02 | 20:24 |
| | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | C273-02 | 20:24 |
| JF0003 | SW8330 | METHOD N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C273-03 | 21:02 |
| | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C273-03 | 21:02 |
| | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C273-03 | 21:02 |
| | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C273-03 | 21:02 |
| | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C273-03 | 21:02 |
| | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C273-03 | 21:02 |
| | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C273-03 | 21:02 |
| | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C273-03 | 21:02 |
| | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C273-03 | 21:02 |
| | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C273-03 | 21:02 |
| | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | C273-03 | 21:02 |
| | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C273-03 | 21:02 |
| | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | C273-03 | 21:02 |
| | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | C273-03 | 21:02 |
| JF0004 | SW8330 | METHOD N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C273-04 | 21:40 |
| | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C273-04 | 21:40 |
| | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C273-04 | 21:40 |
| | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C273-04 | 21:40 |
| | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C273-04 | 21:40 |
| | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C273-04 | 21:40 |
| | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C273-04 | 21:40 |
| | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C273-04 | 21:40 |
| | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C273-04 | 21:40 |
| | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C273-04 | 21:40 |
| | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | C273-04 | 21:40 |
| | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C273-04 | 21:40 |
| | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | C273-04 | 21:40 |
| | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | C273-04 | 21:40 |
| JF0009 | SW8330 | METHOD N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C273-05 | 22:19 |
| | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C273-05 | 22:19 |
| | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C273-05 | 22:19 |
| | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C273-05 | 22:19 |
| | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C273-05 | 22:19 |
| | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C273-05 | 22:19 |

# Validation Qualifier Data Entry Verification

Run Date: September 26, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1073Q-03** | | | | | | | | | | | | | | | | |
| JF0009 | SW8330 | METHOD | N 0 1 | 2-NITROTOLUENE | .4 | mg/kg | U | N Y U | U | | | | | | C273-05 | 22:19 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N Y U | U | | | | | | C273-05 | 22:19 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N Y U | U | | | | | | C273-05 | 22:19 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N Y U | U | | | | | | C273-05 | 22:19 |
| | | | | HMX | .4 | mg/kg | U | N Y U | U | | | | | | C273-05 | 22:19 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N Y U | U | | | | | | C273-05 | 22:19 |
| | | | | RDX | .4 | mg/kg | U | N Y U | U | | | | | | C273-05 | 22:19 |
| | | | | TETRYL | .4 | mg/kg | U | N Y U | U | | | | | | C273-05 | 22:19 |
| JF0010 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N Y U | U | | | | | | C273-06 | 00:53 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N Y U | U | | | | | | C273-06 | 00:53 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N Y U | U | | | | | | C273-06 | 00:53 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N Y U | U | | | | | | C273-06 | 00:53 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N Y U | U | | | | | | C273-06 | 00:53 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N Y U | U | | | | | | C273-06 | 00:53 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N Y U | U | | | | | | C273-06 | 00:53 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N Y U | U | | | | | | C273-06 | 00:53 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N Y U | U | | | | | | C273-06 | 00:53 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N Y U | U | | | | | | C273-06 | 00:53 |
| | | | | HMX | .4 | mg/kg | U | N Y U | U | | | | | | C273-06 | 00:53 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N Y U | U | | | | | | C273-06 | 00:53 |
| | | | | RDX | .4 | mg/kg | U | N Y U | U | | | | | | C273-06 | 00:53 |
| | | | | TETRYL | .4 | mg/kg | U | N Y U | U | | | | | | C273-06 | 00:53 |
| JF0001 | E314.0 | NONE | N 0 1 | PERCHLORATE | .061 | mg/kg | U | N Y U | U | | | | | | C273-01 | 22:45 |
| JF0002 | E314.0 | NONE | N 0 1 | PERCHLORATE | .062 | mg/kg | U | N Y U | U | | | | | | C273-02 | 23:02 |
| JF0003 | E314.0 | NONE | N 0 1 | PERCHLORATE | .059 | mg/kg | U | N Y U | U | | | | | | C273-03 | 23:19 |
| JF0004 | E314.0 | NONE | N 0 1 | PERCHLORATE | .0617 | mg/kg | U | N Y U | U | | | | | | C273-04 | 23:37 |
| JF0009 | E314.0 | NONE | N 0 1 | PERCHLORATE | .0671 | mg/kg | U | N Y U | U | | | | | | C273-05 | 23:54 |
| JF0010 | E314.0 | NONE | N 0 1 | PERCHLORATE | .0675 | mg/kg | U | N Y U | U | | | | | | C273-06 | 00:45 |
| **1073Q-04** | | | | | | | | | | | | | | | | |
| JF0005 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 15900 | mg/kg | | Y Y P | | | | | | | D059-01 | 19:44 |
| | | | | ANTIMONY | 11.9 | mg/kg | U | N Y U | U | | | | | | D059-01 | 19:44 |
| | | | | ARSENIC | 29.1 | mg/kg | | Y Y P | | | | | | | D059-01 | 20:38 |
| | | | | BARIUM | 44.6 | mg/kg | | Y Y P | | | | | | | D059-01 | 19:44 |
| | | | | BERYLLIUM | .755 | mg/kg | J | Y Y P | J | | 15 | | | | D059-01 | 19:44 |
| | | | | CADMIUM | .593 | mg/kg | U | N Y U | U | | | | | | D059-01 | 19:44 |
| | | | | CALCIUM | 128 | mg/kg | | Y Y P | | | | | | | D059-01 | 19:44 |
| | | | | CHROMIUM | 19.6 | mg/kg | | Y Y P | | | | | | | D059-01 | 19:44 |
| | | | | COBALT | 6.76 | mg/kg | | Y Y P | | | | | | | D059-01 | 19:44 |

# Validation Qualifier Data Entry Verification

Run Date: September 26, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1073Q-04** | | | | | | | | | | | | | | | | | | | | |
| JF0005 | SW6010B | SW3050 | N | 0 | 1 | COPPER | 18.5 | mg/kg | | Y | Y | P | | | | | | | D059-01 | 19:44 |
| | | | | | | IRON | 30700 | mg/kg | | Y | Y | P | | | | | | | D059-01 | 19:44 |
| | | | | | | LEAD | 16.4 | mg/kg | | Y | Y | P | | | | | | | D059-01 | 20:38 |
| | | | | | | MAGNESIUM | 676 | mg/kg | | Y | Y | P | | | | | | | D059-01 | 19:44 |
| | | | | | | MANGANESE | 242 | mg/kg | | Y | Y | P | | | | | | | D059-01 | 19:44 |
| | | | | | | NICKEL | 17.2 | mg/kg | | Y | Y | P | | | | | | | D059-01 | 19:44 |
| | | | | | | POTASSIUM | 295 | mg/kg | J | Y | Y | F | B | | 06B | 15 | | | D059-01 | 19:44 |
| | | | | | | SELENIUM | 1.19 | mg/kg | U | N | Y | U | U | | | | | | D059-01 | 20:38 |
| | | | | | | SILVER | 1.19 | mg/kg | U | N | Y | U | U | | | | | | D059-01 | 19:44 |
| | | | | | | SODIUM | 119 | mg/kg | U | N | Y | U | U | | | | | | D059-01 | 19:44 |
| | | | | | | THALLIUM | 2.37 | mg/kg | U | N | Y | U | U | | | | | | D059-01 | 20:38 |
| | | | | | | VANADIUM | 44.3 | mg/kg | | Y | Y | P | | | | | | | D059-01 | 19:44 |
| | | | | | | ZINC | 46.6 | mg/kg | | Y | Y | P | | | | | | | D059-01 | 19:44 |
| | SW7471A | TOTAL | N | 0 | 1 | MERCURY | .119 | mg/kg | U | N | Y | U | U | | | | | | D059-01 | 13:47 |
| JF0006 | SW6010B | SW3050 | N | 0 | 1 | ALUMINUM | 7790 | mg/kg | | Y | Y | P | | | | | | | D059-02 | 19:49 |
| | | | | | | ANTIMONY | 6.1 | mg/kg | J | Y | Y | P | J | | 15 | | | | D059-02 | 19:49 |
| | | | | | | ARSENIC | 30.6 | mg/kg | | Y | Y | P | | | | | | | D059-02 | 20:42 |
| | | | | | | BARIUM | 14.9 | mg/kg | | Y | Y | P | | | | | | | D059-02 | 19:49 |
| | | | | | | BERYLLIUM | .752 | mg/kg | J | Y | Y | P | J | | 15 | | | | D059-02 | 19:49 |
| | | | | | | CADMIUM | .598 | mg/kg | U | N | Y | U | U | | | | | | D059-02 | 19:49 |
| | | | | | | CALCIUM | 57.6 | mg/kg | J | Y | Y | P | J | | 15 | | | | D059-02 | 19:49 |
| | | | | | | CHROMIUM | 19.1 | mg/kg | | Y | Y | P | | | | | | | D059-02 | 19:49 |
| | | | | | | COBALT | 6.79 | mg/kg | | Y | Y | P | | | | | | | D059-02 | 19:49 |
| | | | | | | COPPER | 20.3 | mg/kg | | Y | Y | P | | | | | | | D059-02 | 19:49 |
| | | | | | | IRON | 34700 | mg/kg | | Y | Y | P | | | | | | | D059-02 | 19:49 |
| | | | | | | LEAD | 20 | mg/kg | | Y | Y | P | | | | | | | D059-02 | 20:42 |
| | | | | | | MAGNESIUM | 376 | mg/kg | | Y | Y | P | | | | | | | D059-02 | 19:49 |
| | | | | | | MANGANESE | 347 | mg/kg | | Y | Y | P | | | | | | | D059-02 | 19:49 |
| | | | | | | NICKEL | 21.8 | mg/kg | | Y | Y | P | | | | | | | D059-02 | 19:49 |
| | | | | | | POTASSIUM | 167 | mg/kg | J | Y | Y | F | B | | 06B | 15 | | | D059-02 | 19:49 |
| | | | | | | SELENIUM | 1.2 | mg/kg | U | N | Y | U | U | | | | | | D059-02 | 20:42 |
| | | | | | | SILVER | 1.2 | mg/kg | U | N | Y | U | U | | | | | | D059-02 | 19:49 |
| | | | | | | SODIUM | 120 | mg/kg | U | N | Y | U | U | | | | | | D059-02 | 19:49 |
| | | | | | | THALLIUM | 2.39 | mg/kg | U | N | Y | U | U | | | | | | D059-02 | 20:42 |
| | | | | | | VANADIUM | 42.6 | mg/kg | | Y | Y | P | | | | | | | D059-02 | 19:49 |
| | | | | | | ZINC | 54.1 | mg/kg | | Y | Y | P | | | | | | | D059-02 | 19:49 |
| | SW7471A | TOTAL | N | 0 | 1 | MERCURY | .12 | mg/kg | U | N | Y | U | U | | | | | | D059-02 | 14:05 |
| JF0005 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D059-01 | 21:32 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D059-01 | 21:32 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D059-01 | 21:32 |

# Validation Qualifier Data Entry Verification

Run Date: September 26, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1073Q-04** | | | | | | | | | | | | | | | | | | |
| JF0005 | SW8330 | METHOD | N 0 1 | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D059-01 | 21:32 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D059-01 | 21:32 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D059-01 | 21:32 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D059-01 | 21:32 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D059-01 | 21:32 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D059-01 | 21:32 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D059-01 | 21:32 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | D059-01 | 21:32 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D059-01 | 21:32 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | D059-01 | 21:32 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | D059-01 | 21:32 |
| JF0006 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D059-02 | 22:11 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D059-02 | 22:11 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D059-02 | 22:11 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D059-02 | 22:11 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D059-02 | 22:11 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D059-02 | 22:11 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D059-02 | 22:11 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D059-02 | 22:11 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D059-02 | 22:11 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D059-02 | 22:11 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | D059-02 | 22:11 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D059-02 | 22:11 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | D059-02 | 22:11 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | D059-02 | 22:11 |
| JF0005 | E314.0 | NONE | N 0 1 | PERCHLORATE | .0593 | mg/kg | U | N | Y | U | U | | | | | | D059-01 | 17:35 |
| JF0006 | E314.0 | NONE | N 0 1 | PERCHLORATE | .0598 | mg/kg | U | N | Y | U | U | | | | | | D059-02 | 17:52 |
| **1073Q-05** | | | | | | | | | | | | | | | | | | |
| JF0007 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 26600 | mg/kg | | Y | Y | P | | | | | | | D095-01 | 22:04 |
| | | | | ANTIMONY | 12.1 | mg/kg | U | N | Y | U | U | | | | | | D095-01 | 22:04 |
| | | | | ARSENIC | 8.79 | mg/kg | | Y | Y | P | | | | | | | D095-01 | 23:08 |
| | | | | BARIUM | 198 | mg/kg | | Y | Y | P | | | | | | | D095-01 | 22:04 |
| | | | | BERYLLIUM | 1.28 | mg/kg | | Y | Y | P | | | | | | | D095-01 | 22:04 |
| | | | | CADMIUM | .606 | mg/kg | U | N | Y | U | U | | | | | | D095-01 | 22:04 |
| | | | | CALCIUM | 220 | mg/kg | | Y | Y | P | | | | | | | D095-01 | 22:04 |
| | | | | CHROMIUM | 18.7 | mg/kg | | Y | Y | P | | | | | | | D095-01 | 22:04 |
| | | | | COBALT | 23.7 | mg/kg | | Y | Y | P | | | | | | | D095-01 | 22:04 |
| | | | | COPPER | 13 | mg/kg | | Y | Y | P | | | | | | | D095-01 | 22:04 |
| | | | | IRON | 19700 | mg/kg | | Y | Y | P | | | | | | | D095-01 | 22:04 |

# Validation Qualifier Data Entry Verification

Run Date: September 26, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1073Q-05** | | | | | | | | | | | | | | | | | | |
| JF0007 | SW6010B | SW3050 | N 0 1 | LEAD | 22.4 | mg/kg | | Y | Y | P | | | | | | | D095-01 | 23:08 |
| | | | | MAGNESIUM | 1100 | mg/kg | | Y | Y | P | | | | | | | D095-01 | 22:04 |
| | | | | MANGANESE | 4110 | mg/kg | | Y | Y | P | | | | | | | D095-01 | 22:04 |
| | | | | NICKEL | 25.4 | mg/kg | | Y | Y | P | | | | | | | D095-01 | 22:04 |
| | | | | POTASSIUM | 769 | mg/kg | | Y | Y | F | B | | 06B | | | | D095-01 | 22:04 |
| | | | | SELENIUM | 1.21 | mg/kg | U | N | Y | U | U | | | | | | D095-01 | 23:08 |
| | | | | SILVER | .62 | mg/kg | J | Y | Y | F | B | | 06A | 06B | 15 | | D095-01 | 22:04 |
| | | | | SODIUM | 26.5 | mg/kg | J | Y | Y | P | J | | 15 | | | | D095-01 | 22:04 |
| | | | | THALLIUM | 2.03 | mg/kg | J | Y | Y | P | J | | 15 | | | | D095-01 | 23:08 |
| | | | | VANADIUM | 32.3 | mg/kg | | Y | Y | P | | | | | | | D095-01 | 22:04 |
| | | | | ZINC | 62.6 | mg/kg | | Y | Y | P | | | | | | | D095-01 | 22:04 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .043 | mg/kg | J | Y | Y | P | J | | 15 | | | | D095-01 | 16:07 |
| JF0008 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 11700 | mg/kg | | Y | Y | P | | | | | | | D095-02 | 22:09 |
| | | | | ANTIMONY | 5.07 | mg/kg | J | Y | Y | P | J | | 15 | | | | D095-02 | 22:09 |
| | | | | ARSENIC | 16.5 | mg/kg | | Y | Y | P | | | | | | | D095-02 | 23:13 |
| | | | | BARIUM | 31.7 | mg/kg | | Y | Y | P | | | | | | | D095-02 | 22:09 |
| | | | | BERYLLIUM | 1.4 | mg/kg | | Y | Y | P | | | | | | | D095-02 | 22:09 |
| | | | | CADMIUM | .644 | mg/kg | U | N | Y | U | U | | | | | | D095-02 | 22:09 |
| | | | | CALCIUM | 26.8 | mg/kg | J | Y | Y | P | J | | 15 | | | | D095-02 | 22:09 |
| | | | | CHROMIUM | 30.3 | mg/kg | | Y | Y | P | | | | | | | D095-02 | 22:09 |
| | | | | COBALT | 2.13 | mg/kg | J | Y | Y | P | J | | 15 | | | | D095-02 | 22:09 |
| | | | | COPPER | 34.4 | mg/kg | | Y | Y | P | | | | | | | D095-02 | 22:09 |
| | | | | IRON | 54000 | mg/kg | | Y | Y | P | | | | | | | D095-02 | 22:09 |
| | | | | LEAD | 11.9 | mg/kg | | Y | Y | P | | | | | | | D095-02 | 23:13 |
| | | | | MAGNESIUM | 608 | mg/kg | | Y | Y | P | | | | | | | D095-02 | 22:09 |
| | | | | MANGANESE | 163 | mg/kg | | Y | Y | P | | | | | | | D095-02 | 22:09 |
| | | | | NICKEL | 9.36 | mg/kg | | Y | Y | P | | | | | | | D095-02 | 22:09 |
| | | | | POTASSIUM | 2160 | mg/kg | | Y | Y | P | | | | | | | D095-02 | 22:09 |
| | | | | SELENIUM | 1.29 | mg/kg | U | N | Y | U | U | | | | | | D095-02 | 23:13 |
| | | | | SILVER | 1.29 | mg/kg | U | N | Y | U | U | | | | | | D095-02 | 22:09 |
| | | | | SODIUM | 129 | mg/kg | U | N | Y | U | U | | | | | | D095-02 | 22:09 |
| | | | | THALLIUM | 1.32 | mg/kg | J | Y | Y | P | J | | 15 | | | | D095-02 | 23:13 |
| | | | | VANADIUM | 38.2 | mg/kg | | Y | Y | P | | | | | | | D095-02 | 22:09 |
| | | | | ZINC | 71.8 | mg/kg | | Y | Y | P | | | | | | | D095-02 | 22:09 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .129 | mg/kg | U | N | Y | U | U | | | | | | D095-02 | 16:10 |
| JF0007 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D095-01 | 19:45 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D095-01 | 19:45 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D095-01 | 19:45 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D095-01 | 19:45 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D095-01 | 19:45 |

# Validation Qualifier Data Entry Verification

Run Date: September 26, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1073Q-05** | | | | | | | | | | | | | | | | | | |
| JF0007 | SW8330 | METHOD | N 0 1 | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D095-01 | 19:45 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D095-01 | 19:45 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D095-01 | 19:45 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D095-01 | 19:45 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D095-01 | 19:45 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | D095-01 | 19:45 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D095-01 | 19:45 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | D095-01 | 19:45 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | D095-01 | 19:45 |
| JF0008 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D095-02 | 20:24 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D095-02 | 20:24 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D095-02 | 20:24 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D095-02 | 20:24 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D095-02 | 20:24 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D095-02 | 20:24 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D095-02 | 20:24 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D095-02 | 20:24 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D095-02 | 20:24 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D095-02 | 20:24 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | D095-02 | 20:24 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D095-02 | 20:24 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | D095-02 | 20:24 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | D095-02 | 20:24 |
| JF0007 | E314.0 | NONE | N 0 1 | PERCHLORATE | .0606 | mg/kg | U | N | Y | U | U | | | | | | D095-01 | 21:12 |
| JF0008 | E314.0 | NONE | N 0 1 | PERCHLORATE | .0644 | mg/kg | U | N | Y | U | U | | | | | | D095-02 | 21:30 |
| **1073Q-06** | | | | | | | | | | | | | | | | | | |
| JF3005 | SW6010B | SW3010 | N 0 1 | ALUMINUM | .121 | mg/L | J | Y | Y | F | B | | 06A | 06B | 15 | | D175-01 | 22:43 |
| | | | | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 22:43 |
| | | | | ARSENIC | .01 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 21:47 |
| | | | | BARIUM | .00505 | mg/L | J | Y | Y | P | J | | 15 | | | | D175-01 | 22:43 |
| | | | | BERYLLIUM | .001 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 22:43 |
| | | | | CADMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 22:43 |
| | | | | CALCIUM | .927 | mg/L | J | Y | Y | F | B | | 06C | 15 | | | D175-01 | 22:43 |
| | | | | CHROMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 22:43 |
| | | | | COBALT | .02 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 22:43 |
| | | | | COPPER | .00448 | mg/L | J | Y | Y | F | B | | 06A | 06B | 15 | | D175-01 | 22:43 |
| | | | | IRON | .267 | mg/L | | Y | Y | P | | | | | | | D175-01 | 22:43 |
| | | | | LEAD | .01 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 21:47 |
| | | | | MAGNESIUM | .464 | mg/L | J | Y | Y | F | B | | 06C | 15 | | | D175-01 | 22:43 |

# Validation Qualifier Data Entry Verification

Run Date: September 26, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1073Q-06** | | | | | | | | | | | | | | | | | | | | |
| JF3005 | SW6010B | SW3010 | N | 0 | 1 | MANGANESE | .0549 | mg/L | | Y | Y | P | | | | | | | D175-01 | 22:43 |
| | | | | | | NICKEL | .0158 | mg/L | J | Y | Y | F | B | | 06A | 06B | 15 | | D175-01 | 22:43 |
| | | | | | | POTASSIUM | 5 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 22:43 |
| | | | | | | SELENIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 21:47 |
| | | | | | | SILVER | .01 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 22:43 |
| | | | | | | SODIUM | .776 | mg/L | J | Y | Y | P | J | | 15 | | | | D175-01 | 22:43 |
| | | | | | | THALLIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 21:47 |
| | | | | | | VANADIUM | .00424 | mg/L | J | Y | Y | F | B | | 06A | 06B | 15 | | D175-01 | 22:43 |
| | | | | | | ZINC | .0117 | mg/L | J | Y | Y | F | B | | 06C | 15 | | | D175-01 | 22:43 |
| | SW7470A | TOTAL | N | 0 | 1 | MERCURY | .0005 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 17:02 |
| JF3005 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 17:20 |
| | | | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 17:20 |
| | | | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 17:20 |
| | | | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 17:20 |
| | | | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 17:20 |
| | | | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 17:20 |
| | | | | | | 2-NITROTOLUENE | .00085 | mg/L | | Y | Y | P | | | | | | | D175-01 | 17:20 |
| | | | | | | 3-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 17:20 |
| | | | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 17:20 |
| | | | | | | 4-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 17:20 |
| | | | | | | HMX | .001 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 17:20 |
| | | | | | | NITROBENZENE | .0004 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 17:20 |
| | | | | | | RDX | .0004 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 17:20 |
| | | | | | | TETRYL | .0004 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 17:20 |
| JF3005 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .005 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 20:30 |
| JF3005 | SW8260B | SW5030 | N | 0 | 1 | 1,1,1,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 06:26 |
| | | | | | | 1,1,1-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 06:26 |
| | | | | | | 1,1,2,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 06:26 |
| | | | | | | 1,1,2-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 06:26 |
| | | | | | | 1,1-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 06:26 |
| | | | | | | 1,1-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 06:26 |
| | | | | | | 1,1-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 06:26 |
| | | | | | | 1,2,3-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 06:26 |
| | | | | | | 1,2,3-TRICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 06:26 |
| | | | | | | 1,2,4-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 06:26 |
| | | | | | | 1,2,4-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 06:26 |
| | | | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .01 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 06:26 |
| | | | | | | 1,2-DIBROMOETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 06:26 |
| | | | | | | 1,2-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 06:26 |
| | | | | | | 1,2-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 06:26 |

# Validation Qualifier Data Entry Verification

Run Date: September 26, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1073Q-06** | | | | | | | | | | | | | | | | | | |
| JF3005 | SW8260B | SW5030 | N 0 1 | 1,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 06:26 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 06:26 |
| | | | | 1,3-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 06:26 |
| | | | | 1,3-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 06:26 |
| | | | | 1,4-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 06:26 |
| | | | | 2,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 06:26 |
| | | | | 2-BUTANONE | .02 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 06:26 |
| | | | | 2-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 06:26 |
| | | | | 2-HEXANONE | .02 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 06:26 |
| | | | | 4-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 06:26 |
| | | | | 4-METHYL-2-PENTANONE | .01 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 06:26 |
| | | | | ACETONE | .02 | mg/L | U | N | Y | U | R | 05A | | | | | D175-01 | 06:26 |
| | | | | BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 06:26 |
| | | | | BROMOBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 06:26 |
| | | | | BROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 06:26 |
| | | | | BROMODICHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 06:26 |
| | | | | BROMOFORM | .005 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 06:26 |
| | | | | BROMOMETHANE | .005 | mg/L | U | N | Y | U | UJ | 05B | | | | | D175-01 | 06:26 |
| | | | | CARBON DISULFIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 06:26 |
| | | | | CARBON TETRACHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 06:26 |
| | | | | CHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 06:26 |
| | | | | CHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 06:26 |
| | | | | CHLOROFORM | .005 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 06:26 |
| | | | | CHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 06:26 |
| | | | | CIS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 06:26 |
| | | | | CIS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 06:26 |
| | | | | DIBROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 06:26 |
| | | | | DIBROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 06:26 |
| | | | | DICHLORODIFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 06:26 |
| | | | | ETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 06:26 |
| | | | | HEXACHLOROBUTADIENE | .005 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 06:26 |
| | | | | ISOPROPYL BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 06:26 |
| | | | | M/P-XYLENES | .01 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 06:26 |
| | | | | METHYLENE CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 06:26 |
| | | | | N-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 06:26 |
| | | | | N-PROPYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 06:26 |
| | | | | NAPHTHALENE | .005 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 06:26 |
| | | | | O-XYLENE | .005 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 06:26 |
| | | | | P-ISOPROPYLTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 06:26 |
| | | | | SEC-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 06:26 |

# Validation Qualifier Data Entry Verification

Run Date: September 26, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1073Q-06** | | | | | | | | | | | | | | | | | | |
| JF3005 | SW8260B | SW5030 | N 0 1 | STYRENE | .005 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 06:26 |
| | | | | TERT-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 06:26 |
| | | | | TETRACHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 06:26 |
| | | | | TOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 06:26 |
| | | | | TRANS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 06:26 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 06:26 |
| | | | | TRICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 06:26 |
| | | | | TRICHLOROFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 06:26 |
| | | | | VINYL CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D175-01 | 06:26 |
| **1073Q-07** | | | | | | | | | | | | | | | | | | |
| JF3002 | SW6010B | SW3010 | N 0 1 | ALUMINUM | .848 | mg/L | | Y | Y | P | | | | | | | E100-01 | 22:08 |
| | | | | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 22:08 |
| | | | | ARSENIC | .01 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 23:13 |
| | | | | BARIUM | .0291 | mg/L | | Y | Y | P | | | | | | | E100-01 | 22:08 |
| | | | | BERYLLIUM | .001 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 22:08 |
| | | | | CADMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 22:08 |
| | | | | CALCIUM | 52.3 | mg/L | | Y | Y | P | | | | | | | E100-01 | 22:08 |
| | | | | CHROMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 22:08 |
| | | | | COBALT | .02 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 22:08 |
| | | | | COPPER | .02 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 22:08 |
| | | | | IRON | .828 | mg/L | | Y | Y | P | | | | | | | E100-01 | 22:08 |
| | | | | LEAD | .01 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 23:13 |
| | | | | MAGNESIUM | 11.3 | mg/L | | Y | Y | P | | | | | | | E100-01 | 22:08 |
| | | | | MANGANESE | .039 | mg/L | | Y | Y | P | | | | | | | E100-01 | 22:08 |
| | | | | NICKEL | .02 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 22:08 |
| | | | | POTASSIUM | 2.82 | mg/L | J | Y | Y | P | J | | 15 | | | | E100-01 | 22:08 |
| | | | | SELENIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 23:13 |
| | | | | SILVER | .01 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 22:08 |
| | | | | SODIUM | 1.06 | mg/L | | Y | Y | P | | | | | | | E100-01 | 22:08 |
| | | | | THALLIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 23:13 |
| | | | | VANADIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 22:08 |
| | | | | ZINC | .013 | mg/L | J | Y | Y | P | J | | 17 | 15 | | | E100-01 | 22:08 |
| | SW7470A | TOTAL | N 0 1 | MERCURY | .0005 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 15:59 |
| JF3003 | SW6010B | SW3010 | N 0 1 | ALUMINUM | .897 | mg/L | | Y | Y | | | | | | | | E100-02 | 22:03 |
| | | | | ANTIMONY | .1 | mg/L | U | N | Y | | U | | | | | | E100-02 | 22:03 |
| | | | | ARSENIC | .01 | mg/L | U | N | Y | | U | | | | | | E100-02 | 23:09 |
| | | | | BARIUM | .0298 | mg/L | | Y | Y | | | | | | | | E100-02 | 22:03 |
| | | | | BERYLLIUM | .00064 | mg/L | J | Y | Y | | J | | 15 | | | | E100-02 | 22:03 |
| | | | | CADMIUM | .01 | mg/L | U | N | Y | | U | | | | | | E100-02 | 22:03 |

# Validation Qualifier Data Entry Verification

Run Date: September 26, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1073Q-07** | | | | | | | | | | | | | | | | | | |
| JF3003 | SW6010B | SW3010 | N 0 1 | CALCIUM | 50.9 | mg/L | | Y | Y | | | | | | | | E100-02 | 22:03 |
| | | | | CHROMIUM | .01 | mg/L | U | N | Y | | U | | | | | | E100-02 | 22:03 |
| | | | | COBALT | .02 | mg/L | U | N | Y | | U | | | | | | E100-02 | 22:03 |
| | | | | COPPER | .02 | mg/L | U | N | Y | | U | | | | | | E100-02 | 22:03 |
| | | | | IRON | .858 | mg/L | | Y | Y | | | | | | | | E100-02 | 22:03 |
| | | | | LEAD | .01 | mg/L | U | N | Y | | U | | | | | | E100-02 | 23:09 |
| | | | | MAGNESIUM | 11.4 | mg/L | | Y | Y | | | | | | | | E100-02 | 22:03 |
| | | | | MANGANESE | .0337 | mg/L | | Y | Y | | | | | | | | E100-02 | 22:03 |
| | | | | NICKEL | .02 | mg/L | U | N | Y | | U | | | | | | E100-02 | 22:03 |
| | | | | POTASSIUM | 2.27 | mg/L | J | Y | Y | | J | | 15 | | | | E100-02 | 22:03 |
| | | | | SELENIUM | .01 | mg/L | U | N | Y | | U | | | | | | E100-02 | 23:09 |
| | | | | SILVER | .01 | mg/L | U | N | Y | | U | | | | | | E100-02 | 22:03 |
| | | | | SODIUM | 1.06 | mg/L | | Y | Y | | | | | | | | E100-02 | 22:03 |
| | | | | THALLIUM | .01 | mg/L | U | N | Y | | U | | | | | | E100-02 | 23:09 |
| | | | | VANADIUM | .01 | mg/L | U | N | Y | | U | | | | | | E100-02 | 22:03 |
| | | | | ZINC | .0058 | mg/L | J | Y | Y | | J | | 17 | 15 | | | E100-02 | 22:03 |
| | SW7470A | TOTAL | N 0 1 | MERCURY | .0005 | mg/L | U | N | Y | | U | | | | | | E100-02 | 16:01 |
| JF3002 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 17:56 |
| | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 17:56 |
| | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 17:56 |
| | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 17:56 |
| | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 17:56 |
| | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 17:56 |
| | | | | 2-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 17:56 |
| | | | | 3-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 17:56 |
| | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 17:56 |
| | | | | 4-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 17:56 |
| | | | | HMX | .001 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 17:56 |
| | | | | NITROBENZENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 17:56 |
| | | | | RDX | .0004 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 17:56 |
| | | | | TETRYL | .0004 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 17:56 |
| JF3003 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | | U | | | | | | E100-02 | 18:34 |
| | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | | U | | | | | | E100-02 | 18:34 |
| | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | | U | | | | | | E100-02 | 18:34 |
| | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | | U | | | | | | E100-02 | 18:34 |
| | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | | U | | | | | | E100-02 | 18:34 |
| | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | | U | | | | | | E100-02 | 18:34 |
| | | | | 2-NITROTOLUENE | .0004 | mg/L | U | N | Y | | U | | | | | | E100-02 | 18:34 |
| | | | | 3-NITROTOLUENE | .0004 | mg/L | U | N | Y | | U | | | | | | E100-02 | 18:34 |
| | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N | Y | | U | | | | | | E100-02 | 18:34 |

# Validation Qualifier Data Entry Verification

Run Date: September 26, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1073Q-07** | | | | | | | | | | | | | | | | | | |
| JF3003 | SW8330 | METHOD | N 0 1 | 4-NITROTOLUENE | .0004 | mg/L | U | N | Y | | U | | | | | | E100-02 | 18:34 |
| | | | | HMX | .001 | mg/L | U | N | Y | | U | | | | | | E100-02 | 18:34 |
| | | | | NITROBENZENE | .0004 | mg/L | U | N | Y | | U | | | | | | E100-02 | 18:34 |
| | | | | RDX | .0004 | mg/L | U | N | Y | | U | | | | | | E100-02 | 18:34 |
| | | | | TETRYL | .0004 | mg/L | U | N | Y | | U | | | | | | E100-02 | 18:34 |
| JF3002 | E314.0 | NONE | N 0 1 | PERCHLORATE | .005 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 17:20 |
| JF3003 | E314.0 | NONE | N 0 1 | PERCHLORATE | .005 | mg/L | U | N | Y | | U | | | | | | E100-02 | 18:46 |
| JF3002 | SW8260B | SW5030 | N 0 1 | 1,1,1,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 02:45 |
| | | | | 1,1,1-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 02:45 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 02:45 |
| | | | | 1,1,2-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 02:45 |
| | | | | 1,1-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 02:45 |
| | | | | 1,1-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 02:45 |
| | | | | 1,1-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 02:45 |
| | | | | 1,2,3-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 02:45 |
| | | | | 1,2,3-TRICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 02:45 |
| | | | | 1,2,4-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 02:45 |
| | | | | 1,2,4-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 02:45 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .01 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 02:45 |
| | | | | 1,2-DIBROMOETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 02:45 |
| | | | | 1,2-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 02:45 |
| | | | | 1,2-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 02:45 |
| | | | | 1,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 02:45 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 02:45 |
| | | | | 1,3-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 02:45 |
| | | | | 1,3-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 02:45 |
| | | | | 1,4-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 02:45 |
| | | | | 2,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 02:45 |
| | | | | 2-BUTANONE | .02 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 02:45 |
| | | | | 2-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 02:45 |
| | | | | 2-HEXANONE | .02 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 02:45 |
| | | | | 4-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 02:45 |
| | | | | 4-METHYL-2-PENTANONE | .01 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 02:45 |
| | | | | ACETONE | .02 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 02:45 |
| | | | | BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 02:45 |
| | | | | BROMOBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 02:45 |
| | | | | BROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 02:45 |
| | | | | BROMODICHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 02:45 |
| | | | | BROMOFORM | .005 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 02:45 |
| | | | | BROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 02:45 |

# Validation Qualifier Data Entry Verification

Run Date: September 26, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1073Q-07** | | | | | | | | | | | | | | | | | | |
| JF3002 | SW8260B | SW5030 | N 0 1 | CARBON DISULFIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 02:45 |
| | | | | CARBON TETRACHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 02:45 |
| | | | | CHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 02:45 |
| | | | | CHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 02:45 |
| | | | | CHLOROFORM | .005 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 02:45 |
| | | | | CHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 02:45 |
| | | | | CIS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 02:45 |
| | | | | CIS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 02:45 |
| | | | | DIBROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 02:45 |
| | | | | DIBROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 02:45 |
| | | | | DICHLORODIFLUOROMETHANE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | E100-01 | 02:45 |
| | | | | ETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 02:45 |
| | | | | HEXACHLOROBUTADIENE | .005 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 02:45 |
| | | | | ISOPROPYL BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 02:45 |
| | | | | M/P-XYLENES | .01 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 02:45 |
| | | | | METHYLENE CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 02:45 |
| | | | | N-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 02:45 |
| | | | | N-PROPYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 02:45 |
| | | | | NAPHTHALENE | .005 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 02:45 |
| | | | | O-XYLENE | .005 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 02:45 |
| | | | | P-ISOPROPYLTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 02:45 |
| | | | | SEC-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 02:45 |
| | | | | STYRENE | .005 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 02:45 |
| | | | | TERT-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 02:45 |
| | | | | TETRACHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 02:45 |
| | | | | TOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 02:45 |
| | | | | TRANS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 02:45 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 02:45 |
| | | | | TRICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 02:45 |
| | | | | TRICHLOROFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 02:45 |
| | | | | VINYL CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E100-01 | 02:45 |
| JF3003 | SW8260B | SW5030 | N 0 1 | 1,1,1,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | | U | | | | | | E100-02 | 03:22 |
| | | | | 1,1,1-TRICHLOROETHANE | .005 | mg/L | U | N | Y | | U | | | | | | E100-02 | 03:22 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | | U | | | | | | E100-02 | 03:22 |
| | | | | 1,1,2-TRICHLOROETHANE | .005 | mg/L | U | N | Y | | U | | | | | | E100-02 | 03:22 |
| | | | | 1,1-DICHLOROETHANE | .005 | mg/L | U | N | Y | | U | | | | | | E100-02 | 03:22 |
| | | | | 1,1-DICHLOROETHENE | .005 | mg/L | U | N | Y | | U | | | | | | E100-02 | 03:22 |
| | | | | 1,1-DICHLOROPROPENE | .005 | mg/L | U | N | Y | | U | | | | | | E100-02 | 03:22 |
| | | | | 1,2,3-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | | U | | | | | | E100-02 | 03:22 |
| | | | | 1,2,3-TRICHLOROPROPANE | .005 | mg/L | U | N | Y | | U | | | | | | E100-02 | 03:22 |

# Validation Qualifier Data Entry Verification

Run Date: September 26, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1073Q-07** | | | | | | | | | | | | | | | | |
| JF3003 | SW8260B | SW5030 | N 0 1 | 1,2,4-TRICHLOROBENZENE | .005 | mg/L | U | N Y | U | | | | | | E100-02 | 03:22 |
| | | | | 1,2,4-TRIMETHYLBENZENE | .005 | mg/L | U | N Y | U | | | | | | E100-02 | 03:22 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .01 | mg/L | U | N Y | U | | | | | | E100-02 | 03:22 |
| | | | | 1,2-DIBROMOETHANE | .005 | mg/L | U | N Y | U | | | | | | E100-02 | 03:22 |
| | | | | 1,2-DICHLOROBENZENE | .005 | mg/L | U | N Y | U | | | | | | E100-02 | 03:22 |
| | | | | 1,2-DICHLOROETHANE | .005 | mg/L | U | N Y | U | | | | | | E100-02 | 03:22 |
| | | | | 1,2-DICHLOROPROPANE | .005 | mg/L | U | N Y | U | | | | | | E100-02 | 03:22 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .005 | mg/L | U | N Y | U | | | | | | E100-02 | 03:22 |
| | | | | 1,3-DICHLOROBENZENE | .005 | mg/L | U | N Y | U | | | | | | E100-02 | 03:22 |
| | | | | 1,3-DICHLOROPROPANE | .005 | mg/L | U | N Y | U | | | | | | E100-02 | 03:22 |
| | | | | 1,4-DICHLOROBENZENE | .005 | mg/L | U | N Y | U | | | | | | E100-02 | 03:22 |
| | | | | 2,2-DICHLOROPROPANE | .005 | mg/L | U | N Y | U | | | | | | E100-02 | 03:22 |
| | | | | 2-BUTANONE | .02 | mg/L | U | N Y | U | | | | | | E100-02 | 03:22 |
| | | | | 2-CHLOROTOLUENE | .005 | mg/L | U | N Y | U | | | | | | E100-02 | 03:22 |
| | | | | 2-HEXANONE | .02 | mg/L | U | N Y | U | | | | | | E100-02 | 03:22 |
| | | | | 4-CHLOROTOLUENE | .005 | mg/L | U | N Y | U | | | | | | E100-02 | 03:22 |
| | | | | 4-METHYL-2-PENTANONE | .01 | mg/L | U | N Y | U | | | | | | E100-02 | 03:22 |
| | | | | ACETONE | .02 | mg/L | U | N Y | U | | | | | | E100-02 | 03:22 |
| | | | | BENZENE | .005 | mg/L | U | N Y | U | | | | | | E100-02 | 03:22 |
| | | | | BROMOBENZENE | .005 | mg/L | U | N Y | U | | | | | | E100-02 | 03:22 |
| | | | | BROMOCHLOROMETHANE | .005 | mg/L | U | N Y | U | | | | | | E100-02 | 03:22 |
| | | | | BROMODICHLOROMETHANE | .005 | mg/L | U | N Y | U | | | | | | E100-02 | 03:22 |
| | | | | BROMOFORM | .005 | mg/L | U | N Y | U | | | | | | E100-02 | 03:22 |
| | | | | BROMOMETHANE | .005 | mg/L | U | N Y | U | | | | | | E100-02 | 03:22 |
| | | | | CARBON DISULFIDE | .005 | mg/L | U | N Y | U | | | | | | E100-02 | 03:22 |
| | | | | CARBON TETRACHLORIDE | .005 | mg/L | U | N Y | U | | | | | | E100-02 | 03:22 |
| | | | | CHLOROBENZENE | .005 | mg/L | U | N Y | U | | | | | | E100-02 | 03:22 |
| | | | | CHLOROETHANE | .005 | mg/L | U | N Y | U | | | | | | E100-02 | 03:22 |
| | | | | CHLOROFORM | .005 | mg/L | U | N Y | U | | | | | | E100-02 | 03:22 |
| | | | | CHLOROMETHANE | .005 | mg/L | U | N Y | U | | | | | | E100-02 | 03:22 |
| | | | | CIS-1,2-DICHLOROETHENE | .005 | mg/L | U | N Y | U | | | | | | E100-02 | 03:22 |
| | | | | CIS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N Y | U | | | | | | E100-02 | 03:22 |
| | | | | DIBROMOCHLOROMETHANE | .005 | mg/L | U | N Y | U | | | | | | E100-02 | 03:22 |
| | | | | DIBROMOMETHANE | .005 | mg/L | U | N Y | U | | | | | | E100-02 | 03:22 |
| | | | | DICHLORODIFLUOROMETHANE | .005 | mg/L | U | N Y | UJ | | 05B | | | | E100-02 | 03:22 |
| | | | | ETHYLBENZENE | .005 | mg/L | U | N Y | U | | | | | | E100-02 | 03:22 |
| | | | | HEXACHLOROBUTADIENE | .005 | mg/L | U | N Y | U | | | | | | E100-02 | 03:22 |
| | | | | ISOPROPYL BENZENE | .005 | mg/L | U | N Y | U | | | | | | E100-02 | 03:22 |
| | | | | M/P-XYLENES | .01 | mg/L | U | N Y | U | | | | | | E100-02 | 03:22 |
| | | | | METHYLENE CHLORIDE | .005 | mg/L | U | N Y | U | | | | | | E100-02 | 03:22 |

# Validation Qualifier Data Entry Verification

Run Date: September 26, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1073Q-07** | | | | | | | | | | | | | | | | |
| JF3003 | SW8260B | SW5030 | N 0 1 | N-BUTYLBENZENE | .005 | mg/L | U | N Y | U | | | | | | E100-02 | 03:22 |
| | | | | N-PROPYLBENZENE | .005 | mg/L | U | N Y | U | | | | | | E100-02 | 03:22 |
| | | | | NAPHTHALENE | .005 | mg/L | U | N Y | U | | | | | | E100-02 | 03:22 |
| | | | | O-XYLENE | .005 | mg/L | U | N Y | U | | | | | | E100-02 | 03:22 |
| | | | | P-ISOPROPYLTOLUENE | .005 | mg/L | U | N Y | U | | | | | | E100-02 | 03:22 |
| | | | | SEC-BUTYLBENZENE | .005 | mg/L | U | N Y | U | | | | | | E100-02 | 03:22 |
| | | | | STYRENE | .005 | mg/L | U | N Y | U | | | | | | E100-02 | 03:22 |
| | | | | TERT-BUTYLBENZENE | .005 | mg/L | U | N Y | U | | | | | | E100-02 | 03:22 |
| | | | | TETRACHLOROETHENE | .005 | mg/L | U | N Y | U | | | | | | E100-02 | 03:22 |
| | | | | TOLUENE | .005 | mg/L | U | N Y | U | | | | | | E100-02 | 03:22 |
| | | | | TRANS-1,2-DICHLOROETHENE | .005 | mg/L | U | N Y | U | | | | | | E100-02 | 03:22 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N Y | U | | | | | | E100-02 | 03:22 |
| | | | | TRICHLOROETHENE | .005 | mg/L | U | N Y | U | | | | | | E100-02 | 03:22 |
| | | | | TRICHLOROFLUOROMETHANE | .005 | mg/L | U | N Y | U | | | | | | E100-02 | 03:22 |
| | | | | VINYL CHLORIDE | .005 | mg/L | U | N Y | U | | | | | | E100-02 | 03:22 |

***Quality Assurance Report***
***For Ranges West of Iron Mountain Road***
***Parcel HR-91Q***
***IT Project No 796887***
***Fort McClellan Quality Assurance Report***

## *1.0 Overview*

Thirty-one soil samples and 8 groundwater samples were collected in support of the investigation at Fort McClellan (FTMC) Parcel HR-91Q, Ranges West of Iron Mountain Road. All samples were submitted to EMAX Laboratories, Inc. for analysis. Soil samples were analyzed for target analyte list (TAL) metals, nitroaromatic-nitramine explosives, and perchlorate. Groundwater samples were analyzed for TAL metals, nitroaromatic-nitramine explosives, perchlorate, and target compound list (TCL) volatiles. QC samples consisted of the following types and quantities: 2 field duplicates, 6 trip blanks, and 8 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 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 data and validation 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 (DQO) were met, laboratory analytical results and data packages were examined for compliance with SW846 SW6010B/SW7000 Series, SW8330, SW8260B and U.S. Environmental Protection Agency (EPA) 314.0 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 analytical holding times were met.

## *2.2 Rejected Data*

Table 2.2-1 lists all rejected analytical data for soil and aqueous samples. Sample re-collection at this time is not warranted due to all rejected results being reported as non-detect.

**Table 2.2-1 Rejected Analytical Results**

| Sample Delivery Group | Sample Number | Contaminant | Reason |
|---|---|---|---|
| 1091Q-07 | JH3006 | 1,2-Dibromo-3-chloropropane | Calibration Relative Response Factor (RRF) <0.05. |

## *2.3 Blank Results*

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

- Trip blanks (TBs) consist of a VOC sample vial filled in the laboratory with ASTM Type II reagent grade water, transported to the sampling site, handled like an environmental sample and returned to the laboratory for analysis. Trip blanks are prepared only when VOC samples are collected and analyzed. Trip blanks are used to assess the potential introduction of contaminants from sample containers during the transportation and/or storage procedures. Trip blanks were sent with all aqueous samples shipped to the laboratory requiring volatile analysis.

- Equipment rinsates (ER) are samples of analyte-free deionized water poured into, or 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 an analyte-free matrix, which is analyzed to verify the analysis system is free of contamination. ICBs

and CCBs are analyzed immediately after the initial and continuing calibration is performed.

Field sample concentrations were evaluated to determine if the sample results could have been biased by the presence of any contamination measured in trip blanks, 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 |
|---|---|---|---|
| 1091Q-02 | JH0009 | Lead | Lead result for sample JH0009 was "B" qualified. |
| 1091Q-05 | JH0027 | Silver<br>Cobalt<br>Potassium | Silver, cobalt and potassium results were "B" qualified. |
| 1091Q-07 | JH3006 | Aluminum<br>Nickel | Aluminum and nickel results for sample JH3006 were "B" qualified. |
| | JH3006 | Acetone | Acetone result for sample JH3006 was "B" qualified |
| 1091Q-08 | JH3001 & JH3009 | Iron<br>Calcium | Iron and calcium results for samples JH3001 and JH3009 were "B" qualified. |
| | JH3001 | Zinc<br>Magnesium | Zinc and magnesium results for sample JH3001 were "B" qualified. |
| 1091Q-09 | JH3007 & JH3010 | Selenium<br>Calcium<br>Magnesium | Selenium, calcium and magnesium results for samples JH3007 and JH3010 were "B" qualified. |
| | JH3007 | Thallium | Thallium result for sample JH3007 was "B" qualified. |
| | JH3010 | Nickel | Nickel result for sample JH3010 was "B" qualified. |
| 1091Q-10 | JH3003 | Methylene chloride | Methylene chloride for sample JH3003 was "B" qualified. |

## *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.

Overall sampling and analysis precision for this task was assessed using field duplicate (FD) samples. Laboratory precision was assessed by laboratory control sample/laboratory control sample duplicate (LCS/LCSD) and matrix spike/matrix spike duplicate (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 list field duplicate, LCS/LCSD and MS/MSD RPD anomalies.

**Table 2.4-1**
**Precision Acceptance Criteria**

| Field/Laboratory QC Type | Matrix | |
|---|---|---|
| | Aqueous | Soil |
| Field Duplicate (Both Organic & Inorganic) | RPD < 35% | RPD < 50% |
| Perchlorate LCS/LCSD and MS/MSD | RPD < 10% | RPD < 20% |
| 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" |
| TCL Volatiles 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% |

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

| Sample Delivery Group | Sample Number | Contaminant | Assigned Validation Qualifier |
|---|---|---|---|
| 1091Q-02 | JH0008 (Parent) / JH0009 (FD) | Barium (57%)<br>Magnesium (57%)<br>Manganese (51%) | Barium, magnesium and manganese results for samples JH0008 and JH0009 were "J" qualified due to RPD between parent sample and its corresponding field duplicate exceeding QC criteria. |
| | JH0024 (Parent) / JH0025(FD) | Barium (81%)<br>Zinc (130%) | Barium and zinc results for samples JH0024 and JH0025 were "J" qualified due to RPD between parent sample and its corresponding field duplicate 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 SW846 SW6010B/SW7000 Series methodology, nitroaromatic-nitramine explosives by SW8330, perchlorate by EPA 314.0, and TCL volatiles by SW8260B. Reported results indicate that an acceptable level of analytical accuracy was achieved. Surrogate, LCS/LCSD and MS/MSD spike recoveries, which exceed QA criteria are summarized in Table 2.5-1. Surrogate recoveries, LCS/LCSD, and MS/MSD spike recoveries, which exceed QC criteria are listed in Table 2.5-1.

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

| Sample Delivery Group | Sample Number | Contaminant | Action |
|---|---|---|---|
| 1091Q-02 | JF0001MS/MSD | Antimony (LB) | Antimony results for samples JH0001, JH0002, JH0005, JH0006, JH0007, JH0008, JH0009, JH0019, JH0020, JH0021, JH0022, JH0023, JH0024, JH0025, JH0029 & JH0030 were "J" / "UJ" qualified due to MS/MSD spike recoveries exceeding QC criteria. |

LB - low 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. Soil sample data are being used to assess potential impacts to terrestrial biota that might use the site for food and/or habitat purposes. Monitoring

well locations where chosen to establish groundwater flow direction and site-specific geology, and provide 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-91Q Ranges West of Iron Mountain Road. 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-91Q requirement for completeness is 95% for both aqueous and soil samples. The % Completeness for this task is calculated to be 100%

- % Completeness = (2057 / 2058) 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-91Q
# Ranges West of Iron Mountain Road
# Analytical Summary
# Project No. 796887

## HR-91Q Soil Sampling

| Sample Location | Sample Name | Sample Number | Date Sampled | Analytical Suite |
|---|---|---|---|---|
| HR-91Q-MW01 | HR-91Q-MW01-SS-JH0001-REG | JH0001 | 28-Mar-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-91Q-MW01-DS-JH0002-REG | JH0002 | 28-Mar-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-91Q-MW02 | HR-91Q-MW02-SS-JH0003-REG | JH0003 | 02-Apr-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-91Q-MW02-DS-JH0004-REG | JH0004 | 02-Apr-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-91Q-MW03 | HR-91Q-MW03-SS-JH0005-REG | JH0005 | 28-Mar-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-91Q-MW03-DS-JH0006-REG | JH0006 | 28-Mar-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-91Q-MW04 | HR-91Q-MW04-SS-JH0007-REG | JH0007 | 28-Mar-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-91Q-MW04-DS-JH0008-REG | JH0008 | 28-Mar-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-91Q-MW04-DS-JH0009-FD | JH0009 | 28-Mar-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-91Q-MW05 | HR-91Q-MW05-SS-JH0011-REG | JH0011 | 02-Apr-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-91Q-MW05-DS-JH0012-REG | JH0012 | 02-Apr-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-91Q-MW06 | HR-91Q-MW06-SS-JH0013-REG | JH0013 | 02-Apr-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-91Q-MW06-DS-JH0014-REG | JH0014 | 02-Apr-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-91Q-MW07 | HR-91Q-MW07-SS-JH0015-REG | JH0015 | 29-Mar-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-91Q-MW07-DS-JH0016-REG | JH0016 | 29-Mar-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-91Q-MW08 | HR-91Q-MW08-SS-JH0017-REG | JH0017 | 29-Mar-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-91Q-MW08-DS-JH0018-REG | JH0018 | 29-Mar-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-91Q-MW09 | HR-91Q-MW09-SS-JH0019-REG | JH0019 | 28-Mar-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-91Q-MW09-DS-JH0020-REG | JH0020 | 28-Mar-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-91Q-GP01 | HR-91Q-GP01-SS-JH0021-REG | JH0021 | 28-Mar-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-91Q-GP01-DS-JH0022-REG | JH0022 | 28-Mar-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-91Q-GP02 | HR-91Q-GP02-SS-JH0023-REG | JH0023 | 28-Mar-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-91Q-GP02-DS-JH0024-REG | JH0024 | 28-Mar-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-91Q-GP02-DS-JH0025-FD | JH0025 | 28-Mar-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-91Q-GP03 | HR-91Q-GP03-SS-JH0027-REG | JH0027 | 09-Apr-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-91Q-GP03-DS-JH0028-REG | JH0028 | 09-Apr-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-91Q-GP04 | HR-91Q-GP04-SS-JH0029-REG | JH0029 | 28-Mar-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-91Q-GP04-DS-JH0030-REG | JH0030 | 28-Mar-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-91Q-GP05 | HR-91Q-GP05-SS-JH0031-REG | JH0031 | 29-Mar-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-91Q-GP05-DS-JH0032-REG | JH0032 | 29-Mar-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-91Q-DEP01 | HR-91Q-DEP01-DEP-JH0033-REG | JH0033 | 07-Mar-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |

# Ft. McClellan
# Parcel HR-91Q
# Ranges West of Iron Mountain Road
# Analytical Summary
# Project No. 796887

| HR-91Q Groundwater Sampling | | | | |
|---|---|---|---|---|
| **Sample Location** | **Sample Name** | **Sample Number** | **Date Sampled** | **Analytical Suite** |
| HR-91Q-MW01 | HR-91Q-MW01-GW-JH3001-REG | JH3001 | 22-May-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-91Q-MW02 | HR-91Q-MW02-GW-JH3002-REG | JH3002 | Not Sampled | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-91Q-MW03 | HR-91Q-MW03-GW-JH3003-REG | JH3003 | 27-Jun-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-91Q-MW04 | HR-91Q-MW04-GW-JH3004-REG | JH3004 | 28-Jun-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-91Q-MW05 | HR-91Q-MW05-GW-JH3005-REG | JH3005 | Not Sampled | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-91Q-MW06 | HR-91Q-MW06-GW-JH3006-REG | JH3006 | 16-May-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-91Q-MW07 | HR-91Q-MW07-GW-JH3007-REG | JH3007 | 23-May-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-91Q-MW09-GW-JH3010-REG | JH3010 | 23-May-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-91Q-MW08 | HR-91Q-MW08-GW-JH3008-REG | JH3008 | 15-May-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Semivolatiles by SW8270C, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-91Q-MW09 | HR-91Q-MW09-GW-JH3009-REG | JH3009 | 23-May-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |

# ATTACHMENT B

# DATA VALIDATION SUMMARY REPORT

***Data Validation Summary Report***
***for the Site Investigation Performed at the***
***Ranges West of Iron Mountain (Parcel 91Q)***
***Fort McCellan***

## *1.0 Introduction*

Level III data validation was performed on 100% of the environmental samples collected at Parcel 91Q. The analytical data consisted of ten sample delivery groups (SDG) 1091Q-01, -02, -03, -04, -05, -06, -07, -08, -09, and -10, 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 |
| Perchlorate by EPA 314.0 |
| Volatiles by SW846 8260B |
| Semivolatiles by SW846 8270C |

## *2.0 Procedures*

The sample data were validated following the logic identified in the *USEPA Contract Laboratory Program (CLP) National Functional Guidelines For Inorganic Data Review (February 1994)* and *USEPA Contract Laboratory Program National Functional Guidelines For Organic Review (October 1999)* for all areas except Blanks. *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's) were applied to all sample results. As the result of the use of Update III SW846 test methods for the analytical data and the application of the 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 Chromatograph (GC) and Gas Chromatograph/Mass Spectra (GC/MS) calibration areas and is due to the fact that the analytical methods are "performance-based", and allows 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, CFR, SOP's, QAP) 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 qualification. The only rejected data ("R" qualified) was due to "poor performing" volatile compounds (Ketones, some halogenated hydrocarbons, etc.), which experienced poor calibration responses in the associated calibration data, and samples that were reanalyzed and have more than one results reported. The "R" qualifier was assigned to the samples with more than one set of results to indicate that a given result should not be use to characterize a particular constituent or an analysis for a given sample.

Individual validation reports have been prepared for each parameter in each SDG 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 Parcel 91Q. 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:

<u>Holding Times</u>

Technical holding time criteria were met for all samples.

<u>Initial and Continuing calibrations</u>

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 exceptions noted below:

Note: 'B' Qualifiers were applied to all of the following sample results.

| SDG | Samples Affected | Element/Elements | Associated Blank Contamination |
|---|---|---|---|
| 1091Q-02 | JH0009 | Lead | Method |
| 1091Q-05 | JH0027 | Silver, Cobalt, Potassium | Method/Calibration |
| 1091Q-07 | JH3006 | Aluminum, Nickel | Calibration |
| 1091Q-08 | JH3001, JH3009 | Iron, Calcium | Calibration/ER |
| | JH3001 | Zinc, Magnesium | Calibration/ER |
| 1091Q-09 | JH3007, JH3010 | Selenium, Calcium, Magnesium | Method/ER |
| | JH3007 | Thallium | Calibration |
| | JH3010 | Nickel | Calibration |

Matrix Spike / Matrix Spike Duplicate

Batch QC was performed for the project samples and all QC criteria were met with the exception of the following:

| SDG | Samples Affected | Analyte/Analytes | Validation Qualifier |
|---|---|---|---|
| 1091Q-02 | JH0001, JH0002, JH0005, JH0006, JH0007, JH0008, JH0009, JH0019, JH0020, JH0021, JH0022, JH0023, JH0024, JH0025, JH0029, JH0030 | Antimony | J/UJ |

Laboratory Control Sample (LCS)

All QC criteria were met for the LCS associated with the project sample analyses.

Interference Check Sample (ICS)

All ICS % recoveries for the project samples were acceptable.

ICP Serial Dilutions

All QC criteria were met with the exception of the following:

| SDG | Samples Affected | Analyte/Analytes | Validation Qualifier |
|---|---|---|---|
| 1091Q-02 | JH0001, JH0002, JH0005, JH0006, JH0007, JH0008, JH0009, JH0019, JH0020, JH0021, JH0022, JH0023, JH0024, JH0025, JH0029, JH0030 | Chromium, Lead, Zinc | J/B |

Field Duplicates

Field duplicates were performed for the project samples and all QC criteria were met with the exception of the following:

| SDG | Samples Affected | Analyte/Analytes | Validation Qualifier |
|---|---|---|---|
| 1091Q-02 | JH0008 (original), JH0009 (duplicate) | Barium, Magnesium, Manganese | J |
| | JH0024 (original), JH0025 (duplicate) | Barium, Zinc | J |

Sample Quantitation

Results quantified between the IDL and the RL ("J" flagged by the laboratory) were qualified as estimated (J).

### *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 are within acceptable QC ranges.

Matrix Spike / Matrix Spike Duplicate

Batch QC was performed for the project samples and all QC criteria were met.

Laboratory Control Sample (LCS)

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

Field Duplicates

Field duplicates were performed for the project samples and all QC criteria were met.

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.

### *4.3 Perchlorate by EPA 314.0*

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

Batch QC was performed for the project samples and all QC criteria were met.

Laboratory Control Sample (LCS)

All QC criteria were met for the LCS associated with the project sample analyses.

Field Duplicates

Field duplicates were performed for the project samples and all QC criteria were met.

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.

### *4.4 Volatile Organics by GC/MS SW846 8260B*

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 Calibration

The initial calibration and continuing calibrations associated with the project samples met QC criteria, with the exception of the following:

- The following exhibited individual RRF < 0.1:

| SDG Number | Samples Affected | Compound(s) | Validation Qualifier |
|---|---|---|---|
| 1091Q-07 | JH3006 | Acetone, 1,2-Dibromo-3-chloropropane | B/R |

- The following exhibited individual CCAL %D's > 20%:

| SDG Number | Samples Affected | Compound(s) | Validation Qualifier |
|---|---|---|---|
| 1091Q-07 | JH3006 | 2-Hexanone, Bromomethane, Chloromethane, Dichlorodifluoromethane | UJ |

Blanks

The 5X/10X rule for contaminants found in the associated equipment rinses, trip blanks, and method blanks was applied to all sample results. All were found to be acceptable with the exception of the following:

Note: 'B' Qualifiers were applied to all of the following sample results.

| SDG | Samples Affected | Element/Elements | Associated Blank Contamination |
|---|---|---|---|
| 1091Q-07 | JH3006 | Acetone | ER |
| 1091Q-10 | JH3003 | Methylene chloride | Method/TB |

Surrogate Recoveries

All surrogate recoveries are within acceptable QC limits.

Matrix Spike / Matrix Spike Duplicate

No MS/MSD were performed for the project samples.

Laboratory Control Sample (LCS)

LCS 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.

Internal Standards

All internal standards met QC criteria

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.

### *4.5 Semivolatile Organics by GC/MS SW846 8270C*

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 Calibration

The initial calibration and continuing calibrations associated with the project samples met QC criteria, with the exception of the following:

- The following exhibited individual CCAL %D's > 20%:

| SDG Number | Samples Affected | Compound(s) | Validation Qualifier |
|---|---|---|---|
| 1091Q-06 | JH3008 | 2,4-Dinitrophenol, 2-Nitroaniline, 4,6-Dinitro-2-methylphenol, bis(2-Chloroethyl)ether, Bis(2-Chloroisopropyl)ether, n-Nitroso-di-n-propylamine | UJ |

Blanks

The 5X/10X rule for contaminants found in the associated equipment rinses, trip blanks, and method blanks was applied to all sample results. All were found to be acceptable.

Surrogate Recoveries

All surrogate recoveries are within acceptable QC limits.

Matrix Spike / Matrix Spike Duplicate

No MS/MSD were performed for the project samples.

Laboratory Control Sample (LCS)

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

Field Duplicates

No field duplicates were associated with the project samples.

Internal Standards

All internal standards met QC criteria

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.

## *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 "nondetect" may be inaccurate or imprecise. The nondetect result should be estimated.

## Validation Reason Code Definitions

| Reason Code | Definition |
|---|---|
| 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

Run Date: October 26, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1091Q-01** | | | | | | | | | | | | | | | | | | |
| JH0033 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 4540 | mg/kg | | Y | Y | P | | | | | | | C081-01 | 22:28 |
| | | | | ANTIMONY | 13.3 | mg/kg | U | N | Y | U | U | | | | | | C081-01 | 22:28 |
| | | | | ARSENIC | 1.29 | mg/kg | J | Y | Y | P | J | | 15 | | | | C081-01 | 21:41 |
| | | | | BARIUM | 263 | mg/kg | | Y | Y | P | | | | | | | C081-01 | 22:28 |
| | | | | BERYLLIUM | .815 | mg/kg | J | Y | Y | P | J | | 15 | | | | C081-01 | 22:28 |
| | | | | CADMIUM | .665 | mg/kg | U | N | Y | U | U | | | | | | C081-01 | 22:28 |
| | | | | CALCIUM | 2770 | mg/kg | | Y | Y | P | | | | | | | C081-01 | 22:28 |
| | | | | CHROMIUM | 2.8 | mg/kg | | Y | Y | P | | | | | | | C081-01 | 22:28 |
| | | | | COBALT | 6.86 | mg/kg | | Y | Y | P | | | | | | | C081-01 | 22:28 |
| | | | | COPPER | 4.73 | mg/kg | | Y | Y | P | | | | | | | C081-01 | 22:28 |
| | | | | IRON | 2610 | mg/kg | | Y | Y | P | | | | | | | C081-01 | 22:28 |
| | | | | LEAD | 20.1 | mg/kg | | Y | Y | P | | | | | | | C081-01 | 21:41 |
| | | | | MAGNESIUM | 513 | mg/kg | | Y | Y | P | | | | | | | C081-01 | 22:28 |
| | | | | MANGANESE | 2250 | mg/kg | | Y | Y | P | | | | | | | C081-01 | 22:28 |
| | | | | NICKEL | 5.97 | mg/kg | | Y | Y | P | | | | | | | C081-01 | 22:28 |
| | | | | POTASSIUM | 390 | mg/kg | J | Y | Y | P | J | | 15 | | | | C081-01 | 22:28 |
| | | | | SELENIUM | 1.33 | mg/kg | U | N | Y | U | U | | | | | | C081-01 | 21:41 |
| | | | | SILVER | 1.33 | mg/kg | U | N | Y | U | U | | | | | | C081-01 | 22:28 |
| | | | | SODIUM | 26.8 | mg/kg | J | Y | Y | P | J | | 15 | | | | C081-01 | 22:28 |
| | | | | THALLIUM | 2.66 | mg/kg | U | N | Y | U | U | | | | | | C081-01 | 21:41 |
| | | | | VANADIUM | 4.29 | mg/kg | | Y | Y | P | | | | | | | C081-01 | 22:28 |
| | | | | ZINC | 35.8 | mg/kg | | Y | Y | P | | | | | | | C081-01 | 22:28 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .10 | mg/kg | J | Y | Y | P | J | | 15 | | | | C081-01 | 15:47 |
| JH0033 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C081-01 | 03:04 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C081-01 | 03:04 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C081-01 | 03:04 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C081-01 | 03:04 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C081-01 | 03:04 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C081-01 | 03:04 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C081-01 | 03:04 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C081-01 | 03:04 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C081-01 | 03:04 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C081-01 | 03:04 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | C081-01 | 03:04 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C081-01 | 03:04 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | C081-01 | 03:04 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | C081-01 | 03:04 |
| JH0033 | E314.0 | NONE | N 0 1 | PERCHLORATE | .0665 | mg/kg | U | N | Y | U | U | | | | | | C081-01 | 18:24 |
| **1091Q-02** | | | | | | | | | | | | | | | | | | |

# Validation Qualifier Data Entry Verification

Run Date: October 26, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1091Q-02** | | | | | | | | | | | | | | | | | | |
| JH0001 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 9620 | mg/kg | | Y | Y | P | | | | | | | C255-01 | 00:48 |
| | | | | ANTIMONY | 11.4 | mg/kg | U | N | Y | U | UJ | | 08A | | | | C255-01 | 00:48 |
| | | | | ARSENIC | 2.71 | mg/kg | | Y | Y | P | | | | | | | C255-01 | 22:47 |
| | | | | BARIUM | 68.7 | mg/kg | | Y | Y | P | | | | | | | C255-01 | 00:48 |
| | | | | BERYLLIUM | .464 | mg/kg | J | Y | Y | P | J | | 15 | | | | C255-01 | 00:48 |
| | | | | CADMIUM | .57 | mg/kg | U | N | Y | U | U | | | | | | C255-01 | 00:48 |
| | | | | CALCIUM | 169 | mg/kg | | Y | Y | P | | | | | | | C255-01 | 00:48 |
| | | | | CHROMIUM | 12.1 | mg/kg | | Y | Y | P | J | | 13 | | | | C255-01 | 00:48 |
| | | | | COBALT | 2.6 | mg/kg | | Y | Y | P | | | | | | | C255-01 | 00:48 |
| | | | | COPPER | 3.02 | mg/kg | | Y | Y | P | | | | | | | C255-01 | 00:48 |
| | | | | IRON | 10600 | mg/kg | | Y | Y | P | | | | | | | C255-01 | 00:48 |
| | | | | LEAD | 8.83 | mg/kg | | Y | Y | P | J | | 13 | | | | C255-01 | 22:47 |
| | | | | MAGNESIUM | 288 | mg/kg | | Y | Y | P | | | | | | | C255-01 | 00:48 |
| | | | | MANGANESE | 669 | mg/kg | | Y | Y | P | | | | | | | C255-01 | 00:48 |
| | | | | NICKEL | 2.83 | mg/kg | | Y | Y | P | | | | | | | C255-01 | 00:48 |
| | | | | POTASSIUM | 570 | mg/kg | U | N | Y | U | U | | | | | | C255-01 | 00:48 |
| | | | | SELENIUM | 1.14 | mg/kg | U | N | Y | U | U | | | | | | C255-01 | 22:47 |
| | | | | SILVER | 1.14 | mg/kg | U | N | Y | U | U | | | | | | C255-01 | 00:48 |
| | | | | SODIUM | 114 | mg/kg | U | N | Y | U | U | | | | | | C255-01 | 00:48 |
| | | | | THALLIUM | 2.28 | mg/kg | U | N | Y | U | U | | | | | | C255-01 | 22:47 |
| | | | | VANADIUM | 19.8 | mg/kg | | Y | Y | P | | | | | | | C255-01 | 00:48 |
| | | | | ZINC | 12.5 | mg/kg | | Y | Y | P | J | | 13 | | | | C255-01 | 00:48 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .114 | mg/kg | U | N | Y | U | U | | | | | | C255-01 | 11:02 |
| JH0002 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 12500 | mg/kg | | Y | Y | P | | | | | | | C255-02 | 23:58 |
| | | | | ANTIMONY | 11.4 | mg/kg | U | N | Y | U | UJ | | 08A | | | | C255-02 | 23:58 |
| | | | | ARSENIC | 5.98 | mg/kg | | Y | Y | P | | | | | | | C255-02 | 21:59 |
| | | | | BARIUM | 47.2 | mg/kg | | Y | Y | P | | | | | | | C255-02 | 23:58 |
| | | | | BERYLLIUM | .296 | mg/kg | J | Y | Y | P | J | | 15 | | | | C255-02 | 23:58 |
| | | | | CADMIUM | .572 | mg/kg | U | N | Y | U | U | | | | | | C255-02 | 23:58 |
| | | | | CALCIUM | 126 | mg/kg | | Y | Y | P | | | | | | | C255-02 | 23:58 |
| | | | | CHROMIUM | 35.6 | mg/kg | | Y | Y | P | J | | 13 | | | | C255-02 | 23:58 |
| | | | | COBALT | 3.62 | mg/kg | | Y | Y | P | | | | | | | C255-02 | 23:58 |
| | | | | COPPER | 3.74 | mg/kg | | Y | Y | P | | | | | | | C255-02 | 23:58 |
| | | | | IRON | 23200 | mg/kg | | Y | Y | P | | | | | | | C255-02 | 23:58 |
| | | | | LEAD | 8.14 | mg/kg | | Y | Y | P | J | | 13 | | | | C255-02 | 21:59 |
| | | | | MAGNESIUM | 346 | mg/kg | | Y | Y | P | | | | | | | C255-02 | 23:58 |
| | | | | MANGANESE | 197 | mg/kg | | Y | Y | P | | | | | | | C255-02 | 23:58 |
| | | | | NICKEL | 2.19 | mg/kg | J | Y | Y | P | J | | 15 | | | | C255-02 | 23:58 |
| | | | | POTASSIUM | 572 | mg/kg | U | N | Y | U | U | | | | | | C255-02 | 23:58 |
| | | | | SELENIUM | 1.14 | mg/kg | U | N | Y | U | U | | | | | | C255-02 | 21:59 |

# Validation Qualifier Data Entry Verification

Run Date: October 26, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1091Q-02** | | | | | | | | | | | | | | | | | | | | |
| JH0002 | SW6010B | SW3050 | N | 0 | 1 | SILVER | 1.14 | mg/kg | U | N | Y | U | U | | | | | | C255-02 | 23:58 |
| | | | | | | SODIUM | 114 | mg/kg | U | N | Y | U | U | | | | | | C255-02 | 23:58 |
| | | | | | | THALLIUM | .648 | mg/kg | J | Y | Y | P | J | | 15 | | | | C255-02 | 21:59 |
| | | | | | | VANADIUM | 41.4 | mg/kg | | Y | Y | P | | | | | | | C255-02 | 23:58 |
| | | | | | | ZINC | 11.9 | mg/kg | | Y | Y | P | J | | 13 | | | | C255-02 | 23:58 |
| | SW7471A | TOTAL | N | 0 | 1 | MERCURY | .042 | mg/kg | J | Y | Y | P | J | | 15 | | | | C255-02 | 11:15 |
| JH0005 | SW6010B | SW3050 | N | 0 | 1 | ALUMINUM | 13400 | mg/kg | | Y | Y | P | | | | | | | C255-03 | 00:03 |
| | | | | | | ANTIMONY | 5.25 | mg/kg | J | Y | Y | P | J | | 08A | 15 | | | C255-03 | 00:03 |
| | | | | | | ARSENIC | 2.86 | mg/kg | | Y | Y | P | | | | | | | C255-03 | 22:04 |
| | | | | | | BARIUM | 24.4 | mg/kg | | Y | Y | P | | | | | | | C255-03 | 00:03 |
| | | | | | | BERYLLIUM | .111 | mg/kg | J | Y | Y | P | J | | 15 | | | | C255-03 | 00:03 |
| | | | | | | CADMIUM | .586 | mg/kg | U | N | Y | U | U | | | | | | C255-03 | 00:03 |
| | | | | | | CALCIUM | 163 | mg/kg | | Y | Y | P | | | | | | | C255-03 | 00:03 |
| | | | | | | CHROMIUM | 39.2 | mg/kg | | Y | Y | P | J | | 13 | | | | C255-03 | 00:03 |
| | | | | | | COBALT | .487 | mg/kg | J | Y | Y | P | J | | 15 | | | | C255-03 | 00:03 |
| | | | | | | COPPER | 3.8 | mg/kg | | Y | Y | P | | | | | | | C255-03 | 00:03 |
| | | | | | | IRON | 10700 | mg/kg | | Y | Y | P | | | | | | | C255-03 | 00:03 |
| | | | | | | LEAD | 9.54 | mg/kg | | Y | Y | P | J | | 13 | | | | C255-03 | 22:04 |
| | | | | | | MAGNESIUM | 218 | mg/kg | | Y | Y | P | | | | | | | C255-03 | 00:03 |
| | | | | | | MANGANESE | 62.5 | mg/kg | | Y | Y | P | | | | | | | C255-03 | 00:03 |
| | | | | | | NICKEL | 12.6 | mg/kg | | Y | Y | P | | | | | | | C255-03 | 00:03 |
| | | | | | | POTASSIUM | 586 | mg/kg | U | N | Y | U | U | | | | | | C255-03 | 00:03 |
| | | | | | | SELENIUM | 1.17 | mg/kg | U | N | Y | U | U | | | | | | C255-03 | 22:04 |
| | | | | | | SILVER | 1.17 | mg/kg | U | N | Y | U | U | | | | | | C255-03 | 00:03 |
| | | | | | | SODIUM | 117 | mg/kg | U | N | Y | U | U | | | | | | C255-03 | 00:03 |
| | | | | | | THALLIUM | 2.34 | mg/kg | U | N | Y | U | U | | | | | | C255-03 | 22:04 |
| | | | | | | VANADIUM | 24.1 | mg/kg | | Y | Y | P | | | | | | | C255-03 | 00:03 |
| | | | | | | ZINC | 12.2 | mg/kg | | Y | Y | P | J | | 13 | | | | C255-03 | 00:03 |
| | SW7471A | TOTAL | N | 0 | 1 | MERCURY | .061 | mg/kg | J | Y | Y | P | J | | 15 | | | | C255-03 | 11:28 |
| JH0006 | SW6010B | SW3050 | N | 0 | 1 | ALUMINUM | 6910 | mg/kg | | Y | Y | P | | | | | | | C255-04 | 00:09 |
| | | | | | | ANTIMONY | 11.4 | mg/kg | U | N | Y | U | UJ | | 08A | | | | C255-04 | 00:09 |
| | | | | | | ARSENIC | 2.26 | mg/kg | | Y | Y | P | | | | | | | C255-04 | 22:09 |
| | | | | | | BARIUM | 5.12 | mg/kg | | Y | Y | P | | | | | | | C255-04 | 00:09 |
| | | | | | | BERYLLIUM | .046 | mg/kg | J | Y | Y | P | J | | 15 | | | | C255-04 | 00:09 |
| | | | | | | CADMIUM | .572 | mg/kg | U | N | Y | U | U | | | | | | C255-04 | 00:09 |
| | | | | | | CALCIUM | 34.4 | mg/kg | J | Y | Y | P | J | | 15 | | | | C255-04 | 00:09 |
| | | | | | | CHROMIUM | 18.7 | mg/kg | | Y | Y | P | J | | 13 | | | | C255-04 | 00:09 |
| | | | | | | COBALT | 2.29 | mg/kg | U | N | Y | U | U | | | | | | C255-04 | 00:09 |
| | | | | | | COPPER | 1.5 | mg/kg | J | Y | Y | P | J | | 15 | | | | C255-04 | 00:09 |
| | | | | | | IRON | 10100 | mg/kg | | Y | Y | P | | | | | | | C255-04 | 00:09 |

# Validation Qualifier Data Entry Verification

Run Date: October 26, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1091Q-02** | | | | | | | | | | | | | | | | | | |
| JH0006 | SW6010B | SW3050 | N 0 1 | LEAD | 3.69 | mg/kg | | Y | Y | P | J | | 13 | | | | C255-04 | 22:09 |
| | | | | MAGNESIUM | 97.6 | mg/kg | J | Y | Y | P | J | | 15 | | | | C255-04 | 00:09 |
| | | | | MANGANESE | 6.5 | mg/kg | | Y | Y | P | | | | | | | C255-04 | 00:09 |
| | | | | NICKEL | .971 | mg/kg | J | Y | Y | P | J | | 15 | | | | C255-04 | 00:09 |
| | | | | POTASSIUM | 572 | mg/kg | U | N | Y | U | U | | | | | | C255-04 | 00:09 |
| | | | | SELENIUM | 1.14 | mg/kg | U | N | Y | U | U | | | | | | C255-04 | 22:09 |
| | | | | SILVER | 1.14 | mg/kg | U | N | Y | U | U | | | | | | C255-04 | 00:09 |
| | | | | SODIUM | 114 | mg/kg | U | N | Y | U | U | | | | | | C255-04 | 00:09 |
| | | | | THALLIUM | 2.29 | mg/kg | U | N | Y | U | U | | | | | | C255-04 | 22:09 |
| | | | | VANADIUM | 26.3 | mg/kg | | Y | Y | P | | | | | | | C255-04 | 00:09 |
| | | | | ZINC | 4.11 | mg/kg | | Y | Y | P | J | | 13 | | | | C255-04 | 00:09 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .114 | mg/kg | U | N | Y | U | U | | | | | | C255-04 | 11:31 |
| JH0007 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 3370 | mg/kg | | Y | Y | P | | | | | | | C255-05 | 00:14 |
| | | | | ANTIMONY | 10.7 | mg/kg | U | N | Y | U | UJ | | 08A | | | | C255-05 | 00:14 |
| | | | | ARSENIC | 1.3 | mg/kg | | Y | Y | P | | | | | | | C255-05 | 22:13 |
| | | | | BARIUM | 5.06 | mg/kg | | Y | Y | P | | | | | | | C255-05 | 00:14 |
| | | | | BERYLLIUM | .0125 | mg/kg | J | Y | Y | P | J | | 15 | | | | C255-05 | 00:14 |
| | | | | CADMIUM | .535 | mg/kg | U | N | Y | U | U | | | | | | C255-05 | 00:14 |
| | | | | CALCIUM | 26.4 | mg/kg | J | Y | Y | P | J | | 15 | | | | C255-05 | 00:14 |
| | | | | CHROMIUM | 6.81 | mg/kg | | Y | Y | P | J | | 13 | | | | C255-05 | 00:14 |
| | | | | COBALT | 2.14 | mg/kg | U | N | Y | U | U | | | | | | C255-05 | 00:14 |
| | | | | COPPER | 2.14 | mg/kg | U | N | Y | U | U | | | | | | C255-05 | 00:14 |
| | | | | IRON | 4130 | mg/kg | | Y | Y | P | | | | | | | C255-05 | 00:14 |
| | | | | LEAD | 1.55 | mg/kg | | Y | Y | P | J | | 13 | | | | C255-05 | 22:13 |
| | | | | MAGNESIUM | 51.9 | mg/kg | J | Y | Y | P | J | | 15 | | | | C255-05 | 00:14 |
| | | | | MANGANESE | 2.5 | mg/kg | | Y | Y | P | | | | | | | C255-05 | 00:14 |
| | | | | NICKEL | 2.14 | mg/kg | U | N | Y | U | U | | | | | | C255-05 | 00:14 |
| | | | | POTASSIUM | 535 | mg/kg | U | N | Y | U | U | | | | | | C255-05 | 00:14 |
| | | | | SELENIUM | 1.07 | mg/kg | U | N | Y | U | U | | | | | | C255-05 | 22:13 |
| | | | | SILVER | 1.07 | mg/kg | U | N | Y | U | U | | | | | | C255-05 | 00:14 |
| | | | | SODIUM | 107 | mg/kg | U | N | Y | U | U | | | | | | C255-05 | 00:14 |
| | | | | THALLIUM | 2.14 | mg/kg | U | N | Y | U | U | | | | | | C255-05 | 22:13 |
| | | | | VANADIUM | 10.4 | mg/kg | | Y | Y | P | | | | | | | C255-05 | 00:14 |
| | | | | ZINC | 1.51 | mg/kg | J | Y | Y | P | J | | 13 | 15 | | | C255-05 | 00:14 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .107 | mg/kg | U | N | Y | U | U | | | | | | C255-05 | 11:33 |
| JH0008 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 3420 | mg/kg | | Y | Y | P | | | | | | | C255-06 | 00:53 |
| | | | | ANTIMONY | 10.7 | mg/kg | U | N | Y | U | UJ | | 08A | | | | C255-06 | 00:53 |
| | | | | ARSENIC | 1.5 | mg/kg | | Y | Y | P | | | | | | | C255-06 | 22:52 |
| | | | | BARIUM | 5.02 | mg/kg | | Y | Y | P | J | | 17 | | | | C255-06 | 00:53 |
| | | | | BERYLLIUM | .0357 | mg/kg | J | Y | Y | P | J | | 15 | | | | C255-06 | 00:53 |

# Validation Qualifier Data Entry Verification

Run Date: October 26, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1091Q-02** | | | | | | | | | | | | | | | | | | |
| JH0008 | SW6010B | SW3050 | N 0 1 | CADMIUM | .535 | mg/kg | U | N | Y | U | U | | | | | | C255-06 | 00:53 |
| | | | | CALCIUM | 23.1 | mg/kg | J | Y | Y | P | J | | 15 | | | | C255-06 | 00:53 |
| | | | | CHROMIUM | 9.02 | mg/kg | | Y | Y | P | J | | 13 | | | | C255-06 | 00:53 |
| | | | | COBALT | 2.14 | mg/kg | U | N | Y | U | U | | | | | | C255-06 | 00:53 |
| | | | | COPPER | 2.14 | mg/kg | U | N | Y | U | U | | | | | | C255-06 | 00:53 |
| | | | | IRON | 4830 | mg/kg | | Y | Y | P | | | | | | | C255-06 | 00:53 |
| | | | | LEAD | 1.79 | mg/kg | | Y | Y | P | J | | 13 | | | | C255-06 | 22:52 |
| | | | | MAGNESIUM | 54.8 | mg/kg | J | Y | Y | P | J | | 17 | 15 | | | C255-06 | 00:53 |
| | | | | MANGANESE | 2.11 | mg/kg | | Y | Y | P | J | | 17 | | | | C255-06 | 00:53 |
| | | | | NICKEL | 2.14 | mg/kg | U | N | Y | U | U | | | | | | C255-06 | 00:53 |
| | | | | POTASSIUM | 535 | mg/kg | U | N | Y | U | U | | | | | | C255-06 | 00:53 |
| | | | | SELENIUM | 1.07 | mg/kg | U | N | Y | U | U | | | | | | C255-06 | 22:52 |
| | | | | SILVER | 1.07 | mg/kg | U | N | Y | U | U | | | | | | C255-06 | 00:53 |
| | | | | SODIUM | 107 | mg/kg | U | N | Y | U | U | | | | | | C255-06 | 00:53 |
| | | | | THALLIUM | 2.14 | mg/kg | U | N | Y | U | U | | | | | | C255-06 | 22:52 |
| | | | | VANADIUM | 11.9 | mg/kg | | Y | Y | P | | | | | | | C255-06 | 00:53 |
| | | | | ZINC | 1.78 | mg/kg | J | Y | Y | P | J | | 13 | 15 | | | C255-06 | 00:53 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .107 | mg/kg | U | N | Y | U | U | | | | | | C255-06 | 11:36 |
| JH0009 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 2200 | mg/kg | | Y | Y | | | | | | | | C255-07 | 00:58 |
| | | | | ANTIMONY | 10.8 | mg/kg | U | N | Y | | UJ | | 08A | | | | C255-07 | 00:58 |
| | | | | ARSENIC | .907 | mg/kg | J | Y | Y | | J | | 15 | | | | C255-07 | 22:57 |
| | | | | BARIUM | 2.8 | mg/kg | | Y | Y | | J | | 17 | | | | C255-07 | 00:58 |
| | | | | BERYLLIUM | 1.08 | mg/kg | U | N | Y | | U | | | | | | C255-07 | 00:58 |
| | | | | CADMIUM | .54 | mg/kg | U | N | Y | | U | | | | | | C255-07 | 00:58 |
| | | | | CALCIUM | 22 | mg/kg | J | Y | Y | | J | | 15 | | | | C255-07 | 00:58 |
| | | | | CHROMIUM | 6.7 | mg/kg | | Y | Y | | J | | 13 | | | | C255-07 | 00:58 |
| | | | | COBALT | 2.16 | mg/kg | U | N | Y | | U | | | | | | C255-07 | 00:58 |
| | | | | COPPER | 2.16 | mg/kg | U | N | Y | | U | | | | | | C255-07 | 00:58 |
| | | | | IRON | 3350 | mg/kg | | Y | Y | | | | | | | | C255-07 | 00:58 |
| | | | | LEAD | 1.12 | mg/kg | | Y | Y | | B | | 06A | 13 | | | C255-07 | 22:57 |
| | | | | MAGNESIUM | 30.4 | mg/kg | J | Y | Y | | J | | 17 | 15 | | | C255-07 | 00:58 |
| | | | | MANGANESE | 1.25 | mg/kg | | Y | Y | | J | | 17 | | | | C255-07 | 00:58 |
| | | | | NICKEL | 2.16 | mg/kg | U | N | Y | | U | | | | | | C255-07 | 00:58 |
| | | | | POTASSIUM | 540 | mg/kg | U | N | Y | | U | | | | | | C255-07 | 00:58 |
| | | | | SELENIUM | 1.08 | mg/kg | U | N | Y | | U | | | | | | C255-07 | 22:57 |
| | | | | SILVER | 1.08 | mg/kg | U | N | Y | | U | | | | | | C255-07 | 00:58 |
| | | | | SODIUM | 108 | mg/kg | U | N | Y | | U | | | | | | C255-07 | 00:58 |
| | | | | THALLIUM | 2.16 | mg/kg | U | N | Y | | U | | | | | | C255-07 | 22:57 |
| | | | | VANADIUM | 9.22 | mg/kg | | Y | Y | | | | | | | | C255-07 | 00:58 |
| | | | | ZINC | 1.32 | mg/kg | J | Y | Y | | J | | 13 | 15 | | | C255-07 | 00:58 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1091Q-02** | | | | | | | | | | | | | | | | | | | | |
| JH0009 | SW7471A | TOTAL | N | 0 | 1 | MERCURY | .108 | mg/kg | U | N | Y | | U | | | | | | C255-07 | 11:38 |
| JH0019 | SW6010B | SW3050 | N | 0 | 1 | ALUMINUM | 2520 | mg/kg | | Y | Y | P | | | | | | | C255-08 | 01:03 |
| | | | | | | ANTIMONY | 11.8 | mg/kg | U | N | Y | U | UJ | | 08A | | | | C255-08 | 01:03 |
| | | | | | | ARSENIC | 1.58 | mg/kg | | Y | Y | P | | | | | | | C255-08 | 23:02 |
| | | | | | | BARIUM | 41.4 | mg/kg | | Y | Y | P | | | | | | | C255-08 | 01:03 |
| | | | | | | BERYLLIUM | .135 | mg/kg | J | Y | Y | P | J | | 15 | | | | C255-08 | 01:03 |
| | | | | | | CADMIUM | .59 | mg/kg | U | N | Y | U | U | | | | | | C255-08 | 01:03 |
| | | | | | | CALCIUM | 4230 | mg/kg | | Y | Y | P | | | | | | | C255-08 | 01:03 |
| | | | | | | CHROMIUM | 10.1 | mg/kg | | Y | Y | P | J | | 13 | | | | C255-08 | 01:03 |
| | | | | | | COBALT | 1.17 | mg/kg | J | Y | Y | P | J | | 15 | | | | C255-08 | 01:03 |
| | | | | | | COPPER | 1.91 | mg/kg | J | Y | Y | P | J | | 15 | | | | C255-08 | 01:03 |
| | | | | | | IRON | 7790 | mg/kg | | Y | Y | P | | | | | | | C255-08 | 01:03 |
| | | | | | | LEAD | 6.33 | mg/kg | | Y | Y | P | J | | 13 | | | | C255-08 | 23:02 |
| | | | | | | MAGNESIUM | 2290 | mg/kg | | Y | Y | P | | | | | | | C255-08 | 01:03 |
| | | | | | | MANGANESE | 106 | mg/kg | | Y | Y | P | | | | | | | C255-08 | 01:03 |
| | | | | | | NICKEL | 1.53 | mg/kg | J | Y | Y | P | J | | 15 | | | | C255-08 | 01:03 |
| | | | | | | POTASSIUM | 213 | mg/kg | J | Y | Y | P | J | | 15 | | | | C255-08 | 01:03 |
| | | | | | | SELENIUM | 1.18 | mg/kg | U | N | Y | U | U | | | | | | C255-08 | 23:02 |
| | | | | | | SILVER | 1.18 | mg/kg | U | N | Y | U | U | | | | | | C255-08 | 01:03 |
| | | | | | | SODIUM | 32.1 | mg/kg | J | Y | Y | P | J | | 15 | | | | C255-08 | 01:03 |
| | | | | | | THALLIUM | 2.36 | mg/kg | U | N | Y | U | U | | | | | | C255-08 | 23:02 |
| | | | | | | VANADIUM | 18 | mg/kg | | Y | Y | P | | | | | | | C255-08 | 01:03 |
| | | | | | | ZINC | 7.04 | mg/kg | | Y | Y | P | J | | 13 | | | | C255-08 | 01:03 |
| | SW7471A | TOTAL | N | 0 | 1 | MERCURY | .118 | mg/kg | U | N | Y | U | U | | | | | | C255-08 | 11:41 |
| JH0020 | SW6010B | SW3050 | N | 0 | 1 | ALUMINUM | 4720 | mg/kg | | Y | Y | P | | | | | | | C255-09 | 01:08 |
| | | | | | | ANTIMONY | 11.6 | mg/kg | U | N | Y | U | UJ | | 08A | | | | C255-09 | 01:08 |
| | | | | | | ARSENIC | 1.32 | mg/kg | | Y | Y | P | | | | | | | C255-09 | 23:06 |
| | | | | | | BARIUM | 7.82 | mg/kg | | Y | Y | P | | | | | | | C255-09 | 01:08 |
| | | | | | | BERYLLIUM | .0819 | mg/kg | J | Y | Y | P | J | | 15 | | | | C255-09 | 01:08 |
| | | | | | | CADMIUM | .581 | mg/kg | U | N | Y | U | U | | | | | | C255-09 | 01:08 |
| | | | | | | CALCIUM | 206 | mg/kg | | Y | Y | P | | | | | | | C255-09 | 01:08 |
| | | | | | | CHROMIUM | 16.1 | mg/kg | | Y | Y | P | J | | 13 | | | | C255-09 | 01:08 |
| | | | | | | COBALT | 2.32 | mg/kg | U | N | Y | U | U | | | | | | C255-09 | 01:08 |
| | | | | | | COPPER | 2.57 | mg/kg | | Y | Y | P | | | | | | | C255-09 | 01:08 |
| | | | | | | IRON | 9840 | mg/kg | | Y | Y | P | | | | | | | C255-09 | 01:08 |
| | | | | | | LEAD | 3.08 | mg/kg | | Y | Y | P | J | | 13 | | | | C255-09 | 23:06 |
| | | | | | | MAGNESIUM | 184 | mg/kg | | Y | Y | P | | | | | | | C255-09 | 01:08 |
| | | | | | | MANGANESE | 12.8 | mg/kg | | Y | Y | P | | | | | | | C255-09 | 01:08 |
| | | | | | | NICKEL | 1.9 | mg/kg | J | Y | Y | P | J | | 15 | | | | C255-09 | 01:08 |
| | | | | | | POTASSIUM | 581 | mg/kg | U | N | Y | U | U | | | | | | C255-09 | 01:08 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1091Q-02** | | | | | | | | | | | | | | | | | | |
| JH0020 | SW6010B | SW3050 | N 0 1 | SELENIUM | 1.16 | mg/kg | U | N | Y | U | U | | | | | | C255-09 | 23:06 |
| | | | | SILVER | 1.16 | mg/kg | U | N | Y | U | U | | | | | | C255-09 | 01:08 |
| | | | | SODIUM | 116 | mg/kg | U | N | Y | U | U | | | | | | C255-09 | 01:08 |
| | | | | THALLIUM | 2.32 | mg/kg | U | N | Y | U | U | | | | | | C255-09 | 23:06 |
| | | | | VANADIUM | 21.6 | mg/kg | | Y | Y | P | | | | | | | C255-09 | 01:08 |
| | | | | ZINC | 5.1 | mg/kg | | Y | Y | P | J | | 13 | | | | C255-09 | 01:08 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .116 | mg/kg | U | N | Y | U | U | | | | | | C255-09 | 11:46 |
| JH0021 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 16400 | mg/kg | | Y | Y | P | | | | | | | C255-10 | 01:14 |
| | | | | ANTIMONY | 12.1 | mg/kg | U | N | Y | U | UJ | | 08A | | | | C255-10 | 01:14 |
| | | | | ARSENIC | 3.65 | mg/kg | | Y | Y | P | | | | | | | C255-10 | 23:11 |
| | | | | BARIUM | 196 | mg/kg | | Y | Y | P | | | | | | | C255-10 | 01:14 |
| | | | | BERYLLIUM | .934 | mg/kg | J | Y | Y | P | J | | 15 | | | | C255-10 | 01:14 |
| | | | | CADMIUM | .605 | mg/kg | U | N | Y | U | U | | | | | | C255-10 | 01:14 |
| | | | | CALCIUM | 1060 | mg/kg | | Y | Y | P | | | | | | | C255-10 | 01:14 |
| | | | | CHROMIUM | 15 | mg/kg | | Y | Y | P | J | | 13 | | | | C255-10 | 01:14 |
| | | | | COBALT | 5.71 | mg/kg | | Y | Y | P | | | | | | | C255-10 | 01:14 |
| | | | | COPPER | 5.77 | mg/kg | | Y | Y | P | | | | | | | C255-10 | 01:14 |
| | | | | IRON | 14000 | mg/kg | | Y | Y | P | | | | | | | C255-10 | 01:14 |
| | | | | LEAD | 14.1 | mg/kg | | Y | Y | P | J | | 13 | | | | C255-10 | 23:11 |
| | | | | MAGNESIUM | 637 | mg/kg | | Y | Y | P | | | | | | | C255-10 | 01:14 |
| | | | | MANGANESE | 1190 | mg/kg | | Y | Y | P | | | | | | | C255-10 | 01:14 |
| | | | | NICKEL | 6.05 | mg/kg | | Y | Y | P | | | | | | | C255-10 | 01:14 |
| | | | | POTASSIUM | 279 | mg/kg | J | Y | Y | P | J | | 15 | | | | C255-10 | 01:14 |
| | | | | SELENIUM | 1.21 | mg/kg | U | N | Y | U | U | | | | | | C255-10 | 23:11 |
| | | | | SILVER | 1.21 | mg/kg | U | N | Y | U | U | | | | | | C255-10 | 01:14 |
| | | | | SODIUM | 33 | mg/kg | J | Y | Y | P | J | | 15 | | | | C255-10 | 01:14 |
| | | | | THALLIUM | 2.42 | mg/kg | U | N | Y | U | U | | | | | | C255-10 | 23:11 |
| | | | | VANADIUM | 24.3 | mg/kg | | Y | Y | P | | | | | | | C255-10 | 01:14 |
| | | | | ZINC | 26.2 | mg/kg | | Y | Y | P | J | | 13 | | | | C255-10 | 01:14 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .121 | mg/kg | U | N | Y | U | U | | | | | | C255-10 | 11:48 |
| JH0022 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 6380 | mg/kg | | Y | Y | P | | | | | | | C255-11 | 01:19 |
| | | | | ANTIMONY | 12 | mg/kg | U | N | Y | U | UJ | | 08A | | | | C255-11 | 01:19 |
| | | | | ARSENIC | 2.34 | mg/kg | | Y | Y | P | | | | | | | C255-11 | 23:16 |
| | | | | BARIUM | 15.4 | mg/kg | | Y | Y | P | | | | | | | C255-11 | 01:19 |
| | | | | BERYLLIUM | .168 | mg/kg | J | Y | Y | P | J | | 15 | | | | C255-11 | 01:19 |
| | | | | CADMIUM | .601 | mg/kg | U | N | Y | U | U | | | | | | C255-11 | 01:19 |
| | | | | CALCIUM | 152 | mg/kg | | Y | Y | P | | | | | | | C255-11 | 01:19 |
| | | | | CHROMIUM | 23.3 | mg/kg | | Y | Y | P | J | | 13 | | | | C255-11 | 01:19 |
| | | | | COBALT | 2.4 | mg/kg | U | N | Y | U | U | | | | | | C255-11 | 01:19 |
| | | | | COPPER | 3.37 | mg/kg | | Y | Y | P | | | | | | | C255-11 | 01:19 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1091Q-02** | | | | | | | | | | | | | | | | | | |
| JH0022 | SW6010B | SW3050 | N 0 1 | IRON | 27200 | mg/kg | | Y | Y | P | | | | | | | C255-11 | 01:19 |
| | | | | LEAD | 3.62 | mg/kg | | Y | Y | P | J | | 13 | | | | C255-11 | 23:16 |
| | | | | MAGNESIUM | 138 | mg/kg | | Y | Y | P | | | | | | | C255-11 | 01:19 |
| | | | | MANGANESE | 36.3 | mg/kg | | Y | Y | P | | | | | | | C255-11 | 01:19 |
| | | | | NICKEL | 2.4 | mg/kg | U | N | Y | U | U | | | | | | C255-11 | 01:19 |
| | | | | POTASSIUM | 810 | mg/kg | | Y | Y | P | | | | | | | C255-11 | 01:19 |
| | | | | SELENIUM | 1.2 | mg/kg | U | N | Y | U | U | | | | | | C255-11 | 23:16 |
| | | | | SILVER | 1.2 | mg/kg | U | N | Y | U | U | | | | | | C255-11 | 01:19 |
| | | | | SODIUM | 120 | mg/kg | U | N | Y | U | U | | | | | | C255-11 | 01:19 |
| | | | | THALLIUM | 2.4 | mg/kg | U | N | Y | U | U | | | | | | C255-11 | 23:16 |
| | | | | VANADIUM | 34.1 | mg/kg | | Y | Y | P | | | | | | | C255-11 | 01:19 |
| | | | | ZINC | 2.73 | mg/kg | | Y | Y | P | J | | 13 | | | | C255-11 | 01:19 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .12 | mg/kg | U | N | Y | U | U | | | | | | C255-11 | 11:51 |
| JH0023 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 6940 | mg/kg | | Y | Y | P | | | | | | | C255-12 | 01:24 |
| | | | | ANTIMONY | 11.7 | mg/kg | U | N | Y | U | UJ | | 08A | | | | C255-12 | 01:24 |
| | | | | ARSENIC | 1.81 | mg/kg | | Y | Y | P | | | | | | | C255-12 | 23:21 |
| | | | | BARIUM | 17.3 | mg/kg | | Y | Y | P | | | | | | | C255-12 | 01:24 |
| | | | | BERYLLIUM | .119 | mg/kg | J | Y | Y | P | J | | 15 | | | | C255-12 | 01:24 |
| | | | | CADMIUM | .584 | mg/kg | U | N | Y | U | U | | | | | | C255-12 | 01:24 |
| | | | | CALCIUM | 85.4 | mg/kg | J | Y | Y | P | J | | 15 | | | | C255-12 | 01:24 |
| | | | | CHROMIUM | 11.5 | mg/kg | | Y | Y | P | J | | 13 | | | | C255-12 | 01:24 |
| | | | | COBALT | 2.34 | mg/kg | U | N | Y | U | U | | | | | | C255-12 | 01:24 |
| | | | | COPPER | 1.07 | mg/kg | J | Y | Y | P | J | | 15 | | | | C255-12 | 01:24 |
| | | | | IRON | 10700 | mg/kg | | Y | Y | P | | | | | | | C255-12 | 01:24 |
| | | | | LEAD | 3.76 | mg/kg | | Y | Y | P | J | | 13 | | | | C255-12 | 23:21 |
| | | | | MAGNESIUM | 141 | mg/kg | | Y | Y | P | | | | | | | C255-12 | 01:24 |
| | | | | MANGANESE | 23.5 | mg/kg | | Y | Y | P | | | | | | | C255-12 | 01:24 |
| | | | | NICKEL | 2.34 | mg/kg | U | N | Y | U | U | | | | | | C255-12 | 01:24 |
| | | | | POTASSIUM | 584 | mg/kg | U | N | Y | U | U | | | | | | C255-12 | 01:24 |
| | | | | SELENIUM | 1.17 | mg/kg | U | N | Y | U | U | | | | | | C255-12 | 23:21 |
| | | | | SILVER | 1.17 | mg/kg | U | N | Y | U | U | | | | | | C255-12 | 01:24 |
| | | | | SODIUM | 117 | mg/kg | U | N | Y | U | U | | | | | | C255-12 | 01:24 |
| | | | | THALLIUM | 2.34 | mg/kg | U | N | Y | U | U | | | | | | C255-12 | 23:21 |
| | | | | VANADIUM | 20.2 | mg/kg | | Y | Y | P | | | | | | | C255-12 | 01:24 |
| | | | | ZINC | 5.01 | mg/kg | | Y | Y | P | J | | 13 | | | | C255-12 | 01:24 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .117 | mg/kg | U | N | Y | U | U | | | | | | C255-12 | 12:01 |
| JH0024 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 4290 | mg/kg | | Y | Y | P | | | | | | | C255-13 | 01:29 |
| | | | | ANTIMONY | 11.7 | mg/kg | U | N | Y | U | UJ | | 08A | | | | C255-13 | 01:29 |
| | | | | ARSENIC | 2.04 | mg/kg | | Y | Y | P | | | | | | | C255-13 | 23:26 |
| | | | | BARIUM | 13.5 | mg/kg | | Y | Y | P | | | 17 | | | | C255-13 | 01:29 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1091Q-02** | | | | | | | | | | | | | | | | | | |
| JH0024 | SW6010B | SW3050 | N 0 1 | BERYLLIUM | .111 | mg/kg | J | Y | Y | P | J | | 15 | | | | C255-13 | 01:29 |
| | | | | CADMIUM | .584 | mg/kg | U | N | Y | U | U | | | | | | C255-13 | 01:29 |
| | | | | CALCIUM | 36.8 | mg/kg | J | Y | Y | P | J | | 15 | | | | C255-13 | 01:29 |
| | | | | CHROMIUM | 17.6 | mg/kg | | Y | Y | P | J | | 13 | | | | C255-13 | 01:29 |
| | | | | COBALT | 2.34 | mg/kg | U | N | Y | U | U | | | | | | C255-13 | 01:29 |
| | | | | COPPER | .876 | mg/kg | J | Y | Y | P | J | | 15 | | | | C255-13 | 01:29 |
| | | | | IRON | 16200 | mg/kg | | Y | Y | P | | | | | | | C255-13 | 01:29 |
| | | | | LEAD | 3.61 | mg/kg | | Y | Y | P | J | | 13 | | | | C255-13 | 23:26 |
| | | | | MAGNESIUM | 52.3 | mg/kg | J | Y | Y | P | J | | 15 | | | | C255-13 | 01:29 |
| | | | | MANGANESE | 9.29 | mg/kg | | Y | Y | P | | | | | | | C255-13 | 01:29 |
| | | | | NICKEL | 1.08 | mg/kg | J | Y | Y | P | J | | 15 | | | | C255-13 | 01:29 |
| | | | | POTASSIUM | 584 | mg/kg | U | N | Y | U | U | | | | | | C255-13 | 01:29 |
| | | | | SELENIUM | 1.17 | mg/kg | U | N | Y | U | U | | | | | | C255-13 | 23:26 |
| | | | | SILVER | 1.17 | mg/kg | U | N | Y | U | U | | | | | | C255-13 | 01:29 |
| | | | | SODIUM | 117 | mg/kg | U | N | Y | U | U | | | | | | C255-13 | 01:29 |
| | | | | THALLIUM | 2.34 | mg/kg | U | N | Y | U | U | | | | | | C255-13 | 23:26 |
| | | | | VANADIUM | 28.2 | mg/kg | | Y | Y | P | | | | | | | C255-13 | 01:29 |
| | | | | ZINC | 15.9 | mg/kg | | Y | Y | P | J | | 13 | 17 | | | C255-13 | 01:29 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .117 | mg/kg | U | N | Y | U | U | | | | | | C255-13 | 12:04 |
| JH0025 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 3470 | mg/kg | | Y | Y | | | | | | | | C255-14 | 01:44 |
| | | | | ANTIMONY | 11.8 | mg/kg | U | N | Y | | UJ | | 08A | | | | C255-14 | 01:44 |
| | | | | ARSENIC | 2.83 | mg/kg | | Y | Y | | | | | | | | C255-14 | 23:40 |
| | | | | BARIUM | 31.8 | mg/kg | | Y | Y | | J | | 17 | | | | C255-14 | 01:44 |
| | | | | BERYLLIUM | .155 | mg/kg | J | Y | Y | | J | | 15 | | | | C255-14 | 01:44 |
| | | | | CADMIUM | .588 | mg/kg | U | N | Y | | U | | | | | | C255-14 | 01:44 |
| | | | | CALCIUM | 54.2 | mg/kg | J | Y | Y | | J | | 15 | | | | C255-14 | 01:44 |
| | | | | CHROMIUM | 16.7 | mg/kg | | Y | Y | | J | | 13 | | | | C255-14 | 01:44 |
| | | | | COBALT | .514 | mg/kg | J | Y | Y | | J | | 15 | | | | C255-14 | 01:44 |
| | | | | COPPER | 2.35 | mg/kg | U | N | Y | | U | | | | | | C255-14 | 01:44 |
| | | | | IRON | 15100 | mg/kg | | Y | Y | | | | | | | | C255-14 | 01:44 |
| | | | | LEAD | 4.57 | mg/kg | | Y | Y | | J | | 13 | | | | C255-14 | 23:40 |
| | | | | MAGNESIUM | 46.9 | mg/kg | J | Y | Y | | J | | 15 | | | | C255-14 | 01:44 |
| | | | | MANGANESE | 10.9 | mg/kg | | Y | Y | | | | | | | | C255-14 | 01:44 |
| | | | | NICKEL | 1.1 | mg/kg | J | Y | Y | | J | | 15 | | | | C255-14 | 01:44 |
| | | | | POTASSIUM | 588 | mg/kg | U | N | Y | | U | | | | | | C255-14 | 01:44 |
| | | | | SELENIUM | 1.18 | mg/kg | U | N | Y | | U | | | | | | C255-14 | 23:40 |
| | | | | SILVER | 1.18 | mg/kg | U | N | Y | | U | | | | | | C255-14 | 01:44 |
| | | | | SODIUM | 118 | mg/kg | U | N | Y | | U | | | | | | C255-14 | 01:44 |
| | | | | THALLIUM | 2.35 | mg/kg | U | N | Y | | U | | | | | | C255-14 | 23:40 |
| | | | | VANADIUM | 24.3 | mg/kg | | Y | Y | | | | | | | | C255-14 | 01:44 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1091Q-02** | | | | | | | | | | | | | | | | | | | | |
| JH0025 | SW6010B | SW3050 | N | 0 | 1 | ZINC | 3.34 | mg/kg | | Y | Y | | J | | 13 | 17 | | | C255-14 | 01:44 |
| | SW7471A | TOTAL | N | 0 | 1 | MERCURY | .118 | mg/kg | U | N | Y | | U | | | | | | C255-14 | 12:06 |
| JH0029 | SW6010B | SW3050 | N | 0 | 1 | ALUMINUM | 9300 | mg/kg | | Y | Y | P | | | | | | | C255-15 | 01:49 |
| | | | | | | ANTIMONY | 11.1 | mg/kg | U | N | Y | U | UJ | | 08A | | | | C255-15 | 01:49 |
| | | | | | | ARSENIC | 2.66 | mg/kg | | Y | Y | P | | | | | | | C255-15 | 23:45 |
| | | | | | | BARIUM | 18.2 | mg/kg | | Y | Y | P | | | | | | | C255-15 | 01:49 |
| | | | | | | BERYLLIUM | .114 | mg/kg | J | Y | Y | P | J | | 15 | | | | C255-15 | 01:49 |
| | | | | | | CADMIUM | .554 | mg/kg | U | N | Y | U | U | | | | | | C255-15 | 01:49 |
| | | | | | | CALCIUM | 71.5 | mg/kg | J | Y | Y | P | J | | 15 | | | | C255-15 | 01:49 |
| | | | | | | CHROMIUM | 10.8 | mg/kg | | Y | Y | P | J | | 13 | | | | C255-15 | 01:49 |
| | | | | | | COBALT | .734 | mg/kg | J | Y | Y | P | J | | 15 | | | | C255-15 | 01:49 |
| | | | | | | COPPER | 1.48 | mg/kg | J | Y | Y | P | J | | 15 | | | | C255-15 | 01:49 |
| | | | | | | IRON | 7900 | mg/kg | | Y | Y | P | | | | | | | C255-15 | 01:49 |
| | | | | | | LEAD | 5.75 | mg/kg | | Y | Y | P | J | | 13 | | | | C255-15 | 23:45 |
| | | | | | | MAGNESIUM | 237 | mg/kg | | Y | Y | P | | | | | | | C255-15 | 01:49 |
| | | | | | | MANGANESE | 14.8 | mg/kg | | Y | Y | P | | | | | | | C255-15 | 01:49 |
| | | | | | | NICKEL | 2.31 | mg/kg | | Y | Y | P | | | | | | | C255-15 | 01:49 |
| | | | | | | POTASSIUM | 554 | mg/kg | U | N | Y | U | U | | | | | | C255-15 | 01:49 |
| | | | | | | SELENIUM | 1.11 | mg/kg | U | N | Y | U | U | | | | | | C255-15 | 23:45 |
| | | | | | | SILVER | 1.11 | mg/kg | U | N | Y | U | U | | | | | | C255-15 | 01:49 |
| | | | | | | SODIUM | 30.2 | mg/kg | J | Y | Y | P | J | | 15 | | | | C255-15 | 01:49 |
| | | | | | | THALLIUM | 2.22 | mg/kg | U | N | Y | U | U | | | | | | C255-15 | 23:45 |
| | | | | | | VANADIUM | 16.8 | mg/kg | | Y | Y | P | | | | | | | C255-15 | 01:49 |
| | | | | | | ZINC | 8.54 | mg/kg | | Y | Y | P | J | | 13 | | | | C255-15 | 01:49 |
| | SW7471A | TOTAL | N | 0 | 1 | MERCURY | .111 | mg/kg | U | N | Y | U | U | | | | | | C255-15 | 12:09 |
| JH0030 | SW6010B | SW3050 | N | 0 | 1 | ALUMINUM | 11900 | mg/kg | | Y | Y | P | | | | | | | C255-16 | 01:54 |
| | | | | | | ANTIMONY | 12 | mg/kg | U | N | Y | U | UJ | | 08A | | | | C255-16 | 01:54 |
| | | | | | | ARSENIC | 4.54 | mg/kg | | Y | Y | P | | | | | | | C255-16 | 23:50 |
| | | | | | | BARIUM | 9.81 | mg/kg | | Y | Y | P | | | | | | | C255-16 | 01:54 |
| | | | | | | BERYLLIUM | .106 | mg/kg | J | Y | Y | P | J | | 15 | | | | C255-16 | 01:54 |
| | | | | | | CADMIUM | .602 | mg/kg | U | N | Y | U | U | | | | | | C255-16 | 01:54 |
| | | | | | | CALCIUM | 58.4 | mg/kg | J | Y | Y | P | J | | 15 | | | | C255-16 | 01:54 |
| | | | | | | CHROMIUM | 47.5 | mg/kg | | Y | Y | P | J | | 13 | | | | C255-16 | 01:54 |
| | | | | | | COBALT | 2.41 | mg/kg | U | N | Y | U | U | | | | | | C255-16 | 01:54 |
| | | | | | | COPPER | 2.8 | mg/kg | | Y | Y | P | | | | | | | C255-16 | 01:54 |
| | | | | | | IRON | 26100 | mg/kg | | Y | Y | P | | | | | | | C255-16 | 01:54 |
| | | | | | | LEAD | 4.69 | mg/kg | | Y | Y | P | J | | 13 | | | | C255-16 | 23:50 |
| | | | | | | MAGNESIUM | 181 | mg/kg | | Y | Y | P | | | | | | | C255-16 | 01:54 |
| | | | | | | MANGANESE | 5.29 | mg/kg | | Y | Y | P | | | | | | | C255-16 | 01:54 |
| | | | | | | NICKEL | 2.41 | mg/kg | U | N | Y | U | U | | | | | | C255-16 | 01:54 |

# Validation Qualifier Data Entry Verification

Run Date: October 26, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1091Q-02** | | | | | | | | | | | | | | | | | | | | |
| JH0030 | SW6010B | SW3050 | N | 0 | 1 | POTASSIUM | 602 | mg/kg | U | N | Y | U | U | | | | | | C255-16 | 01:54 |
| | | | | | | SELENIUM | 1.2 | mg/kg | U | N | Y | U | U | | | | | | C255-16 | 23:50 |
| | | | | | | SILVER | 1.2 | mg/kg | U | N | Y | U | U | | | | | | C255-16 | 01:54 |
| | | | | | | SODIUM | 120 | mg/kg | U | N | Y | U | U | | | | | | C255-16 | 01:54 |
| | | | | | | THALLIUM | 2.41 | mg/kg | U | N | Y | U | U | | | | | | C255-16 | 23:50 |
| | | | | | | VANADIUM | 62.5 | mg/kg | | Y | Y | P | | | | | | | C255-16 | 01:54 |
| | | | | | | ZINC | 5.51 | mg/kg | | Y | Y | P | J | | 13 | | | | C255-16 | 01:54 |
| | SW7471A | TOTAL | N | 0 | 1 | MERCURY | .12 | mg/kg | U | N | Y | U | U | | | | | | C255-16 | 12:11 |
| JH0001 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-01 | 12:15 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-01 | 12:15 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-01 | 12:15 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-01 | 12:15 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-01 | 12:15 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-01 | 12:15 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-01 | 12:15 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-01 | 12:15 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-01 | 12:15 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-01 | 12:15 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-01 | 12:15 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-01 | 12:15 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-01 | 12:15 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-01 | 12:15 |
| JH0002 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-02 | 12:54 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-02 | 12:54 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-02 | 12:54 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-02 | 12:54 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-02 | 12:54 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-02 | 12:54 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-02 | 12:54 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-02 | 12:54 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-02 | 12:54 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-02 | 12:54 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-02 | 12:54 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-02 | 12:54 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-02 | 12:54 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-02 | 12:54 |
| JH0005 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-03 | 13:32 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-03 | 13:32 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-03 | 13:32 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-03 | 13:32 |

# Validation Qualifier Data Entry Verification

Run Date: October 26, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1091Q-02** | | | | | | | | | | | | | | | | | | |
| JH0005 | SW8330 | METHOD | N 0 1 | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-03 | 13:32 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-03 | 13:32 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-03 | 13:32 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-03 | 13:32 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-03 | 13:32 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-03 | 13:32 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-03 | 13:32 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-03 | 13:32 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-03 | 13:32 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-03 | 13:32 |
| JH0006 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-04 | 14:10 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-04 | 14:10 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-04 | 14:10 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-04 | 14:10 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-04 | 14:10 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-04 | 14:10 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-04 | 14:10 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-04 | 14:10 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-04 | 14:10 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-04 | 14:10 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-04 | 14:10 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-04 | 14:10 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-04 | 14:10 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-04 | 14:10 |
| JH0007 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-05 | 14:49 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-05 | 14:49 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-05 | 14:49 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-05 | 14:49 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-05 | 14:49 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-05 | 14:49 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-05 | 14:49 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-05 | 14:49 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-05 | 14:49 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-05 | 14:49 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-05 | 14:49 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-05 | 14:49 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-05 | 14:49 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-05 | 14:49 |
| JH0008 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-06 | 15:27 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-06 | 15:27 |

# Validation Qualifier Data Entry Verification

Run Date: October 26, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1091Q-02** | | | | | | | | | | | | | | | | | | |
| JH0008 | SW8330 | METHOD | N 0 1 | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-06 | 15:27 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-06 | 15:27 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-06 | 15:27 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-06 | 15:27 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-06 | 15:27 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-06 | 15:27 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-06 | 15:27 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-06 | 15:27 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-06 | 15:27 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-06 | 15:27 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-06 | 15:27 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-06 | 15:27 |
| JH0009 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | | U | | | | | | C255-07 | 18:06 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | | U | | | | | | C255-07 | 18:06 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | | U | | | | | | C255-07 | 18:06 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | | U | | | | | | C255-07 | 18:06 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | | U | | | | | | C255-07 | 18:06 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | | U | | | | | | C255-07 | 18:06 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | | U | | | | | | C255-07 | 18:06 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | | U | | | | | | C255-07 | 18:06 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | | U | | | | | | C255-07 | 18:06 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | | U | | | | | | C255-07 | 18:06 |
| | | | | HMX | .4 | mg/kg | U | N | Y | | U | | | | | | C255-07 | 18:06 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | | U | | | | | | C255-07 | 18:06 |
| | | | | RDX | .4 | mg/kg | U | N | Y | | U | | | | | | C255-07 | 18:06 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | | U | | | | | | C255-07 | 18:06 |
| JH0019 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-08 | 18:44 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-08 | 18:44 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-08 | 18:44 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-08 | 18:44 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-08 | 18:44 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-08 | 18:44 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-08 | 18:44 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-08 | 18:44 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-08 | 18:44 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-08 | 18:44 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-08 | 18:44 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-08 | 18:44 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-08 | 18:44 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-08 | 18:44 |

# Validation Qualifier Data Entry Verification

Run Date: October 26, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1091Q-02** | | | | | | | | | | | | | |
| JH0020 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N Y U | U | | | C255-09 | 19:25 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N Y U | U | | | C255-09 | 19:25 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N Y U | U | | | C255-09 | 19:25 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N Y U | U | | | C255-09 | 19:25 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N Y U | U | | | C255-09 | 19:25 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N Y U | U | | | C255-09 | 19:25 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N Y U | U | | | C255-09 | 19:25 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N Y U | U | | | C255-09 | 19:25 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N Y U | U | | | C255-09 | 19:25 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N Y U | U | | | C255-09 | 19:25 |
| | | | | HMX | .4 | mg/kg | U | N Y U | U | | | C255-09 | 19:25 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N Y U | U | | | C255-09 | 19:25 |
| | | | | RDX | .4 | mg/kg | U | N Y U | U | | | C255-09 | 19:25 |
| | | | | TETRYL | .4 | mg/kg | U | N Y U | U | | | C255-09 | 19:25 |
| JH0021 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N Y U | U | | | C255-10 | 20:06 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N Y U | U | | | C255-10 | 20:06 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N Y U | U | | | C255-10 | 20:06 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N Y U | U | | | C255-10 | 20:06 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N Y U | U | | | C255-10 | 20:06 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N Y U | U | | | C255-10 | 20:06 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N Y U | U | | | C255-10 | 20:06 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N Y U | U | | | C255-10 | 20:06 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N Y U | U | | | C255-10 | 20:06 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N Y U | U | | | C255-10 | 20:06 |
| | | | | HMX | .4 | mg/kg | U | N Y U | U | | | C255-10 | 20:06 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N Y U | U | | | C255-10 | 20:06 |
| | | | | RDX | .4 | mg/kg | U | N Y U | U | | | C255-10 | 20:06 |
| | | | | TETRYL | .4 | mg/kg | U | N Y U | U | | | C255-10 | 20:06 |
| JH0022 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N Y U | U | | | C255-11 | 20:46 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N Y U | U | | | C255-11 | 20:46 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N Y U | U | | | C255-11 | 20:46 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N Y U | U | | | C255-11 | 20:46 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N Y U | U | | | C255-11 | 20:46 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N Y U | U | | | C255-11 | 20:46 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N Y U | U | | | C255-11 | 20:46 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N Y U | U | | | C255-11 | 20:46 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N Y U | U | | | C255-11 | 20:46 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N Y U | U | | | C255-11 | 20:46 |
| | | | | HMX | .4 | mg/kg | U | N Y U | U | | | C255-11 | 20:46 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N Y U | U | | | C255-11 | 20:46 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1091Q-02** | | | | | | | | | | | | | | | | | | |
| JH0022 | SW8330 | METHOD | N 0 1 | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-11 | 20:46 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-11 | 20:46 |
| JH0023 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-12 | 21:24 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-12 | 21:24 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-12 | 21:24 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-12 | 21:24 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-12 | 21:24 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-12 | 21:24 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-12 | 21:24 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-12 | 21:24 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-12 | 21:24 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-12 | 21:24 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-12 | 21:24 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-12 | 21:24 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-12 | 21:24 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-12 | 21:24 |
| JH0024 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-13 | 22:02 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-13 | 22:02 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-13 | 22:02 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-13 | 22:02 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-13 | 22:02 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-13 | 22:02 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-13 | 22:02 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-13 | 22:02 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-13 | 22:02 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-13 | 22:02 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-13 | 22:02 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-13 | 22:02 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-13 | 22:02 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-13 | 22:02 |
| JH0025 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | | U | | | | | | C255-14 | 22:41 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | | U | | | | | | C255-14 | 22:41 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | | U | | | | | | C255-14 | 22:41 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | | U | | | | | | C255-14 | 22:41 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | | U | | | | | | C255-14 | 22:41 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | | U | | | | | | C255-14 | 22:41 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | | U | | | | | | C255-14 | 22:41 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | | U | | | | | | C255-14 | 22:41 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | | U | | | | | | C255-14 | 22:41 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | | U | | | | | | C255-14 | 22:41 |

# Validation Qualifier Data Entry Verification

Run Date: October 26, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1091Q-02** | | | | | | | | | | | | | | | | | | | | |
| JH0025 | SW8330 | METHOD | N | 0 | 1 | HMX | .4 | mg/kg | U | N | Y | | U | | | | | | C255-14 | 22:41 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | | U | | | | | | C255-14 | 22:41 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | | U | | | | | | C255-14 | 22:41 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | | U | | | | | | C255-14 | 22:41 |
| JH0029 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-15 | 23:19 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-15 | 23:19 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-15 | 23:19 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-15 | 23:19 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-15 | 23:19 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-15 | 23:19 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-15 | 23:19 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-15 | 23:19 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-15 | 23:19 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-15 | 23:19 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-15 | 23:19 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-15 | 23:19 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-15 | 23:19 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-15 | 23:19 |
| JH0030 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-16 | 23:58 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-16 | 23:58 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-16 | 23:58 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-16 | 23:58 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-16 | 23:58 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-16 | 23:58 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-16 | 23:58 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-16 | 23:58 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-16 | 23:58 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-16 | 23:58 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-16 | 23:58 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-16 | 23:58 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-16 | 23:58 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | C255-16 | 23:58 |
| JH0001 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .057 | mg/kg | U | N | Y | U | U | | | | | | C255-01 | 20:13 |
| JH0002 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0572 | mg/kg | U | N | Y | U | U | | | | | | C255-02 | 20:30 |
| JH0005 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0586 | mg/kg | U | N | Y | U | U | | | | | | C255-03 | 20:48 |
| JH0006 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0572 | mg/kg | U | N | Y | U | U | | | | | | C255-04 | 21:05 |
| JH0007 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0535 | mg/kg | U | N | Y | U | U | | | | | | C255-05 | 21:22 |
| JH0008 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0535 | mg/kg | U | N | Y | U | U | | | | | | C255-06 | 21:39 |
| JH0009 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .054 | mg/kg | U | N | Y | | U | | | | | | C255-07 | 21:56 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1091Q-02** | | | | | | | | | | | | | | | | | | | | |
| JH0019 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .059 | mg/kg | U | N | Y | U | U | | | | | | C255-08 | 22:13 |
| JH0020 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0581 | mg/kg | U | N | Y | U | U | | | | | | C255-09 | 22:30 |
| JH0021 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0605 | mg/kg | U | N | Y | U | U | | | | | | C255-10 | 23:22 |
| JH0022 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0601 | mg/kg | U | N | Y | U | U | | | | | | C255-11 | 00:13 |
| JH0023 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0584 | mg/kg | U | N | Y | U | U | | | | | | C255-12 | 00:31 |
| JH0024 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0584 | mg/kg | U | N | Y | U | U | | | | | | C255-13 | 00:48 |
| JH0025 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0588 | mg/kg | U | N | Y | | U | | | | | | C255-14 | 01:05 |
| JH0029 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0554 | mg/kg | U | N | Y | U | U | | | | | | C255-15 | 01:22 |
| JH0030 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0602 | mg/kg | U | N | Y | U | U | | | | | | C255-16 | 01:39 |
| **1091Q-03** | | | | | | | | | | | | | | | | | | | | |
| JH0015 | SW6010B | SW3050 | N | 0 | 1 | ALUMINUM | 9000 | mg/kg | | Y | Y | P | | | | | | | C272-01 | 18:11 |
| | | | | | | ANTIMONY | 12.4 | mg/kg | U | N | Y | U | U | | | | | | C272-01 | 18:11 |
| | | | | | | ARSENIC | 1.71 | mg/kg | | Y | Y | P | | | | | | | C272-01 | 02:38 |
| | | | | | | BARIUM | 41.6 | mg/kg | | Y | Y | P | | | | | | | C272-01 | 18:11 |
| | | | | | | BERYLLIUM | .389 | mg/kg | J | Y | Y | P | J | | 15 | | | | C272-01 | 18:11 |
| | | | | | | CADMIUM | .619 | mg/kg | U | N | Y | U | U | | | | | | C272-01 | 18:11 |
| | | | | | | CALCIUM | 109 | mg/kg | J | Y | Y | P | J | | 15 | | | | C272-01 | 18:11 |
| | | | | | | CHROMIUM | 7.31 | mg/kg | | Y | Y | P | | | | | | | C272-01 | 18:11 |
| | | | | | | COBALT | 2.78 | mg/kg | | Y | Y | P | | | | | | | C272-01 | 18:11 |
| | | | | | | COPPER | 3.16 | mg/kg | | Y | Y | P | | | | | | | C272-01 | 18:11 |
| | | | | | | IRON | 6080 | mg/kg | | Y | Y | P | | | | | | | C272-01 | 18:11 |
| | | | | | | LEAD | 9.83 | mg/kg | | Y | Y | P | | | | | | | C272-01 | 02:38 |
| | | | | | | MAGNESIUM | 215 | mg/kg | | Y | Y | P | | | | | | | C272-01 | 18:11 |
| | | | | | | MANGANESE | 317 | mg/kg | | Y | Y | P | | | | | | | C272-01 | 18:11 |
| | | | | | | NICKEL | 2.37 | mg/kg | J | Y | Y | P | J | | 15 | | | | C272-01 | 18:11 |
| | | | | | | POTASSIUM | 216 | mg/kg | J | Y | Y | P | J | | 15 | | | | C272-01 | 18:11 |
| | | | | | | SELENIUM | 1.24 | mg/kg | U | N | Y | U | U | | | | | | C272-01 | 02:38 |
| | | | | | | SILVER | 1.24 | mg/kg | U | N | Y | U | U | | | | | | C272-01 | 18:11 |
| | | | | | | SODIUM | 124 | mg/kg | U | N | Y | U | U | | | | | | C272-01 | 18:11 |
| | | | | | | THALLIUM | 2.48 | mg/kg | U | N | Y | U | U | | | | | | C272-01 | 02:38 |
| | | | | | | VANADIUM | 12.1 | mg/kg | | Y | Y | P | | | | | | | C272-01 | 18:11 |
| | | | | | | ZINC | 11 | mg/kg | | Y | Y | P | | | | | | | C272-01 | 18:11 |
| | SW7471A | TOTAL | N | 0 | 1 | MERCURY | .1 | mg/kg | U | N | Y | U | U | | | | | | C272-01 | 10:13 |
| JH0016 | SW6010B | SW3050 | N | 0 | 1 | ALUMINUM | 2120 | mg/kg | | Y | Y | P | | | | | | | C272-02 | 18:16 |
| | | | | | | ANTIMONY | 11.8 | mg/kg | U | N | Y | U | U | | | | | | C272-02 | 18:16 |
| | | | | | | ARSENIC | .791 | mg/kg | J | Y | Y | P | J | | 15 | | | | C272-02 | 02:43 |
| | | | | | | BARIUM | 9.25 | mg/kg | | Y | Y | P | | | | | | | C272-02 | 18:16 |
| | | | | | | BERYLLIUM | .116 | mg/kg | J | Y | Y | P | J | | 15 | | | | C272-02 | 18:16 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1091Q-03** | | | | | | | | | | | | | | | | | | |
| JH0016 | SW6010B | SW3050 | N 0 1 | CADMIUM | .591 | mg/kg | U | N | Y | U | U | | | | | | C272-02 | 18:16 |
| | | | | CALCIUM | 36.2 | mg/kg | J | Y | Y | P | J | | 15 | | | | C272-02 | 18:16 |
| | | | | CHROMIUM | 28 | mg/kg | | Y | Y | P | | | | | | | C272-02 | 18:16 |
| | | | | COBALT | 2.36 | mg/kg | U | N | Y | U | U | | | | | | C272-02 | 18:16 |
| | | | | COPPER | 1.96 | mg/kg | J | Y | Y | P | J | | 15 | | | | C272-02 | 18:16 |
| | | | | IRON | 14500 | mg/kg | | Y | Y | P | | | | | | | C272-02 | 18:16 |
| | | | | LEAD | 1.85 | mg/kg | | Y | Y | P | | | | | | | C272-02 | 02:43 |
| | | | | MAGNESIUM | 34.4 | mg/kg | J | Y | Y | P | J | | 15 | | | | C272-02 | 18:16 |
| | | | | MANGANESE | 7.55 | mg/kg | | Y | Y | P | | | | | | | C272-02 | 18:16 |
| | | | | NICKEL | 1.23 | mg/kg | J | Y | Y | P | J | | 15 | | | | C272-02 | 18:16 |
| | | | | POTASSIUM | 591 | mg/kg | U | N | Y | U | U | | | | | | C272-02 | 18:16 |
| | | | | SELENIUM | 1.18 | mg/kg | U | N | Y | U | U | | | | | | C272-02 | 02:43 |
| | | | | SILVER | 1.18 | mg/kg | U | N | Y | U | U | | | | | | C272-02 | 18:16 |
| | | | | SODIUM | 34 | mg/kg | J | Y | Y | P | J | | 15 | | | | C272-02 | 18:16 |
| | | | | THALLIUM | 2.36 | mg/kg | U | N | Y | U | U | | | | | | C272-02 | 02:43 |
| | | | | VANADIUM | 33.1 | mg/kg | | Y | Y | P | | | | | | | C272-02 | 18:16 |
| | | | | ZINC | 2.52 | mg/kg | | Y | Y | P | | | | | | | C272-02 | 18:16 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .1 | mg/kg | U | N | Y | U | U | | | | | | C272-02 | 10:16 |
| JH0017 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 3220 | mg/kg | | Y | Y | P | | | | | | | C272-03 | 18:21 |
| | | | | ANTIMONY | 11.3 | mg/kg | U | N | Y | U | U | | | | | | C272-03 | 18:21 |
| | | | | ARSENIC | 2.1 | mg/kg | | Y | Y | P | | | | | | | C272-03 | 02:48 |
| | | | | BARIUM | 27.9 | mg/kg | | Y | Y | P | | | | | | | C272-03 | 18:21 |
| | | | | BERYLLIUM | .141 | mg/kg | J | Y | Y | P | J | | 15 | | | | C272-03 | 18:21 |
| | | | | CADMIUM | .567 | mg/kg | U | N | Y | U | U | | | | | | C272-03 | 18:21 |
| | | | | CALCIUM | 9120 | mg/kg | | Y | Y | P | | | | | | | C272-03 | 18:21 |
| | | | | CHROMIUM | 6.28 | mg/kg | | Y | Y | P | | | | | | | C272-03 | 18:21 |
| | | | | COBALT | .993 | mg/kg | J | Y | Y | P | J | | 15 | | | | C272-03 | 18:21 |
| | | | | COPPER | 2.65 | mg/kg | | Y | Y | P | | | | | | | C272-03 | 18:21 |
| | | | | IRON | 6590 | mg/kg | | Y | Y | P | | | | | | | C272-03 | 18:21 |
| | | | | LEAD | 9.04 | mg/kg | | Y | Y | P | | | | | | | C272-03 | 02:48 |
| | | | | MAGNESIUM | 5290 | mg/kg | | Y | Y | P | | | | | | | C272-03 | 18:21 |
| | | | | MANGANESE | 127 | mg/kg | | Y | Y | P | | | | | | | C272-03 | 18:21 |
| | | | | NICKEL | 1.51 | mg/kg | J | Y | Y | P | J | | 15 | | | | C272-03 | 18:21 |
| | | | | POTASSIUM | 276 | mg/kg | J | Y | Y | P | J | | 15 | | | | C272-03 | 18:21 |
| | | | | SELENIUM | 1.13 | mg/kg | U | N | Y | U | U | | | | | | C272-03 | 02:48 |
| | | | | SILVER | 1.13 | mg/kg | U | N | Y | U | U | | | | | | C272-03 | 18:21 |
| | | | | SODIUM | 113 | mg/kg | U | N | Y | U | U | | | | | | C272-03 | 18:21 |
| | | | | THALLIUM | 2.27 | mg/kg | U | N | Y | U | U | | | | | | C272-03 | 02:48 |
| | | | | VANADIUM | 10.4 | mg/kg | | Y | Y | P | | | | | | | C272-03 | 18:21 |
| | | | | ZINC | 7.78 | mg/kg | | Y | Y | P | | | | | | | C272-03 | 18:21 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1091Q-03** | | | | | | | | | | | | | | | | | | | | |
| JH0017 | SW7471A | TOTAL | N | 0 | 1 | MERCURY | .1 | mg/kg | U | N | Y | U | U | | | | | | C272-03 | 10:19 |
| JH0018 | SW6010B | SW3050 | N | 0 | 1 | ALUMINUM | 4240 | mg/kg | | Y | Y | P | | | | | | | C272-04 | 18:26 |
| | | | | | | ANTIMONY | 12.6 | mg/kg | U | N | Y | U | U | | | | | | C272-04 | 18:26 |
| | | | | | | ARSENIC | 4.33 | mg/kg | | Y | Y | P | | | | | | | C272-04 | 02:53 |
| | | | | | | BARIUM | 28.4 | mg/kg | | Y | Y | P | | | | | | | C272-04 | 18:26 |
| | | | | | | BERYLLIUM | .492 | mg/kg | J | Y | Y | P | J | | 15 | | | | C272-04 | 18:26 |
| | | | | | | CADMIUM | .631 | mg/kg | U | N | Y | U | U | | | | | | C272-04 | 18:26 |
| | | | | | | CALCIUM | 125 | mg/kg | J | Y | Y | P | J | | 15 | | | | C272-04 | 18:26 |
| | | | | | | CHROMIUM | 13.4 | mg/kg | | Y | Y | P | | | | | | | C272-04 | 18:26 |
| | | | | | | COBALT | 1.78 | mg/kg | J | Y | Y | P | J | | 15 | | | | C272-04 | 18:26 |
| | | | | | | COPPER | 7.96 | mg/kg | | Y | Y | P | | | | | | | C272-04 | 18:26 |
| | | | | | | IRON | 23200 | mg/kg | | Y | Y | P | | | | | | | C272-04 | 18:26 |
| | | | | | | LEAD | 6.48 | mg/kg | | Y | Y | P | | | | | | | C272-04 | 02:53 |
| | | | | | | MAGNESIUM | 182 | mg/kg | | Y | Y | P | | | | | | | C272-04 | 18:26 |
| | | | | | | MANGANESE | 55.4 | mg/kg | | Y | Y | P | | | | | | | C272-04 | 18:26 |
| | | | | | | NICKEL | 3.2 | mg/kg | | Y | Y | P | | | | | | | C272-04 | 18:26 |
| | | | | | | POTASSIUM | 2080 | mg/kg | | Y | Y | P | | | | | | | C272-04 | 18:26 |
| | | | | | | SELENIUM | 1.26 | mg/kg | U | N | Y | U | U | | | | | | C272-04 | 02:53 |
| | | | | | | SILVER | 1.26 | mg/kg | U | N | Y | U | U | | | | | | C272-04 | 18:26 |
| | | | | | | SODIUM | 126 | mg/kg | U | N | Y | U | U | | | | | | C272-04 | 18:26 |
| | | | | | | THALLIUM | 2.52 | mg/kg | U | N | Y | U | U | | | | | | C272-04 | 02:53 |
| | | | | | | VANADIUM | 15.5 | mg/kg | | Y | Y | P | | | | | | | C272-04 | 18:26 |
| | | | | | | ZINC | 8.42 | mg/kg | | Y | Y | P | | | | | | | C272-04 | 18:26 |
| | SW7471A | TOTAL | N | 0 | 1 | MERCURY | .1 | mg/kg | U | N | Y | U | U | | | | | | C272-04 | 10:21 |
| JH0031 | SW6010B | SW3050 | N | 0 | 1 | ALUMINUM | 5970 | mg/kg | | Y | Y | P | | | | | | | C272-05 | 18:31 |
| | | | | | | ANTIMONY | 11.5 | mg/kg | U | N | Y | U | U | | | | | | C272-05 | 18:31 |
| | | | | | | ARSENIC | 1.24 | mg/kg | | Y | Y | P | | | | | | | C272-05 | 02:57 |
| | | | | | | BARIUM | 23.6 | mg/kg | | Y | Y | P | | | | | | | C272-05 | 18:31 |
| | | | | | | BERYLLIUM | .127 | mg/kg | J | Y | Y | P | J | | 15 | | | | C272-05 | 18:31 |
| | | | | | | CADMIUM | .576 | mg/kg | U | N | Y | U | U | | | | | | C272-05 | 18:31 |
| | | | | | | CALCIUM | 113 | mg/kg | J | Y | Y | P | J | | 15 | | | | C272-05 | 18:31 |
| | | | | | | CHROMIUM | 4.8 | mg/kg | | Y | Y | P | | | | | | | C272-05 | 18:31 |
| | | | | | | COBALT | 2.3 | mg/kg | U | N | Y | U | U | | | | | | C272-05 | 18:31 |
| | | | | | | COPPER | 1.36 | mg/kg | J | Y | Y | P | J | | 15 | | | | C272-05 | 18:31 |
| | | | | | | IRON | 4070 | mg/kg | | Y | Y | P | | | | | | | C272-05 | 18:31 |
| | | | | | | LEAD | 6.85 | mg/kg | | Y | Y | P | | | | | | | C272-05 | 02:57 |
| | | | | | | MAGNESIUM | 178 | mg/kg | | Y | Y | P | | | | | | | C272-05 | 18:31 |
| | | | | | | MANGANESE | 22.7 | mg/kg | | Y | Y | P | | | | | | | C272-05 | 18:31 |
| | | | | | | NICKEL | 1.67 | mg/kg | J | Y | Y | P | J | | 15 | | | | C272-05 | 18:31 |
| | | | | | | POTASSIUM | 576 | mg/kg | U | N | Y | U | U | | | | | | C272-05 | 18:31 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1091Q-03** | | | | | | | | | | | | | | | | | | |
| JH0031 | SW6010B | SW3050 | N 0 1 | SELENIUM | 1.15 | mg/kg | U | N | Y | U | U | | | | | | C272-05 | 02:57 |
| | | | | SILVER | 1.15 | mg/kg | U | N | Y | U | U | | | | | | C272-05 | 18:31 |
| | | | | SODIUM | 115 | mg/kg | U | N | Y | U | U | | | | | | C272-05 | 18:31 |
| | | | | THALLIUM | 2.3 | mg/kg | U | N | Y | U | U | | | | | | C272-05 | 02:57 |
| | | | | VANADIUM | 7.65 | mg/kg | | Y | Y | P | | | | | | | C272-05 | 18:31 |
| | | | | ZINC | 8.18 | mg/kg | | Y | Y | P | | | | | | | C272-05 | 18:31 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .1 | mg/kg | U | N | Y | U | U | | | | | | C272-05 | 10:32 |
| JH0032 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 6340 | mg/kg | | Y | Y | P | | | | | | | C272-06 | 18:37 |
| | | | | ANTIMONY | 12.5 | mg/kg | U | N | Y | U | U | | | | | | C272-06 | 18:37 |
| | | | | ARSENIC | 2.33 | mg/kg | | Y | Y | P | | | | | | | C272-06 | 03:02 |
| | | | | BARIUM | 16.3 | mg/kg | | Y | Y | P | | | | | | | C272-06 | 18:37 |
| | | | | BERYLLIUM | .565 | mg/kg | J | Y | Y | P | J | | 15 | | | | C272-06 | 18:37 |
| | | | | CADMIUM | .627 | mg/kg | U | N | Y | U | U | | | | | | C272-06 | 18:37 |
| | | | | CALCIUM | 23.7 | mg/kg | J | Y | Y | P | J | | 15 | | | | C272-06 | 18:37 |
| | | | | CHROMIUM | 12.8 | mg/kg | | Y | Y | P | | | | | | | C272-06 | 18:37 |
| | | | | COBALT | .919 | mg/kg | J | Y | Y | P | J | | 15 | | | | C272-06 | 18:37 |
| | | | | COPPER | 6.48 | mg/kg | | Y | Y | P | | | | | | | C272-06 | 18:37 |
| | | | | IRON | 15900 | mg/kg | | Y | Y | P | | | | | | | C272-06 | 18:37 |
| | | | | LEAD | 5.12 | mg/kg | | Y | Y | P | | | | | | | C272-06 | 03:02 |
| | | | | MAGNESIUM | 214 | mg/kg | | Y | Y | P | | | | | | | C272-06 | 18:37 |
| | | | | MANGANESE | 4.65 | mg/kg | | Y | Y | P | | | | | | | C272-06 | 18:37 |
| | | | | NICKEL | 4.4 | mg/kg | | Y | Y | P | | | | | | | C272-06 | 18:37 |
| | | | | POTASSIUM | 1390 | mg/kg | | Y | Y | P | | | | | | | C272-06 | 18:37 |
| | | | | SELENIUM | 1.25 | mg/kg | U | N | Y | U | U | | | | | | C272-06 | 03:02 |
| | | | | SILVER | 1.25 | mg/kg | U | N | Y | U | U | | | | | | C272-06 | 18:37 |
| | | | | SODIUM | 125 | mg/kg | U | N | Y | U | U | | | | | | C272-06 | 18:37 |
| | | | | THALLIUM | 2.51 | mg/kg | U | N | Y | U | U | | | | | | C272-06 | 03:02 |
| | | | | VANADIUM | 19.1 | mg/kg | | Y | Y | P | | | | | | | C272-06 | 18:37 |
| | | | | ZINC | 8.07 | mg/kg | | Y | Y | P | | | | | | | C272-06 | 18:37 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .1 | mg/kg | U | N | Y | U | U | | | | | | C272-06 | 10:34 |
| JH0015 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-01 | 15:12 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-01 | 15:12 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-01 | 15:12 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-01 | 15:12 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-01 | 15:12 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-01 | 15:12 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-01 | 15:12 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-01 | 15:12 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-01 | 15:12 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-01 | 15:12 |

# Validation Qualifier Data Entry Verification

Run Date: October 26, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1091Q-03** | | | | | | | | | | | | | | | | | | | | |
| JH0015 | SW8330 | METHOD | N | 0 | 1 | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-01 | 15:12 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-01 | 15:12 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-01 | 15:12 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-01 | 15:12 |
| JH0016 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-02 | 16:29 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-02 | 16:29 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-02 | 16:29 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-02 | 16:29 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-02 | 16:29 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-02 | 16:29 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-02 | 16:29 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-02 | 16:29 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-02 | 16:29 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-02 | 16:29 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-02 | 16:29 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-02 | 16:29 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-02 | 16:29 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-02 | 16:29 |
| JH0017 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-03 | 17:08 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-03 | 17:08 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-03 | 17:08 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-03 | 17:08 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-03 | 17:08 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-03 | 17:08 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-03 | 17:08 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-03 | 17:08 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-03 | 17:08 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-03 | 17:08 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-03 | 17:08 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-03 | 17:08 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-03 | 17:08 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-03 | 17:08 |
| JH0018 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-04 | 17:46 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-04 | 17:46 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-04 | 17:46 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-04 | 17:46 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-04 | 17:46 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-04 | 17:46 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-04 | 17:46 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-04 | 17:46 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1091Q-03** | | | | | | | | | | | | | | | | | | | | |
| JH0018 | SW8330 | METHOD | N | 0 | 1 | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-04 | 17:46 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-04 | 17:46 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-04 | 17:46 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-04 | 17:46 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-04 | 17:46 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-04 | 17:46 |
| JH0031 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-05 | 18:28 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-05 | 18:28 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-05 | 18:28 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-05 | 18:28 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-05 | 18:28 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-05 | 18:28 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-05 | 18:28 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-05 | 18:28 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-05 | 18:28 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-05 | 18:28 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-05 | 18:28 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-05 | 18:28 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-05 | 18:28 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-05 | 18:28 |
| JH0032 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-06 | 19:07 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-06 | 19:07 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-06 | 19:07 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-06 | 19:07 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-06 | 19:07 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-06 | 19:07 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-06 | 19:07 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-06 | 19:07 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-06 | 19:07 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-06 | 19:07 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-06 | 19:07 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-06 | 19:07 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-06 | 19:07 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | C272-06 | 19:07 |
| JH0015 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0619 | mg/kg | U | N | Y | U | U | | | | | | C272-01 | 20:28 |
| JH0016 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0591 | mg/kg | U | N | Y | U | U | | | | | | C272-02 | 20:45 |
| JH0017 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0567 | mg/kg | U | N | Y | U | U | | | | | | C272-03 | 21:02 |
| JH0018 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0631 | mg/kg | U | N | Y | U | U | | | | | | C272-04 | 21:19 |
| JH0031 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0576 | mg/kg | U | N | Y | U | U | | | | | | C272-05 | 21:36 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1091Q-03** | | | | | | | | | | | | | | | | |
| JH0032 | E314.0 | NONE | N 0 1 | PERCHLORATE | .0627 | mg/kg | U | N Y U | U | | | | | | C272-06 | 21:54 |
| **1091Q-04** | | | | | | | | | | | | | | | | |
| JH0003 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 8770 | mg/kg | | Y Y P | | | | | | | D021-01 | 01:32 |
| | | | | ANTIMONY | 11.5 | mg/kg | U | N Y U | U | | | | | | D021-01 | 01:32 |
| | | | | ARSENIC | 1.92 | mg/kg | | Y Y P | | | | | | | D021-01 | 20:45 |
| | | | | BARIUM | 30.6 | mg/kg | | Y Y P | | | | | | | D021-01 | 01:32 |
| | | | | BERYLLIUM | .175 | mg/kg | J | Y Y P | J | | 15 | | | | D021-01 | 01:32 |
| | | | | CADMIUM | .574 | mg/kg | U | N Y U | U | | | | | | D021-01 | 01:32 |
| | | | | CALCIUM | 70.6 | mg/kg | J | Y Y P | J | | 15 | | | | D021-01 | 01:32 |
| | | | | CHROMIUM | 7.83 | mg/kg | | Y Y P | | | | | | | D021-01 | 01:32 |
| | | | | COBALT | 1.39 | mg/kg | J | Y Y P | J | | 15 | | | | D021-01 | 01:32 |
| | | | | COPPER | 2.31 | mg/kg | | Y Y P | | | | | | | D021-01 | 01:32 |
| | | | | IRON | 6430 | mg/kg | | Y Y P | | | | | | | D021-01 | 01:32 |
| | | | | LEAD | 5.78 | mg/kg | | Y Y P | | | | | | | D021-01 | 20:45 |
| | | | | MAGNESIUM | 308 | mg/kg | | Y Y P | | | | | | | D021-01 | 01:32 |
| | | | | MANGANESE | 44.1 | mg/kg | | Y Y P | | | | | | | D021-01 | 01:32 |
| | | | | NICKEL | 2.81 | mg/kg | | Y Y P | | | | | | | D021-01 | 01:32 |
| | | | | POTASSIUM | 168 | mg/kg | J | Y Y P | J | | 15 | | | | D021-01 | 01:32 |
| | | | | SELENIUM | 1.15 | mg/kg | U | N Y U | U | | | | | | D021-01 | 20:45 |
| | | | | SILVER | 1.15 | mg/kg | U | N Y U | U | | | | | | D021-01 | 01:32 |
| | | | | SODIUM | 115 | mg/kg | U | N Y U | U | | | | | | D021-01 | 01:32 |
| | | | | THALLIUM | 2.3 | mg/kg | U | N Y U | U | | | | | | D021-01 | 20:45 |
| | | | | VANADIUM | 13.2 | mg/kg | | Y Y P | | | | | | | D021-01 | 01:32 |
| | | | | ZINC | 9.13 | mg/kg | | Y Y P | | | | | | | D021-01 | 01:32 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .115 | mg/kg | U | N Y U | U | | | | | | D021-01 | 14:50 |
| JH0004 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 9990 | mg/kg | | Y Y P | | | | | | | D021-02 | 01:37 |
| | | | | ANTIMONY | 11.8 | mg/kg | U | N Y U | U | | | | | | D021-02 | 01:37 |
| | | | | ARSENIC | 3.24 | mg/kg | | Y Y P | | | | | | | D021-02 | 20:49 |
| | | | | BARIUM | 9.61 | mg/kg | | Y Y P | | | | | | | D021-02 | 01:37 |
| | | | | BERYLLIUM | .0965 | mg/kg | J | Y Y P | J | | 15 | | | | D021-02 | 01:37 |
| | | | | CADMIUM | .592 | mg/kg | U | N Y U | U | | | | | | D021-02 | 01:37 |
| | | | | CALCIUM | 35 | mg/kg | J | Y Y P | J | | 15 | | | | D021-02 | 01:37 |
| | | | | CHROMIUM | 38 | mg/kg | | Y Y P | | | | | | | D021-02 | 01:37 |
| | | | | COBALT | .575 | mg/kg | J | Y Y P | J | | 15 | | | | D021-02 | 01:37 |
| | | | | COPPER | 4.63 | mg/kg | | Y Y P | | | | | | | D021-02 | 01:37 |
| | | | | IRON | 26700 | mg/kg | | Y Y P | | | | | | | D021-02 | 01:37 |
| | | | | LEAD | 5.14 | mg/kg | | Y Y P | | | | | | | D021-02 | 20:49 |
| | | | | MAGNESIUM | 123 | mg/kg | | Y Y P | | | | | | | D021-02 | 01:37 |
| | | | | MANGANESE | 5.36 | mg/kg | | Y Y P | | | | | | | D021-02 | 01:37 |

# Validation Qualifier Data Entry Verification

Run Date: October 26, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1091Q-04** | | | | | | | | | | | | | | | | | | |
| JH0004 | SW6010B | SW3050 | N 0 1 | NICKEL | 2.37 | mg/kg | U | N | Y | U | U | | | | | | D021-02 | 01:37 |
| | | | | POTASSIUM | 592 | mg/kg | U | N | Y | U | U | | | | | | D021-02 | 01:37 |
| | | | | SELENIUM | 1.18 | mg/kg | U | N | Y | U | U | | | | | | D021-02 | 20:49 |
| | | | | SILVER | 1.18 | mg/kg | U | N | Y | U | U | | | | | | D021-02 | 01:37 |
| | | | | SODIUM | 118 | mg/kg | U | N | Y | U | U | | | | | | D021-02 | 01:37 |
| | | | | THALLIUM | .734 | mg/kg | J | Y | Y | P | J | | 15 | | | | D021-02 | 20:49 |
| | | | | VANADIUM | 54 | mg/kg | | Y | Y | P | | | | | | | D021-02 | 01:37 |
| | | | | ZINC | 4.9 | mg/kg | | Y | Y | P | | | | | | | D021-02 | 01:37 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .023 | mg/kg | J | Y | Y | P | J | | 15 | | | | D021-02 | 14:52 |
| JH0011 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 8720 | mg/kg | | Y | Y | P | | | | | | | D021-03 | 01:42 |
| | | | | ANTIMONY | 11.8 | mg/kg | U | N | Y | U | U | | | | | | D021-03 | 01:42 |
| | | | | ARSENIC | 1.33 | mg/kg | | Y | Y | P | | | | | | | D021-03 | 20:54 |
| | | | | BARIUM | 42.4 | mg/kg | | Y | Y | P | | | | | | | D021-03 | 01:42 |
| | | | | BERYLLIUM | .202 | mg/kg | J | Y | Y | P | J | | 15 | | | | D021-03 | 01:42 |
| | | | | CADMIUM | .592 | mg/kg | U | N | Y | U | U | | | | | | D021-03 | 01:42 |
| | | | | CALCIUM | 158 | mg/kg | | Y | Y | P | | | | | | | D021-03 | 01:42 |
| | | | | CHROMIUM | 9.22 | mg/kg | | Y | Y | P | | | | | | | D021-03 | 01:42 |
| | | | | COBALT | 1.86 | mg/kg | J | Y | Y | P | J | | 15 | | | | D021-03 | 01:42 |
| | | | | COPPER | 1.92 | mg/kg | J | Y | Y | P | J | | 15 | | | | D021-03 | 01:42 |
| | | | | IRON | 4800 | mg/kg | | Y | Y | P | | | | | | | D021-03 | 01:42 |
| | | | | LEAD | 6.3 | mg/kg | | Y | Y | P | | | | | | | D021-03 | 20:54 |
| | | | | MAGNESIUM | 363 | mg/kg | | Y | Y | P | | | | | | | D021-03 | 01:42 |
| | | | | MANGANESE | 88.6 | mg/kg | | Y | Y | P | | | | | | | D021-03 | 01:42 |
| | | | | NICKEL | 3.7 | mg/kg | | Y | Y | P | | | | | | | D021-03 | 01:42 |
| | | | | POTASSIUM | 176 | mg/kg | J | Y | Y | P | J | | 15 | | | | D021-03 | 01:42 |
| | | | | SELENIUM | 1.18 | mg/kg | U | N | Y | U | U | | | | | | D021-03 | 20:54 |
| | | | | SILVER | 1.18 | mg/kg | U | N | Y | U | U | | | | | | D021-03 | 01:42 |
| | | | | SODIUM | 118 | mg/kg | U | N | Y | U | U | | | | | | D021-03 | 01:42 |
| | | | | THALLIUM | 2.37 | mg/kg | U | N | Y | U | U | | | | | | D021-03 | 20:54 |
| | | | | VANADIUM | 10.2 | mg/kg | | Y | Y | P | | | | | | | D021-03 | 01:42 |
| | | | | ZINC | 11.1 | mg/kg | | Y | Y | P | | | | | | | D021-03 | 01:42 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .118 | mg/kg | U | N | Y | U | U | | | | | | D021-03 | 15:12 |
| JH0012 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 7960 | mg/kg | | Y | Y | P | | | | | | | D021-04 | 01:47 |
| | | | | ANTIMONY | 11.3 | mg/kg | U | N | Y | U | U | | | | | | D021-04 | 01:47 |
| | | | | ARSENIC | 2.08 | mg/kg | | Y | Y | P | | | | | | | D021-04 | 20:59 |
| | | | | BARIUM | 17.2 | mg/kg | | Y | Y | P | | | | | | | D021-04 | 01:47 |
| | | | | BERYLLIUM | .104 | mg/kg | J | Y | Y | P | J | | 15 | | | | D021-04 | 01:47 |
| | | | | CADMIUM | .564 | mg/kg | U | N | Y | U | U | | | | | | D021-04 | 01:47 |
| | | | | CALCIUM | 40.8 | mg/kg | J | Y | Y | P | J | | 15 | | | | D021-04 | 01:47 |
| | | | | CHROMIUM | 7.26 | mg/kg | | Y | Y | P | | | | | | | D021-04 | 01:47 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1091Q-04** | | | | | | | | | | | | | | | | | | |
| JH0012 | SW6010B | SW3050 | N 0 1 | COBALT | .836 | mg/kg | J | Y | Y | P | J | | 15 | | | | D021-04 | 01:47 |
| | | | | COPPER | 2.95 | mg/kg | | Y | Y | P | | | | | | | D021-04 | 01:47 |
| | | | | IRON | 7450 | mg/kg | | Y | Y | P | | | | | | | D021-04 | 01:47 |
| | | | | LEAD | 4.69 | mg/kg | | Y | Y | P | | | | | | | D021-04 | 20:59 |
| | | | | MAGNESIUM | 254 | mg/kg | | Y | Y | P | | | | | | | D021-04 | 01:47 |
| | | | | MANGANESE | 19.6 | mg/kg | | Y | Y | P | | | | | | | D021-04 | 01:47 |
| | | | | NICKEL | 1.55 | mg/kg | J | Y | Y | P | J | | 15 | | | | D021-04 | 01:47 |
| | | | | POTASSIUM | 564 | mg/kg | U | N | Y | U | U | | | | | | D021-04 | 01:47 |
| | | | | SELENIUM | 1.13 | mg/kg | U | N | Y | U | U | | | | | | D021-04 | 20:59 |
| | | | | SILVER | 1.13 | mg/kg | U | N | Y | U | U | | | | | | D021-04 | 01:47 |
| | | | | SODIUM | 113 | mg/kg | U | N | Y | U | U | | | | | | D021-04 | 01:47 |
| | | | | THALLIUM | 2.26 | mg/kg | U | N | Y | U | U | | | | | | D021-04 | 20:59 |
| | | | | VANADIUM | 13.5 | mg/kg | | Y | Y | P | | | | | | | D021-04 | 01:47 |
| | | | | ZINC | 6.58 | mg/kg | | Y | Y | P | | | | | | | D021-04 | 01:47 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .024 | mg/kg | J | Y | Y | P | J | | 15 | | | | D021-04 | 15:14 |
| JH0013 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 12800 | mg/kg | | Y | Y | P | | | | | | | D021-05 | 01:52 |
| | | | | ANTIMONY | 11.9 | mg/kg | U | N | Y | U | U | | | | | | D021-05 | 01:52 |
| | | | | ARSENIC | 1.86 | mg/kg | | Y | Y | P | | | | | | | D021-05 | 21:04 |
| | | | | BARIUM | 51.6 | mg/kg | | Y | Y | P | | | | | | | D021-05 | 01:52 |
| | | | | BERYLLIUM | .364 | mg/kg | J | Y | Y | P | J | | 15 | | | | D021-05 | 01:52 |
| | | | | CADMIUM | .597 | mg/kg | U | N | Y | U | U | | | | | | D021-05 | 01:52 |
| | | | | CALCIUM | 171 | mg/kg | | Y | Y | P | | | | | | | D021-05 | 01:52 |
| | | | | CHROMIUM | 9.73 | mg/kg | | Y | Y | P | | | | | | | D021-05 | 01:52 |
| | | | | COBALT | 1.97 | mg/kg | J | Y | Y | P | J | | 15 | | | | D021-05 | 01:52 |
| | | | | COPPER | 3.5 | mg/kg | | Y | Y | P | | | | | | | D021-05 | 01:52 |
| | | | | IRON | 8640 | mg/kg | | Y | Y | P | | | | | | | D021-05 | 01:52 |
| | | | | LEAD | 9.52 | mg/kg | | Y | Y | P | | | | | | | D021-05 | 21:04 |
| | | | | MAGNESIUM | 360 | mg/kg | | Y | Y | P | | | | | | | D021-05 | 01:52 |
| | | | | MANGANESE | 156 | mg/kg | | Y | Y | P | | | | | | | D021-05 | 01:52 |
| | | | | NICKEL | 3.44 | mg/kg | | Y | Y | P | | | | | | | D021-05 | 01:52 |
| | | | | POTASSIUM | 169 | mg/kg | J | Y | Y | P | J | | 15 | | | | D021-05 | 01:52 |
| | | | | SELENIUM | 1.19 | mg/kg | U | N | Y | U | U | | | | | | D021-05 | 21:04 |
| | | | | SILVER | 1.19 | mg/kg | U | N | Y | U | U | | | | | | D021-05 | 01:52 |
| | | | | SODIUM | 119 | mg/kg | U | N | Y | U | U | | | | | | D021-05 | 01:52 |
| | | | | THALLIUM | 2.39 | mg/kg | U | N | Y | U | U | | | | | | D021-05 | 21:04 |
| | | | | VANADIUM | 15.8 | mg/kg | | Y | Y | P | | | | | | | D021-05 | 01:52 |
| | | | | ZINC | 13.9 | mg/kg | | Y | Y | P | | | | | | | D021-05 | 01:52 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .119 | mg/kg | U | N | Y | U | U | | | | | | D021-05 | 15:17 |
| JH0014 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 13100 | mg/kg | | Y | Y | P | | | | | | | D021-06 | 01:57 |
| | | | | ANTIMONY | 5.96 | mg/kg | J | Y | Y | P | J | | 15 | | | | D021-06 | 01:57 |

# Validation Qualifier Data Entry Verification

Run Date: October 26, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1091Q-04** | | | | | | | | | | | | | | | | | | |
| JH0014 | SW6010B | SW3050 | N 0 1 | ARSENIC | 2.62 | mg/kg | | Y | Y | P | | | | | | | D021-06 | 21:09 |
| | | | | BARIUM | 16.2 | mg/kg | | Y | Y | P | | | | | | | D021-06 | 01:57 |
| | | | | BERYLLIUM | .149 | mg/kg | J | Y | Y | P | J | | 15 | | | | D021-06 | 01:57 |
| | | | | CADMIUM | .579 | mg/kg | U | N | Y | U | U | | | | | | D021-06 | 01:57 |
| | | | | CALCIUM | 66.3 | mg/kg | J | Y | Y | P | J | | 15 | | | | D021-06 | 01:57 |
| | | | | CHROMIUM | 17.1 | mg/kg | | Y | Y | P | | | | | | | D021-06 | 01:57 |
| | | | | COBALT | .775 | mg/kg | J | Y | Y | P | J | | 15 | | | | D021-06 | 01:57 |
| | | | | COPPER | 6.48 | mg/kg | | Y | Y | P | | | | | | | D021-06 | 01:57 |
| | | | | IRON | 18700 | mg/kg | | Y | Y | P | | | | | | | D021-06 | 01:57 |
| | | | | LEAD | 6.87 | mg/kg | | Y | Y | P | | | | | | | D021-06 | 21:09 |
| | | | | MAGNESIUM | 255 | mg/kg | | Y | Y | P | | | | | | | D021-06 | 01:57 |
| | | | | MANGANESE | 21.2 | mg/kg | | Y | Y | P | | | | | | | D021-06 | 01:57 |
| | | | | NICKEL | 2.11 | mg/kg | J | Y | Y | P | J | | 15 | | | | D021-06 | 01:57 |
| | | | | POTASSIUM | 140 | mg/kg | J | Y | Y | P | J | | 15 | | | | D021-06 | 01:57 |
| | | | | SELENIUM | 1.16 | mg/kg | U | N | Y | U | U | | | | | | D021-06 | 21:09 |
| | | | | SILVER | 1.16 | mg/kg | U | N | Y | U | U | | | | | | D021-06 | 01:57 |
| | | | | SODIUM | 116 | mg/kg | U | N | Y | U | U | | | | | | D021-06 | 01:57 |
| | | | | THALLIUM | 2.31 | mg/kg | U | N | Y | U | U | | | | | | D021-06 | 21:09 |
| | | | | VANADIUM | 29.9 | mg/kg | | Y | Y | P | | | | | | | D021-06 | 01:57 |
| | | | | ZINC | 10.2 | mg/kg | | Y | Y | P | | | | | | | D021-06 | 01:57 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .116 | mg/kg | U | N | Y | U | U | | | | | | D021-06 | 15:19 |
| JH0003 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D021-01 | 14:53 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D021-01 | 14:53 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D021-01 | 14:53 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D021-01 | 14:53 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D021-01 | 14:53 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D021-01 | 14:53 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D021-01 | 14:53 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D021-01 | 14:53 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D021-01 | 14:53 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D021-01 | 14:53 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | D021-01 | 14:53 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D021-01 | 14:53 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | D021-01 | 14:53 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | D021-01 | 14:53 |
| JH0004 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D021-02 | 15:32 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D021-02 | 15:32 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D021-02 | 15:32 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D021-02 | 15:32 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D021-02 | 15:32 |

# Validation Qualifier Data Entry Verification

Run Date: October 26, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1091Q-04** | | | | | | | | | | | | | | | | |
| JH0004 | SW8330 | METHOD | N 0 1 | 2-AM-4,6-DNT | .4 | mg/kg | U | N Y U | U | | | | | | D021-02 | 15:32 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N Y U | U | | | | | | D021-02 | 15:32 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N Y U | U | | | | | | D021-02 | 15:32 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N Y U | U | | | | | | D021-02 | 15:32 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N Y U | U | | | | | | D021-02 | 15:32 |
| | | | | HMX | .4 | mg/kg | U | N Y U | U | | | | | | D021-02 | 15:32 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N Y U | U | | | | | | D021-02 | 15:32 |
| | | | | RDX | .4 | mg/kg | U | N Y U | U | | | | | | D021-02 | 15:32 |
| | | | | TETRYL | .4 | mg/kg | U | N Y U | U | | | | | | D021-02 | 15:32 |
| JH0011 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N Y U | U | | | | | | D021-03 | 16:10 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N Y U | U | | | | | | D021-03 | 16:10 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N Y U | U | | | | | | D021-03 | 16:10 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N Y U | U | | | | | | D021-03 | 16:10 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N Y U | U | | | | | | D021-03 | 16:10 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N Y U | U | | | | | | D021-03 | 16:10 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N Y U | U | | | | | | D021-03 | 16:10 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N Y U | U | | | | | | D021-03 | 16:10 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N Y U | U | | | | | | D021-03 | 16:10 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N Y U | U | | | | | | D021-03 | 16:10 |
| | | | | HMX | .4 | mg/kg | U | N Y U | U | | | | | | D021-03 | 16:10 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N Y U | U | | | | | | D021-03 | 16:10 |
| | | | | RDX | .4 | mg/kg | U | N Y U | U | | | | | | D021-03 | 16:10 |
| | | | | TETRYL | .4 | mg/kg | U | N Y U | U | | | | | | D021-03 | 16:10 |
| JH0012 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N Y U | U | | | | | | D021-04 | 16:49 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N Y U | U | | | | | | D021-04 | 16:49 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N Y U | U | | | | | | D021-04 | 16:49 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N Y U | U | | | | | | D021-04 | 16:49 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N Y U | U | | | | | | D021-04 | 16:49 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N Y U | U | | | | | | D021-04 | 16:49 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N Y U | U | | | | | | D021-04 | 16:49 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N Y U | U | | | | | | D021-04 | 16:49 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N Y U | U | | | | | | D021-04 | 16:49 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N Y U | U | | | | | | D021-04 | 16:49 |
| | | | | HMX | .4 | mg/kg | U | N Y U | U | | | | | | D021-04 | 16:49 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N Y U | U | | | | | | D021-04 | 16:49 |
| | | | | RDX | .4 | mg/kg | U | N Y U | U | | | | | | D021-04 | 16:49 |
| | | | | TETRYL | .4 | mg/kg | U | N Y U | U | | | | | | D021-04 | 16:49 |
| JH0013 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N Y U | U | | | | | | D021-05 | 17:27 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N Y U | U | | | | | | D021-05 | 17:27 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N Y U | U | | | | | | D021-05 | 17:27 |

# Validation Qualifier Data Entry Verification

Run Date: October 26, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1091Q-04** | | | | | | | | | | | | | | | | |
| JH0013 | SW8330 | METHOD | N 0 1 | 2,4-DNT | .4 | mg/kg | U | N Y U | U | | | | | | D021-05 | 17:27 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N Y U | U | | | | | | D021-05 | 17:27 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N Y U | U | | | | | | D021-05 | 17:27 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N Y U | U | | | | | | D021-05 | 17:27 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N Y U | U | | | | | | D021-05 | 17:27 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N Y U | U | | | | | | D021-05 | 17:27 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N Y U | U | | | | | | D021-05 | 17:27 |
| | | | | HMX | .4 | mg/kg | U | N Y U | U | | | | | | D021-05 | 17:27 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N Y U | U | | | | | | D021-05 | 17:27 |
| | | | | RDX | .4 | mg/kg | U | N Y U | U | | | | | | D021-05 | 17:27 |
| | | | | TETRYL | .4 | mg/kg | U | N Y U | U | | | | | | D021-05 | 17:27 |
| JH0014 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N Y U | U | | | | | | D021-06 | 18:07 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N Y U | U | | | | | | D021-06 | 18:07 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N Y U | U | | | | | | D021-06 | 18:07 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N Y U | U | | | | | | D021-06 | 18:07 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N Y U | U | | | | | | D021-06 | 18:07 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N Y U | U | | | | | | D021-06 | 18:07 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N Y U | U | | | | | | D021-06 | 18:07 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N Y U | U | | | | | | D021-06 | 18:07 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N Y U | U | | | | | | D021-06 | 18:07 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N Y U | U | | | | | | D021-06 | 18:07 |
| | | | | HMX | .4 | mg/kg | U | N Y U | U | | | | | | D021-06 | 18:07 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N Y U | U | | | | | | D021-06 | 18:07 |
| | | | | RDX | .4 | mg/kg | U | N Y U | U | | | | | | D021-06 | 18:07 |
| | | | | TETRYL | .4 | mg/kg | U | N Y U | U | | | | | | D021-06 | 18:07 |
| JH0003 | E314.0 | NONE | N 0 1 | PERCHLORATE | .0574 | mg/kg | U | N Y U | U | | | | | | D021-01 | 23:56 |
| JH0004 | E314.0 | NONE | N 0 1 | PERCHLORATE | .0592 | mg/kg | U | N Y U | U | | | | | | D021-02 | 00:14 |
| JH0011 | E314.0 | NONE | N 0 1 | PERCHLORATE | .0592 | mg/kg | U | N Y U | U | | | | | | D021-03 | 00:31 |
| JH0012 | E314.0 | NONE | N 0 1 | PERCHLORATE | .0564 | mg/kg | U | N Y U | U | | | | | | D021-04 | 00:48 |
| JH0013 | E314.0 | NONE | N 0 1 | PERCHLORATE | .0597 | mg/kg | U | N Y U | U | | | | | | D021-05 | 01:05 |
| JH0014 | E314.0 | NONE | N 0 1 | PERCHLORATE | .0579 | mg/kg | U | N Y U | U | | | | | | D021-06 | 01:22 |
| **1091Q-05** | | | | | | | | | | | | | | | | |
| JH0027 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 7760 | mg/kg | | Y Y P | | | | | | | D083-01 | 22:14 |
| | | | | ANTIMONY | 11.3 | mg/kg | U | N Y U | U | | | | | | D083-01 | 22:14 |
| | | | | ARSENIC | .868 | mg/kg | J | Y Y P | J | | 15 | | | | D083-01 | 23:17 |
| | | | | BARIUM | 20.5 | mg/kg | | Y Y P | | | | | | | D083-01 | 22:14 |
| | | | | BERYLLIUM | .137 | mg/kg | J | Y Y P | J | | 15 | | | | D083-01 | 22:14 |
| | | | | CADMIUM | .566 | mg/kg | U | N Y U | U | | | | | | D083-01 | 22:14 |

# Validation Qualifier Data Entry Verification

Run Date: October 26, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1091Q-05** | | | | | | | | | | | | | | | | | | | | |
| JH0027 | SW6010B | SW3050 | N | 0 | 1 | CALCIUM | 70.5 | mg/kg | J | Y | Y | P | J | | 15 | | | | D083-01 | 22:14 |
| | | | | | | CHROMIUM | 5.93 | mg/kg | | Y | Y | P | | | | | | | D083-01 | 22:14 |
| | | | | | | COBALT | .86 | mg/kg | J | Y | Y | F | B | | 06B | 15 | | | D083-01 | 22:14 |
| | | | | | | COPPER | 1.38 | mg/kg | J | Y | Y | P | J | | 15 | | | | D083-01 | 22:14 |
| | | | | | | IRON | 4350 | mg/kg | | Y | Y | P | | | | | | | D083-01 | 22:14 |
| | | | | | | LEAD | 3.99 | mg/kg | | Y | Y | P | | | | | | | D083-01 | 23:17 |
| | | | | | | MAGNESIUM | 257 | mg/kg | | Y | Y | P | | | | | | | D083-01 | 22:14 |
| | | | | | | MANGANESE | 17.7 | mg/kg | | Y | Y | P | | | | | | | D083-01 | 22:14 |
| | | | | | | NICKEL | 3.08 | mg/kg | | Y | Y | P | | | | | | | D083-01 | 22:14 |
| | | | | | | POTASSIUM | 293 | mg/kg | J | Y | Y | F | B | | 06B | 15 | | | D083-01 | 22:14 |
| | | | | | | SELENIUM | 1.13 | mg/kg | U | N | Y | U | U | | | | | | D083-01 | 23:17 |
| | | | | | | SILVER | .516 | mg/kg | J | Y | Y | F | B | | 06A | 06B | 15 | | D083-01 | 22:14 |
| | | | | | | SODIUM | 113 | mg/kg | U | N | Y | U | U | | | | | | D083-01 | 22:14 |
| | | | | | | THALLIUM | 2.27 | mg/kg | U | N | Y | U | U | | | | | | D083-01 | 23:17 |
| | | | | | | VANADIUM | 10.1 | mg/kg | | Y | Y | P | | | | | | | D083-01 | 22:14 |
| | | | | | | ZINC | 9.04 | mg/kg | | Y | Y | P | | | | | | | D083-01 | 22:14 |
| | SW7471A | TOTAL | N | 0 | 1 | MERCURY | .113 | mg/kg | U | N | Y | U | U | | | | | | D083-01 | 16:30 |
| JH0028 | SW6010B | SW3050 | N | 0 | 1 | ALUMINUM | 14600 | mg/kg | | Y | Y | P | | | | | | | D083-02 | 22:19 |
| | | | | | | ANTIMONY | 5.75 | mg/kg | J | Y | Y | P | J | | 15 | | | | D083-02 | 22:19 |
| | | | | | | ARSENIC | 3.19 | mg/kg | | Y | Y | P | | | | | | | D083-02 | 23:22 |
| | | | | | | BARIUM | 23.9 | mg/kg | | Y | Y | P | | | | | | | D083-02 | 22:19 |
| | | | | | | BERYLLIUM | .612 | mg/kg | J | Y | Y | P | J | | 15 | | | | D083-02 | 22:19 |
| | | | | | | CADMIUM | .627 | mg/kg | U | N | Y | U | U | | | | | | D083-02 | 22:19 |
| | | | | | | CALCIUM | 37 | mg/kg | J | Y | Y | P | J | | 15 | | | | D083-02 | 22:19 |
| | | | | | | CHROMIUM | 32.4 | mg/kg | | Y | Y | P | | | | | | | D083-02 | 22:19 |
| | | | | | | COBALT | 1.97 | mg/kg | J | Y | Y | P | J | | 15 | | | | D083-02 | 22:19 |
| | | | | | | COPPER | 12.8 | mg/kg | | Y | Y | P | | | | | | | D083-02 | 22:19 |
| | | | | | | IRON | 30000 | mg/kg | | Y | Y | P | | | | | | | D083-02 | 22:19 |
| | | | | | | LEAD | 5.53 | mg/kg | | Y | Y | P | | | | | | | D083-02 | 23:22 |
| | | | | | | MAGNESIUM | 406 | mg/kg | | Y | Y | P | | | | | | | D083-02 | 22:19 |
| | | | | | | MANGANESE | 18.6 | mg/kg | | Y | Y | P | | | | | | | D083-02 | 22:19 |
| | | | | | | NICKEL | 7.55 | mg/kg | | Y | Y | P | | | | | | | D083-02 | 22:19 |
| | | | | | | POTASSIUM | 1830 | mg/kg | | Y | Y | P | | | | | | | D083-02 | 22:19 |
| | | | | | | SELENIUM | 1.25 | mg/kg | U | N | Y | U | U | | | | | | D083-02 | 23:22 |
| | | | | | | SILVER | 1.25 | mg/kg | U | N | Y | U | U | | | | | | D083-02 | 22:19 |
| | | | | | | SODIUM | 125 | mg/kg | U | N | Y | U | U | | | | | | D083-02 | 22:19 |
| | | | | | | THALLIUM | 2.51 | mg/kg | U | N | Y | U | U | | | | | | D083-02 | 23:22 |
| | | | | | | VANADIUM | 57.5 | mg/kg | | Y | Y | P | | | | | | | D083-02 | 22:19 |
| | | | | | | ZINC | 15.5 | mg/kg | | Y | Y | P | | | | | | | D083-02 | 22:19 |
| | SW7471A | TOTAL | N | 0 | 1 | MERCURY | .041 | mg/kg | J | Y | Y | P | J | | 15 | | | | D083-02 | 16:33 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1091Q-05** | | | | | | | | | | | | | | | | | | | | |
| JH0027 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D083-01 | 17:39 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D083-01 | 17:39 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D083-01 | 17:39 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D083-01 | 17:39 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D083-01 | 17:39 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D083-01 | 17:39 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D083-01 | 17:39 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D083-01 | 17:39 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D083-01 | 17:39 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D083-01 | 17:39 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | D083-01 | 17:39 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D083-01 | 17:39 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | D083-01 | 17:39 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | D083-01 | 17:39 |
| JH0028 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D083-02 | 18:17 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D083-02 | 18:17 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D083-02 | 18:17 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D083-02 | 18:17 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D083-02 | 18:17 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D083-02 | 18:17 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D083-02 | 18:17 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D083-02 | 18:17 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D083-02 | 18:17 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D083-02 | 18:17 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | D083-02 | 18:17 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D083-02 | 18:17 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | D083-02 | 18:17 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | D083-02 | 18:17 |
| JH0027 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0566 | mg/kg | U | N | Y | U | U | | | | | | D083-01 | 20:38 |
| JH0028 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0627 | mg/kg | U | N | Y | U | U | | | | | | D083-02 | 20:55 |
| **1091Q-06** | | | | | | | | | | | | | | | | | | | | |
| JH3008 | SW6010B | SW3010 | N | 0 | 1 | ALUMINUM | .287 | mg/L | | Y | Y | P | | | | | | | E118-02 | 17:51 |
| | | | | | | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:51 |
| | | | | | | ARSENIC | .01 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 21:33 |
| | | | | | | BARIUM | .0287 | mg/L | | Y | Y | P | | | | | | | E118-02 | 17:51 |
| | | | | | | BERYLLIUM | .001 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:51 |
| | | | | | | CADMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:51 |
| | | | | | | CALCIUM | .98 | mg/L | J | Y | Y | P | J | | 15 | | | | E118-02 | 17:51 |
| | | | | | | CHROMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:51 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1091Q-06** | | | | | | | | | | | | | | | | | | |
| JH3008 | SW6010B | SW3010 | N 0 1 | COBALT | .02 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:51 |
| | | | | COPPER | .02 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:51 |
| | | | | IRON | .169 | mg/L | J | Y | Y | P | J | | 15 | | | | E118-02 | 17:51 |
| | | | | LEAD | .01 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 21:33 |
| | | | | MAGNESIUM | .225 | mg/L | J | Y | Y | P | J | | 15 | | | | E118-02 | 17:51 |
| | | | | MANGANESE | .159 | mg/L | | Y | Y | P | | | | | | | E118-02 | 17:51 |
| | | | | NICKEL | .02 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:51 |
| | | | | POTASSIUM | 5 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:51 |
| | | | | SELENIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 21:33 |
| | | | | SILVER | .01 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:51 |
| | | | | SODIUM | .881 | mg/L | J | Y | Y | P | J | | 15 | | | | E118-02 | 17:51 |
| | | | | THALLIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 21:33 |
| | | | | VANADIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:51 |
| | | | | ZINC | .00617 | mg/L | J | Y | Y | P | J | | 15 | | | | E118-02 | 17:51 |
| | SW7470A | TOTAL | N 0 1 | MERCURY | .0005 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 15:36 |
| JH3008 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 20:37 |
| | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 20:37 |
| | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 20:37 |
| | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 20:37 |
| | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 20:37 |
| | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 20:37 |
| | | | | 2-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 20:37 |
| | | | | 3-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 20:37 |
| | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 20:37 |
| | | | | 4-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 20:37 |
| | | | | HMX | .001 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 20:37 |
| | | | | NITROBENZENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 20:37 |
| | | | | RDX | .0004 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 20:37 |
| | | | | TETRYL | .0004 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 20:37 |
| JH3008 | E314.0 | NONE | N 0 1 | PERCHLORATE | .005 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 03:03 |
| JH3008 | SW8270C | SW3520 | N 0 .95 | 1,2,4-TRICHLOROBENZENE | .0095 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 23:35 |
| | | | | 1,2-DICHLOROBENZENE | .0095 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 23:35 |
| | | | | 1,3-DICHLOROBENZENE | .0095 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 23:35 |
| | | | | 1,4-DICHLOROBENZENE | .0095 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 23:35 |
| | | | | 2,4,5-TRICHLOROPHENOL | .0095 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 23:35 |
| | | | | 2,4,6-TRICHLOROPHENOL | .024 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 23:35 |
| | | | | 2,4-DICHLOROPHENOL | .0095 | mg/L | U | N | Y | U | | | | | | | E118-02 | 23:35 |
| | | | | 2,4-DIMETHYLPHENOL | .0095 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 23:35 |
| | | | | 2,4-DINITROPHENOL | .024 | mg/L | U | N | Y | U | UJ | | 05B | | | | E118-02 | 23:35 |
| | | | | 2,4-DINITROTOLUENE | .0095 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 23:35 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1091Q-06** | | | | | | | | | | | | | | | | | | |
| JH3008 | SW8270C | SW3520 | N 0 .95 | 2,6-DINITROTOLUENE | .0095 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 23:35 |
| | | | | 2-CHLORONAPHTHALENE | .0095 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 23:35 |
| | | | | 2-CHLOROPHENOL | .0095 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 23:35 |
| | | | | 2-METHYLNAPHTHALENE | .0095 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 23:35 |
| | | | | 2-METHYLPHENOL | .0095 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 23:35 |
| | | | | 2-NITROANILINE | .024 | mg/L | U | N | Y | U | UJ | | 05B | | | | E118-02 | 23:35 |
| | | | | 2-NITROPHENOL | .0095 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 23:35 |
| | | | | 3,3'-DICHLOROBENZIDINE | .024 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 23:35 |
| | | | | 3-NITROANILINE | .024 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 23:35 |
| | | | | 4,6-DINITRO-2-METHYLPHENOL | .024 | mg/L | U | N | Y | U | UJ | | 05B | | | | E118-02 | 23:35 |
| | | | | 4-BROMOPHENYL-PHENYL ETHER | .0095 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 23:35 |
| | | | | 4-CHLORO-3-METHYLPHENOL | .0095 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 23:35 |
| | | | | 4-CHLOROANILINE | .0095 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 23:35 |
| | | | | 4-CHLOROPHENYL-PHENYL ETHER | .0095 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 23:35 |
| | | | | 4-METHYLPHENOL | .0095 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 23:35 |
| | | | | 4-NITROANILINE | .0095 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 23:35 |
| | | | | 4-NITROPHENOL | .024 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 23:35 |
| | | | | ACENAPHTHENE | .0095 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 23:35 |
| | | | | ACENAPHTHYLENE | .0095 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 23:35 |
| | | | | ANTHRACENE | .0095 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 23:35 |
| | | | | BENZO(A)ANTHRACENE | .0095 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 23:35 |
| | | | | BENZO(A)PYRENE | .0095 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 23:35 |
| | | | | BENZO(B)FLUORANTHENE | .0095 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 23:35 |
| | | | | BENZO(G,H,I)PERYLENE | .0095 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 23:35 |
| | | | | BENZO(K)FLUORANTHENE | .0095 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 23:35 |
| | | | | BIS(2-CHLOROETHOXY)METHANE | .0095 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 23:35 |
| | | | | BIS(2-CHLOROETHYL)ETHER | .0095 | mg/L | U | N | Y | U | UJ | | 05B | | | | E118-02 | 23:35 |
| | | | | BIS(2-CHLOROISOPROPYL)ETHER | .0095 | mg/L | U | N | Y | U | UJ | | 05B | | | | E118-02 | 23:35 |
| | | | | BIS(2-ETHYLHEXYL)PHTHALATE | .0095 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 23:35 |
| | | | | BUTYLBENZYLPHTHALATE | .0095 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 23:35 |
| | | | | CARBAZOLE | .0095 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 23:35 |
| | | | | CHRYSENE | .0095 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 23:35 |
| | | | | DI-N-BUTYLPHTHALATE | .0095 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 23:35 |
| | | | | DI-N-OCTYLPHTHALATE | .0095 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 23:35 |
| | | | | DIBENZO(A,H)ANTHRACENE | .0095 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 23:35 |
| | | | | DIBENZOFURAN | .0095 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 23:35 |
| | | | | DIETHYLPHTHALATE | .0095 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 23:35 |
| | | | | DIMETHYLPHTHALATE | .0095 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 23:35 |
| | | | | FLUORANTHENE | .0095 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 23:35 |
| | | | | FLUORENE | .0095 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 23:35 |

# Validation Qualifier Data Entry Verification

Run Date: October 26, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1091Q-06** | | | | | | | | | | | | | | | | | | |
| JH3008 | SW8270C | SW3520 | N 0 .95 | HEXACHLOROBENZENE | .0095 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 23:35 |
| | | | | HEXACHLOROBUTADIENE | .0095 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 23:35 |
| | | | | HEXACHLOROCYCLOPENTADIENE | .0095 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 23:35 |
| | | | | HEXACHLOROETHANE | .0095 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 23:35 |
| | | | | INDENO(1,2,3-CD)PYRENE | .0095 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 23:35 |
| | | | | ISOPHORONE | .0095 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 23:35 |
| | | | | N-NITROSO-DI-N-PROPYLAMINE | .0095 | mg/L | U | N | Y | U | UJ | | 05B | | | | E118-02 | 23:35 |
| | | | | N-NITROSODIPHENYLAMINE | .0095 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 23:35 |
| | | | | NAPHTHALENE | .0095 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 23:35 |
| | | | | NITROBENZENE | .0095 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 23:35 |
| | | | | PENTACHLOROPHENOL | .024 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 23:35 |
| | | | | PHENANTHRENE | .0095 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 23:35 |
| | | | | PHENOL | .0095 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 23:35 |
| | | | | PYRENE | .0095 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 23:35 |
| JH3008 | SW8260B | SW5030 | N 0 1 | 1,1,1,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:50 |
| | | | | 1,1,1-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:50 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:50 |
| | | | | 1,1,2-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:50 |
| | | | | 1,1-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:50 |
| | | | | 1,1-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:50 |
| | | | | 1,1-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:50 |
| | | | | 1,2,3-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:50 |
| | | | | 1,2,3-TRICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:50 |
| | | | | 1,2,4-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:50 |
| | | | | 1,2,4-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:50 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .01 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:50 |
| | | | | 1,2-DIBROMOETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:50 |
| | | | | 1,2-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:50 |
| | | | | 1,2-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:50 |
| | | | | 1,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:50 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:50 |
| | | | | 1,3-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:50 |
| | | | | 1,3-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:50 |
| | | | | 1,4-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:50 |
| | | | | 2,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:50 |
| | | | | 2-BUTANONE | .02 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:50 |
| | | | | 2-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:50 |
| | | | | 2-HEXANONE | .02 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:50 |
| | | | | 4-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:50 |
| | | | | 4-METHYL-2-PENTANONE | .01 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:50 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1091Q-06** | | | | | | | | | | | | | | | | | | |
| JH3008 | SW8260B | SW5030 | N 0 1 | ACETONE | .02 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:50 |
| | | | | BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:50 |
| | | | | BROMOBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:50 |
| | | | | BROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:50 |
| | | | | BROMODICHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:50 |
| | | | | BROMOFORM | .005 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:50 |
| | | | | BROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:50 |
| | | | | CARBON DISULFIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:50 |
| | | | | CARBON TETRACHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:50 |
| | | | | CHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:50 |
| | | | | CHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:50 |
| | | | | CHLOROFORM | .005 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:50 |
| | | | | CHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:50 |
| | | | | CIS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:50 |
| | | | | CIS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:50 |
| | | | | DIBROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:50 |
| | | | | DIBROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:50 |
| | | | | DICHLORODIFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:50 |
| | | | | ETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:50 |
| | | | | HEXACHLOROBUTADIENE | .005 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:50 |
| | | | | ISOPROPYL BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:50 |
| | | | | M/P-XYLENES | .01 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:50 |
| | | | | METHYLENE CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:50 |
| | | | | N-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:50 |
| | | | | N-PROPYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:50 |
| | | | | NAPHTHALENE | .005 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:50 |
| | | | | O-XYLENE | .005 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:50 |
| | | | | P-ISOPROPYLTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:50 |
| | | | | SEC-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:50 |
| | | | | STYRENE | .005 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:50 |
| | | | | TERT-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:50 |
| | | | | TETRACHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:50 |
| | | | | TOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:50 |
| | | | | TRANS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:50 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:50 |
| | | | | TRICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:50 |
| | | | | TRICHLOROFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:50 |
| | | | | VINYL CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E118-02 | 17:50 |
| **1091Q-07** | | | | | | | | | | | | | | | | | | |
| JH3006 | SW6010B | SW3010 | N 0 1 | ALUMINUM | .0778 | mg/L | J | Y | Y | F | B | | 06B | 15 | | | E147-01 | 21:29 |

# Validation Qualifier Data Entry Verification

Run Date: October 26, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1091Q-07** | | | | | | | | | | | | | | | | |
| JH3006 | SW6010B | SW3010 | N 0 1 | ANTIMONY | .1 | mg/L | U | N Y U | U | | | | | | E147-01 | 21:29 |
| | | | | ARSENIC | .01 | mg/L | U | N Y U | U | | | | | | E147-01 | 21:28 |
| | | | | BARIUM | .0135 | mg/L | | Y Y P | | | | | | | E147-01 | 21:29 |
| | | | | BERYLLIUM | .001 | mg/L | U | N Y U | U | | | | | | E147-01 | 21:29 |
| | | | | CADMIUM | .01 | mg/L | U | N Y U | U | | | | | | E147-01 | 21:29 |
| | | | | CALCIUM | .839 | mg/L | J | Y Y P | J | | 15 | | | | E147-01 | 21:29 |
| | | | | CHROMIUM | .01 | mg/L | U | N Y U | U | | | | | | E147-01 | 21:29 |
| | | | | COBALT | .02 | mg/L | U | N Y U | U | | | | | | E147-01 | 21:29 |
| | | | | COPPER | .02 | mg/L | U | N Y U | U | | | | | | E147-01 | 21:29 |
| | | | | IRON | 4.91 | mg/L | | Y Y P | | | | | | | E147-01 | 21:29 |
| | | | | LEAD | .01 | mg/L | U | N Y U | U | | | | | | E147-01 | 21:28 |
| | | | | MAGNESIUM | .376 | mg/L | J | Y Y P | J | | 15 | | | | E147-01 | 21:29 |
| | | | | MANGANESE | .218 | mg/L | | Y Y P | | | | | | | E147-01 | 21:29 |
| | | | | NICKEL | .0113 | mg/L | J | Y Y F | B | | 06B | 15 | | | E147-01 | 21:29 |
| | | | | POTASSIUM | 5 | mg/L | U | N Y U | U | | | | | | E147-01 | 21:29 |
| | | | | SELENIUM | .01 | mg/L | U | N Y U | U | | | | | | E147-01 | 21:28 |
| | | | | SILVER | .01 | mg/L | U | N Y U | U | | | | | | E147-01 | 21:29 |
| | | | | SODIUM | 1.26 | mg/L | | Y Y P | | | | | | | E147-01 | 21:29 |
| | | | | THALLIUM | .01 | mg/L | U | N Y U | U | | | | | | E147-01 | 21:28 |
| | | | | VANADIUM | .01 | mg/L | U | N Y U | U | | | | | | E147-01 | 21:29 |
| | | | | ZINC | .02 | mg/L | U | N Y U | U | | | | | | E147-01 | 21:29 |
| | SW7470A | TOTAL | N 0 1 | MERCURY | .0005 | mg/L | U | N Y U | U | | | | | | E147-01 | 11:01 |
| JH3006 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .0004 | mg/L | U | N Y U | U | | | | | | E147-01 | 23:50 |
| | | | | 1,3-DNB | .0004 | mg/L | U | N Y U | U | | | | | | E147-01 | 23:50 |
| | | | | 2,4,6-TNT | .0004 | mg/L | U | N Y U | U | | | | | | E147-01 | 23:50 |
| | | | | 2,4-DNT | .0004 | mg/L | U | N Y U | U | | | | | | E147-01 | 23:50 |
| | | | | 2,6-DNT | .0004 | mg/L | U | N Y U | U | | | | | | E147-01 | 23:50 |
| | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N Y U | U | | | | | | E147-01 | 23:50 |
| | | | | 2-NITROTOLUENE | .0004 | mg/L | U | N Y U | U | | | | | | E147-01 | 23:50 |
| | | | | 3-NITROTOLUENE | .0004 | mg/L | U | N Y U | U | | | | | | E147-01 | 23:50 |
| | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N Y U | U | | | | | | E147-01 | 23:50 |
| | | | | 4-NITROTOLUENE | .0004 | mg/L | U | N Y U | U | | | | | | E147-01 | 23:50 |
| | | | | HMX | .001 | mg/L | U | N Y U | U | | | | | | E147-01 | 23:50 |
| | | | | NITROBENZENE | .0004 | mg/L | U | N Y U | U | | | | | | E147-01 | 23:50 |
| | | | | RDX | .0004 | mg/L | U | N Y U | U | | | | | | E147-01 | 23:50 |
| | | | | TETRYL | .0004 | mg/L | U | N Y U | U | | | | | | E147-01 | 23:50 |
| JH3006 | E314.0 | NONE | N 0 1 | PERCHLORATE | .005 | mg/L | U | N Y U | U | | | | | | E147-01 | 19:57 |
| JH3006 | SW8260B | SW5030 | N 0 1 | 1,1,1,2-TETRACHLOROETHANE | .005 | mg/L | U | N Y U | U | | | | | | E147-01 | 18:46 |
| | | | | 1,1,1-TRICHLOROETHANE | .005 | mg/L | U | N Y U | U | | | | | | E147-01 | 18:46 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .005 | mg/L | U | N Y U | U | | | | | | E147-01 | 18:46 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1091Q-07** | | | | | | | | | | | | | | | | | | |
| JH3006 | SW8260B | SW5030 | N 0 1 | 1,1,2-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E147-01 | 18:46 |
| | | | | 1,1-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E147-01 | 18:46 |
| | | | | 1,1-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E147-01 | 18:46 |
| | | | | 1,1-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | E147-01 | 18:46 |
| | | | | 1,2,3-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E147-01 | 18:46 |
| | | | | 1,2,3-TRICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E147-01 | 18:46 |
| | | | | 1,2,4-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E147-01 | 18:46 |
| | | | | 1,2,4-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E147-01 | 18:46 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .01 | mg/L | U | N | Y | U | R | | 05A | | | | E147-01 | 18:46 |
| | | | | 1,2-DIBROMOETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E147-01 | 18:46 |
| | | | | 1,2-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E147-01 | 18:46 |
| | | | | 1,2-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E147-01 | 18:46 |
| | | | | 1,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E147-01 | 18:46 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E147-01 | 18:46 |
| | | | | 1,3-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E147-01 | 18:46 |
| | | | | 1,3-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E147-01 | 18:46 |
| | | | | 1,4-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E147-01 | 18:46 |
| | | | | 2,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E147-01 | 18:46 |
| | | | | 2-BUTANONE | .02 | mg/L | U | N | Y | U | U | | | | | | E147-01 | 18:46 |
| | | | | 2-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E147-01 | 18:46 |
| | | | | 2-HEXANONE | .02 | mg/L | U | N | Y | U | UJ | | 05B | | | | E147-01 | 18:46 |
| | | | | 4-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E147-01 | 18:46 |
| | | | | 4-METHYL-2-PENTANONE | .01 | mg/L | U | N | Y | U | U | | | | | | E147-01 | 18:46 |
| | | | | ACETONE | .021 | mg/L | | Y | Y | F | B | | 06C | 05A | | | E147-01 | 18:46 |
| | | | | BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E147-01 | 18:46 |
| | | | | BROMOBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E147-01 | 18:46 |
| | | | | BROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E147-01 | 18:46 |
| | | | | BROMODICHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E147-01 | 18:46 |
| | | | | BROMOFORM | .005 | mg/L | U | N | Y | U | U | | | | | | E147-01 | 18:46 |
| | | | | BROMOMETHANE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | E147-01 | 18:46 |
| | | | | CARBON DISULFIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E147-01 | 18:46 |
| | | | | CARBON TETRACHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E147-01 | 18:46 |
| | | | | CHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E147-01 | 18:46 |
| | | | | CHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E147-01 | 18:46 |
| | | | | CHLOROFORM | .005 | mg/L | U | N | Y | U | U | | | | | | E147-01 | 18:46 |
| | | | | CHLOROMETHANE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | E147-01 | 18:46 |
| | | | | CIS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E147-01 | 18:46 |
| | | | | CIS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | E147-01 | 18:46 |
| | | | | DIBROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E147-01 | 18:46 |
| | | | | DIBROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E147-01 | 18:46 |

# Validation Qualifier Data Entry Verification

Run Date: October 26, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1091Q-07** | | | | | | | | | | | | | | | | | | |
| JH3006 | SW8260B | SW5030 | N 0 1 | DICHLORODIFLUOROMETHANE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | E147-01 | 18:46 |
| | | | | ETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E147-01 | 18:46 |
| | | | | HEXACHLOROBUTADIENE | .005 | mg/L | U | N | Y | U | U | | | | | | E147-01 | 18:46 |
| | | | | ISOPROPYL BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E147-01 | 18:46 |
| | | | | M/P-XYLENES | .01 | mg/L | U | N | Y | U | U | | | | | | E147-01 | 18:46 |
| | | | | METHYLENE CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E147-01 | 18:46 |
| | | | | N-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E147-01 | 18:46 |
| | | | | N-PROPYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E147-01 | 18:46 |
| | | | | NAPHTHALENE | .005 | mg/L | U | N | Y | U | U | | | | | | E147-01 | 18:46 |
| | | | | O-XYLENE | .005 | mg/L | U | N | Y | U | U | | | | | | E147-01 | 18:46 |
| | | | | P-ISOPROPYLTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E147-01 | 18:46 |
| | | | | SEC-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E147-01 | 18:46 |
| | | | | STYRENE | .005 | mg/L | U | N | Y | U | U | | | | | | E147-01 | 18:46 |
| | | | | TERT-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E147-01 | 18:46 |
| | | | | TETRACHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E147-01 | 18:46 |
| | | | | TOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E147-01 | 18:46 |
| | | | | TRANS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E147-01 | 18:46 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | E147-01 | 18:46 |
| | | | | TRICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E147-01 | 18:46 |
| | | | | TRICHLOROFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E147-01 | 18:46 |
| | | | | VINYL CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E147-01 | 18:46 |
| **1091Q-08** | | | | | | | | | | | | | | | | | | |
| JH3001 | SW6010B | SW3010 | N 0 1 | ALUMINUM | .469 | mg/L | | Y | Y | P | | | | | | | E189-03 | 21:04 |
| | | | | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | E189-03 | 21:04 |
| | | | | ARSENIC | .01 | mg/L | U | N | Y | U | U | | | | | | E189-03 | 18:58 |
| | | | | BARIUM | .0066 | mg/L | J | Y | Y | P | J | | 15 | | | | E189-03 | 21:04 |
| | | | | BERYLLIUM | .001 | mg/L | U | N | Y | U | U | | | | | | E189-03 | 21:04 |
| | | | | CADMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E189-03 | 21:04 |
| | | | | CALCIUM | .297 | mg/L | J | Y | Y | F | B | | 06C | 15 | | | E189-03 | 21:04 |
| | | | | CHROMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E189-03 | 21:04 |
| | | | | COBALT | .02 | mg/L | U | N | Y | U | U | | | | | | E189-03 | 21:04 |
| | | | | COPPER | .02 | mg/L | U | N | Y | U | U | | | | | | E189-03 | 21:04 |
| | | | | IRON | .284 | mg/L | | Y | Y | F | B | | 06B | | | | E189-03 | 21:04 |
| | | | | LEAD | .01 | mg/L | U | N | Y | U | U | | | | | | E189-03 | 18:58 |
| | | | | MAGNESIUM | .147 | mg/L | J | Y | Y | F | B | | 06C | 15 | | | E189-03 | 21:04 |
| | | | | MANGANESE | .0142 | mg/L | | Y | Y | P | | | | | | | E189-03 | 21:04 |
| | | | | NICKEL | .02 | mg/L | U | N | Y | U | U | | | | | | E189-03 | 21:04 |
| | | | | POTASSIUM | 5 | mg/L | U | N | Y | U | U | | | | | | E189-03 | 21:04 |
| | | | | SELENIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E189-03 | 18:58 |
| | | | | SILVER | .01 | mg/L | U | N | Y | U | U | | | | | | E189-03 | 21:04 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1091Q-08** | | | | | | | | | | | | | | | | | | |
| JH3001 | SW6010B | SW3010 | N 0 1 | SODIUM | 2.31 | mg/L | | Y | Y | P | | | | | | | E189-03 | 21:04 |
| | | | | THALLIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E189-03 | 18:58 |
| | | | | VANADIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E189-03 | 21:04 |
| | | | | ZINC | .0263 | mg/L | | Y | Y | F | B | | 06B | | | | E189-03 | 21:04 |
| | SW7470A | TOTAL | N 0 1 | MERCURY | .0005 | mg/L | U | N | Y | U | U | | | | | | E189-03 | 10:52 |
| JH3009 | SW6010B | SW3010 | N 0 1 | ALUMINUM | .5 | mg/L | | Y | Y | P | | | | | | | E189-04 | 21:09 |
| | | | | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | E189-04 | 21:09 |
| | | | | ARSENIC | .01 | mg/L | U | N | Y | U | U | | | | | | E189-04 | 19:03 |
| | | | | BARIUM | .0184 | mg/L | | Y | Y | P | | | | | | | E189-04 | 21:09 |
| | | | | BERYLLIUM | .001 | mg/L | U | N | Y | U | U | | | | | | E189-04 | 21:09 |
| | | | | CADMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E189-04 | 21:09 |
| | | | | CALCIUM | 2.57 | mg/L | | Y | Y | F | B | | 06C | | | | E189-04 | 21:09 |
| | | | | CHROMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E189-04 | 21:09 |
| | | | | COBALT | .02 | mg/L | U | N | Y | U | U | | | | | | E189-04 | 21:09 |
| | | | | COPPER | .02 | mg/L | U | N | Y | U | U | | | | | | E189-04 | 21:09 |
| | | | | IRON | .234 | mg/L | | Y | Y | F | B | | 06B | | | | E189-04 | 21:09 |
| | | | | LEAD | .01 | mg/L | U | N | Y | U | U | | | | | | E189-04 | 19:03 |
| | | | | MAGNESIUM | 2.11 | mg/L | | Y | Y | P | | | | | | | E189-04 | 21:09 |
| | | | | MANGANESE | .0219 | mg/L | | Y | Y | P | | | | | | | E189-04 | 21:09 |
| | | | | NICKEL | .02 | mg/L | U | N | Y | U | U | | | | | | E189-04 | 21:09 |
| | | | | POTASSIUM | 5 | mg/L | U | N | Y | U | U | | | | | | E189-04 | 21:09 |
| | | | | SELENIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E189-04 | 19:03 |
| | | | | SILVER | .01 | mg/L | U | N | Y | U | U | | | | | | E189-04 | 21:09 |
| | | | | SODIUM | .542 | mg/L | J | Y | Y | P | J | | 15 | | | | E189-04 | 21:09 |
| | | | | THALLIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E189-04 | 19:03 |
| | | | | VANADIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E189-04 | 21:09 |
| | | | | ZINC | .0601 | mg/L | | Y | Y | P | | | | | | | E189-04 | 21:09 |
| | SW7470A | TOTAL | N 0 1 | MERCURY | .0005 | mg/L | U | N | Y | U | U | | | | | | E189-04 | 10:54 |
| JH3001 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | U | U | | | | | | E176-01W | 11:58 |
| | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | U | U | | | | | | E176-01W | 11:58 |
| | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E176-01W | 11:58 |
| | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E176-01W | 11:58 |
| | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E176-01W | 11:58 |
| | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E176-01W | 11:58 |
| | | | | 2-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E176-01W | 11:58 |
| | | | | 3-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E176-01W | 11:58 |
| | | | | 4-AM-2,6-DNT | .0018 | mg/L | | Y | Y | P | | | | | | | E176-01W | 11:58 |
| | | | | 4-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E176-01W | 11:58 |
| | | | | HMX | .001 | mg/L | U | N | Y | U | U | | | | | | E176-01W | 11:58 |
| | | | | NITROBENZENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E176-01W | 11:58 |

# Validation Qualifier Data Entry Verification

Run Date: October 26, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1091Q-08** | | | | | | | | | | | | | | | | | | | | |
| JH3001 | SW8330 | METHOD | N | 0 | 1 | RDX | .0004 | mg/L | U | N | Y | U | U | | | | | | E176-01W | 11:58 |
| | | | | | | TETRYL | .0004 | mg/L | U | N | Y | U | U | | | | | | E176-01W | 11:58 |
| JH3009 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | U | U | | | | | | E189-04 | 06:45 |
| | | | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | U | U | | | | | | E189-04 | 06:45 |
| | | | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E189-04 | 06:45 |
| | | | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E189-04 | 06:45 |
| | | | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E189-04 | 06:45 |
| | | | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E189-04 | 06:45 |
| | | | | | | 2-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E189-04 | 06:45 |
| | | | | | | 3-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E189-04 | 06:45 |
| | | | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E189-04 | 06:45 |
| | | | | | | 4-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E189-04 | 06:45 |
| | | | | | | HMX | .001 | mg/L | U | N | Y | U | U | | | | | | E189-04 | 06:45 |
| | | | | | | NITROBENZENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E189-04 | 06:45 |
| | | | | | | RDX | .0004 | mg/L | U | N | Y | U | U | | | | | | E189-04 | 06:45 |
| | | | | | | TETRYL | .0004 | mg/L | U | N | Y | U | U | | | | | | E189-04 | 06:45 |
| JH3001 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .005 | mg/L | U | N | Y | U | U | | | | | | E176-01 | 22:14 |
| JH3009 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .005 | mg/L | U | N | Y | U | U | | | | | | E189-04 | 22:31 |
| JH3001 | SW8260B | SW5030 | N | 0 | 1 | 1,1,1,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E176-01 | 19:59 |
| | | | | | | 1,1,1-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E176-01 | 19:59 |
| | | | | | | 1,1,2,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E176-01 | 19:59 |
| | | | | | | 1,1,2-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E176-01 | 19:59 |
| | | | | | | 1,1-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E176-01 | 19:59 |
| | | | | | | 1,1-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E176-01 | 19:59 |
| | | | | | | 1,1-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | E176-01 | 19:59 |
| | | | | | | 1,2,3-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E176-01 | 19:59 |
| | | | | | | 1,2,3-TRICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E176-01 | 19:59 |
| | | | | | | 1,2,4-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E176-01 | 19:59 |
| | | | | | | 1,2,4-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E176-01 | 19:59 |
| | | | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .01 | mg/L | U | N | Y | U | U | | | | | | E176-01 | 19:59 |
| | | | | | | 1,2-DIBROMOETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E176-01 | 19:59 |
| | | | | | | 1,2-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E176-01 | 19:59 |
| | | | | | | 1,2-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E176-01 | 19:59 |
| | | | | | | 1,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E176-01 | 19:59 |
| | | | | | | 1,3,5-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E176-01 | 19:59 |
| | | | | | | 1,3-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E176-01 | 19:59 |
| | | | | | | 1,3-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E176-01 | 19:59 |
| | | | | | | 1,4-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E176-01 | 19:59 |
| | | | | | | 2,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E176-01 | 19:59 |
| | | | | | | 2-BUTANONE | .02 | mg/L | U | N | Y | U | U | | | | | | E176-01 | 19:59 |

# Validation Qualifier Data Entry Verification

Run Date: October 26, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1091Q-08** | | | | | | | | | | | | | | | | | | |
| JH3001 | SW8260B | SW5030 | N 0 1 | 2-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E176-01 | 19:59 |
| | | | | 2-HEXANONE | .02 | mg/L | U | N | Y | U | U | | | | | | E176-01 | 19:59 |
| | | | | 4-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E176-01 | 19:59 |
| | | | | 4-METHYL-2-PENTANONE | .01 | mg/L | U | N | Y | U | U | | | | | | E176-01 | 19:59 |
| | | | | ACETONE | .02 | mg/L | U | N | Y | U | U | | | | | | E176-01 | 19:59 |
| | | | | BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E176-01 | 19:59 |
| | | | | BROMOBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E176-01 | 19:59 |
| | | | | BROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E176-01 | 19:59 |
| | | | | BROMODICHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E176-01 | 19:59 |
| | | | | BROMOFORM | .005 | mg/L | U | N | Y | U | U | | | | | | E176-01 | 19:59 |
| | | | | BROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E176-01 | 19:59 |
| | | | | CARBON DISULFIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E176-01 | 19:59 |
| | | | | CARBON TETRACHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E176-01 | 19:59 |
| | | | | CHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E176-01 | 19:59 |
| | | | | CHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E176-01 | 19:59 |
| | | | | CHLOROFORM | .005 | mg/L | U | N | Y | U | U | | | | | | E176-01 | 19:59 |
| | | | | CHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E176-01 | 19:59 |
| | | | | CIS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E176-01 | 19:59 |
| | | | | CIS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | E176-01 | 19:59 |
| | | | | DIBROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E176-01 | 19:59 |
| | | | | DIBROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E176-01 | 19:59 |
| | | | | DICHLORODIFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E176-01 | 19:59 |
| | | | | ETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E176-01 | 19:59 |
| | | | | HEXACHLOROBUTADIENE | .005 | mg/L | U | N | Y | U | U | | | | | | E176-01 | 19:59 |
| | | | | ISOPROPYL BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E176-01 | 19:59 |
| | | | | M/P-XYLENES | .01 | mg/L | U | N | Y | U | U | | | | | | E176-01 | 19:59 |
| | | | | METHYLENE CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E176-01 | 19:59 |
| | | | | N-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E176-01 | 19:59 |
| | | | | N-PROPYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E176-01 | 19:59 |
| | | | | NAPHTHALENE | .005 | mg/L | U | N | Y | U | U | | | | | | E176-01 | 19:59 |
| | | | | O-XYLENE | .005 | mg/L | U | N | Y | U | U | | | | | | E176-01 | 19:59 |
| | | | | P-ISOPROPYLTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E176-01 | 19:59 |
| | | | | SEC-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E176-01 | 19:59 |
| | | | | STYRENE | .005 | mg/L | U | N | Y | U | U | | | | | | E176-01 | 19:59 |
| | | | | TERT-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E176-01 | 19:59 |
| | | | | TETRACHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E176-01 | 19:59 |
| | | | | TOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E176-01 | 19:59 |
| | | | | TRANS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E176-01 | 19:59 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | E176-01 | 19:59 |
| | | | | TRICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E176-01 | 19:59 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1091Q-08** | | | | | | | | | | | | | |
| JH3001 | SW8260B | SW5030 | N 0 1 | TRICHLOROFLUOROMETHANE | .005 | mg/L | U | N Y U | U | | | E176-01 | 19:59 |
| | | | | VINYL CHLORIDE | .005 | mg/L | U | N Y U | U | | | E176-01 | 19:59 |
| JH3009 | SW8260B | SW5030 | N 0 1 | 1,1,1,2-TETRACHLOROETHANE | .005 | mg/L | U | N Y U | U | | | E189-04 | 21:51 |
| | | | | 1,1,1-TRICHLOROETHANE | .005 | mg/L | U | N Y U | U | | | E189-04 | 21:51 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .005 | mg/L | U | N Y U | U | | | E189-04 | 21:51 |
| | | | | 1,1,2-TRICHLOROETHANE | .005 | mg/L | U | N Y U | U | | | E189-04 | 21:51 |
| | | | | 1,1-DICHLOROETHANE | .005 | mg/L | U | N Y U | U | | | E189-04 | 21:51 |
| | | | | 1,1-DICHLOROETHENE | .005 | mg/L | U | N Y U | U | | | E189-04 | 21:51 |
| | | | | 1,1-DICHLOROPROPENE | .005 | mg/L | U | N Y U | U | | | E189-04 | 21:51 |
| | | | | 1,2,3-TRICHLOROBENZENE | .005 | mg/L | U | N Y U | U | | | E189-04 | 21:51 |
| | | | | 1,2,3-TRICHLOROPROPANE | .005 | mg/L | U | N Y U | U | | | E189-04 | 21:51 |
| | | | | 1,2,4-TRICHLOROBENZENE | .005 | mg/L | U | N Y U | U | | | E189-04 | 21:51 |
| | | | | 1,2,4-TRIMETHYLBENZENE | .005 | mg/L | U | N Y U | U | | | E189-04 | 21:51 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .01 | mg/L | U | N Y U | U | | | E189-04 | 21:51 |
| | | | | 1,2-DIBROMOETHANE | .005 | mg/L | U | N Y U | U | | | E189-04 | 21:51 |
| | | | | 1,2-DICHLOROBENZENE | .005 | mg/L | U | N Y U | U | | | E189-04 | 21:51 |
| | | | | 1,2-DICHLOROETHANE | .005 | mg/L | U | N Y U | U | | | E189-04 | 21:51 |
| | | | | 1,2-DICHLOROPROPANE | .005 | mg/L | U | N Y U | U | | | E189-04 | 21:51 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .005 | mg/L | U | N Y U | U | | | E189-04 | 21:51 |
| | | | | 1,3-DICHLOROBENZENE | .005 | mg/L | U | N Y U | U | | | E189-04 | 21:51 |
| | | | | 1,3-DICHLOROPROPANE | .005 | mg/L | U | N Y U | U | | | E189-04 | 21:51 |
| | | | | 1,4-DICHLOROBENZENE | .005 | mg/L | U | N Y U | U | | | E189-04 | 21:51 |
| | | | | 2,2-DICHLOROPROPANE | .005 | mg/L | U | N Y U | U | | | E189-04 | 21:51 |
| | | | | 2-BUTANONE | .02 | mg/L | U | N Y U | U | | | E189-04 | 21:51 |
| | | | | 2-CHLOROTOLUENE | .005 | mg/L | U | N Y U | U | | | E189-04 | 21:51 |
| | | | | 2-HEXANONE | .02 | mg/L | U | N Y U | U | | | E189-04 | 21:51 |
| | | | | 4-CHLOROTOLUENE | .005 | mg/L | U | N Y U | U | | | E189-04 | 21:51 |
| | | | | 4-METHYL-2-PENTANONE | .01 | mg/L | U | N Y U | U | | | E189-04 | 21:51 |
| | | | | ACETONE | .02 | mg/L | U | N Y U | U | | | E189-04 | 21:51 |
| | | | | BENZENE | .005 | mg/L | U | N Y U | U | | | E189-04 | 21:51 |
| | | | | BROMOBENZENE | .005 | mg/L | U | N Y U | U | | | E189-04 | 21:51 |
| | | | | BROMOCHLOROMETHANE | .005 | mg/L | U | N Y U | U | | | E189-04 | 21:51 |
| | | | | BROMODICHLOROMETHANE | .005 | mg/L | U | N Y U | U | | | E189-04 | 21:51 |
| | | | | BROMOFORM | .005 | mg/L | U | N Y U | U | | | E189-04 | 21:51 |
| | | | | BROMOMETHANE | .005 | mg/L | U | N Y U | U | | | E189-04 | 21:51 |
| | | | | CARBON DISULFIDE | .005 | mg/L | U | N Y U | U | | | E189-04 | 21:51 |
| | | | | CARBON TETRACHLORIDE | .005 | mg/L | U | N Y U | U | | | E189-04 | 21:51 |
| | | | | CHLOROBENZENE | .005 | mg/L | U | N Y U | U | | | E189-04 | 21:51 |
| | | | | CHLOROETHANE | .005 | mg/L | U | N Y U | U | | | E189-04 | 21:51 |
| | | | | CHLOROFORM | .005 | mg/L | U | N Y U | U | | | E189-04 | 21:51 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1091Q-08** | | | | | | | | | | | | | | | | | | |
| JH3009 | SW8260B | SW5030 | N 0 1 | CHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E189-04 | 21:51 |
| | | | | CIS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E189-04 | 21:51 |
| | | | | CIS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | E189-04 | 21:51 |
| | | | | DIBROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E189-04 | 21:51 |
| | | | | DIBROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E189-04 | 21:51 |
| | | | | DICHLORODIFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E189-04 | 21:51 |
| | | | | ETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E189-04 | 21:51 |
| | | | | HEXACHLOROBUTADIENE | .005 | mg/L | U | N | Y | U | U | | | | | | E189-04 | 21:51 |
| | | | | ISOPROPYL BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E189-04 | 21:51 |
| | | | | M/P-XYLENES | .01 | mg/L | U | N | Y | U | U | | | | | | E189-04 | 21:51 |
| | | | | METHYLENE CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E189-04 | 21:51 |
| | | | | N-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E189-04 | 21:51 |
| | | | | N-PROPYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E189-04 | 21:51 |
| | | | | NAPHTHALENE | .005 | mg/L | U | N | Y | U | U | | | | | | E189-04 | 21:51 |
| | | | | O-XYLENE | .005 | mg/L | U | N | Y | U | U | | | | | | E189-04 | 21:51 |
| | | | | P-ISOPROPYLTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E189-04 | 21:51 |
| | | | | SEC-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E189-04 | 21:51 |
| | | | | STYRENE | .005 | mg/L | U | N | Y | U | U | | | | | | E189-04 | 21:51 |
| | | | | TERT-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E189-04 | 21:51 |
| | | | | TETRACHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E189-04 | 21:51 |
| | | | | TOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E189-04 | 21:51 |
| | | | | TRANS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E189-04 | 21:51 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | E189-04 | 21:51 |
| | | | | TRICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E189-04 | 21:51 |
| | | | | TRICHLOROFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E189-04 | 21:51 |
| | | | | VINYL CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E189-04 | 21:51 |
| **1091Q-09** | | | | | | | | | | | | | | | | | | |
| JH3007 | SW6010B | SW3010 | N 0 1 | ALUMINUM | .069 | mg/L | J | Y | Y | P | J | | 15 | | | | E205-01 | 18:28 |
| | | | | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | E205-01 | 18:28 |
| | | | | ARSENIC | .00277 | mg/L | J | Y | Y | P | J | | 15 | | | | E205-01 | 13:34 |
| | | | | BARIUM | .00471 | mg/L | J | Y | Y | P | J | | 15 | | | | E205-01 | 18:28 |
| | | | | BERYLLIUM | .001 | mg/L | U | N | Y | U | U | | | | | | E205-01 | 18:28 |
| | | | | CADMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E205-01 | 18:28 |
| | | | | CALCIUM | .398 | mg/L | J | Y | Y | F | B | | 06C | 15 | | | E205-01 | 18:28 |
| | | | | CHROMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E205-01 | 18:28 |
| | | | | COBALT | .02 | mg/L | U | N | Y | U | U | | | | | | E205-01 | 18:28 |
| | | | | COPPER | .02 | mg/L | U | N | Y | U | U | | | | | | E205-01 | 18:28 |
| | | | | IRON | .0767 | mg/L | J | Y | Y | P | J | | 15 | | | | E205-01 | 18:28 |
| | | | | LEAD | .01 | mg/L | U | N | Y | U | U | | | | | | E205-01 | 13:34 |
| | | | | MAGNESIUM | .291 | mg/L | J | Y | Y | F | B | | 06C | 15 | | | E205-01 | 18:28 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1091Q-09** | | | | | | | | | | | | | | | | | | | | |
| JH3007 | SW6010B | SW3010 | N | 0 | 1 | MANGANESE | .0196 | mg/L | | Y | Y | P | | | | | | | E205-01 | 18:28 |
| | | | | | | NICKEL | .02 | mg/L | U | N | Y | U | U | | | | | | E205-01 | 18:28 |
| | | | | | | POTASSIUM | 5 | mg/L | U | N | Y | U | U | | | | | | E205-01 | 18:28 |
| | | | | | | SELENIUM | .00306 | mg/L | J | Y | Y | F | B | | 06A | 15 | | | E205-01 | 13:34 |
| | | | | | | SILVER | .01 | mg/L | U | N | Y | U | U | | | | | | E205-01 | 18:28 |
| | | | | | | SODIUM | 1.26 | mg/L | | Y | Y | P | | | | | | | E205-01 | 18:28 |
| | | | | | | THALLIUM | .00565 | mg/L | J | Y | Y | F | B | | 06B | 15 | | | E205-01 | 13:34 |
| | | | | | | VANADIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E205-01 | 18:28 |
| | | | | | | ZINC | .02 | mg/L | U | N | Y | U | U | | | | | | E205-01 | 18:28 |
| | SW7470A | TOTAL | N | 0 | 1 | MERCURY | .0005 | mg/L | U | N | Y | U | U | | | | | | E205-01 | 11:16 |
| JH3010 | SW6010B | SW3010 | N | 0 | 1 | ALUMINUM | .0575 | mg/L | J | Y | Y | | J | | 15 | | | | E205-02 | 18:32 |
| | | | | | | ANTIMONY | .1 | mg/L | U | N | Y | | U | | | | | | E205-02 | 18:32 |
| | | | | | | ARSENIC | .01 | mg/L | U | N | Y | | U | | | | | | E205-02 | 13:38 |
| | | | | | | BARIUM | .0052 | mg/L | J | Y | Y | | J | | 15 | | | | E205-02 | 18:32 |
| | | | | | | BERYLLIUM | .001 | mg/L | U | N | Y | | U | | | | | | E205-02 | 18:32 |
| | | | | | | CADMIUM | .01 | mg/L | U | N | Y | | U | | | | | | E205-02 | 18:32 |
| | | | | | | CALCIUM | .403 | mg/L | J | Y | Y | F | B | | 06C | 15 | | | E205-02 | 18:32 |
| | | | | | | CHROMIUM | .01 | mg/L | U | N | Y | | U | | | | | | E205-02 | 18:32 |
| | | | | | | COBALT | .02 | mg/L | U | N | Y | | U | | | | | | E205-02 | 18:32 |
| | | | | | | COPPER | .02 | mg/L | U | N | Y | | U | | | | | | E205-02 | 18:32 |
| | | | | | | IRON | .0762 | mg/L | J | Y | Y | | J | | 15 | | | | E205-02 | 18:32 |
| | | | | | | LEAD | .01 | mg/L | U | N | Y | | U | | | | | | E205-02 | 13:38 |
| | | | | | | MAGNESIUM | .287 | mg/L | J | Y | Y | F | B | | 06C | 15 | | | E205-02 | 18:32 |
| | | | | | | MANGANESE | .019 | mg/L | | Y | Y | | | | | | | | E205-02 | 18:32 |
| | | | | | | NICKEL | .00998 | mg/L | J | Y | Y | F | B | | 06B | 15 | | | E205-02 | 18:32 |
| | | | | | | POTASSIUM | 5 | mg/L | U | N | Y | | U | | | | | | E205-02 | 18:32 |
| | | | | | | SELENIUM | .00373 | mg/L | J | Y | Y | F | B | | 06A | 15 | | | E205-02 | 13:38 |
| | | | | | | SILVER | .01 | mg/L | U | N | Y | | U | | | | | | E205-02 | 18:32 |
| | | | | | | SODIUM | 1.25 | mg/L | | Y | Y | | | | | | | | E205-02 | 18:32 |
| | | | | | | THALLIUM | .01 | mg/L | U | N | Y | | U | | | | | | E205-02 | 13:38 |
| | | | | | | VANADIUM | .01 | mg/L | U | N | Y | | U | | | | | | E205-02 | 18:32 |
| | | | | | | ZINC | .02 | mg/L | U | N | Y | | U | | | | | | E205-02 | 18:32 |
| | SW7470A | TOTAL | N | 0 | 1 | MERCURY | .0005 | mg/L | U | N | Y | | U | | | | | | E205-02 | 11:19 |
| JH3007 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | U | U | | | | | | E205-01 | 10:39 |
| | | | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | U | U | | | | | | E205-01 | 10:39 |
| | | | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E205-01 | 10:39 |
| | | | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E205-01 | 10:39 |
| | | | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E205-01 | 10:39 |
| | | | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E205-01 | 10:39 |
| | | | | | | 2-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E205-01 | 10:39 |

# Validation Qualifier Data Entry Verification

Run Date: October 26, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1091Q-09** | | | | | | | | | | | | | |
| JH3007 | SW8330 | METHOD | N 0 1 | 3-NITROTOLUENE | .0004 | mg/L | U | N Y U | U | | | E205-01 | 10:39 |
| | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N Y U | U | | | E205-01 | 10:39 |
| | | | | 4-NITROTOLUENE | .0004 | mg/L | U | N Y U | U | | | E205-01 | 10:39 |
| | | | | HMX | .001 | mg/L | U | N Y U | U | | | E205-01 | 10:39 |
| | | | | NITROBENZENE | .0004 | mg/L | U | N Y U | U | | | E205-01 | 10:39 |
| | | | | RDX | .0004 | mg/L | U | N Y U | U | | | E205-01 | 10:39 |
| | | | | TETRYL | .0004 | mg/L | U | N Y U | U | | | E205-01 | 10:39 |
| JH3010 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .0004 | mg/L | U | N Y | U | | | E205-02 | 11:18 |
| | | | | 1,3-DNB | .0004 | mg/L | U | N Y | U | | | E205-02 | 11:18 |
| | | | | 2,4,6-TNT | .0004 | mg/L | U | N Y | U | | | E205-02 | 11:18 |
| | | | | 2,4-DNT | .0004 | mg/L | U | N Y | U | | | E205-02 | 11:18 |
| | | | | 2,6-DNT | .0004 | mg/L | U | N Y | U | | | E205-02 | 11:18 |
| | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N Y | U | | | E205-02 | 11:18 |
| | | | | 2-NITROTOLUENE | .0004 | mg/L | U | N Y | U | | | E205-02 | 11:18 |
| | | | | 3-NITROTOLUENE | .0004 | mg/L | U | N Y | U | | | E205-02 | 11:18 |
| | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N Y | U | | | E205-02 | 11:18 |
| | | | | 4-NITROTOLUENE | .0004 | mg/L | U | N Y | U | | | E205-02 | 11:18 |
| | | | | HMX | .001 | mg/L | U | N Y | U | | | E205-02 | 11:18 |
| | | | | NITROBENZENE | .0004 | mg/L | U | N Y | U | | | E205-02 | 11:18 |
| | | | | RDX | .0004 | mg/L | U | N Y | U | | | E205-02 | 11:18 |
| | | | | TETRYL | .0004 | mg/L | U | N Y | U | | | E205-02 | 11:18 |
| JH3007 | E314.0 | NONE | N 0 1 | PERCHLORATE | .005 | mg/L | U | N Y U | U | | | E205-01 | 04:58 |
| JH3010 | E314.0 | NONE | N 0 1 | PERCHLORATE | .005 | mg/L | U | N Y | U | | | E205-02 | 05:15 |
| JH3007 | SW8260B | SW5030 | N 0 1 | 1,1,1,2-TETRACHLOROETHANE | .005 | mg/L | U | N Y U | U | | | E205-01 | 23:34 |
| | | | | 1,1,1-TRICHLOROETHANE | .005 | mg/L | U | N Y U | U | | | E205-01 | 23:34 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .005 | mg/L | U | N Y U | U | | | E205-01 | 23:34 |
| | | | | 1,1,2-TRICHLOROETHANE | .005 | mg/L | U | N Y U | U | | | E205-01 | 23:34 |
| | | | | 1,1-DICHLOROETHANE | .005 | mg/L | U | N Y U | U | | | E205-01 | 23:34 |
| | | | | 1,1-DICHLOROETHENE | .005 | mg/L | U | N Y U | U | | | E205-01 | 23:34 |
| | | | | 1,1-DICHLOROPROPENE | .005 | mg/L | U | N Y U | U | | | E205-01 | 23:34 |
| | | | | 1,2,3-TRICHLOROBENZENE | .005 | mg/L | U | N Y U | U | | | E205-01 | 23:34 |
| | | | | 1,2,3-TRICHLOROPROPANE | .005 | mg/L | U | N Y U | U | | | E205-01 | 23:34 |
| | | | | 1,2,4-TRICHLOROBENZENE | .005 | mg/L | U | N Y U | U | | | E205-01 | 23:34 |
| | | | | 1,2,4-TRIMETHYLBENZENE | .005 | mg/L | U | N Y U | U | | | E205-01 | 23:34 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .01 | mg/L | U | N Y U | U | | | E205-01 | 23:34 |
| | | | | 1,2-DIBROMOETHANE | .005 | mg/L | U | N Y U | U | | | E205-01 | 23:34 |
| | | | | 1,2-DICHLOROBENZENE | .005 | mg/L | U | N Y U | U | | | E205-01 | 23:34 |
| | | | | 1,2-DICHLOROETHANE | .005 | mg/L | U | N Y U | U | | | E205-01 | 23:34 |
| | | | | 1,2-DICHLOROPROPANE | .005 | mg/L | U | N Y U | U | | | E205-01 | 23:34 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .005 | mg/L | U | N Y U | U | | | E205-01 | 23:34 |

# Validation Qualifier Data Entry Verification

Run Date: October 26, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1091Q-09** | | | | | | | | | | | | | | | | | | |
| JH3007 | SW8260B | SW5030 | N 0 1 | 1,3-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E205-01 | 23:34 |
| | | | | 1,3-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E205-01 | 23:34 |
| | | | | 1,4-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E205-01 | 23:34 |
| | | | | 2,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E205-01 | 23:34 |
| | | | | 2-BUTANONE | .02 | mg/L | U | N | Y | U | U | | | | | | E205-01 | 23:34 |
| | | | | 2-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E205-01 | 23:34 |
| | | | | 2-HEXANONE | .02 | mg/L | U | N | Y | U | U | | | | | | E205-01 | 23:34 |
| | | | | 4-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E205-01 | 23:34 |
| | | | | 4-METHYL-2-PENTANONE | .01 | mg/L | U | N | Y | U | U | | | | | | E205-01 | 23:34 |
| | | | | ACETONE | .02 | mg/L | U | N | Y | U | U | | | | | | E205-01 | 23:34 |
| | | | | BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E205-01 | 23:34 |
| | | | | BROMOBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E205-01 | 23:34 |
| | | | | BROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E205-01 | 23:34 |
| | | | | BROMODICHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E205-01 | 23:34 |
| | | | | BROMOFORM | .005 | mg/L | U | N | Y | U | U | | | | | | E205-01 | 23:34 |
| | | | | BROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E205-01 | 23:34 |
| | | | | CARBON DISULFIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E205-01 | 23:34 |
| | | | | CARBON TETRACHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E205-01 | 23:34 |
| | | | | CHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E205-01 | 23:34 |
| | | | | CHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E205-01 | 23:34 |
| | | | | CHLOROFORM | .005 | mg/L | U | N | Y | U | U | | | | | | E205-01 | 23:34 |
| | | | | CHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E205-01 | 23:34 |
| | | | | CIS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E205-01 | 23:34 |
| | | | | CIS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | E205-01 | 23:34 |
| | | | | DIBROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E205-01 | 23:34 |
| | | | | DIBROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E205-01 | 23:34 |
| | | | | DICHLORODIFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E205-01 | 23:34 |
| | | | | ETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E205-01 | 23:34 |
| | | | | HEXACHLOROBUTADIENE | .005 | mg/L | U | N | Y | U | U | | | | | | E205-01 | 23:34 |
| | | | | ISOPROPYL BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E205-01 | 23:34 |
| | | | | M/P-XYLENES | .01 | mg/L | U | N | Y | U | U | | | | | | E205-01 | 23:34 |
| | | | | METHYLENE CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E205-01 | 23:34 |
| | | | | N-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E205-01 | 23:34 |
| | | | | N-PROPYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E205-01 | 23:34 |
| | | | | NAPHTHALENE | .005 | mg/L | U | N | Y | U | U | | | | | | E205-01 | 23:34 |
| | | | | O-XYLENE | .005 | mg/L | U | N | Y | U | U | | | | | | E205-01 | 23:34 |
| | | | | P-ISOPROPYLTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E205-01 | 23:34 |
| | | | | SEC-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E205-01 | 23:34 |
| | | | | STYRENE | .005 | mg/L | U | N | Y | U | U | | | | | | E205-01 | 23:34 |
| | | | | TERT-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E205-01 | 23:34 |

# Validation Qualifier Data Entry Verification

Run Date: October 26, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1091Q-09** | | | | | | | | | | | | | | | | | | |
| JH3007 | SW8260B | SW5030 | N 0 1 | TETRACHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E205-01 | 23:34 |
| | | | | TOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E205-01 | 23:34 |
| | | | | TRANS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E205-01 | 23:34 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | E205-01 | 23:34 |
| | | | | TRICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E205-01 | 23:34 |
| | | | | TRICHLOROFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E205-01 | 23:34 |
| | | | | VINYL CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E205-01 | 23:34 |
| JH3010 | SW8260B | SW5030 | N 0 1 | 1,1,1,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | | U | | | | | | E205-02 | 00:11 |
| | | | | 1,1,1-TRICHLOROETHANE | .005 | mg/L | U | N | Y | | U | | | | | | E205-02 | 00:11 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | | U | | | | | | E205-02 | 00:11 |
| | | | | 1,1,2-TRICHLOROETHANE | .005 | mg/L | U | N | Y | | U | | | | | | E205-02 | 00:11 |
| | | | | 1,1-DICHLOROETHANE | .005 | mg/L | U | N | Y | | U | | | | | | E205-02 | 00:11 |
| | | | | 1,1-DICHLOROETHENE | .005 | mg/L | U | N | Y | | U | | | | | | E205-02 | 00:11 |
| | | | | 1,1-DICHLOROPROPENE | .005 | mg/L | U | N | Y | | U | | | | | | E205-02 | 00:11 |
| | | | | 1,2,3-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | | U | | | | | | E205-02 | 00:11 |
| | | | | 1,2,3-TRICHLOROPROPANE | .005 | mg/L | U | N | Y | | U | | | | | | E205-02 | 00:11 |
| | | | | 1,2,4-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | | U | | | | | | E205-02 | 00:11 |
| | | | | 1,2,4-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | | U | | | | | | E205-02 | 00:11 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .01 | mg/L | U | N | Y | | U | | | | | | E205-02 | 00:11 |
| | | | | 1,2-DIBROMOETHANE | .005 | mg/L | U | N | Y | | U | | | | | | E205-02 | 00:11 |
| | | | | 1,2-DICHLOROBENZENE | .005 | mg/L | U | N | Y | | U | | | | | | E205-02 | 00:11 |
| | | | | 1,2-DICHLOROETHANE | .005 | mg/L | U | N | Y | | U | | | | | | E205-02 | 00:11 |
| | | | | 1,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | | U | | | | | | E205-02 | 00:11 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | | U | | | | | | E205-02 | 00:11 |
| | | | | 1,3-DICHLOROBENZENE | .005 | mg/L | U | N | Y | | U | | | | | | E205-02 | 00:11 |
| | | | | 1,3-DICHLOROPROPANE | .005 | mg/L | U | N | Y | | U | | | | | | E205-02 | 00:11 |
| | | | | 1,4-DICHLOROBENZENE | .005 | mg/L | U | N | Y | | U | | | | | | E205-02 | 00:11 |
| | | | | 2,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | | U | | | | | | E205-02 | 00:11 |
| | | | | 2-BUTANONE | .02 | mg/L | U | N | Y | | U | | | | | | E205-02 | 00:11 |
| | | | | 2-CHLOROTOLUENE | .005 | mg/L | U | N | Y | | U | | | | | | E205-02 | 00:11 |
| | | | | 2-HEXANONE | .02 | mg/L | U | N | Y | | U | | | | | | E205-02 | 00:11 |
| | | | | 4-CHLOROTOLUENE | .005 | mg/L | U | N | Y | | U | | | | | | E205-02 | 00:11 |
| | | | | 4-METHYL-2-PENTANONE | .01 | mg/L | U | N | Y | | U | | | | | | E205-02 | 00:11 |
| | | | | ACETONE | .02 | mg/L | U | N | Y | | U | | | | | | E205-02 | 00:11 |
| | | | | BENZENE | .005 | mg/L | U | N | Y | | U | | | | | | E205-02 | 00:11 |
| | | | | BROMOBENZENE | .005 | mg/L | U | N | Y | | U | | | | | | E205-02 | 00:11 |
| | | | | BROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | | U | | | | | | E205-02 | 00:11 |
| | | | | BROMODICHLOROMETHANE | .005 | mg/L | U | N | Y | | U | | | | | | E205-02 | 00:11 |
| | | | | BROMOFORM | .005 | mg/L | U | N | Y | | U | | | | | | E205-02 | 00:11 |
| | | | | BROMOMETHANE | .005 | mg/L | U | N | Y | | U | | | | | | E205-02 | 00:11 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1091Q-09** | | | | | | | | | | | | | | | | | | |
| JH3010 | SW8260B | SW5030 | N 0 1 | CARBON DISULFIDE | .005 | mg/L | U | N | Y | | U | | | | | | E205-02 | 00:11 |
| | | | | CARBON TETRACHLORIDE | .005 | mg/L | U | N | Y | | U | | | | | | E205-02 | 00:11 |
| | | | | CHLOROBENZENE | .005 | mg/L | U | N | Y | | U | | | | | | E205-02 | 00:11 |
| | | | | CHLOROETHANE | .005 | mg/L | U | N | Y | | U | | | | | | E205-02 | 00:11 |
| | | | | CHLOROFORM | .005 | mg/L | U | N | Y | | U | | | | | | E205-02 | 00:11 |
| | | | | CHLOROMETHANE | .005 | mg/L | U | N | Y | | U | | | | | | E205-02 | 00:11 |
| | | | | CIS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | | U | | | | | | E205-02 | 00:11 |
| | | | | CIS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | | U | | | | | | E205-02 | 00:11 |
| | | | | DIBROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | | U | | | | | | E205-02 | 00:11 |
| | | | | DIBROMOMETHANE | .005 | mg/L | U | N | Y | | U | | | | | | E205-02 | 00:11 |
| | | | | DICHLORODIFLUOROMETHANE | .005 | mg/L | U | N | Y | | U | | | | | | E205-02 | 00:11 |
| | | | | ETHYLBENZENE | .005 | mg/L | U | N | Y | | U | | | | | | E205-02 | 00:11 |
| | | | | HEXACHLOROBUTADIENE | .005 | mg/L | U | N | Y | | U | | | | | | E205-02 | 00:11 |
| | | | | ISOPROPYL BENZENE | .005 | mg/L | U | N | Y | | U | | | | | | E205-02 | 00:11 |
| | | | | M/P-XYLENES | .01 | mg/L | U | N | Y | | U | | | | | | E205-02 | 00:11 |
| | | | | METHYLENE CHLORIDE | .005 | mg/L | U | N | Y | | U | | | | | | E205-02 | 00:11 |
| | | | | N-BUTYLBENZENE | .005 | mg/L | U | N | Y | | U | | | | | | E205-02 | 00:11 |
| | | | | N-PROPYLBENZENE | .005 | mg/L | U | N | Y | | U | | | | | | E205-02 | 00:11 |
| | | | | NAPHTHALENE | .005 | mg/L | U | N | Y | | U | | | | | | E205-02 | 00:11 |
| | | | | O-XYLENE | .005 | mg/L | U | N | Y | | U | | | | | | E205-02 | 00:11 |
| | | | | P-ISOPROPYLTOLUENE | .005 | mg/L | U | N | Y | | U | | | | | | E205-02 | 00:11 |
| | | | | SEC-BUTYLBENZENE | .005 | mg/L | U | N | Y | | U | | | | | | E205-02 | 00:11 |
| | | | | STYRENE | .005 | mg/L | U | N | Y | | U | | | | | | E205-02 | 00:11 |
| | | | | TERT-BUTYLBENZENE | .005 | mg/L | U | N | Y | | U | | | | | | E205-02 | 00:11 |
| | | | | TETRACHLOROETHENE | .005 | mg/L | U | N | Y | | U | | | | | | E205-02 | 00:11 |
| | | | | TOLUENE | .005 | mg/L | U | N | Y | | U | | | | | | E205-02 | 00:11 |
| | | | | TRANS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | | U | | | | | | E205-02 | 00:11 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | | U | | | | | | E205-02 | 00:11 |
| | | | | TRICHLOROETHENE | .005 | mg/L | U | N | Y | | U | | | | | | E205-02 | 00:11 |
| | | | | TRICHLOROFLUOROMETHANE | .005 | mg/L | U | N | Y | | U | | | | | | E205-02 | 00:11 |
| | | | | VINYL CHLORIDE | .005 | mg/L | U | N | Y | | U | | | | | | E205-02 | 00:11 |
| **1091Q-10** | | | | | | | | | | | | | | | | | | |
| JH3003 | SW6010B | SW3010 | N 0 1 | ALUMINUM | .482 | mg/L | | Y | Y | P | | | | | | | F246-02 | 19:49 |
| | | | | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 19:49 |
| | | | | ARSENIC | .01 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 15:15 |
| | | | | BARIUM | .0252 | mg/L | | Y | Y | P | | | | | | | F246-02 | 19:49 |
| | | | | BERYLLIUM | .001 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 19:49 |
| | | | | CADMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 19:49 |
| | | | | CALCIUM | 1.68 | mg/L | | Y | Y | P | | | | | | | F246-02 | 19:49 |
| | | | | CHROMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 19:49 |

# Validation Qualifier Data Entry Verification

Run Date: October 26, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1091Q-10** | | | | | | | | | | | | | | | | | | |
| JH3003 | SW6010B | SW3010 | N 0 1 | COBALT | .0109 | mg/L | J | Y | Y | P | J | | 15 | | | | F246-02 | 19:49 |
| | | | | COPPER | .02 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 19:49 |
| | | | | IRON | .236 | mg/L | | Y | Y | P | | | | | | | F246-02 | 19:49 |
| | | | | LEAD | .01 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 15:15 |
| | | | | MAGNESIUM | .278 | mg/L | J | Y | Y | F | J | | 15 | | | | F246-02 | 19:49 |
| | | | | MANGANESE | .0216 | mg/L | | Y | Y | P | | | | | | | F246-02 | 19:49 |
| | | | | NICKEL | .02 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 19:49 |
| | | | | POTASSIUM | 5 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 19:49 |
| | | | | SELENIUM | .01 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 15:15 |
| | | | | SILVER | .01 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 19:49 |
| | | | | SODIUM | .801 | mg/L | J | Y | Y | P | J | | 15 | | | | F246-02 | 19:49 |
| | | | | THALLIUM | .01 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 15:15 |
| | | | | VANADIUM | .01 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 19:49 |
| | | | | ZINC | .02 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 19:49 |
| | SW7470A | TOTAL | N 0 1 | MERCURY | .0005 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 17:08 |
| JH3004 | SW6010B | SW3010 | N 0 1 | ALUMINUM | .537 | mg/L | | Y | Y | P | | | | | | | F250-05 | 20:03 |
| | | | | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 20:03 |
| | | | | ARSENIC | .01 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 15:29 |
| | | | | BARIUM | .00627 | mg/L | J | Y | Y | P | J | | 15 | | | | F250-05 | 20:03 |
| | | | | BERYLLIUM | .001 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 20:03 |
| | | | | CADMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 20:03 |
| | | | | CALCIUM | 2.36 | mg/L | | Y | Y | P | | | | | | | F250-05 | 20:03 |
| | | | | CHROMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 20:03 |
| | | | | COBALT | .0115 | mg/L | J | Y | Y | P | J | | 15 | | | | F250-05 | 20:03 |
| | | | | COPPER | .02 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 20:03 |
| | | | | IRON | .271 | mg/L | | Y | Y | P | | | | | | | F250-05 | 20:03 |
| | | | | LEAD | .01 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 15:29 |
| | | | | MAGNESIUM | .342 | mg/L | J | Y | Y | F | J | | 15 | | | | F250-05 | 20:03 |
| | | | | MANGANESE | .0132 | mg/L | | Y | Y | P | | | | | | | F250-05 | 20:03 |
| | | | | NICKEL | .02 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 20:03 |
| | | | | POTASSIUM | 5 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 20:03 |
| | | | | SELENIUM | .01 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 15:29 |
| | | | | SILVER | .01 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 20:03 |
| | | | | SODIUM | .801 | mg/L | J | Y | Y | P | J | | 15 | | | | F250-05 | 20:03 |
| | | | | THALLIUM | .01 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 15:29 |
| | | | | VANADIUM | .01 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 20:03 |
| | | | | ZINC | .02 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 20:03 |
| | SW7470A | TOTAL | N 0 1 | MERCURY | .0005 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 17:20 |
| JH3003 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 16:47 |
| | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 16:47 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1091Q-10** | | | | | | | | | | | | | | | | | | |
| JH3003 | SW8330 | METHOD | N 0 1 | 2,4,6-TNT | .0004 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 16:47 |
| | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 16:47 |
| | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 16:47 |
| | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 16:47 |
| | | | | 2-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 16:47 |
| | | | | 3-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 16:47 |
| | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 16:47 |
| | | | | 4-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 16:47 |
| | | | | HMX | .001 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 16:47 |
| | | | | NITROBENZENE | .0004 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 16:47 |
| | | | | RDX | .0004 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 16:47 |
| | | | | TETRYL | .0004 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 16:47 |
| JH3004 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 18:05 |
| | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 18:05 |
| | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 18:05 |
| | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 18:05 |
| | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 18:05 |
| | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 18:05 |
| | | | | 2-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 18:05 |
| | | | | 3-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 18:05 |
| | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 18:05 |
| | | | | 4-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 18:05 |
| | | | | HMX | .001 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 18:05 |
| | | | | NITROBENZENE | .0004 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 18:05 |
| | | | | RDX | .0004 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 18:05 |
| | | | | TETRYL | .0004 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 18:05 |
| JH3003 | E314.0 | NONE | N 0 1 | PERCHLORATE | .005 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 15:21 |
| JH3004 | E314.0 | NONE | N 0 1 | PERCHLORATE | .005 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 15:55 |
| JH3003 | SW8260B | SW5030 | N 0 1 | 1,1,1,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 07:35 |
| | | | | 1,1,1-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 07:35 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 07:35 |
| | | | | 1,1,2-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 07:35 |
| | | | | 1,1-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 07:35 |
| | | | | 1,1-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 07:35 |
| | | | | 1,1-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 07:35 |
| | | | | 1,2,3-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 07:35 |
| | | | | 1,2,3-TRICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 07:35 |
| | | | | 1,2,4-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 07:35 |
| | | | | 1,2,4-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 07:35 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .01 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 07:35 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1091Q-10** | | | | | | | | | | | | | | | | | | |
| JH3003 | SW8260B | SW5030 | N 0 1 | 1,2-DIBROMOETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 07:35 |
| | | | | 1,2-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 07:35 |
| | | | | 1,2-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 07:35 |
| | | | | 1,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 07:35 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 07:35 |
| | | | | 1,3-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 07:35 |
| | | | | 1,3-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 07:35 |
| | | | | 1,4-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 07:35 |
| | | | | 2,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 07:35 |
| | | | | 2-BUTANONE | .02 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 07:35 |
| | | | | 2-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 07:35 |
| | | | | 2-HEXANONE | .02 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 07:35 |
| | | | | 4-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 07:35 |
| | | | | 4-METHYL-2-PENTANONE | .01 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 07:35 |
| | | | | ACETONE | .02 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 07:35 |
| | | | | BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 07:35 |
| | | | | BROMOBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 07:35 |
| | | | | BROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 07:35 |
| | | | | BROMODICHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 07:35 |
| | | | | BROMOFORM | .005 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 07:35 |
| | | | | BROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 07:35 |
| | | | | CARBON DISULFIDE | .005 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 07:35 |
| | | | | CARBON TETRACHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 07:35 |
| | | | | CHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 07:35 |
| | | | | CHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 07:35 |
| | | | | CHLOROFORM | .005 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 07:35 |
| | | | | CHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 07:35 |
| | | | | CIS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 07:35 |
| | | | | CIS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 07:35 |
| | | | | DIBROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 07:35 |
| | | | | DIBROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 07:35 |
| | | | | DICHLORODIFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 07:35 |
| | | | | ETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 07:35 |
| | | | | HEXACHLOROBUTADIENE | .005 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 07:35 |
| | | | | ISOPROPYL BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 07:35 |
| | | | | M/P-XYLENES | .01 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 07:35 |
| | | | | METHYLENE CHLORIDE | .0036 | mg/L | J | Y | Y | F | B | | 06A | 06D | 15 | | F246-02 | 07:35 |
| | | | | N-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 07:35 |
| | | | | N-PROPYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 07:35 |
| | | | | NAPHTHALENE | .005 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 07:35 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1091Q-10** | | | | | | | | | | | | | | | | | | |
| JH3003 | SW8260B | SW5030 | N 0 1 | O-XYLENE | .005 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 07:35 |
| | | | | P-ISOPROPYLTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 07:35 |
| | | | | SEC-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 07:35 |
| | | | | STYRENE | .005 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 07:35 |
| | | | | TERT-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 07:35 |
| | | | | TETRACHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 07:35 |
| | | | | TOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 07:35 |
| | | | | TRANS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 07:35 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 07:35 |
| | | | | TRICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 07:35 |
| | | | | TRICHLOROFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 07:35 |
| | | | | VINYL CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | F246-02 | 07:35 |
| JH3004 | SW8260B | SW5030 | N 0 1 | 1,1,1,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 10:37 |
| | | | | 1,1,1-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 10:37 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 10:37 |
| | | | | 1,1,2-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 10:37 |
| | | | | 1,1-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 10:37 |
| | | | | 1,1-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 10:37 |
| | | | | 1,1-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 10:37 |
| | | | | 1,2,3-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 10:37 |
| | | | | 1,2,3-TRICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 10:37 |
| | | | | 1,2,4-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 10:37 |
| | | | | 1,2,4-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 10:37 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .01 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 10:37 |
| | | | | 1,2-DIBROMOETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 10:37 |
| | | | | 1,2-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 10:37 |
| | | | | 1,2-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 10:37 |
| | | | | 1,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 10:37 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 10:37 |
| | | | | 1,3-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 10:37 |
| | | | | 1,3-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 10:37 |
| | | | | 1,4-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 10:37 |
| | | | | 2,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 10:37 |
| | | | | 2-BUTANONE | .02 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 10:37 |
| | | | | 2-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 10:37 |
| | | | | 2-HEXANONE | .02 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 10:37 |
| | | | | 4-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 10:37 |
| | | | | 4-METHYL-2-PENTANONE | .01 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 10:37 |
| | | | | ACETONE | .02 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 10:37 |
| | | | | BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 10:37 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1091Q-10** | | | | | | | | | | | | | | | | | | |
| JH3004 | SW8260B | SW5030 | N 0 1 | BROMOBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 10:37 |
| | | | | BROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 10:37 |
| | | | | BROMODICHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 10:37 |
| | | | | BROMOFORM | .005 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 10:37 |
| | | | | BROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 10:37 |
| | | | | CARBON DISULFIDE | .005 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 10:37 |
| | | | | CARBON TETRACHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 10:37 |
| | | | | CHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 10:37 |
| | | | | CHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 10:37 |
| | | | | CHLOROFORM | .005 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 10:37 |
| | | | | CHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 10:37 |
| | | | | CIS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 10:37 |
| | | | | CIS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 10:37 |
| | | | | DIBROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 10:37 |
| | | | | DIBROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 10:37 |
| | | | | DICHLORODIFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 10:37 |
| | | | | ETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 10:37 |
| | | | | HEXACHLOROBUTADIENE | .005 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 10:37 |
| | | | | ISOPROPYL BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 10:37 |
| | | | | M/P-XYLENES | .01 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 10:37 |
| | | | | METHYLENE CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 10:37 |
| | | | | N-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 10:37 |
| | | | | N-PROPYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 10:37 |
| | | | | NAPHTHALENE | .005 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 10:37 |
| | | | | O-XYLENE | .005 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 10:37 |
| | | | | P-ISOPROPYLTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 10:37 |
| | | | | SEC-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 10:37 |
| | | | | STYRENE | .005 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 10:37 |
| | | | | TERT-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 10:37 |
| | | | | TETRACHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 10:37 |
| | | | | TOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 10:37 |
| | | | | TRANS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 10:37 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 10:37 |
| | | | | TRICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 10:37 |
| | | | | TRICHLOROFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 10:37 |
| | | | | VINYL CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | F250-05 | 10:37 |

***Quality Assurance Report***
***For Ranges West of Iron Mountain Road***
***Parcel HR-115Q***
***IT Project No 796887***
***Fort McClellan Quality Assurance Report***

## *1.0 Overview*

Twelve soil, 2 sediment, 2 surface water, and 6 groundwater samples were collected in support of the investigation at Fort McClellan (FTMC) Parcel HR-115Q, Ranges West of Iron Mountain Road. All samples were submitted to EMAX Laboratories, Inc. for analysis. Soil, sediment, and surface water samples were analyzed for target analyte list (TAL) metals, nitroaromatic-nitramine explosives, and perchlorate. Groundwater samples were analyzed for (TAL) metals, nitroaromatic-nitramine explosives, perchlorate, and target compound list (TCL) volatiles. QC samples consisted of the following types and quantities: 2 field duplicates, 1 MS/MSD, 4 trip blanks, and 4 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 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 data and validation 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 (DQO) were met, laboratory analytical results and data packages were examined for compliance with SW846 SW6010B/SW7000 Series, SW8330, SW8260B and U.S. Environmental Protection Agency (EPA) 314.0 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 analytical holding times were met.

## *2.2 Rejected Data*

Table 2.2-1 lists all rejected analytical data for soil and aqueous samples. Sample re-collection at this time is not warranted due to all rejected results being reported as non-detect.

**Table 2.2-1 Rejected Analytical Results**

| Sample Delivery Group | Sample Number | Contaminant | Reason |
|---|---|---|---|
| 10115Q-04 | JK3006 | Acetone | Calibration Relative Response Factor (RRF) <0.05. |
| 10115Q-05 | JK3002, JK3003, JK3004 & JK3005 | Acetone | Calibration Relative Response Factor (RRF) <0.05. |
| 10115Q-06 | JK3001 | Acetone | Calibration Relative Response Factor (RRF) <0.05. |

## *2.3 Blank Results*

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

- Trip blanks (TBs) consist of a VOC sample vial filled in the laboratory with ASTM Type II reagent grade water, transported to the sampling site, handled like an environmental sample and returned to the laboratory for analysis. Trip blanks are prepared only when VOC samples are collected and analyzed. Trip blanks are used to assess the potential introduction of contaminants from sample containers during the transportation and/or storage procedures. Trip blanks were sent with all aqueous samples shipped to the laboratory requiring volatile analysis.

- Equipment rinsates (ER) are samples of analyte-free deionized water poured into, or 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 an analyte-free matrix which is analyzed to verify the analysis system is free of contamination. ICBs and CCBs are analyzed immediately after the initial and continuing calibration is performed.

Field sample concentrations were evaluated to determine if the sample results could have been biased by the presence of any contamination measured in trip blanks, 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 |
|---|---|---|---|
| 10115Q-01 | JK0001, JK0006 & JK0007 | Cobalt | Cobalt results for samples JK0001, JK0006 & JK0007 were "B" qualified. |
| | JK0002 & JK0011 | Chromium | Chromium results for samples JK0002 & JK0011 were "B" qualified. |
| | JK0004 & JK0009 | Beryllium | Beryllium results for samples JK0004 & JK0009 were "B" qualified. |
| | JK0007 & JK0009 | Selenium | Selenium results for samples JK0007 & JK0009 were "B" qualified. |
| 10115Q-02 | JK1001 | Potassium | Potassium result for sample JK1001 was "B" qualified. |
| 10115Q-03 | JK2002 | Aluminum | Aluminum result for sample JK2002 was "B" qualified. |
| 10115Q-04 | JK3006 | Magnesium<br>Selenium<br>Barium | Magnesium, selenium and barium results for sample JK3006 were "B" qualified. |
| 10115Q-05 | JK3004 | Magnesium | Magnesium result for sample JK3004 was "B" qualified. |
| 10115Q-06 | JK3001 | Aluminum<br>Nickel<br>Calcium<br>Iron<br>Magnesium | Aluminum, nickel, calcium, iron and magnesium results for sample JK3001 were "B" qualified. |

## *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.

Overall sampling and analysis precision for this task was assessed using field duplicate (FD) samples. Laboratory precision was assessed by laboratory control sample/laboratory control sample duplicate (LCS/LCSD) and matrix spike/matrix spike duplicate (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 list field duplicate, LCS/LCSD and MS/MSD RPD anomalies.

**Table 2.4-1 Precision Acceptance Criteria**

| Field/Laboratory QC Type | Matrix | |
|---|---|---|
| | Aqueous | Soil |
| Field Duplicate (Both Organic & Inorganic) | RPD < 35% | RPD < 50% |
| Perchlorate LCS/LCSD and MS/MSD | RPD < 10% | RPD < 20% |
| Nitroaromatic and Nitramine Explosives LCS/LCSD and MS/MSD | Refer to Table 8-1of FTMC "Installation Wide Sample and Analysis Plan" | Refer to Table 8-1of FTMC "Installation Wide Sample and Analysis Plan" |
| Metals LCS/LCSD and MS/MSD | RPD < 20% | 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 |
|---|---|---|---|
| 10115Q-01 | JK0007 (MS/MSD) | Manganese (31) | Manganese results for samples JK0001 through JK0007 and JK0009 through JK0013 were "J" qualified due 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 SW846 SW6010B/SW7000 Series methodology, nitroaromatic-nitramine explosives by SW8330, perchlorate by EPA 314.0, and TCL volatiles by SW8260B. 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 LCS/LCSD and MS/MSD Spike Recovery Criteria Exceedances**

| Sample Delivery Group | Sample Number | Contaminant | Action |
|---|---|---|---|
| 10115Q-01 | JK0001, JK0002, JK0003, JK0004, JK0005, JK0006, JK0007, JK0009, JK0010, JK0011, JK0012 & JK0013 | Antimony (LB)<br>Arsenic (LB)<br>Cadmium (LB)<br>Lead (LB)<br>Manganese (LB,HB)<br>Selenium (LB) | Antimony, arsenic, cadmium, lead, manganese and selenium results were "J"/"UJ"/"B" 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. Soil sample data are being used to assess potential impacts to terrestrial biota that might use the site for food and/or habitat purposes. Monitoring well locations where chosen to establish groundwater flow direction and site-specific geology, and provide 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-115Q Ranges West of Iron Mountain Road. 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-115Q requirement for completeness is 95% for both aqueous and soil samples. The % Completeness for this task is calculated to be 99.5%

- % Completeness = (1178 / 1184) x 100 = 99.5%.

## *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-115Q
# Ranges West of Iron Mountain Road
# Analytical Summary
# Project No. 796887

## HR-115Q Soil Sampling

| Sample Location | Sample Name | Sample Number | Date Sampled | Analytical Suite |
|---|---|---|---|---|
| HR-115Q-MW01 | HR-115Q-MW01-SS-JK0001-REG | JK0001 | 08-Dec-00 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-115Q-MW01-DS-JK0002-REG | JK0002 | 08-Dec-00 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-115Q-MW02 | HR-115Q-MW02-SS-JK0003-REG | JK0003 | 07-Dec-00 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-115Q-MW02-DS-JK0004-REG | JK0004 | 07-Dec-00 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-115Q-MW03 | HR-115Q-MW03-SS-JK0005-REG | JK0005 | 07-Dec-00 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-115Q-MW03-DS-JK0006-REG | JK0006 | 07-Dec-00 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-115Q-MW03-DS-JK0007-FD | JK0007 | 07-Dec-00 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-115Q-MW03-DS-JK0008-FS | JK0008 | 07-Dec-00 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-115Q-MW04 | HR-115Q-MW04-SS-JK0009-REG | JK0009 | 08-Dec-00 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-115Q-MW04-DS-JK0010-REG | JK0010 | 08-Dec-00 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-115Q-MW05 | HR-115Q-MW05-SS-JK0011-REG | JK0011 | 08-Dec-00 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-115Q-MW05-DS-JK0012-REG | JK0012 | 08-Dec-00 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |

## HR-115Q Groundwater Sampling

| Sample Location | Sample Name | Sample Number | Date Sampled | Analytical Suite |
|---|---|---|---|---|
| HR-115Q-MW01 | HR-115Q-MW01-GW-JK3001-REG | JK3001 | 16-Apr-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-115Q-MW02 | HR-115Q-MW02-GW-JK3002-REG | JK3002 | 12-Apr-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-115Q-MW02-GW-JK3004-FD | JK3004 | 12-Apr-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-115Q-MW03 | HR-115Q-MW03-GW-JK3003-REG | JK3003 | 11-Apr-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-115Q-MW04 | HR-115Q-MW04-GW-JK3005-REG | JK3005 | 12-Apr-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-115Q-MW04-GW-JK3005-MS | JK3005-MS | 12-Apr-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-115Q-MW04-GW-JK3005-MSD | JK3005-MSD | 12-Apr-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-115Q-MW05 | HR-115Q-MW05-GW-JK3006-REG | JK3006 | 10-Apr-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |

## HR-115Q Sediment-Surface Water Sampling

| Sample Location | Sample Name | Sample Number | Date Sampled | Analytical Suite |
|---|---|---|---|---|
| HR-115Q-SW/SD01 | HR-115Q-SW/SD01-SD-JK1001-REG | JK1001 | 28-Feb-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330, Perchlorate by EPA 314.0, TOC by SW9060 and Grain size by ASTM 421/422. |
| | HR-115Q-SW/SD01-SW-JK2001-REG | JK2001 | 28-Feb-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-115Q-SW/SD02 | HR-115Q-SW/SD02-SD-JK1002-REG | JK1002 | 28-Feb-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330, Perchlorate by EPA 314.0, TOC by SW9060 and Grain size by ASTM 421/422. |
| | HR-115Q-SW/SD02-SW-JK2002-REG | JK2002 | 28-Feb-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |

# ATTACHMENT B

# DATA VALIDATION SUMMARY REPORT

***Data Validation Summary Report***
***for the Site Investigation Performed at the***
***Ranges West of Iron Mountain Road (Parcel HR-115Q)***
***Fort McClellan***

## *1.0 Introduction*

Level III data validation was performed on 100% of the environmental samples collected at Ranges West of Iron Mountain Road (Parcel HR-115Q). The analytical data consisted of six sample delivery groups (SDG) 10115Q-01 and 10115Q-02, 10115Q-03, 10115Q-04, 10115Q-05, and 10115Q-06, 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) |
|---|
| Volatile Organics by GC/MS SW846 8260B |
| TAL Metals by SW846 6010B/7470A |
| Nitroaromatic and Nitramine Explosives by SW846 8330 |
| Perchlorate by EPA 314.0 |

## *2.0 Procedures*

The sample data were validated following the logic identified in the *USEPA Contract Laboratory Program (CLP) National Functional Guidelines For Inorganic Data Review (February 1994)* and *USEPA Contract Laboratory Program National Functional Guidelines For Organic Review (October 1999)* for all areas except Blanks. *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's) were applied to all sample results. As the result of the use of Update III SW846 test methods for the analytical data and the application of the 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 Chromatograph (GC) and Gas Chromatograph/Mass Spectra (GC/MS) calibration areas and is due to the fact that the analytical methods are "performance-based", and allows 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, CFR, SOP's, QAP) 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 qualification. The only rejected data ('R' qualified) were due to "poor performing" volatile compounds (ketones, some halogenated hydrocarbons, e.g.), which exhibited poor calibration responses in the associated calibration data, and samples that were reanalyzed and have more than one set of results reported. The "R" qualifier was assigned to the samples with more than one set of results to indicate that a given result should not be used to characterize a particular constituent or an analysis for a given sample.

Individual validation reports have been prepared for each parameter in each SDG 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 Parcel HR-115. 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 Volatile Organics by GC/MS SW846 8260B*

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:

<u>Holding Times</u>

Technical holding time criteria were met for all samples.

<u>Initial and Continuing Calibration</u>

The initial calibration and continuing calibrations associated with the project samples met QC criteria, with the exception of the following:

- The following exhibited individual ICAL/CCAL RRF<.1 and/or RSD>30%, CCAL %D's > 20%:

| SDG Number | Samples Affected | Compound(s) | Validation Qualifier |
|---|---|---|---|
| 10115Q-04 | JK3006 | Acetone, 1,2,4-Trichlorobenzene, Chloromethane, Dichlorodifluoromethane, Naphthalene, Styrene | R/UJ |
| 10115Q-05 | JK3002, JK3003, JK3004, JK3005 | Acetone, Dichlorodifluoromethane, Styrene, Tetrachloroethene, tert-Butylbenzene | R/UJ |
| 10115Q-06 | JK3001 | Acetone, Bromomethane | R/UJ |

Blanks

The 5X/10X rule for contaminants found in the associated equipment rinses, trip blanks, and method blanks was applied to all sample results. All were found to be acceptable.

Surrogate Recoveries

All surrogate recoveries were within acceptable QC criteria.

Matrix Spike / Matrix Spike Duplicate

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

Laboratory Control Sample (LCS)

LCS 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.

Internal Standards

All internal standards met QC criteria

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.

### *4.2 TAL Metals by SW846 6010B/7470A/7471A*

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 exception of the following:

Note: 'B' Qualifiers were applied to all of the following sample results.

| SDG | Samples Affected | Element/Elements | Associated Blank Contamination |
|---|---|---|---|
| 10115Q-01 | JK0001, JK0006, JK0007 | Cobalt | Calibration |
| | JK0002, JK0011 | Chromium | Method |
| | JK0004, JK0009 | Beryllium | Calibration |
| | JK0007, JK0009 | Selenium | Calibration |
| 10115Q-02 | JK1001 | Potassium | Calibration |
| 10115Q-03 | JK2002 | Aluminum | Method |
| 10115Q-04 | JK3006 | Magnesium, Selenium, Barium | Calibration/ER |
| 10115Q-05 | JK3004 | Magnesium | Calibration |
| 10115Q-06 | JK3001 | Aluminum, Nickel, Calcium, Iron, Magnesium | Method/Calibration/ER |

'B' qualifiers assigned to designate blank contamination, which are identification qualifiers, take precedence over estimating qualifiers, assigned due to quantitation.

Matrix Spike / Matrix Spike Duplicate

Batch QC was performed for the project samples and all QC criteria were met, with the exception of the following:

| SDG | Samples Affected | Element/Elements | Validation Qualifier |
|---|---|---|---|
| 10115-01 | ALL | Antimony, Arsenic, Cadmium, Lead, Manganese, Selenium | J/UJ/B |

Laboratory Control Sample (LCS)

All QC criteria were met for the LCS associated with the project sample analyses.

Interference Check Sample (ICS)

All ICS % recoveries for the project samples were acceptable.

ICP Serial Dilutions

All QC criteria were met, with the exception of the following:

| SDG | Samples Affected | Element/Elements | Validation Qualifier |
|---|---|---|---|
| 10115-01 | ALL | Barium | J |

Field Duplicates

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

Sample Quantitation

Results quantified between the IDL and the RL ("J" flagged by the laboratory) were qualified as estimated (J).

### *4.3 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

The initial calibration 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 acceptable QC ranges.

Matrix Spike / Matrix Spike Duplicate

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

Laboratory Control Sample (LCS)

LCS 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.

### *4.4 Perchlorate by EPA 314.0*

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

Laboratory Control Sample (LCS)

All QC criteria were met for the LCS associated with the project sample analyses.

Field Duplicates

Original and field duplicate results were evaluated and no problems were noted.

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.

## *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 "nondetect" may be inaccurate or imprecise. The nondetect result should be estimated.

## Validation Reason Code Definitions

| Reason Code | Definition |
|---|---|
| 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

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10115Q-01** | | | | | | | | | | | | | | | | | | |
| JK0001 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 5120 | mg/kg | | Y | Y | P | | | | | | | L116-01 | 19:45 |
| | | | | ANTIMONY | 11.4 | mg/kg | U | N | Y | U | UJ | | 08A | | | | L116-01 | 19:45 |
| | | | | ARSENIC | 1.45 | mg/kg | | Y | Y | P | J | | 08A | | | | L116-01 | 16:30 |
| | | | | BARIUM | 36.3 | mg/kg | | Y | Y | P | J | | 13 | | | | L116-01 | 19:45 |
| | | | | BERYLLIUM | .332 | mg/kg | J | Y | Y | P | J | | 15 | | | | L116-01 | 19:45 |
| | | | | CADMIUM | .568 | mg/kg | U | N | Y | U | UJ | | 08A | | | | L116-01 | 19:45 |
| | | | | CALCIUM | 79.2 | mg/kg | J | Y | Y | P | J | | 15 | | | | L116-01 | 19:45 |
| | | | | CHROMIUM | 4.96 | mg/kg | | Y | Y | P | | | | | | | L116-01 | 19:45 |
| | | | | COBALT | 1.69 | mg/kg | J | Y | Y | F | B | | 15 | 06B | | | L116-01 | 19:45 |
| | | | | COPPER | 2.63 | mg/kg | | Y | Y | P | | | | | | | L116-01 | 19:45 |
| | | | | IRON | 3600 | mg/kg | | Y | Y | P | | | | | | | L116-01 | 19:45 |
| | | | | LEAD | 10.5 | mg/kg | | Y | Y | P | J | | 08A | | | | L116-01 | 16:30 |
| | | | | MAGNESIUM | 145 | mg/kg | | Y | Y | P | | | | | | | L116-01 | 19:45 |
| | | | | MANGANESE | 213 | mg/kg | | Y | Y | P | J | | 08A | 08B | | | L116-01 | 19:45 |
| | | | | NICKEL | 2.46 | mg/kg | | Y | Y | P | | | | | | | L116-01 | 19:45 |
| | | | | POTASSIUM | 568 | mg/kg | U | N | Y | U | U | | | | | | L116-01 | 19:45 |
| | | | | SELENIUM | 1.14 | mg/kg | U | N | Y | U | UJ | | 08A | | | | L116-01 | 16:30 |
| | | | | SILVER | 1.14 | mg/kg | U | N | Y | U | U | | | | | | L116-01 | 19:45 |
| | | | | SODIUM | 114 | mg/kg | U | N | Y | U | U | | | | | | L116-01 | 19:45 |
| | | | | THALLIUM | 2.27 | mg/kg | U | N | Y | U | U | | | | | | L116-01 | 16:30 |
| | | | | VANADIUM | 7.31 | mg/kg | | Y | Y | P | | | | | | | L116-01 | 19:45 |
| | | | | ZINC | 16.2 | mg/kg | | Y | Y | P | | | | | | | L116-01 | 19:45 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .029 | mg/kg | J | Y | Y | P | J | | 15 | | | | L116-01 | 11:49 |
| JK0002 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 384 | mg/kg | | Y | Y | P | | | | | | | L116-02 | 19:50 |
| | | | | ANTIMONY | 11.8 | mg/kg | U | N | Y | U | UJ | | 08A | | | | L116-02 | 19:50 |
| | | | | ARSENIC | 1.18 | mg/kg | U | N | Y | U | UJ | | 08A | | | | L116-02 | 17:02 |
| | | | | BARIUM | .306 | mg/kg | J | Y | Y | P | J | | 13 | 15 | | | L116-02 | 19:50 |
| | | | | BERYLLIUM | 1.18 | mg/kg | U | N | Y | U | U | | | | | | L116-02 | 19:50 |
| | | | | CADMIUM | .591 | mg/kg | U | N | Y | U | UJ | | 08A | | | | L116-02 | 19:50 |
| | | | | CALCIUM | 16.8 | mg/kg | J | Y | Y | P | J | | 15 | | | | L116-02 | 19:50 |
| | | | | CHROMIUM | 1.41 | mg/kg | | Y | Y | F | B | | 06A | | | | L116-02 | 19:50 |
| | | | | COBALT | 2.36 | mg/kg | U | N | Y | U | U | | | | | | L116-02 | 19:50 |
| | | | | COPPER | 2.36 | mg/kg | U | N | Y | U | U | | | | | | L116-02 | 19:50 |
| | | | | IRON | 164 | mg/kg | | Y | Y | P | | | | | | | L116-02 | 19:50 |
| | | | | LEAD | .61 | mg/kg | J | Y | Y | P | J | | 08A | 15 | | | L116-02 | 17:02 |
| | | | | MAGNESIUM | 6.82 | mg/kg | J | Y | Y | P | J | | 15 | | | | L116-02 | 19:50 |
| | | | | MANGANESE | .565 | mg/kg | J | Y | Y | P | J | | 08A | 15 | 08B | | L116-02 | 19:50 |
| | | | | NICKEL | 2.36 | mg/kg | U | N | Y | U | U | | | | | | L116-02 | 19:50 |
| | | | | POTASSIUM | 591 | mg/kg | U | N | Y | U | U | | | | | | L116-02 | 19:50 |
| | | | | SELENIUM | 1.18 | mg/kg | U | N | Y | U | UJ | | 08A | | | | L116-02 | 17:02 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10115Q-01** | | | | | | | | | | | | | | | | | | |
| JK0002 | SW6010B | SW3050 | N 0 1 | SILVER | 1.18 | mg/kg | U | N | Y | U | U | | | | | | L116-02 | 19:50 |
| | | | | SODIUM | 118 | mg/kg | U | N | Y | U | U | | | | | | L116-02 | 19:50 |
| | | | | THALLIUM | 2.36 | mg/kg | U | N | Y | U | U | | | | | | L116-02 | 17:02 |
| | | | | VANADIUM | 2.77 | mg/kg | | Y | Y | P | | | | | | | L116-02 | 19:50 |
| | | | | ZINC | .497 | mg/kg | J | Y | Y | P | J | | 15 | | | | L116-02 | 19:50 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .118 | mg/kg | U | N | Y | U | U | | | | | | L116-02 | 11:52 |
| JK0003 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 5920 | mg/kg | | Y | Y | P | | | | | | | L100-01 | 18:49 |
| | | | | ANTIMONY | 11.4 | mg/kg | U | N | Y | U | UJ | | 08A | | | | L100-01 | 18:49 |
| | | | | ARSENIC | 2.05 | mg/kg | | Y | Y | P | J | | 08A | | | | L100-01 | 15:34 |
| | | | | BARIUM | 64.5 | mg/kg | | Y | Y | P | J | | 13 | | | | L100-01 | 18:49 |
| | | | | BERYLLIUM | .444 | mg/kg | J | Y | Y | P | J | | 15 | | | | L100-01 | 18:49 |
| | | | | CADMIUM | .57 | mg/kg | U | N | Y | U | UJ | | 08A | | | | L100-01 | 18:49 |
| | | | | CALCIUM | 184 | mg/kg | | Y | Y | P | | | | | | | L100-01 | 18:49 |
| | | | | CHROMIUM | 8.29 | mg/kg | | Y | Y | P | | | | | | | L100-01 | 18:49 |
| | | | | COBALT | 2.79 | mg/kg | | Y | Y | P | | | | | | | L100-01 | 18:49 |
| | | | | COPPER | 4.35 | mg/kg | | Y | Y | P | | | | | | | L100-01 | 18:49 |
| | | | | IRON | 5720 | mg/kg | | Y | Y | P | | | | | | | L100-01 | 18:49 |
| | | | | LEAD | 17.1 | mg/kg | | Y | Y | P | J | | 08A | | | | L100-01 | 15:34 |
| | | | | MAGNESIUM | 170 | mg/kg | | Y | Y | P | | | | | | | L100-01 | 18:49 |
| | | | | MANGANESE | 367 | mg/kg | | Y | Y | P | J | | 08A | 08B | | | L100-01 | 18:49 |
| | | | | NICKEL | 3.1 | mg/kg | | Y | Y | P | | | | | | | L100-01 | 18:49 |
| | | | | POTASSIUM | 219 | mg/kg | J | Y | Y | P | J | | 15 | | | | L100-01 | 18:49 |
| | | | | SELENIUM | 1.14 | mg/kg | U | N | Y | U | UJ | | 08A | | | | L100-01 | 15:34 |
| | | | | SILVER | 1.14 | mg/kg | U | N | Y | U | U | | | | | | L100-01 | 18:49 |
| | | | | SODIUM | 114 | mg/kg | U | N | Y | U | U | | | | | | L100-01 | 18:49 |
| | | | | THALLIUM | 2.28 | mg/kg | U | N | Y | U | U | | | | | | L100-01 | 15:34 |
| | | | | VANADIUM | 10.4 | mg/kg | | Y | Y | P | | | | | | | L100-01 | 18:49 |
| | | | | ZINC | 14.3 | mg/kg | | Y | Y | P | | | | | | | L100-01 | 18:49 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .046 | mg/kg | J | Y | Y | P | J | | 15 | | | | L100-01 | 11:29 |
| JK0004 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 1990 | mg/kg | | Y | Y | P | | | | | | | L100-02 | 18:54 |
| | | | | ANTIMONY | 10.8 | mg/kg | U | N | Y | U | UJ | | 08A | | | | L100-02 | 18:54 |
| | | | | ARSENIC | .805 | mg/kg | J | Y | Y | P | J | | 08A | | | | L100-02 | 15:39 |
| | | | | BARIUM | 7.24 | mg/kg | | Y | Y | P | J | | 13 | | | | L100-02 | 18:54 |
| | | | | BERYLLIUM | .0728 | mg/kg | J | Y | Y | F | B | | 06B | 15 | | | L100-02 | 18:54 |
| | | | | CADMIUM | .542 | mg/kg | U | N | Y | U | UJ | | 08A | | | | L100-02 | 18:54 |
| | | | | CALCIUM | 45 | mg/kg | J | Y | Y | P | J | | 15 | | | | L100-02 | 18:54 |
| | | | | CHROMIUM | 11.3 | mg/kg | | Y | Y | P | | | | | | | L100-02 | 18:54 |
| | | | | COBALT | 2.17 | mg/kg | U | N | Y | U | U | | | | | | L100-02 | 18:54 |
| | | | | COPPER | 2.51 | mg/kg | | Y | Y | P | | | | | | | L100-02 | 18:54 |
| | | | | IRON | 4630 | mg/kg | | Y | Y | P | | | | | | | L100-02 | 18:54 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10115Q-01** | | | | | | | | | | | | | | | | | | |
| JK0004 | SW6010B | SW3050 | N 0 1 | LEAD | 2.4 | mg/kg | | Y | Y | P | J | | 08A | | | | L100-02 | 15:39 |
| | | | | MAGNESIUM | 46.8 | mg/kg | J | Y | Y | P | J | | 15 | | | | L100-02 | 18:54 |
| | | | | MANGANESE | 24.3 | mg/kg | | Y | Y | P | J | | 08A | 08B | | | L100-02 | 18:54 |
| | | | | NICKEL | 1.58 | mg/kg | J | Y | Y | P | J | | 15 | | | | L100-02 | 18:54 |
| | | | | POTASSIUM | 542 | mg/kg | U | N | Y | U | U | | | | | | L100-02 | 18:54 |
| | | | | SELENIUM | 1.08 | mg/kg | U | N | Y | U | UJ | | 08A | | | | L100-02 | 15:39 |
| | | | | SILVER | 1.08 | mg/kg | U | N | Y | U | U | | | | | | L100-02 | 18:54 |
| | | | | SODIUM | 108 | mg/kg | U | N | Y | U | U | | | | | | L100-02 | 18:54 |
| | | | | THALLIUM | 2.17 | mg/kg | U | N | Y | U | U | | | | | | L100-02 | 15:39 |
| | | | | VANADIUM | 11.5 | mg/kg | | Y | Y | P | | | | | | | L100-02 | 18:54 |
| | | | | ZINC | 3.9 | mg/kg | | Y | Y | P | | | | | | | L100-02 | 18:54 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .025 | mg/kg | J | Y | Y | P | J | | 15 | | | | L100-02 | 11:31 |
| JK0005 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 8400 | mg/kg | | Y | Y | P | | | | | | | L100-03 | 18:59 |
| | | | | ANTIMONY | 11.5 | mg/kg | U | N | Y | U | UJ | | 08A | | | | L100-03 | 18:59 |
| | | | | ARSENIC | 2.58 | mg/kg | | Y | Y | P | J | | 08A | | | | L100-03 | 15:44 |
| | | | | BARIUM | 27.7 | mg/kg | | Y | Y | P | J | | 13 | | | | L100-03 | 18:59 |
| | | | | BERYLLIUM | .243 | mg/kg | J | Y | Y | P | J | | 15 | | | | L100-03 | 18:59 |
| | | | | CADMIUM | .573 | mg/kg | U | N | Y | U | UJ | | 08A | | | | L100-03 | 18:59 |
| | | | | CALCIUM | 150 | mg/kg | | Y | Y | P | | | | | | | L100-03 | 18:59 |
| | | | | CHROMIUM | 12.1 | mg/kg | | Y | Y | P | | | | | | | L100-03 | 18:59 |
| | | | | COBALT | 3.55 | mg/kg | | Y | Y | P | | | | | | | L100-03 | 18:59 |
| | | | | COPPER | 5.65 | mg/kg | | Y | Y | P | | | | | | | L100-03 | 18:59 |
| | | | | IRON | 13500 | mg/kg | | Y | Y | P | | | | | | | L100-03 | 18:59 |
| | | | | LEAD | 12.6 | mg/kg | | Y | Y | P | J | | 08A | | | | L100-03 | 15:44 |
| | | | | MAGNESIUM | 172 | mg/kg | | Y | Y | P | | | | | | | L100-03 | 18:59 |
| | | | | MANGANESE | 131 | mg/kg | | Y | Y | P | J | | 08A | 08B | | | L100-03 | 18:59 |
| | | | | NICKEL | 2.32 | mg/kg | | Y | Y | P | | | | | | | L100-03 | 18:59 |
| | | | | POTASSIUM | 573 | mg/kg | U | N | Y | U | U | | | | | | L100-03 | 18:59 |
| | | | | SELENIUM | 1.15 | mg/kg | U | N | Y | U | UJ | | 08A | | | | L100-03 | 15:44 |
| | | | | SILVER | 1.15 | mg/kg | U | N | Y | U | U | | | | | | L100-03 | 18:59 |
| | | | | SODIUM | 115 | mg/kg | U | N | Y | U | U | | | | | | L100-03 | 18:59 |
| | | | | THALLIUM | .627 | mg/kg | J | Y | Y | P | J | | 15 | | | | L100-03 | 15:44 |
| | | | | VANADIUM | 17.7 | mg/kg | | Y | Y | P | | | | | | | L100-03 | 18:59 |
| | | | | ZINC | 12.3 | mg/kg | | Y | Y | P | | | | | | | L100-03 | 18:59 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .052 | mg/kg | J | Y | Y | P | J | | 15 | | | | L100-03 | 11:34 |
| JK0006 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 5560 | mg/kg | | Y | Y | P | | | | | | | L100-04 | 19:04 |
| | | | | ANTIMONY | 11 | mg/kg | U | N | Y | U | UJ | | 08A | | | | L100-04 | 19:04 |
| | | | | ARSENIC | 2.69 | mg/kg | | Y | Y | P | J | | 08A | | | | L100-04 | 15:49 |
| | | | | BARIUM | 14 | mg/kg | | Y | Y | P | J | | 13 | | | | L100-04 | 19:04 |
| | | | | BERYLLIUM | .181 | mg/kg | J | Y | Y | P | J | | 15 | | | | L100-04 | 19:04 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10115Q-01** | | | | | | | | | | | | | | | | | | |
| JK0006 | SW6010B | SW3050 | N 0 1 | CADMIUM | .548 | mg/kg | U | N | Y | U | UJ | | 08A | | | | L100-04 | 19:04 |
| | | | | CALCIUM | 111 | mg/kg | | Y | Y | P | | | | | | | L100-04 | 19:04 |
| | | | | CHROMIUM | 15.9 | mg/kg | | Y | Y | P | | | | | | | L100-04 | 19:04 |
| | | | | COBALT | 2.09 | mg/kg | J | Y | Y | F | B | | 15 | 06B | | | L100-04 | 19:04 |
| | | | | COPPER | 4.45 | mg/kg | | Y | Y | P | | | | | | | L100-04 | 19:04 |
| | | | | IRON | 15800 | mg/kg | | Y | Y | P | | | | | | | L100-04 | 19:04 |
| | | | | LEAD | 3.74 | mg/kg | | Y | Y | P | J | | 08A | | | | L100-04 | 15:49 |
| | | | | MAGNESIUM | 77.3 | mg/kg | J | Y | Y | P | J | | 15 | | | | L100-04 | 19:04 |
| | | | | MANGANESE | 55.4 | mg/kg | | Y | Y | P | J | | 08A | 08B | | | L100-04 | 19:04 |
| | | | | NICKEL | 1.32 | mg/kg | J | Y | Y | P | J | | 15 | | | | L100-04 | 19:04 |
| | | | | POTASSIUM | 548 | mg/kg | U | N | Y | U | U | | | | | | L100-04 | 19:04 |
| | | | | SELENIUM | 1.1 | mg/kg | U | N | Y | U | UJ | | 08A | | | | L100-04 | 15:49 |
| | | | | SILVER | 1.1 | mg/kg | U | N | Y | U | U | | | | | | L100-04 | 19:04 |
| | | | | SODIUM | 110 | mg/kg | U | N | Y | U | U | | | | | | L100-04 | 19:04 |
| | | | | THALLIUM | .868 | mg/kg | J | Y | Y | P | J | | 15 | | | | L100-04 | 15:49 |
| | | | | VANADIUM | 16.4 | mg/kg | | Y | Y | P | | | | | | | L100-04 | 19:04 |
| | | | | ZINC | 6.39 | mg/kg | | Y | Y | P | | | | | | | L100-04 | 19:04 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .0214 | mg/kg | J | Y | Y | P | J | | 15 | | | | L100-04 | 11:44 |
| JK0007 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 5130 | mg/kg | | Y | Y | | | | | | | | L100-05 | 19:40 |
| | | | | ANTIMONY | 10.9 | mg/kg | U | N | Y | | UJ | | 08A | | | | L100-05 | 19:40 |
| | | | | ARSENIC | 2.81 | mg/kg | | Y | Y | | J | | 08A | | | | L100-05 | 16:25 |
| | | | | BARIUM | 16.7 | mg/kg | | Y | Y | | J | | 13 | | | | L100-05 | 19:40 |
| | | | | BERYLLIUM | .176 | mg/kg | J | Y | Y | | J | | 15 | | | | L100-05 | 19:40 |
| | | | | CADMIUM | .545 | mg/kg | U | N | Y | | UJ | | 08A | | | | L100-05 | 19:40 |
| | | | | CALCIUM | 114 | mg/kg | | Y | Y | | | | | | | | L100-05 | 19:40 |
| | | | | CHROMIUM | 15.7 | mg/kg | | Y | Y | | | | | | | | L100-05 | 19:40 |
| | | | | COBALT | 2.05 | mg/kg | J | Y | Y | F | B | | 06B | 15 | | | L100-05 | 19:40 |
| | | | | COPPER | 4.75 | mg/kg | | Y | Y | | | | | | | | L100-05 | 19:40 |
| | | | | IRON | 18700 | mg/kg | | Y | Y | | | | | | | | L100-05 | 19:40 |
| | | | | LEAD | 4.43 | mg/kg | | Y | Y | | J | | 08A | | | | L100-05 | 16:25 |
| | | | | MAGNESIUM | 88.1 | mg/kg | J | Y | Y | | J | | 15 | | | | L100-05 | 19:40 |
| | | | | MANGANESE | 67.7 | mg/kg | | Y | Y | | J | | 08A | 08B | | | L100-05 | 19:40 |
| | | | | NICKEL | 1.98 | mg/kg | J | Y | Y | | J | | 15 | | | | L100-05 | 19:40 |
| | | | | POTASSIUM | 545 | mg/kg | U | N | Y | | U | | | | | | L100-05 | 19:40 |
| | | | | SELENIUM | .476 | mg/kg | J | Y | Y | F | B | | 06B | 15 | 08A | | L100-05 | 16:25 |
| | | | | SILVER | 1.09 | mg/kg | U | N | Y | | U | | | | | | L100-05 | 19:40 |
| | | | | SODIUM | 109 | mg/kg | U | N | Y | | U | | | | | | L100-05 | 19:40 |
| | | | | THALLIUM | .654 | mg/kg | J | Y | Y | | J | | 15 | | | | L100-05 | 16:25 |
| | | | | VANADIUM | 18.2 | mg/kg | | Y | Y | | | | | | | | L100-05 | 19:40 |
| | | | | ZINC | 6.58 | mg/kg | | Y | Y | | | | | | | | L100-05 | 19:40 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10115Q-01** | | | | | | | | | | | | | | | | | | |
| JK0007 | SW7471A | TOTAL | N 0 1 | MERCURY | .028 | mg/kg | J | Y | Y | | J | | 15 | | | | L100-05 | 11:47 |
| JK0009 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 5840 | mg/kg | | Y | Y | P | | | | | | | L116-03 | 19:55 |
| | | | | ANTIMONY | 11.4 | mg/kg | U | N | Y | U | UJ | | 08A | | | | L116-03 | 19:55 |
| | | | | ARSENIC | 1.74 | mg/kg | | Y | Y | P | J | | 08A | | | | L116-03 | 16:40 |
| | | | | BARIUM | 7.84 | mg/kg | | Y | Y | P | J | | 13 | | | | L116-03 | 19:55 |
| | | | | BERYLLIUM | .0706 | mg/kg | J | Y | Y | F | B | | 06B | 15 | | | L116-03 | 19:55 |
| | | | | CADMIUM | .569 | mg/kg | U | N | Y | U | UJ | | 08A | | | | L116-03 | 19:55 |
| | | | | CALCIUM | 43.3 | mg/kg | J | Y | Y | P | J | | 15 | | | | L116-03 | 19:55 |
| | | | | CHROMIUM | 8.21 | mg/kg | | Y | Y | P | | | | | | | L116-03 | 19:55 |
| | | | | COBALT | .445 | mg/kg | J | Y | Y | P | J | | 15 | | | | L116-03 | 19:55 |
| | | | | COPPER | 5.73 | mg/kg | | Y | Y | P | | | | | | | L116-03 | 19:55 |
| | | | | IRON | 7300 | mg/kg | | Y | Y | P | | | | | | | L116-03 | 19:55 |
| | | | | LEAD | 38.4 | mg/kg | | Y | Y | P | J | | 08A | | | | L116-03 | 16:40 |
| | | | | MAGNESIUM | 87.4 | mg/kg | J | Y | Y | P | J | | 15 | | | | L116-03 | 19:55 |
| | | | | MANGANESE | 7.08 | mg/kg | | Y | Y | P | J | | 08A | 08B | | | L116-03 | 19:55 |
| | | | | NICKEL | 2.28 | mg/kg | U | N | Y | U | U | | | | | | L116-03 | 19:55 |
| | | | | POTASSIUM | 569 | mg/kg | U | N | Y | U | U | | | | | | L116-03 | 19:55 |
| | | | | SELENIUM | .616 | mg/kg | J | Y | Y | F | B | | 06B | 15 | 08A | | L116-03 | 16:40 |
| | | | | SILVER | 1.14 | mg/kg | U | N | Y | U | U | | | | | | L116-03 | 19:55 |
| | | | | SODIUM | 114 | mg/kg | U | N | Y | U | U | | | | | | L116-03 | 19:55 |
| | | | | THALLIUM | 2.28 | mg/kg | U | N | Y | U | U | | | | | | L116-03 | 16:40 |
| | | | | VANADIUM | 14.8 | mg/kg | | Y | Y | P | | | | | | | L116-03 | 19:55 |
| | | | | ZINC | 6.09 | mg/kg | | Y | Y | P | | | | | | | L116-03 | 19:55 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .041 | mg/kg | J | Y | Y | P | J | | 15 | | | | L116-03 | 11:54 |
| JK0010 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 782 | mg/kg | | Y | Y | P | | | | | | | L116-04 | 20:00 |
| | | | | ANTIMONY | 11 | mg/kg | U | N | Y | U | UJ | | 08A | | | | L116-04 | 20:00 |
| | | | | ARSENIC | .457 | mg/kg | J | Y | Y | P | J | | 08A | | | | L116-04 | 16:45 |
| | | | | BARIUM | .608 | mg/kg | J | Y | Y | P | J | | 13 | 15 | | | L116-04 | 20:00 |
| | | | | BERYLLIUM | 1.1 | mg/kg | U | N | Y | U | U | | | | | | L116-04 | 20:00 |
| | | | | CADMIUM | .551 | mg/kg | U | N | Y | U | UJ | | 08A | | | | L116-04 | 20:00 |
| | | | | CALCIUM | 10.7 | mg/kg | J | Y | Y | P | J | | 15 | | | | L116-04 | 20:00 |
| | | | | CHROMIUM | 10 | mg/kg | | Y | Y | P | | | | | | | L116-04 | 20:00 |
| | | | | COBALT | 2.21 | mg/kg | U | N | Y | U | U | | | | | | L116-04 | 20:00 |
| | | | | COPPER | 2.21 | mg/kg | U | N | Y | U | U | | | | | | L116-04 | 20:00 |
| | | | | IRON | 2940 | mg/kg | | Y | Y | P | | | | | | | L116-04 | 20:00 |
| | | | | LEAD | .528 | mg/kg | J | Y | Y | P | J | | 08A | 15 | | | L116-04 | 16:45 |
| | | | | MAGNESIUM | 110 | mg/kg | U | N | Y | U | U | | | | | | L116-04 | 20:00 |
| | | | | MANGANESE | .626 | mg/kg | J | Y | Y | P | J | | 08A | 15 | 08B | | L116-04 | 20:00 |
| | | | | NICKEL | 2.82 | mg/kg | | Y | Y | P | | | | | | | L116-04 | 20:00 |
| | | | | POTASSIUM | 551 | mg/kg | U | N | Y | U | U | | | | | | L116-04 | 20:00 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10115Q-01** | | | | | | | | | | | | | | | | | | |
| JK0010 | SW6010B | SW3050 | N 0 1 | SELENIUM | 1.1 | mg/kg | U | N | Y | U | UJ | | 08A | | | | L116-04 | 16:45 |
| | | | | SILVER | 1.1 | mg/kg | U | N | Y | U | U | | | | | | L116-04 | 20:00 |
| | | | | SODIUM | 110 | mg/kg | U | N | Y | U | U | | | | | | L116-04 | 20:00 |
| | | | | THALLIUM | 2.21 | mg/kg | U | N | Y | U | U | | | | | | L116-04 | 16:45 |
| | | | | VANADIUM | 6.8 | mg/kg | | Y | Y | P | | | | | | | L116-04 | 20:00 |
| | | | | ZINC | 2.21 | mg/kg | U | N | Y | U | U | | | | | | L116-04 | 20:00 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .11 | mg/kg | U | N | Y | U | U | | | | | | L116-04 | 11:57 |
| JK0011 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 1180 | mg/kg | | Y | Y | P | | | | | | | L116-05 | 20:06 |
| | | | | ANTIMONY | 11.5 | mg/kg | U | N | Y | U | UJ | | 08A | | | | L116-05 | 20:06 |
| | | | | ARSENIC | 1.15 | mg/kg | U | N | Y | U | UJ | | 08A | | | | L116-05 | 16:52 |
| | | | | BARIUM | 1.39 | mg/kg | | Y | Y | P | J | | 13 | | | | L116-05 | 20:06 |
| | | | | BERYLLIUM | 1.15 | mg/kg | U | N | Y | U | U | | | | | | L116-05 | 20:06 |
| | | | | CADMIUM | .575 | mg/kg | U | N | Y | U | UJ | | 08A | | | | L116-05 | 20:06 |
| | | | | CALCIUM | 22.7 | mg/kg | J | Y | Y | P | J | | 15 | | | | L116-05 | 20:06 |
| | | | | CHROMIUM | 1.62 | mg/kg | | Y | Y | F | B | | 06A | | | | L116-05 | 20:06 |
| | | | | COBALT | 2.3 | mg/kg | U | N | Y | U | U | | | | | | L116-05 | 20:06 |
| | | | | COPPER | 2.3 | mg/kg | U | N | Y | U | U | | | | | | L116-05 | 20:06 |
| | | | | IRON | 1780 | mg/kg | | Y | Y | P | | | | | | | L116-05 | 20:06 |
| | | | | LEAD | .656 | mg/kg | J | Y | Y | P | J | | 08A | 15 | | | L116-05 | 16:52 |
| | | | | MAGNESIUM | 22.4 | mg/kg | J | Y | Y | P | J | | 15 | | | | L116-05 | 20:06 |
| | | | | MANGANESE | 12.3 | mg/kg | | Y | Y | P | J | | 08A | 08B | | | L116-05 | 20:06 |
| | | | | NICKEL | 2.3 | mg/kg | U | N | Y | U | U | | | | | | L116-05 | 20:06 |
| | | | | POTASSIUM | 575 | mg/kg | U | N | Y | U | U | | | | | | L116-05 | 20:06 |
| | | | | SELENIUM | 1.15 | mg/kg | U | N | Y | U | UJ | | 08A | | | | L116-05 | 16:52 |
| | | | | SILVER | 1.15 | mg/kg | U | N | Y | U | U | | | | | | L116-05 | 20:06 |
| | | | | SODIUM | 115 | mg/kg | U | N | Y | U | U | | | | | | L116-05 | 20:06 |
| | | | | THALLIUM | 2.3 | mg/kg | U | N | Y | U | U | | | | | | L116-05 | 16:52 |
| | | | | VANADIUM | 4 | mg/kg | | Y | Y | P | | | | | | | L116-05 | 20:06 |
| | | | | ZINC | .514 | mg/kg | J | Y | Y | P | J | | 15 | | | | L116-05 | 20:06 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .050 | mg/kg | J | Y | Y | P | J | | 15 | | | | L116-05 | 12:00 |
| JK0012 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 6730 | mg/kg | | Y | Y | P | | | | | | | L116-06 | 20:11 |
| | | | | ANTIMONY | 10.7 | mg/kg | U | N | Y | U | UJ | | 08A | | | | L116-06 | 20:11 |
| | | | | ARSENIC | 2.18 | mg/kg | | Y | Y | P | UJ | | 08A | | | | L116-06 | 16:57 |
| | | | | BARIUM | 50.3 | mg/kg | | Y | Y | P | J | | 13 | | | | L116-06 | 20:11 |
| | | | | BERYLLIUM | .285 | mg/kg | J | Y | Y | P | J | | 15 | | | | L116-06 | 20:11 |
| | | | | CADMIUM | .535 | mg/kg | U | N | Y | U | UJ | | 08A | | | | L116-06 | 20:11 |
| | | | | CALCIUM | 98.2 | mg/kg | J | Y | Y | P | J | | 15 | | | | L116-06 | 20:11 |
| | | | | CHROMIUM | 8.44 | mg/kg | | Y | Y | P | | | | | | | L116-06 | 20:11 |
| | | | | COBALT | 3.05 | mg/kg | | Y | Y | P | | | | | | | L116-06 | 20:11 |
| | | | | COPPER | 3.96 | mg/kg | | Y | Y | P | | | | | | | L116-06 | 20:11 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10115Q-01** | | | | | | | | | | | | | | | | |
| JK0012 | SW6010B | SW3050 | N 0 1 | IRON | 7070 | mg/kg | | Y Y P | | | | | | | L116-06 | 20:11 |
| | | | | LEAD | 10.9 | mg/kg | | Y Y P | J | | 08A | | | | L116-06 | 16:57 |
| | | | | MAGNESIUM | 190 | mg/kg | | Y Y P | | | | | | | L116-06 | 20:11 |
| | | | | MANGANESE | 327 | mg/kg | | Y Y P | J | | 08A | 08B | | | L116-06 | 20:11 |
| | | | | NICKEL | 2.26 | mg/kg | | Y Y P | | | | | | | L116-06 | 20:11 |
| | | | | POTASSIUM | 168 | mg/kg | J | Y Y P | J | | 15 | | | | L116-06 | 20:11 |
| | | | | SELENIUM | 1.07 | mg/kg | U | N Y U | UJ | | 08A | | | | L116-06 | 16:57 |
| | | | | SILVER | 1.07 | mg/kg | U | N Y U | U | | | | | | L116-06 | 20:11 |
| | | | | SODIUM | 107 | mg/kg | U | N Y U | U | | | | | | L116-06 | 20:11 |
| | | | | THALLIUM | 2.14 | mg/kg | U | N Y U | U | | | | | | L116-06 | 16:57 |
| | | | | VANADIUM | 11 | mg/kg | | Y Y P | | | | | | | L116-06 | 20:11 |
| | | | | ZINC | 11.8 | mg/kg | | Y Y P | | | | | | | L116-06 | 20:11 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .107 | mg/kg | U | N Y U | U | | | | | | L116-06 | 12:02 |
| JK0001 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N Y U | U | | | | | | L116-01 | 21:18 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N Y U | U | | | | | | L116-01 | 21:18 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N Y U | U | | | | | | L116-01 | 21:18 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N Y U | U | | | | | | L116-01 | 21:18 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N Y U | U | | | | | | L116-01 | 21:18 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N Y U | U | | | | | | L116-01 | 21:18 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N Y U | U | | | | | | L116-01 | 21:18 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N Y U | U | | | | | | L116-01 | 21:18 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N Y U | U | | | | | | L116-01 | 21:18 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N Y U | U | | | | | | L116-01 | 21:18 |
| | | | | HMX | .4 | mg/kg | U | N Y U | U | | | | | | L116-01 | 21:18 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N Y U | U | | | | | | L116-01 | 21:18 |
| | | | | RDX | .4 | mg/kg | U | N Y U | U | | | | | | L116-01 | 21:18 |
| | | | | TETRYL | .4 | mg/kg | U | N Y U | U | | | | | | L116-01 | 21:18 |
| JK0002 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N Y U | U | | | | | | L116-02 | 21:59 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N Y U | U | | | | | | L116-02 | 21:59 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N Y U | U | | | | | | L116-02 | 21:59 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N Y U | U | | | | | | L116-02 | 21:59 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N Y U | U | | | | | | L116-02 | 21:59 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N Y U | U | | | | | | L116-02 | 21:59 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N Y U | U | | | | | | L116-02 | 21:59 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N Y U | U | | | | | | L116-02 | 21:59 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N Y U | U | | | | | | L116-02 | 21:59 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N Y U | U | | | | | | L116-02 | 21:59 |
| | | | | HMX | .4 | mg/kg | U | N Y U | U | | | | | | L116-02 | 21:59 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N Y U | U | | | | | | L116-02 | 21:59 |
| | | | | RDX | .4 | mg/kg | U | N Y U | U | | | | | | L116-02 | 21:59 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10115Q-01** | | | | | | | | | | | | | | | | | | | | |
| JK0002 | SW8330 | METHOD | N | 0 | 1 | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | L116-02 | 21:59 |
| JK0003 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | L100-01 | 17:58 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | L100-01 | 17:58 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L100-01 | 17:58 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L100-01 | 17:58 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L100-01 | 17:58 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L100-01 | 17:58 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L100-01 | 17:58 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L100-01 | 17:58 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L100-01 | 17:58 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L100-01 | 17:58 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | L100-01 | 17:58 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L100-01 | 17:58 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | L100-01 | 17:58 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | L100-01 | 17:58 |
| JK0004 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | L100-02 | 18:37 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | L100-02 | 18:37 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L100-02 | 18:37 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L100-02 | 18:37 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L100-02 | 18:37 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L100-02 | 18:37 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L100-02 | 18:37 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L100-02 | 18:37 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L100-02 | 18:37 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L100-02 | 18:37 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | L100-02 | 18:37 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L100-02 | 18:37 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | L100-02 | 18:37 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | L100-02 | 18:37 |
| JK0005 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | L100-03 | 19:17 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | L100-03 | 19:17 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L100-03 | 19:17 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L100-03 | 19:17 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L100-03 | 19:17 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L100-03 | 19:17 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L100-03 | 19:17 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L100-03 | 19:17 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L100-03 | 19:17 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L100-03 | 19:17 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | L100-03 | 19:17 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10115Q-01** | | | | | | | | | | | | | | | | | | | | |
| JK0005 | SW8330 | METHOD | N | 0 | 1 | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L100-03 | 19:17 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | L100-03 | 19:17 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | L100-03 | 19:17 |
| JK0006 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | L100-04 | 19:58 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | L100-04 | 19:58 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L100-04 | 19:58 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L100-04 | 19:58 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L100-04 | 19:58 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L100-04 | 19:58 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L100-04 | 19:58 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L100-04 | 19:58 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L100-04 | 19:58 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L100-04 | 19:58 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | L100-04 | 19:58 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L100-04 | 19:58 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | L100-04 | 19:58 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | L100-04 | 19:58 |
| JK0007 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | | U | | | | | | L100-05 | 20:38 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | | U | | | | | | L100-05 | 20:38 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | | U | | | | | | L100-05 | 20:38 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | | U | | | | | | L100-05 | 20:38 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | | U | | | | | | L100-05 | 20:38 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | | U | | | | | | L100-05 | 20:38 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | | U | | | | | | L100-05 | 20:38 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | | U | | | | | | L100-05 | 20:38 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | | U | | | | | | L100-05 | 20:38 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | | U | | | | | | L100-05 | 20:38 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | | U | | | | | | L100-05 | 20:38 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | | U | | | | | | L100-05 | 20:38 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | | U | | | | | | L100-05 | 20:38 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | | U | | | | | | L100-05 | 20:38 |
| JK0009 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | L116-03 | 22:39 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | L116-03 | 22:39 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L116-03 | 22:39 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L116-03 | 22:39 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L116-03 | 22:39 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L116-03 | 22:39 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L116-03 | 22:39 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L116-03 | 22:39 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L116-03 | 22:39 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10115Q-01** | | | | | | | | | | | | | | | | | | | | |
| JK0009 | SW8330 | METHOD | N | 0 | 1 | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L116-03 | 22:39 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | L116-03 | 22:39 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L116-03 | 22:39 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | L116-03 | 22:39 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | L116-03 | 22:39 |
| JK0010 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | L116-04 | 23:20 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | L116-04 | 23:20 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L116-04 | 23:20 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L116-04 | 23:20 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L116-04 | 23:20 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L116-04 | 23:20 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L116-04 | 23:20 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L116-04 | 23:20 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L116-04 | 23:20 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L116-04 | 23:20 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | L116-04 | 23:20 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L116-04 | 23:20 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | L116-04 | 23:20 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | L116-04 | 23:20 |
| JK0011 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | L116-05 | 00:00 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | L116-05 | 00:00 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L116-05 | 00:00 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L116-05 | 00:00 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L116-05 | 00:00 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L116-05 | 00:00 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L116-05 | 00:00 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L116-05 | 00:00 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L116-05 | 00:00 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L116-05 | 00:00 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | L116-05 | 00:00 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L116-05 | 00:00 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | L116-05 | 00:00 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | L116-05 | 00:00 |
| JK0012 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | L116-06 | 02:02 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | L116-06 | 02:02 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L116-06 | 02:02 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L116-06 | 02:02 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L116-06 | 02:02 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L116-06 | 02:02 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L116-06 | 02:02 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10115Q-01** | | | | | | | | | | | | | | | | | | | | |
| JK0012 | SW8330 | METHOD | N | 0 | 1 | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L116-06 | 02:02 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L116-06 | 02:02 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L116-06 | 02:02 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | L116-06 | 02:02 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L116-06 | 02:02 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | L116-06 | 02:02 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | L116-06 | 02:02 |
| JK0001 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0455 | mg/kg | U | N | Y | U | U | | | | | | L116-01 | 05:38 |
| JK0002 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0473 | mg/kg | U | N | Y | U | U | | | | | | L116-02 | 06:30 |
| JK0003 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0456 | mg/kg | U | N | Y | U | U | | | | | | L100-01 | 03:21 |
| JK0004 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0433 | mg/kg | U | N | Y | U | U | | | | | | L100-02 | 03:38 |
| JK0005 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0459 | mg/kg | U | N | Y | U | U | | | | | | L100-03 | 03:55 |
| JK0006 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0439 | mg/kg | U | N | Y | U | U | | | | | | L100-04 | 04:12 |
| JK0007 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0436 | mg/kg | U | N | Y | | U | | | | | | L100-05 | 04:30 |
| JK0009 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0456 | mg/kg | U | N | Y | U | U | | | | | | L116-03 | 06:47 |
| JK0010 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0441 | mg/kg | U | N | Y | U | U | | | | | | L116-04 | 07:04 |
| JK0011 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .046 | mg/kg | U | N | Y | U | U | | | | | | L116-05 | 07:21 |
| JK0012 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0428 | mg/kg | U | N | Y | U | U | | | | | | L116-06 | 07:38 |
| **10115Q-02** | | | | | | | | | | | | | | | | | | | | |
| JK1001 | SW6010B | SW3050 | N | 0 | 1 | ALUMINUM | 5820 | mg/kg | | Y | Y | P | | | | | | | C026-01 | 00:17 |
| | | | | | | ANTIMONY | 14.5 | mg/kg | U | N | Y | U | U | | | | | | C026-01 | 00:17 |
| | | | | | | ARSENIC | 2.22 | mg/kg | | Y | Y | P | | | | | | | C026-01 | 22:51 |
| | | | | | | BARIUM | 35 | mg/kg | | Y | Y | P | | | | | | | C026-01 | 00:17 |
| | | | | | | BERYLLIUM | .383 | mg/kg | J | Y | Y | P | J | | 15 | | | | C026-01 | 00:17 |
| | | | | | | CADMIUM | .726 | mg/kg | U | N | Y | U | U | | | | | | C026-01 | 00:17 |
| | | | | | | CALCIUM | 191 | mg/kg | | Y | Y | P | | | | | | | C026-01 | 00:17 |
| | | | | | | CHROMIUM | 11.4 | mg/kg | | Y | Y | P | | | | | | | C026-01 | 00:17 |
| | | | | | | COBALT | 2.17 | mg/kg | J | Y | Y | P | J | | 15 | | | | C026-01 | 00:17 |
| | | | | | | COPPER | 4.92 | mg/kg | | Y | Y | P | | | | | | | C026-01 | 00:17 |
| | | | | | | IRON | 9680 | mg/kg | | Y | Y | P | | | | | | | C026-01 | 00:17 |
| | | | | | | LEAD | 8.43 | mg/kg | | Y | Y | P | | | | | | | C026-01 | 22:51 |
| | | | | | | MAGNESIUM | 184 | mg/kg | | Y | Y | P | | | | | | | C026-01 | 00:17 |
| | | | | | | MANGANESE | 232 | mg/kg | | Y | Y | P | | | | | | | C026-01 | 00:17 |
| | | | | | | NICKEL | 2.83 | mg/kg | J | Y | Y | P | J | | 15 | | | | C026-01 | 00:17 |
| | | | | | | POTASSIUM | 162 | mg/kg | J | Y | Y | F | B | | 15 | 06B | | | C026-01 | 00:17 |
| | | | | | | SELENIUM | 1.45 | mg/kg | U | N | Y | U | U | | | | | | C026-01 | 22:51 |
| | | | | | | SILVER | 1.45 | mg/kg | U | N | Y | U | U | | | | | | C026-01 | 00:17 |
| | | | | | | SODIUM | 145 | mg/kg | U | N | Y | U | U | | | | | | C026-01 | 00:17 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10115Q-02** | | | | | | | | | | | | | | | | | | |
| JK1001 | SW6010B | SW3050 | N 0 1 | THALLIUM | 2.9 | mg/kg | U | N | Y | U | U | | | | | | C026-01 | 22:51 |
| | | | | VANADIUM | 15.4 | mg/kg | | Y | Y | P | | | | | | | C026-01 | 00:17 |
| | | | | ZINC | 8.51 | mg/kg | | Y | Y | P | | | | | | | C026-01 | 00:17 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .089 | mg/kg | J | Y | Y | P | J | | 15 | | | | C026-01 | 14:27 |
| JK1002 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 10800 | mg/kg | | Y | Y | P | | | | | | | C026-02 | 00:22 |
| | | | | ANTIMONY | 18 | mg/kg | U | N | Y | U | U | | | | | | C026-02 | 00:22 |
| | | | | ARSENIC | 10.6 | mg/kg | | Y | Y | P | | | | | | | C026-02 | 22:56 |
| | | | | BARIUM | 41.3 | mg/kg | | Y | Y | P | | | | | | | C026-02 | 00:22 |
| | | | | BERYLLIUM | .755 | mg/kg | J | Y | Y | P | J | | 15 | | | | C026-02 | 00:22 |
| | | | | CADMIUM | .901 | mg/kg | U | N | Y | U | U | | | | | | C026-02 | 00:22 |
| | | | | CALCIUM | 206 | mg/kg | | Y | Y | P | | | | | | | C026-02 | 00:22 |
| | | | | CHROMIUM | 46.2 | mg/kg | | Y | Y | P | | | | | | | C026-02 | 00:22 |
| | | | | COBALT | 5.41 | mg/kg | | Y | Y | P | | | | | | | C026-02 | 00:22 |
| | | | | COPPER | 4.91 | mg/kg | | Y | Y | P | | | | | | | C026-02 | 00:22 |
| | | | | IRON | 39200 | mg/kg | | Y | Y | P | | | | | | | C026-02 | 00:22 |
| | | | | LEAD | 19.8 | mg/kg | | Y | Y | P | | | | | | | C026-02 | 22:56 |
| | | | | MAGNESIUM | 347 | mg/kg | | Y | Y | P | | | | | | | C026-02 | 00:22 |
| | | | | MANGANESE | 161 | mg/kg | | Y | Y | P | | | | | | | C026-02 | 00:22 |
| | | | | NICKEL | 7.44 | mg/kg | | Y | Y | P | | | | | | | C026-02 | 00:22 |
| | | | | POTASSIUM | 901 | mg/kg | U | N | Y | U | U | | | | | | C026-02 | 00:22 |
| | | | | SELENIUM | 1.8 | mg/kg | U | N | Y | U | U | | | | | | C026-02 | 22:56 |
| | | | | SILVER | 1.8 | mg/kg | U | N | Y | U | U | | | | | | C026-02 | 00:22 |
| | | | | SODIUM | 180 | mg/kg | U | N | Y | U | U | | | | | | C026-02 | 00:22 |
| | | | | THALLIUM | 3.6 | mg/kg | U | N | Y | U | U | | | | | | C026-02 | 22:56 |
| | | | | VANADIUM | 63 | mg/kg | | Y | Y | P | | | | | | | C026-02 | 00:22 |
| | | | | ZINC | 25.2 | mg/kg | | Y | Y | P | | | | | | | C026-02 | 00:22 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .084 | mg/kg | J | Y | Y | P | J | | 15 | | | | C026-02 | 14:29 |
| JK1001 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C026-01 | 22:32 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C026-01 | 22:32 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C026-01 | 22:32 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C026-01 | 22:32 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C026-01 | 22:32 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C026-01 | 22:32 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C026-01 | 22:32 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C026-01 | 22:32 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C026-01 | 22:32 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C026-01 | 22:32 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | C026-01 | 22:32 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C026-01 | 22:32 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | C026-01 | 22:32 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10115Q-02** | | | | | | | | | | | | | | | | | | | | |
| JK1001 | SW8330 | METHOD | N | 0 | 1 | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | C026-01 | 22:32 |
| JK1002 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C026-02 | 23:10 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C026-02 | 23:10 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C026-02 | 23:10 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C026-02 | 23:10 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C026-02 | 23:10 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C026-02 | 23:10 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C026-02 | 23:10 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C026-02 | 23:10 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C026-02 | 23:10 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C026-02 | 23:10 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | C026-02 | 23:10 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C026-02 | 23:10 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | C026-02 | 23:10 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | C026-02 | 23:10 |
| JK1001 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0726 | mg/kg | U | N | Y | U | U | | | | | | C026-01 | 03:53 |
| JK1002 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0901 | mg/kg | U | N | Y | U | U | | | | | | C026-02 | 04:11 |
| JK1001 | SW9060 | NONE | N | 0 | 1 | TOC | 136 | mg/kg | | Y | Y | P | | | | | | | C026-01 | 17:00 |
| JK1002 | SW9060 | NONE | N | 0 | 1 | TOC | 160 | mg/kg | | Y | Y | P | | | | | | | C026-02 | 17:30 |
| **10115Q-03** | | | | | | | | | | | | | | | | | | | | |
| JK2001 | SW6010B | SW3010 | N | 0 | 1 | ALUMINUM | 1.03 | mg/L | | Y | Y | P | | | | | | | C027-01 | 01:56 |
| | | | | | | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | C027-01 | 01:56 |
| | | | | | | ARSENIC | .01 | mg/L | U | N | Y | U | U | | | | | | C027-01 | 20:25 |
| | | | | | | BARIUM | .0241 | mg/L | | Y | Y | P | | | | | | | C027-01 | 01:56 |
| | | | | | | BERYLLIUM | .001 | mg/L | U | N | Y | U | U | | | | | | C027-01 | 01:56 |
| | | | | | | CADMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | C027-01 | 01:56 |
| | | | | | | CALCIUM | .667 | mg/L | J | Y | Y | P | J | | 15 | | | | C027-01 | 01:56 |
| | | | | | | CHROMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | C027-01 | 01:56 |
| | | | | | | COBALT | .02 | mg/L | U | N | Y | U | U | | | | | | C027-01 | 01:56 |
| | | | | | | COPPER | .02 | mg/L | U | N | Y | U | U | | | | | | C027-01 | 01:56 |
| | | | | | | IRON | .871 | mg/L | | Y | Y | P | | | | | | | C027-01 | 01:56 |
| | | | | | | LEAD | .0019 | mg/L | J | Y | Y | P | J | | 15 | | | | C027-01 | 20:25 |
| | | | | | | MAGNESIUM | .594 | mg/L | J | Y | Y | P | J | | 15 | | | | C027-01 | 01:56 |
| | | | | | | MANGANESE | .0349 | mg/L | | Y | Y | P | | | | | | | C027-01 | 01:56 |
| | | | | | | NICKEL | .02 | mg/L | U | N | Y | U | U | | | | | | C027-01 | 01:56 |
| | | | | | | POTASSIUM | 5 | mg/L | U | N | Y | U | U | | | | | | C027-01 | 01:56 |
| | | | | | | SELENIUM | .01 | mg/L | U | N | Y | U | U | | | | | | C027-01 | 20:25 |
| | | | | | | SILVER | .01 | mg/L | U | N | Y | U | U | | | | | | C027-01 | 01:56 |
| | | | | | | SODIUM | .781 | mg/L | J | Y | Y | P | J | | 15 | | | | C027-01 | 01:56 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10115Q-03** | | | | | | | | | | | | | | | | |
| JK2001 | SW6010B | SW3010 | N 0 1 | THALLIUM | .01 | mg/L | U | N Y U | U | | | | | | C027-01 | 20:25 |
| | | | | VANADIUM | .01 | mg/L | U | N Y U | U | | | | | | C027-01 | 01:56 |
| | | | | ZINC | .02 | mg/L | U | N Y U | U | | | | | | C027-01 | 01:56 |
| | SW7470A | TOTAL | N 0 1 | MERCURY | .0005 | mg/L | U | N Y U | U | | | | | | C027-01 | 11:44 |
| JK2002 | SW6010B | SW3010 | N 0 1 | ALUMINUM | .248 | mg/L | | Y Y F | B | | 06A | | | | C027-02 | 02:00 |
| | | | | ANTIMONY | .1 | mg/L | U | N Y U | U | | | | | | C027-02 | 02:00 |
| | | | | ARSENIC | .01 | mg/L | U | N Y U | U | | | | | | C027-02 | 20:29 |
| | | | | BARIUM | .0191 | mg/L | | Y Y P | | | | | | | C027-02 | 02:00 |
| | | | | BERYLLIUM | .001 | mg/L | U | N Y U | U | | | | | | C027-02 | 02:00 |
| | | | | CADMIUM | .01 | mg/L | U | N Y U | U | | | | | | C027-02 | 02:00 |
| | | | | CALCIUM | .604 | mg/L | J | Y Y P | J | | 15 | | | | C027-02 | 02:00 |
| | | | | CHROMIUM | .01 | mg/L | U | N Y U | U | | | | | | C027-02 | 02:00 |
| | | | | COBALT | .02 | mg/L | U | N Y U | U | | | | | | C027-02 | 02:00 |
| | | | | COPPER | .02 | mg/L | U | N Y U | U | | | | | | C027-02 | 02:00 |
| | | | | IRON | .19 | mg/L | J | Y Y P | J | | 15 | | | | C027-02 | 02:00 |
| | | | | LEAD | .01 | mg/L | U | N Y U | U | | | | | | C027-02 | 20:29 |
| | | | | MAGNESIUM | .51 | mg/L | J | Y Y P | J | | 15 | | | | C027-02 | 02:00 |
| | | | | MANGANESE | .0286 | mg/L | | Y Y P | | | | | | | C027-02 | 02:00 |
| | | | | NICKEL | .02 | mg/L | U | N Y U | U | | | | | | C027-02 | 02:00 |
| | | | | POTASSIUM | 5 | mg/L | U | N Y U | U | | | | | | C027-02 | 02:00 |
| | | | | SELENIUM | .01 | mg/L | U | N Y U | U | | | | | | C027-02 | 20:29 |
| | | | | SILVER | .01 | mg/L | U | N Y U | U | | | | | | C027-02 | 02:00 |
| | | | | SODIUM | .768 | mg/L | J | Y Y P | J | | 15 | | | | C027-02 | 02:00 |
| | | | | THALLIUM | .01 | mg/L | U | N Y U | U | | | | | | C027-02 | 20:29 |
| | | | | VANADIUM | .01 | mg/L | U | N Y U | U | | | | | | C027-02 | 02:00 |
| | | | | ZINC | .00748 | mg/L | J | Y Y P | J | | 15 | | | | C027-02 | 02:00 |
| | SW7470A | TOTAL | N 0 1 | MERCURY | .0005 | mg/L | U | N Y U | U | | | | | | C027-02 | 11:46 |
| JK2001 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .0004 | mg/L | U | N Y U | U | | | | | | C027-01 | 04:25 |
| | | | | 1,3-DNB | .0004 | mg/L | U | N Y U | U | | | | | | C027-01 | 04:25 |
| | | | | 2,4,6-TNT | .0004 | mg/L | U | N Y U | U | | | | | | C027-01 | 04:25 |
| | | | | 2,4-DNT | .0004 | mg/L | U | N Y U | U | | | | | | C027-01 | 04:25 |
| | | | | 2,6-DNT | .0004 | mg/L | U | N Y U | U | | | | | | C027-01 | 04:25 |
| | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N Y U | U | | | | | | C027-01 | 04:25 |
| | | | | 2-NITROTOLUENE | .0004 | mg/L | U | N Y U | U | | | | | | C027-01 | 04:25 |
| | | | | 3-NITROTOLUENE | .0004 | mg/L | U | N Y U | U | | | | | | C027-01 | 04:25 |
| | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N Y U | U | | | | | | C027-01 | 04:25 |
| | | | | 4-NITROTOLUENE | .0004 | mg/L | U | N Y U | U | | | | | | C027-01 | 04:25 |
| | | | | HMX | .001 | mg/L | U | N Y U | U | | | | | | C027-01 | 04:25 |
| | | | | NITROBENZENE | .0004 | mg/L | U | N Y U | U | | | | | | C027-01 | 04:25 |
| | | | | RDX | .0004 | mg/L | U | N Y U | U | | | | | | C027-01 | 04:25 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10115Q-03** | | | | | | | | | | | | | | | | | | | | |
| JK2001 | SW8330 | METHOD | N | 0 | 1 | TETRYL | .0004 | mg/L | U | N | Y | U | U | | | | | | C027-01 | 04:25 |
| JK2002 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | U | U | | | | | | C027-02 | 05:03 |
| | | | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | U | U | | | | | | C027-02 | 05:03 |
| | | | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | U | U | | | | | | C027-02 | 05:03 |
| | | | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | C027-02 | 05:03 |
| | | | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | C027-02 | 05:03 |
| | | | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | C027-02 | 05:03 |
| | | | | | | 2-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | C027-02 | 05:03 |
| | | | | | | 3-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | C027-02 | 05:03 |
| | | | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | C027-02 | 05:03 |
| | | | | | | 4-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | C027-02 | 05:03 |
| | | | | | | HMX | .001 | mg/L | U | N | Y | U | U | | | | | | C027-02 | 05:03 |
| | | | | | | NITROBENZENE | .0004 | mg/L | U | N | Y | U | U | | | | | | C027-02 | 05:03 |
| | | | | | | RDX | .0004 | mg/L | U | N | Y | U | U | | | | | | C027-02 | 05:03 |
| | | | | | | TETRYL | .0004 | mg/L | U | N | Y | U | U | | | | | | C027-02 | 05:03 |
| JK2001 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .005 | mg/L | U | N | Y | U | U | | | | | | C027-01 | 19:30 |
| JK2002 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .005 | mg/L | U | N | Y | U | U | | | | | | C027-02 | 19:47 |
| **10115Q-04** | | | | | | | | | | | | | | | | | | | | |
| JK3006 | SW6010B | SW3010 | N | 0 | 1 | ALUMINUM | .348 | mg/L | | Y | Y | P | | | | | | | D078-01 | 22:38 |
| | | | | | | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | D078-01 | 22:38 |
| | | | | | | ARSENIC | .01 | mg/L | U | N | Y | U | U | | | | | | D078-01 | 18:42 |
| | | | | | | BARIUM | .00484 | mg/L | J | Y | Y | F | B | | 15 | 06B | | | D078-01 | 22:38 |
| | | | | | | BERYLLIUM | .001 | mg/L | U | N | Y | U | U | | | | | | D078-01 | 22:38 |
| | | | | | | CADMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D078-01 | 22:38 |
| | | | | | | CALCIUM | .477 | mg/L | J | Y | Y | P | J | | 15 | | | | D078-01 | 22:38 |
| | | | | | | CHROMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D078-01 | 22:38 |
| | | | | | | COBALT | .02 | mg/L | U | N | Y | U | U | | | | | | D078-01 | 22:38 |
| | | | | | | COPPER | .02 | mg/L | U | N | Y | U | U | | | | | | D078-01 | 22:38 |
| | | | | | | IRON | .122 | mg/L | J | Y | Y | P | J | | 15 | | | | D078-01 | 22:38 |
| | | | | | | LEAD | .01 | mg/L | U | N | Y | U | U | | | | | | D078-01 | 18:42 |
| | | | | | | MAGNESIUM | .218 | mg/L | J | Y | Y | F | B | | 06B | 15 | | | D078-01 | 22:38 |
| | | | | | | MANGANESE | .0149 | mg/L | | Y | Y | P | | | | | | | D078-01 | 22:38 |
| | | | | | | NICKEL | .02 | mg/L | U | N | Y | U | U | | | | | | D078-01 | 22:38 |
| | | | | | | POTASSIUM | 5 | mg/L | U | N | Y | U | U | | | | | | D078-01 | 22:38 |
| | | | | | | SELENIUM | .00284 | mg/L | J | Y | Y | F | B | | 06C | 15 | | | D078-01 | 18:42 |
| | | | | | | SILVER | .01 | mg/L | U | N | Y | U | U | | | | | | D078-01 | 22:38 |
| | | | | | | SODIUM | 5.61 | mg/L | | Y | Y | P | | | | | | | D078-01 | 22:38 |
| | | | | | | THALLIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D078-01 | 18:42 |
| | | | | | | VANADIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D078-01 | 22:38 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10115Q-04** | | | | | | | | | | | | | | | | |
| JK3006 | SW6010B | SW3010 | N 0 1 | ZINC | .02 | mg/L | U | N Y U | U | | | | | | D078-01 | 22:38 |
| | SW7470A | TOTAL | N 0 1 | MERCURY | .0005 | mg/L | U | N Y U | U | | | | | | D078-01 | 11:38 |
| JK3006 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .0004 | mg/L | U | N Y U | U | | | | | | D078-01 | 20:43 |
| | | | | 1,3-DNB | .0004 | mg/L | U | N Y U | U | | | | | | D078-01 | 20:43 |
| | | | | 2,4,6-TNT | .0004 | mg/L | U | N Y U | U | | | | | | D078-01 | 20:43 |
| | | | | 2,4-DNT | .0004 | mg/L | U | N Y U | U | | | | | | D078-01 | 20:43 |
| | | | | 2,6-DNT | .0004 | mg/L | U | N Y U | U | | | | | | D078-01 | 20:43 |
| | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N Y U | U | | | | | | D078-01 | 20:43 |
| | | | | 2-NITROTOLUENE | .0004 | mg/L | U | N Y U | U | | | | | | D078-01 | 20:43 |
| | | | | 3-NITROTOLUENE | .0004 | mg/L | U | N Y U | U | | | | | | D078-01 | 20:43 |
| | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N Y U | U | | | | | | D078-01 | 20:43 |
| | | | | 4-NITROTOLUENE | .0004 | mg/L | U | N Y U | U | | | | | | D078-01 | 20:43 |
| | | | | HMX | .001 | mg/L | U | N Y U | U | | | | | | D078-01 | 20:43 |
| | | | | NITROBENZENE | .0004 | mg/L | U | N Y U | U | | | | | | D078-01 | 20:43 |
| | | | | RDX | .0004 | mg/L | U | N Y U | U | | | | | | D078-01 | 20:43 |
| | | | | TETRYL | .0004 | mg/L | U | N Y U | U | | | | | | D078-01 | 20:43 |
| JK3006 | E314.0 | NONE | N 0 1 | PERCHLORATE | .005 | mg/L | U | N Y U | U | | | | | | D078-01 | 23:01 |
| JK3006 | SW8260B | SW5030 | N 0 1 | 1,1,1,2-TETRACHLOROETHANE | .005 | mg/L | U | N Y U | U | | | | | | D078-01 | 14:00 |
| | | | | 1,1,1-TRICHLOROETHANE | .005 | mg/L | U | N Y U | U | | | | | | D078-01 | 14:00 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .005 | mg/L | U | N Y U | U | | | | | | D078-01 | 14:00 |
| | | | | 1,1,2-TRICHLOROETHANE | .005 | mg/L | U | N Y U | U | | | | | | D078-01 | 14:00 |
| | | | | 1,1-DICHLOROETHANE | .005 | mg/L | U | N Y U | U | | | | | | D078-01 | 14:00 |
| | | | | 1,1-DICHLOROETHENE | .005 | mg/L | U | N Y U | U | | | | | | D078-01 | 14:00 |
| | | | | 1,1-DICHLOROPROPENE | .005 | mg/L | U | N Y U | U | | | | | | D078-01 | 14:00 |
| | | | | 1,2,3-TRICHLOROBENZENE | .005 | mg/L | U | N Y U | U | | | | | | D078-01 | 14:00 |
| | | | | 1,2,3-TRICHLOROPROPANE | .005 | mg/L | U | N Y U | U | | | | | | D078-01 | 14:00 |
| | | | | 1,2,4-TRICHLOROBENZENE | .005 | mg/L | U | N Y U | UJ | | 05B | | | | D078-01 | 14:00 |
| | | | | 1,2,4-TRIMETHYLBENZENE | .005 | mg/L | U | N Y U | U | | | | | | D078-01 | 14:00 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .01 | mg/L | U | N Y U | U | | | | | | D078-01 | 14:00 |
| | | | | 1,2-DIBROMOETHANE | .005 | mg/L | U | N Y U | U | | | | | | D078-01 | 14:00 |
| | | | | 1,2-DICHLOROBENZENE | .005 | mg/L | U | N Y U | U | | | | | | D078-01 | 14:00 |
| | | | | 1,2-DICHLOROETHANE | .005 | mg/L | U | N Y U | U | | | | | | D078-01 | 14:00 |
| | | | | 1,2-DICHLOROPROPANE | .005 | mg/L | U | N Y U | U | | | | | | D078-01 | 14:00 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .005 | mg/L | U | N Y U | U | | | | | | D078-01 | 14:00 |
| | | | | 1,3-DICHLOROBENZENE | .005 | mg/L | U | N Y U | U | | | | | | D078-01 | 14:00 |
| | | | | 1,3-DICHLOROPROPANE | .005 | mg/L | U | N Y U | U | | | | | | D078-01 | 14:00 |
| | | | | 1,4-DICHLOROBENZENE | .005 | mg/L | U | N Y U | U | | | | | | D078-01 | 14:00 |
| | | | | 2,2-DICHLOROPROPANE | .005 | mg/L | U | N Y U | U | | | | | | D078-01 | 14:00 |
| | | | | 2-BUTANONE | .02 | mg/L | U | N Y U | U | | | | | | D078-01 | 14:00 |
| | | | | 2-CHLOROTOLUENE | .005 | mg/L | U | N Y U | U | | | | | | D078-01 | 14:00 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10115Q-04** | | | | | | | | | | | | | | | | | | |
| JK3006 | SW8260B | SW5030 | N 0 1 | 2-HEXANONE | .02 | mg/L | U | N | Y | U | U | | | | | | D078-01 | 14:00 |
| | | | | 4-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D078-01 | 14:00 |
| | | | | 4-METHYL-2-PENTANONE | .01 | mg/L | U | N | Y | U | U | | | | | | D078-01 | 14:00 |
| | | | | ACETONE | .02 | mg/L | U | N | Y | U | R | | 04A | | | | D078-01 | 14:00 |
| | | | | BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D078-01 | 14:00 |
| | | | | BROMOBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D078-01 | 14:00 |
| | | | | BROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D078-01 | 14:00 |
| | | | | BROMODICHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D078-01 | 14:00 |
| | | | | BROMOFORM | .005 | mg/L | U | N | Y | U | U | | | | | | D078-01 | 14:00 |
| | | | | BROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D078-01 | 14:00 |
| | | | | CARBON DISULFIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D078-01 | 14:00 |
| | | | | CARBON TETRACHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D078-01 | 14:00 |
| | | | | CHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D078-01 | 14:00 |
| | | | | CHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D078-01 | 14:00 |
| | | | | CHLOROFORM | .005 | mg/L | U | N | Y | U | U | | | | | | D078-01 | 14:00 |
| | | | | CHLOROMETHANE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | D078-01 | 14:00 |
| | | | | CIS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D078-01 | 14:00 |
| | | | | CIS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | D078-01 | 14:00 |
| | | | | DIBROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D078-01 | 14:00 |
| | | | | DIBROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D078-01 | 14:00 |
| | | | | DICHLORODIFLUOROMETHANE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | D078-01 | 14:00 |
| | | | | ETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D078-01 | 14:00 |
| | | | | HEXACHLOROBUTADIENE | .005 | mg/L | U | N | Y | U | U | | | | | | D078-01 | 14:00 |
| | | | | ISOPROPYL BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D078-01 | 14:00 |
| | | | | M/P-XYLENES | .01 | mg/L | U | N | Y | U | U | | | | | | D078-01 | 14:00 |
| | | | | METHYLENE CHLORIDE | .0035 | mg/L | J | Y | Y | P | J | | 15 | | | | D078-01 | 14:00 |
| | | | | N-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D078-01 | 14:00 |
| | | | | N-PROPYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D078-01 | 14:00 |
| | | | | NAPHTHALENE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | D078-01 | 14:00 |
| | | | | O-XYLENE | .005 | mg/L | U | N | Y | U | U | | | | | | D078-01 | 14:00 |
| | | | | P-ISOPROPYLTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D078-01 | 14:00 |
| | | | | SEC-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D078-01 | 14:00 |
| | | | | STYRENE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | D078-01 | 14:00 |
| | | | | TERT-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D078-01 | 14:00 |
| | | | | TETRACHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D078-01 | 14:00 |
| | | | | TOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D078-01 | 14:00 |
| | | | | TRANS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D078-01 | 14:00 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | D078-01 | 14:00 |
| | | | | TRICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D078-01 | 14:00 |
| | | | | TRICHLOROFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D078-01 | 14:00 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10115Q-04** | | | | | | | | | | | | | | | | | | |
| JK3006 | SW8260B | SW5030 | N 0 1 | VINYL CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D078-01 | 14:00 |
| **10115Q-05** | | | | | | | | | | | | | | | | | | |
| JK3002 | SW6010B | SW3010 | N 0 1 | ALUMINUM | .317 | mg/L | | Y | Y | P | | | | | | | D112-05 | 23:24 |
| | | | | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 23:24 |
| | | | | ARSENIC | .01 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 17:55 |
| | | | | BARIUM | .00576 | mg/L | J | Y | Y | P | J | | 15 | | | | D112-05 | 23:24 |
| | | | | BERYLLIUM | .001 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 23:24 |
| | | | | CADMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 23:24 |
| | | | | CALCIUM | .408 | mg/L | J | Y | Y | P | J | | 15 | | | | D112-05 | 23:24 |
| | | | | CHROMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 23:24 |
| | | | | COBALT | .02 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 23:24 |
| | | | | COPPER | .02 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 23:24 |
| | | | | IRON | .0532 | mg/L | J | Y | Y | P | J | | 15 | | | | D112-05 | 23:24 |
| | | | | LEAD | .01 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 17:55 |
| | | | | MAGNESIUM | .196 | mg/L | J | Y | Y | P | J | | 15 | | | | D112-05 | 23:24 |
| | | | | MANGANESE | .0211 | mg/L | | Y | Y | P | | | | | | | D112-05 | 23:24 |
| | | | | NICKEL | .02 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 23:24 |
| | | | | POTASSIUM | 5 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 23:24 |
| | | | | SELENIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 17:55 |
| | | | | SILVER | .01 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 23:24 |
| | | | | SODIUM | .729 | mg/L | J | Y | Y | P | J | | 15 | | | | D112-05 | 23:24 |
| | | | | THALLIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 17:55 |
| | | | | VANADIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 23:24 |
| | | | | ZINC | .00676 | mg/L | J | Y | Y | P | J | | 15 | | | | D112-05 | 23:24 |
| | SW7470A | TOTAL | N 0 1 | MERCURY | .0005 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 11:13 |
| JK3003 | SW6010B | SW3010 | N 0 1 | ALUMINUM | 1.22 | mg/L | | Y | Y | P | | | | | | | D112-06 | 23:29 |
| | | | | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 23:29 |
| | | | | ARSENIC | .01 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 17:59 |
| | | | | BARIUM | .0139 | mg/L | | Y | Y | P | | | | | | | D112-06 | 23:29 |
| | | | | BERYLLIUM | .001 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 23:29 |
| | | | | CADMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 23:29 |
| | | | | CALCIUM | 3.7 | mg/L | | Y | Y | P | | | | | | | D112-06 | 23:29 |
| | | | | CHROMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 23:29 |
| | | | | COBALT | .02 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 23:29 |
| | | | | COPPER | .02 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 23:29 |
| | | | | IRON | 2.87 | mg/L | | Y | Y | P | | | | | | | D112-06 | 23:29 |
| | | | | LEAD | .01 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 17:59 |
| | | | | MAGNESIUM | 1.38 | mg/L | | Y | Y | P | | | | | | | D112-06 | 23:29 |
| | | | | MANGANESE | .171 | mg/L | | Y | Y | P | | | | | | | D112-06 | 23:29 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10115Q-05** | | | | | | | | | | | | | | | | | | |
| JK3003 | SW6010B | SW3010 | N 0 1 | NICKEL | .02 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 23:29 |
| | | | | POTASSIUM | 5 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 23:29 |
| | | | | SELENIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 17:59 |
| | | | | SILVER | .01 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 23:29 |
| | | | | SODIUM | 3.53 | mg/L | | Y | Y | P | | | | | | | D112-06 | 23:29 |
| | | | | THALLIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 17:59 |
| | | | | VANADIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 23:29 |
| | | | | ZINC | .02 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 23:29 |
| | SW7470A | TOTAL | N 0 1 | MERCURY | .0005 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 11:15 |
| JK3004 | SW6010B | SW3010 | N 0 1 | ALUMINUM | .404 | mg/L | | Y | Y | | | | | | | | D112-07 | 23:33 |
| | | | | ANTIMONY | .1 | mg/L | U | N | Y | | U | | | | | | D112-07 | 23:33 |
| | | | | ARSENIC | .01 | mg/L | U | N | Y | | U | | | | | | D112-07 | 18:34 |
| | | | | BARIUM | .00631 | mg/L | J | Y | Y | | J | | 15 | | | | D112-07 | 23:33 |
| | | | | BERYLLIUM | .001 | mg/L | U | N | Y | | U | | | | | | D112-07 | 23:33 |
| | | | | CADMIUM | .01 | mg/L | U | N | Y | | U | | | | | | D112-07 | 23:33 |
| | | | | CALCIUM | .459 | mg/L | J | Y | Y | | J | | 15 | | | | D112-07 | 23:33 |
| | | | | CHROMIUM | .01 | mg/L | U | N | Y | | U | | | | | | D112-07 | 23:33 |
| | | | | COBALT | .02 | mg/L | U | N | Y | | U | | | | | | D112-07 | 23:33 |
| | | | | COPPER | .02 | mg/L | U | N | Y | | U | | | | | | D112-07 | 23:33 |
| | | | | IRON | .0747 | mg/L | J | Y | Y | | J | | 15 | | | | D112-07 | 23:33 |
| | | | | LEAD | .01 | mg/L | U | N | Y | | U | | | | | | D112-07 | 18:34 |
| | | | | MAGNESIUM | .217 | mg/L | J | Y | Y | F | B | | 06B | 15 | | | D112-07 | 23:33 |
| | | | | MANGANESE | .0229 | mg/L | | Y | Y | | | | | | | | D112-07 | 23:33 |
| | | | | NICKEL | .02 | mg/L | U | N | Y | | U | | | | | | D112-07 | 23:33 |
| | | | | POTASSIUM | 5 | mg/L | U | N | Y | | U | | | | | | D112-07 | 23:33 |
| | | | | SELENIUM | .01 | mg/L | U | N | Y | | U | | | | | | D112-07 | 18:34 |
| | | | | SILVER | .01 | mg/L | U | N | Y | | U | | | | | | D112-07 | 23:33 |
| | | | | SODIUM | .805 | mg/L | J | Y | Y | | J | | 15 | | | | D112-07 | 23:33 |
| | | | | THALLIUM | .01 | mg/L | U | N | Y | | U | | | | | | D112-07 | 18:34 |
| | | | | VANADIUM | .01 | mg/L | U | N | Y | | U | | | | | | D112-07 | 23:33 |
| | | | | ZINC | .00757 | mg/L | J | Y | Y | | J | | 15 | | | | D112-07 | 23:33 |
| | SW7470A | TOTAL | N 0 1 | MERCURY | .0005 | mg/L | U | N | Y | | U | | | | | | D112-07 | 11:18 |
| JK3005 | SW6010B | SW3010 | N 0 1 | ALUMINUM | .25 | mg/L | | Y | Y | P | | | | | | | D112-08 | 23:38 |
| | | | | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 23:38 |
| | | | | ARSENIC | .01 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 18:30 |
| | | | | BARIUM | .00868 | mg/L | J | Y | Y | P | J | | 15 | | | | D112-08 | 23:38 |
| | | | | BERYLLIUM | .001 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 23:38 |
| | | | | CADMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 23:38 |
| | | | | CALCIUM | .909 | mg/L | J | Y | Y | P | J | | 15 | | | | D112-08 | 23:38 |
| | | | | CHROMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 23:38 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10115Q-05** | | | | | | | | | | | | | | | | | | | | |
| JK3005 | SW6010B | SW3010 | N | 0 | 1 | COBALT | .02 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 23:38 |
| | | | | | | COPPER | .00271 | mg/L | J | Y | Y | P | J | | 15 | | | | D112-08 | 23:38 |
| | | | | | | IRON | .2 | mg/L | | Y | Y | P | | | | | | | D112-08 | 23:38 |
| | | | | | | LEAD | .01 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 18:30 |
| | | | | | | MAGNESIUM | .331 | mg/L | J | Y | Y | P | J | | 15 | | | | D112-08 | 23:38 |
| | | | | | | MANGANESE | .0296 | mg/L | | Y | Y | P | | | | | | | D112-08 | 23:38 |
| | | | | | | NICKEL | .02 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 23:38 |
| | | | | | | POTASSIUM | 5 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 23:38 |
| | | | | | | SELENIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 18:30 |
| | | | | | | SILVER | .01 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 23:38 |
| | | | | | | SODIUM | 3.28 | mg/L | | Y | Y | P | | | | | | | D112-08 | 23:38 |
| | | | | | | THALLIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 18:30 |
| | | | | | | VANADIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 23:38 |
| | | | | | | ZINC | .01 | mg/L | J | Y | Y | P | J | | 15 | | | | D112-08 | 23:38 |
| | SW7470A | TOTAL | N | 0 | 1 | MERCURY | .0005 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 10:50 |
| JK3002 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 21:21 |
| | | | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 21:21 |
| | | | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 21:21 |
| | | | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 21:21 |
| | | | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 21:21 |
| | | | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 21:21 |
| | | | | | | 2-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 21:21 |
| | | | | | | 3-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 21:21 |
| | | | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 21:21 |
| | | | | | | 4-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 21:21 |
| | | | | | | HMX | .001 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 21:21 |
| | | | | | | NITROBENZENE | .0004 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 21:21 |
| | | | | | | RDX | .0004 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 21:21 |
| | | | | | | TETRYL | .0004 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 21:21 |
| JK3003 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 21:59 |
| | | | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 21:59 |
| | | | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 21:59 |
| | | | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 21:59 |
| | | | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 21:59 |
| | | | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 21:59 |
| | | | | | | 2-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 21:59 |
| | | | | | | 3-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 21:59 |
| | | | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 21:59 |
| | | | | | | 4-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 21:59 |
| | | | | | | HMX | .001 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 21:59 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10115Q-05** | | | | | | | | | | | | | | | | | | | | |
| JK3003 | SW8330 | METHOD | N | 0 | 1 | NITROBENZENE | .0004 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 21:59 |
| | | | | | | RDX | .0004 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 21:59 |
| | | | | | | TETRYL | .0004 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 21:59 |
| JK3004 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | | U | | | | | | D112-07 | 22:38 |
| | | | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | | U | | | | | | D112-07 | 22:38 |
| | | | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | | U | | | | | | D112-07 | 22:38 |
| | | | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | | U | | | | | | D112-07 | 22:38 |
| | | | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | | U | | | | | | D112-07 | 22:38 |
| | | | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | | U | | | | | | D112-07 | 22:38 |
| | | | | | | 2-NITROTOLUENE | .0004 | mg/L | U | N | Y | | U | | | | | | D112-07 | 22:38 |
| | | | | | | 3-NITROTOLUENE | .0004 | mg/L | U | N | Y | | U | | | | | | D112-07 | 22:38 |
| | | | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N | Y | | U | | | | | | D112-07 | 22:38 |
| | | | | | | 4-NITROTOLUENE | .0004 | mg/L | U | N | Y | | U | | | | | | D112-07 | 22:38 |
| | | | | | | HMX | .001 | mg/L | U | N | Y | | U | | | | | | D112-07 | 22:38 |
| | | | | | | NITROBENZENE | .0004 | mg/L | U | N | Y | | U | | | | | | D112-07 | 22:38 |
| | | | | | | RDX | .0004 | mg/L | U | N | Y | | U | | | | | | D112-07 | 22:38 |
| | | | | | | TETRYL | .0004 | mg/L | U | N | Y | | U | | | | | | D112-07 | 22:38 |
| JK3005 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 23:16 |
| | | | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 23:16 |
| | | | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 23:16 |
| | | | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 23:16 |
| | | | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 23:16 |
| | | | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 23:16 |
| | | | | | | 2-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 23:16 |
| | | | | | | 3-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 23:16 |
| | | | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 23:16 |
| | | | | | | 4-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 23:16 |
| | | | | | | HMX | .001 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 23:16 |
| | | | | | | NITROBENZENE | .0004 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 23:16 |
| | | | | | | RDX | .0004 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 23:16 |
| | | | | | | TETRYL | .0004 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 23:16 |
| JK3002 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 02:56 |
| JK3003 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 03:13 |
| JK3004 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .005 | mg/L | U | N | Y | | U | | | | | | D112-07 | 03:30 |
| JK3005 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 03:47 |
| JK3002 | SW8260B | SW5030 | N | 0 | 1 | 1,1,1,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 12:25 |
| | | | | | | 1,1,1-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 12:25 |
| | | | | | | 1,1,2,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 12:25 |
| | | | | | | 1,1,2-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 12:25 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10115Q-05** | | | | | | | | | | | | | | | | | | |
| JK3002 | SW8260B | SW5030 | N 0 1 | 1,1-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 12:25 |
| | | | | 1,1-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 12:25 |
| | | | | 1,1-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 12:25 |
| | | | | 1,2,3-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 12:25 |
| | | | | 1,2,3-TRICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 12:25 |
| | | | | 1,2,4-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 12:25 |
| | | | | 1,2,4-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 12:25 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .01 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 12:25 |
| | | | | 1,2-DIBROMOETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 12:25 |
| | | | | 1,2-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 12:25 |
| | | | | 1,2-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 12:25 |
| | | | | 1,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 12:25 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 12:25 |
| | | | | 1,3-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 12:25 |
| | | | | 1,3-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 12:25 |
| | | | | 1,4-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 12:25 |
| | | | | 2,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 12:25 |
| | | | | 2-BUTANONE | .02 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 12:25 |
| | | | | 2-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 12:25 |
| | | | | 2-HEXANONE | .02 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 12:25 |
| | | | | 4-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 12:25 |
| | | | | 4-METHYL-2-PENTANONE | .01 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 12:25 |
| | | | | ACETONE | .02 | mg/L | U | N | Y | U | R | | 04A | 05A | | | D112-05 | 12:25 |
| | | | | BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 12:25 |
| | | | | BROMOBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 12:25 |
| | | | | BROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 12:25 |
| | | | | BROMODICHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 12:25 |
| | | | | BROMOFORM | .005 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 12:25 |
| | | | | BROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 12:25 |
| | | | | CARBON DISULFIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 12:25 |
| | | | | CARBON TETRACHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 12:25 |
| | | | | CHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 12:25 |
| | | | | CHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 12:25 |
| | | | | CHLOROFORM | .005 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 12:25 |
| | | | | CHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 12:25 |
| | | | | CIS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 12:25 |
| | | | | CIS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 12:25 |
| | | | | DIBROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 12:25 |
| | | | | DIBROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 12:25 |
| | | | | DICHLORODIFLUOROMETHANE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | D112-05 | 12:25 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10115Q-05** | | | | | | | | | | | | | | | | | | |
| JK3002 | SW8260B | SW5030 | N 0 1 | ETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 12:25 |
| | | | | HEXACHLOROBUTADIENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 12:25 |
| | | | | ISOPROPYL BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 12:25 |
| | | | | M/P-XYLENES | .01 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 12:25 |
| | | | | METHYLENE CHLORIDE | .0015 | mg/L | J | Y | Y | P | J | | 15 | | | | D112-05 | 12:25 |
| | | | | N-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 12:25 |
| | | | | N-PROPYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 12:25 |
| | | | | NAPHTHALENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 12:25 |
| | | | | O-XYLENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 12:25 |
| | | | | P-ISOPROPYLTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 12:25 |
| | | | | SEC-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 12:25 |
| | | | | STYRENE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | D112-05 | 12:25 |
| | | | | TERT-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | D112-05 | 12:25 |
| | | | | TETRACHLOROETHENE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | D112-05 | 12:25 |
| | | | | TOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 12:25 |
| | | | | TRANS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 12:25 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 12:25 |
| | | | | TRICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 12:25 |
| | | | | TRICHLOROFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 12:25 |
| | | | | VINYL CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-05 | 12:25 |
| JK3003 | SW8260B | SW5030 | N 0 1 | 1,1,1,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 12:59 |
| | | | | 1,1,1-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 12:59 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 12:59 |
| | | | | 1,1,2-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 12:59 |
| | | | | 1,1-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 12:59 |
| | | | | 1,1-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 12:59 |
| | | | | 1,1-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 12:59 |
| | | | | 1,2,3-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 12:59 |
| | | | | 1,2,3-TRICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 12:59 |
| | | | | 1,2,4-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 12:59 |
| | | | | 1,2,4-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 12:59 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .01 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 12:59 |
| | | | | 1,2-DIBROMOETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 12:59 |
| | | | | 1,2-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 12:59 |
| | | | | 1,2-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 12:59 |
| | | | | 1,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 12:59 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 12:59 |
| | | | | 1,3-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 12:59 |
| | | | | 1,3-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 12:59 |
| | | | | 1,4-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 12:59 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10115Q-05** | | | | | | | | | | | | | | | | | | |
| JK3003 | SW8260B | SW5030 | N 0 1 | 2,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 12:59 |
| | | | | 2-BUTANONE | .02 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 12:59 |
| | | | | 2-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 12:59 |
| | | | | 2-HEXANONE | .02 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 12:59 |
| | | | | 4-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 12:59 |
| | | | | 4-METHYL-2-PENTANONE | .01 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 12:59 |
| | | | | ACETONE | .02 | mg/L | U | N | Y | U | R | | 04A | 05A | | | D112-06 | 12:59 |
| | | | | BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 12:59 |
| | | | | BROMOBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 12:59 |
| | | | | BROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 12:59 |
| | | | | BROMODICHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 12:59 |
| | | | | BROMOFORM | .005 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 12:59 |
| | | | | BROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 12:59 |
| | | | | CARBON DISULFIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 12:59 |
| | | | | CARBON TETRACHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 12:59 |
| | | | | CHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 12:59 |
| | | | | CHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 12:59 |
| | | | | CHLOROFORM | .005 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 12:59 |
| | | | | CHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 12:59 |
| | | | | CIS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 12:59 |
| | | | | CIS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 12:59 |
| | | | | DIBROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 12:59 |
| | | | | DIBROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 12:59 |
| | | | | DICHLORODIFLUOROMETHANE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | D112-06 | 12:59 |
| | | | | ETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 12:59 |
| | | | | HEXACHLOROBUTADIENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 12:59 |
| | | | | ISOPROPYL BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 12:59 |
| | | | | M/P-XYLENES | .01 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 12:59 |
| | | | | METHYLENE CHLORIDE | .0038 | mg/L | J | Y | Y | P | J | | 15 | | | | D112-06 | 12:59 |
| | | | | N-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 12:59 |
| | | | | N-PROPYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 12:59 |
| | | | | NAPHTHALENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 12:59 |
| | | | | O-XYLENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 12:59 |
| | | | | P-ISOPROPYLTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 12:59 |
| | | | | SEC-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 12:59 |
| | | | | STYRENE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | D112-06 | 12:59 |
| | | | | TERT-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | D112-06 | 12:59 |
| | | | | TETRACHLOROETHENE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | D112-06 | 12:59 |
| | | | | TOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 12:59 |
| | | | | TRANS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 12:59 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10115Q-05** | | | | | | | | | | | | | | | | | | |
| JK3003 | SW8260B | SW5030 | N 0 1 | TRANS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 12:59 |
| | | | | TRICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 12:59 |
| | | | | TRICHLOROFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 12:59 |
| | | | | VINYL CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-06 | 12:59 |
| JK3004 | SW8260B | SW5030 | N 0 1 | 1,1,1,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | | U | | | | | | D112-07 | 08:57 |
| | | | | 1,1,1-TRICHLOROETHANE | .005 | mg/L | U | N | Y | | U | | | | | | D112-07 | 08:57 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | | U | | | | | | D112-07 | 08:57 |
| | | | | 1,1,2-TRICHLOROETHANE | .005 | mg/L | U | N | Y | | U | | | | | | D112-07 | 08:57 |
| | | | | 1,1-DICHLOROETHANE | .005 | mg/L | U | N | Y | | U | | | | | | D112-07 | 08:57 |
| | | | | 1,1-DICHLOROETHENE | .005 | mg/L | U | N | Y | | U | | | | | | D112-07 | 08:57 |
| | | | | 1,1-DICHLOROPROPENE | .005 | mg/L | U | N | Y | | U | | | | | | D112-07 | 08:57 |
| | | | | 1,2,3-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | | U | | | | | | D112-07 | 08:57 |
| | | | | 1,2,3-TRICHLOROPROPANE | .005 | mg/L | U | N | Y | | U | | | | | | D112-07 | 08:57 |
| | | | | 1,2,4-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | | U | | | | | | D112-07 | 08:57 |
| | | | | 1,2,4-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | | U | | | | | | D112-07 | 08:57 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .01 | mg/L | U | N | Y | | U | | | | | | D112-07 | 08:57 |
| | | | | 1,2-DIBROMOETHANE | .005 | mg/L | U | N | Y | | U | | | | | | D112-07 | 08:57 |
| | | | | 1,2-DICHLOROBENZENE | .005 | mg/L | U | N | Y | | U | | | | | | D112-07 | 08:57 |
| | | | | 1,2-DICHLOROETHANE | .005 | mg/L | U | N | Y | | U | | | | | | D112-07 | 08:57 |
| | | | | 1,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | | U | | | | | | D112-07 | 08:57 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | | U | | | | | | D112-07 | 08:57 |
| | | | | 1,3-DICHLOROBENZENE | .005 | mg/L | U | N | Y | | U | | | | | | D112-07 | 08:57 |
| | | | | 1,3-DICHLOROPROPANE | .005 | mg/L | U | N | Y | | U | | | | | | D112-07 | 08:57 |
| | | | | 1,4-DICHLOROBENZENE | .005 | mg/L | U | N | Y | | U | | | | | | D112-07 | 08:57 |
| | | | | 2,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | | U | | | | | | D112-07 | 08:57 |
| | | | | 2-BUTANONE | .02 | mg/L | U | N | Y | | U | | | | | | D112-07 | 08:57 |
| | | | | 2-CHLOROTOLUENE | .005 | mg/L | U | N | Y | | U | | | | | | D112-07 | 08:57 |
| | | | | 2-HEXANONE | .02 | mg/L | U | N | Y | | U | | | | | | D112-07 | 08:57 |
| | | | | 4-CHLOROTOLUENE | .005 | mg/L | U | N | Y | | U | | | | | | D112-07 | 08:57 |
| | | | | 4-METHYL-2-PENTANONE | .01 | mg/L | U | N | Y | | U | | | | | | D112-07 | 08:57 |
| | | | | ACETONE | .02 | mg/L | U | N | Y | | R | | 04A | 05A | | | D112-07 | 08:57 |
| | | | | BENZENE | .005 | mg/L | U | N | Y | | U | | | | | | D112-07 | 08:57 |
| | | | | BROMOBENZENE | .005 | mg/L | U | N | Y | | U | | | | | | D112-07 | 08:57 |
| | | | | BROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | | U | | | | | | D112-07 | 08:57 |
| | | | | BROMODICHLOROMETHANE | .005 | mg/L | U | N | Y | | U | | | | | | D112-07 | 08:57 |
| | | | | BROMOFORM | .005 | mg/L | U | N | Y | | U | | | | | | D112-07 | 08:57 |
| | | | | BROMOMETHANE | .005 | mg/L | U | N | Y | | U | | | | | | D112-07 | 08:57 |
| | | | | CARBON DISULFIDE | .005 | mg/L | U | N | Y | | U | | | | | | D112-07 | 08:57 |
| | | | | CARBON TETRACHLORIDE | .005 | mg/L | U | N | Y | | U | | | | | | D112-07 | 08:57 |
| | | | | CHLOROBENZENE | .005 | mg/L | U | N | Y | | U | | | | | | D112-07 | 08:57 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10115Q-05** | | | | | | | | | | | | | | | | | | |
| JK3004 | SW8260B | SW5030 | N 0 1 | CHLOROETHANE | .005 | mg/L | U | N | Y | | U | | | | | | D112-07 | 08:57 |
| | | | | CHLOROFORM | .005 | mg/L | U | N | Y | | U | | | | | | D112-07 | 08:57 |
| | | | | CHLOROMETHANE | .005 | mg/L | U | N | Y | | U | | | | | | D112-07 | 08:57 |
| | | | | CIS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | | U | | | | | | D112-07 | 08:57 |
| | | | | CIS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | | U | | | | | | D112-07 | 08:57 |
| | | | | DIBROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | | U | | | | | | D112-07 | 08:57 |
| | | | | DIBROMOMETHANE | .005 | mg/L | U | N | Y | | U | | | | | | D112-07 | 08:57 |
| | | | | DICHLORODIFLUOROMETHANE | .005 | mg/L | U | N | Y | | UJ | | 05B | | | | D112-07 | 08:57 |
| | | | | ETHYLBENZENE | .005 | mg/L | U | N | Y | | U | | | | | | D112-07 | 08:57 |
| | | | | HEXACHLOROBUTADIENE | .005 | mg/L | U | N | Y | | U | | | | | | D112-07 | 08:57 |
| | | | | ISOPROPYL BENZENE | .005 | mg/L | U | N | Y | | U | | | | | | D112-07 | 08:57 |
| | | | | M/P-XYLENES | .01 | mg/L | U | N | Y | | U | | | | | | D112-07 | 08:57 |
| | | | | METHYLENE CHLORIDE | .005 | mg/L | U | N | Y | | U | | | | | | D112-07 | 08:57 |
| | | | | N-BUTYLBENZENE | .005 | mg/L | U | N | Y | | U | | | | | | D112-07 | 08:57 |
| | | | | N-PROPYLBENZENE | .005 | mg/L | U | N | Y | | U | | | | | | D112-07 | 08:57 |
| | | | | NAPHTHALENE | .005 | mg/L | U | N | Y | | U | | | | | | D112-07 | 08:57 |
| | | | | O-XYLENE | .005 | mg/L | U | N | Y | | U | | | | | | D112-07 | 08:57 |
| | | | | P-ISOPROPYLTOLUENE | .005 | mg/L | U | N | Y | | U | | | | | | D112-07 | 08:57 |
| | | | | SEC-BUTYLBENZENE | .005 | mg/L | U | N | Y | | U | | | | | | D112-07 | 08:57 |
| | | | | STYRENE | .005 | mg/L | U | N | Y | | UJ | | 05B | | | | D112-07 | 08:57 |
| | | | | TERT-BUTYLBENZENE | .005 | mg/L | U | N | Y | | UJ | | 05B | | | | D112-07 | 08:57 |
| | | | | TETRACHLOROETHENE | .005 | mg/L | U | N | Y | | UJ | | 05B | | | | D112-07 | 08:57 |
| | | | | TOLUENE | .005 | mg/L | U | N | Y | | U | | | | | | D112-07 | 08:57 |
| | | | | TRANS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | | U | | | | | | D112-07 | 08:57 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | | U | | | | | | D112-07 | 08:57 |
| | | | | TRICHLOROETHENE | .005 | mg/L | U | N | Y | | U | | | | | | D112-07 | 08:57 |
| | | | | TRICHLOROFLUOROMETHANE | .005 | mg/L | U | N | Y | | U | | | | | | D112-07 | 08:57 |
| | | | | VINYL CHLORIDE | .005 | mg/L | U | N | Y | | U | | | | | | D112-07 | 08:57 |
| JK3005 | SW8260B | SW5030 | N 0 1 | 1,1,1,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 13:34 |
| | | | | 1,1,1-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 13:34 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 13:34 |
| | | | | 1,1,2-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 13:34 |
| | | | | 1,1-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 13:34 |
| | | | | 1,1-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 13:34 |
| | | | | 1,1-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 13:34 |
| | | | | 1,2,3-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 13:34 |
| | | | | 1,2,3-TRICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 13:34 |
| | | | | 1,2,4-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 13:34 |
| | | | | 1,2,4-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 13:34 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .01 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 13:34 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10115Q-05** | | | | | | | | | | | | | | | | | | |
| JK3005 | SW8260B | SW5030 | N 0 1 | 1,2-DIBROMOETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 13:34 |
| | | | | 1,2-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 13:34 |
| | | | | 1,2-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 13:34 |
| | | | | 1,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 13:34 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 13:34 |
| | | | | 1,3-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 13:34 |
| | | | | 1,3-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 13:34 |
| | | | | 1,4-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 13:34 |
| | | | | 2,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 13:34 |
| | | | | 2-BUTANONE | .02 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 13:34 |
| | | | | 2-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 13:34 |
| | | | | 2-HEXANONE | .02 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 13:34 |
| | | | | 4-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 13:34 |
| | | | | 4-METHYL-2-PENTANONE | .01 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 13:34 |
| | | | | ACETONE | .02 | mg/L | U | N | Y | U | R | | 04A | 05A | | | D112-08 | 13:34 |
| | | | | BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 13:34 |
| | | | | BROMOBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 13:34 |
| | | | | BROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 13:34 |
| | | | | BROMODICHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 13:34 |
| | | | | BROMOFORM | .005 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 13:34 |
| | | | | BROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 13:34 |
| | | | | CARBON DISULFIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 13:34 |
| | | | | CARBON TETRACHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 13:34 |
| | | | | CHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 13:34 |
| | | | | CHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 13:34 |
| | | | | CHLOROFORM | .005 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 13:34 |
| | | | | CHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 13:34 |
| | | | | CIS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 13:34 |
| | | | | CIS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 13:34 |
| | | | | DIBROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 13:34 |
| | | | | DIBROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 13:34 |
| | | | | DICHLORODIFLUOROMETHANE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | D112-08 | 13:34 |
| | | | | ETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 13:34 |
| | | | | HEXACHLOROBUTADIENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 13:34 |
| | | | | ISOPROPYL BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 13:34 |
| | | | | M/P-XYLENES | .01 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 13:34 |
| | | | | METHYLENE CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 13:34 |
| | | | | N-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 13:34 |
| | | | | N-PROPYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 13:34 |
| | | | | NAPHTHALENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 13:34 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10115Q-05** | | | | | | | | | | | | | | | | | | |
| JK3005 | SW8260B | SW5030 | N 0 1 | O-XYLENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 13:34 |
| | | | | P-ISOPROPYLTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 13:34 |
| | | | | SEC-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 13:34 |
| | | | | STYRENE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | D112-08 | 13:34 |
| | | | | TERT-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | D112-08 | 13:34 |
| | | | | TETRACHLOROETHENE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | D112-08 | 13:34 |
| | | | | TOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 13:34 |
| | | | | TRANS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 13:34 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 13:34 |
| | | | | TRICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 13:34 |
| | | | | TRICHLOROFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 13:34 |
| | | | | VINYL CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D112-08 | 13:34 |
| **10115Q-06** | | | | | | | | | | | | | | | | | | |
| JK3001 | SW6010B | SW3010 | N 0 1 | ALUMINUM | .0575 | mg/L | J | Y | Y | F | B | | 06A | 06B | 15 | | D135-01 | 22:38 |
| | | | | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 22:38 |
| | | | | ARSENIC | .01 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 21:43 |
| | | | | BARIUM | .00762 | mg/L | J | Y | Y | P | J | | 15 | | | | D135-01 | 22:38 |
| | | | | BERYLLIUM | .001 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 22:38 |
| | | | | CADMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 22:38 |
| | | | | CALCIUM | .264 | mg/L | J | Y | Y | F | B | | 06C | 15 | | | D135-01 | 22:38 |
| | | | | CHROMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 22:38 |
| | | | | COBALT | .02 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 22:38 |
| | | | | COPPER | .02 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 22:38 |
| | | | | IRON | .0115 | mg/L | J | Y | Y | F | B | | 06C | 15 | 06B | | D135-01 | 22:38 |
| | | | | LEAD | .01 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 21:43 |
| | | | | MAGNESIUM | .265 | mg/L | J | Y | Y | F | B | | 06C | 15 | 06B | | D135-01 | 22:38 |
| | | | | MANGANESE | .0115 | mg/L | | Y | Y | P | | | | | | | D135-01 | 22:38 |
| | | | | NICKEL | .0117 | mg/L | J | Y | Y | F | B | | 06A | 06B | 15 | | D135-01 | 22:38 |
| | | | | POTASSIUM | 5 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 22:38 |
| | | | | SELENIUM | .00202 | mg/L | J | Y | Y | P | J | | 15 | | | | D135-01 | 21:43 |
| | | | | SILVER | .01 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 22:38 |
| | | | | SODIUM | .776 | mg/L | J | Y | Y | P | J | | 15 | | | | D135-01 | 22:38 |
| | | | | THALLIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 21:43 |
| | | | | VANADIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 22:38 |
| | | | | ZINC | .02 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 22:38 |
| | SW7470A | TOTAL | N 0 1 | MERCURY | .0005 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 17:37 |
| JK3001 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 08:34 |
| | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 08:34 |
| | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 08:34 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10115Q-06** | | | | | | | | | | | | | | | | | | |
| JK3001 | SW8330 | METHOD | N 0 1 | 2,4-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 08:34 |
| | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 08:34 |
| | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 08:34 |
| | | | | 2-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 08:34 |
| | | | | 3-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 08:34 |
| | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 08:34 |
| | | | | 4-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 08:34 |
| | | | | HMX | .001 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 08:34 |
| | | | | NITROBENZENE | .0004 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 08:34 |
| | | | | RDX | .0004 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 08:34 |
| | | | | TETRYL | .0004 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 08:34 |
| JK3001 | E314.0 | NONE | N 0 1 | PERCHLORATE | .005 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 20:13 |
| JK3001 | SW8260B | SW5030 | N 0 1 | 1,1,1,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 05:51 |
| | | | | 1,1,1-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 05:51 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 05:51 |
| | | | | 1,1,2-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 05:51 |
| | | | | 1,1-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 05:51 |
| | | | | 1,1-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 05:51 |
| | | | | 1,1-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 05:51 |
| | | | | 1,2,3-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 05:51 |
| | | | | 1,2,3-TRICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 05:51 |
| | | | | 1,2,4-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 05:51 |
| | | | | 1,2,4-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 05:51 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .01 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 05:51 |
| | | | | 1,2-DIBROMOETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 05:51 |
| | | | | 1,2-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 05:51 |
| | | | | 1,2-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 05:51 |
| | | | | 1,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 05:51 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 05:51 |
| | | | | 1,3-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 05:51 |
| | | | | 1,3-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 05:51 |
| | | | | 1,4-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 05:51 |
| | | | | 2,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 05:51 |
| | | | | 2-BUTANONE | .02 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 05:51 |
| | | | | 2-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 05:51 |
| | | | | 2-HEXANONE | .02 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 05:51 |
| | | | | 4-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 05:51 |
| | | | | 4-METHYL-2-PENTANONE | .01 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 05:51 |
| | | | | ACETONE | .02 | mg/L | U | N | Y | U | R | | 05A | | | | D135-01 | 05:51 |
| | | | | BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 05:51 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10115Q-06** | | | | | | | | | | | | | | | | | | |
| JK3001 | SW8260B | SW5030 | N 0 1 | BROMOBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 05:51 |
| | | | | BROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 05:51 |
| | | | | BROMODICHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 05:51 |
| | | | | BROMOFORM | .005 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 05:51 |
| | | | | BROMOMETHANE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | D135-01 | 05:51 |
| | | | | CARBON DISULFIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 05:51 |
| | | | | CARBON TETRACHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 05:51 |
| | | | | CHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 05:51 |
| | | | | CHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 05:51 |
| | | | | CHLOROFORM | .005 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 05:51 |
| | | | | CHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 05:51 |
| | | | | CIS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 05:51 |
| | | | | CIS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 05:51 |
| | | | | DIBROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 05:51 |
| | | | | DIBROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 05:51 |
| | | | | DICHLORODIFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 05:51 |
| | | | | ETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 05:51 |
| | | | | HEXACHLOROBUTADIENE | .005 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 05:51 |
| | | | | ISOPROPYL BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 05:51 |
| | | | | M/P-XYLENES | .01 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 05:51 |
| | | | | METHYLENE CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 05:51 |
| | | | | N-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 05:51 |
| | | | | N-PROPYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 05:51 |
| | | | | NAPHTHALENE | .005 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 05:51 |
| | | | | O-XYLENE | .005 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 05:51 |
| | | | | P-ISOPROPYLTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 05:51 |
| | | | | SEC-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 05:51 |
| | | | | STYRENE | .005 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 05:51 |
| | | | | TERT-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 05:51 |
| | | | | TETRACHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 05:51 |
| | | | | TOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 05:51 |
| | | | | TRANS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 05:51 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 05:51 |
| | | | | TRICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 05:51 |
| | | | | TRICHLOROFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 05:51 |
| | | | | VINYL CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D135-01 | 05:51 |

***Quality Assurance Report***
***For Ranges West of Iron Mountain Road***
***Parcel HR-116Q***
***IT Project No 796887***
***Fort McClellan Quality Assurance Report***

## *1.0 Overview*

Forty-four soil, 4 sediment, 4 surface water, and 7 groundwater samples were collected in support of the investigation at Fort McClellan (FTMC) Parcel HR-116Q, Ranges West of Iron Mountain Road. All samples were submitted to EMAX Laboratories, Inc. for analysis. Soil, sediment, and surface water samples were analyzed for target analyte list (TAL) metals, nitroaromatic-nitramine explosives, and perchlorate. Groundwater samples were analyzed for (TAL) metals, nitroaromatic-nitramine explosives, perchlorate, and target compound list (TCL) volatiles. QC samples consisted of the following types and quantities: 3 field duplicates, 3 MS/MSD, 6 trip blanks, and 9 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 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 data and validation 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 (DQO) were met, laboratory analytical results and data packages were examined for compliance with SW846 SW6010B/SW7000 Series, SW8330, SW8260B, and U.S. Environmental Protection Agency (EPA) 314.0 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 analytical holding times were met.

## 2.2 Rejected Data

Table 2.2-1 lists all rejected analytical data for soil and aqueous samples. Sample re-collection at this time is not warranted due to all rejected results being reported as non-detect.

**Table 2.2-1 Rejected Analytical Results**

| Sample Delivery Group | Sample Number | Contaminant | Reason |
|---|---|---|---|
| 10116Q-09 | JL3005 & JL3006 | Acetone<br>1,2-Dibromo-3-chloropropane | Calibration Relative Response Factor (RRF) <0.05. |
| 10116Q-10 | JL3002 | Acetone<br>1,2-Dibromo-3-chloropropane | Calibration Relative Response Factor (RRF) <0.05. |
| | JL3003 | Acetone | Calibration Relative Response Factor (RRF) <0.05. |
| 10116Q-11 | JL3007 & JL3008 | Acetone<br>1,2-Dibromo-3-chloropropane | Calibration Relative Response Factor (RRF) <0.05. |

## 2.3 Blank Results

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

- Trip blanks (TBs) consist of a VOC sample vial filled in the laboratory with ASTM Type II reagent grade water, transported to the sampling site, handled like an environmental sample and returned to the laboratory for analysis. Trip blanks are prepared only when VOC samples are collected and analyzed. Trip blanks are used to assess the potential introduction of contaminants from sample containers during the transportation and/or storage procedures. Trip blanks were sent with all aqueous samples shipped to the laboratory requiring volatile analysis.

- Equipment rinsates (ER) are samples of analyte-free deionized water poured into, or 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 an analyte-free matrix which is analyzed to verify the analysis system is free of contamination. ICBs and CCBs are analyzed immediately after the initial and continuing calibration is performed.

Field sample concentrations were evaluated to determine if the sample results could have been biased by the presence of any contamination measured in trip blanks, 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 |
|---|---|---|---|
| 10116Q-01 | JL0006, JL0013, JL0014, JL0019, JL0020, JL0029, JL0035 & JL0036 | Potassium | Potassium results for samples JL0006, JL0013, JL0014, JL0019, JL0020, JL0029, JL0035 & JL0036 were "B" qualified. |
| | JL0019 & JL0020 | Arsenic | Arsenic results for JL0019 & JL0020 were "B" qualified. |
| 10116Q-02 | JL0004 | Beryllium | Beryllium result for sample JL0004 was "B" qualified. |
| | JL0001, JL0002, JL0004, JL0011, JL0021, JL0022, JL0023, JL0024, JL0025, JL0028 & JL0040 | Cobalt | Cobalt results for samples JL0001, JL0002, JL0004, JL0011, JL0021, JL0022, JL0023, JL0024, JL0025, JL0028 & JL0040 were "B" qualified. |
| 10116Q-03 | JL0010 & JL0042 | Calcium | Calcium results for samples JL0010 & JL0042 were "B" qualified. |
| | JL0010 | Arsenic<br>Zinc | Arsenic and zinc results for sample JL0010 were "B" qualified. |
| | JL0009, JL0041 & JL0043 | Aluminum | Aluminum results for samples JL0009, JL0041 & JL0043 were "B" qualified. |

**Table 2.3-1 (Continued)**
**Summary of Blank Contamination**

| Sample Delivery Group | Sample Number | Contaminant | Action |
|---|---|---|---|
| 10116Q-04 | JL0034 | Silver<br>Magnesium | Silver and magnesium results for sample JL0034 were "B" qualified. |
| 10116Q-05 | JL2001 & JL2004 | Silver | Silver results for samples JL2001 & JL2004 were "B" qualified. |
| 10116Q-06 | JL1001, JL1002 & JL1004 | Cobalt | Cobalt results for samples JL1001, JL1002 & JL1004 were "B" qualified. |
| | JL1004 | Potassium | Potassium result for sample JL1004 was "B" qualified. |
| 10116Q-07 | JL0015, JL0017 & JL0018 | Potassium | Potassium results for samples JL0015, JL0017 & JL0018 were "B" qualified. |
| 10116Q-08 | JL0037 | Silver | Silver result for sample JL0037 was "B" qualified. |
| | JL0038 | Zinc | Zinc result for sample JL0038 was "B" qualified. |
| | JL0037 & JL0039 | Potassium & Cobalt | Potassium and cobalt results for samples JL0037 & JL0039 were "B" qualified. |
| 10116Q-09 | JL3006 | Copper<br>Selenium<br>Silver | Copper, selenium and silver results for sample JL3006 were "B" qualified. |
| | JL3005 & JL3006 | Calcium<br>Magnesium<br>Zinc | Calcium, magnesium and zinc results for samples JL3005 & JL3006 were "B" qualified. |
| 10116Q-10 | JL3003 | Silver<br>Cobalt<br>Copper<br>Nickel | Silver, cobalt, copper and nickel results for sample JL3003 were "B" qualified. |
| 10116Q-11 | JL3007 & JL3008 | Magnesium<br>Iron | Magnesium and iron results for samples JL3007 & JL3008 were "B" qualified. |

## *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.

Overall sampling and analysis precision for this task was assessed using field duplicate (FD) samples. Laboratory precision was assessed by laboratory control sample/laboratory control sample duplicate (LCS/LCSD) and matrix spike/matrix spike duplicate (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 list field duplicate, LCS/LCSD and MS/MSD RPD anomalies.

**Table 2.4-1 Precision Acceptance Criteria**

| Field/Laboratory QC Type | Matrix | |
|---|---|---|
| | Aqueous | Soil |
| Field Duplicate (Both Organic & Inorganic) | RPD < 35% | RPD < 50% |
| Perchlorate LCS/LCSD and MS/MSD | RPD < 10% | RPD < 20% |
| Nitroaromatic and Nitramine Explosives LCS/LCSD and MS/MSD | Refer to Table 8-1of FTMC "Installation Wide Sample and Analysis Plan" | Refer to Table 8-1of FTMC "Installation Wide Sample and Analysis Plan" |
| Metals LCS/LCSD and MS/MSD | RPD < 20% | 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 |
|---|---|---|---|
| 10116Q-02 | JL0004 (MS/MSD) | Manganese (44%) | Manganese result for samples JL0001, JL0002, JL0003, JL0004, JL0007, JL0008, JL0011, JL0012, JL0021, JL0022, JL0023, JL0024, JL0025, JL0026, JL0027, JL0028, L0039, JL0040 were either "J" / "UJ" qualified due to MS/MSD RPD exceeding QC criteria. |
| 10116Q-03 | JL0042 (MS/MSD) | Antimony (31%) | Antimony result for sample JL0009, JL0010, JL0041, JL0042, JL0043, JL0044 & JL0045 was "J" / "UJ" qualified due to MS/MSD RPD exceeding QC criteria. |
| | JL0044 (Parent) / JL0045 (FD) | Manganese (51%) | Manganese result for sample JL0044 was "J" qualified due to RPD between parent sample and its corresponding field duplicate 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 SW846 SW6010B/SW7000 Series methodology, nitroaromatic-nitramine explosives by SW8330, perchlorate by EPA 314.0 and TCL volatiles by SW8260B. 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 LCS/LCSD and MS/MSD Spike Recovery Criteria Exceedances**

| Sample Delivery Group | Sample Number | Contaminant | Action |
|---|---|---|---|
| 10116Q-01 | JL0030MS/MSD | Antimony (LB) | Antimony results for samples JL0005, JL0006, JL0013, JL0014, JL0019, JL0020, JL0029, JL0030, JL0035 & JL0036 were "J" / "UJ" qualified due to MS/MSD spike recoveries exceeding QC criteria. |
| 10116Q-02 | JL0012MS/MSD | Antimony (LB)<br>Arsenic (LB)<br>Manganese (HLB)<br>Selenium (LB)<br>Vanadium (LB)<br>Zinc (LB) | Antimony, arsenic, manganese, selenium, vanadium and zinc results for samples JL0001, JL0002, JL0003, JL0004, JL0007, JL0008, JL0011, JL0012, JI0021, JL0022, JL0023, JL0024, JL0025, JL0026, JL0027, JL0028, JL0039, JL0040 were "J" / "UJ" qualified due to MS/MSD spike recoveries exceeding QC criteria. |

**Table 2.5-1 (Continued)**
**Summary of LCS/LCSD and MS/MSD Spike Recovery Criteria Exceedances**

| Sample Delivery Group | Sample Number | Contaminant | Action |
|---|---|---|---|
| 10116Q-03 | JL0043MS/MSD | Antimony (LB)<br>Manganese (LB) | Antimony and manganese results for samples JL0009, JL0010, JL0041, JL0042, JL0043, JL0044 and JL0045 were "J" / "UJ" qualified due to MS/MSD spike recoveries exceeding QC criteria. |
| 10116Q-05 | JL2002MS/MSD | 2,4,6-Trinitrotoluene (LB) | 2,4,6-Trinitrotoluene results for samples JL2001, JL2002, JL2003 & JL2004 were "UJ" qualified due to MS/MSD spike recoveries exceeding QC criteria. |
| 10116Q-06 | JL1001MS/MSD | Tetryl (LB) | Tetryl results for samples JL1001, JL1002, JL1003 & JL004 were "UJ" qualified due to MS/MSD spike recoveries exceeding QC criteria. |
| | JL1002MS/MSD | Antimony (LB)<br>Iron (HB)<br>Manganese (LB) | Antimony, iron and manganese results for samples JL1001, JL1002, JL1003 & JL1004 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. Soil sample data are being used to assess potential impacts to terrestrial biota that might use the site for food and/or habitat purposes. Monitoring well locations where chosen to establish groundwater flow direction and site-specific geology, and provide 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-116Q Ranges West of Iron Mountain Road. 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-116Q requirement for completeness is 95% for both aqueous and soil samples. The % Completeness for this task is calculated to be 99.6%

- % Completeness = (2683 / 2694) x 100 = 99.6%.

## *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-116Q
# Ranges West of Iron Mountain Road
# Analytical Summary
# Project No. 796887

## HR-116Q Soil Sampling

| Sample Location | Sample Name | Sample Number | Date Sampled | Analytical Suite |
|---|---|---|---|---|
| HR-116Q-MW01 | HR-116Q-MW01-SS-JL0001-REG | JL0001 | 30-Jan-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-116Q-MW01-DS-JL0002-REG | JL0002 | 30-Jan-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-116Q-MW02 | HR-116Q-MW02-SS-JL0003-REG | JL0003 | 30-Jan-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-116Q-MW02-DS-JL0004-REG | JL0004 | 30-Jan-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-116Q-MW03 | HR-116Q-MW03-SS-JL0005-REG | JL0005 | 13-Dec-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-116Q-MW03-DS-JL0006-REG | JL0006 | 13-Dec-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-116Q-MW04 | HR-116Q-MW04-SS-JL0007-REG | JL0007 | 30-Jan-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-116Q-MW04-DS-JL0008-REG | JL0008 | 30-Jan-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-116Q-MW05 | HR-116Q-MW05-SS-JL0009-REG | JL0009 | 01-Feb-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-116Q-MW05-DS-JL0010-REG | JL0010 | 01-Feb-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-116Q-MW06 | HR-116Q-MW06-SS-JL0011-REG | JL0011 | 30-Jan-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-116Q-MW06-DS-JL0012-REG | JL0012 | 30-Jan-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-116Q-MW06-DS-JL0012-MS | JL0012-MS | 30-Jan-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-116Q-MW06-DS-JL0012-MSD | JL0012-MSD | 30-Jan-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-116Q-MW07 | HR-116Q-MW07-SS-JL0013-REG | JL0013 | 13-Dec-00 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-116Q-MW07-DS-JL0014-REG | JL0014 | 13-Dec-00 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-116Q-MW08 | HR-116Q-MW08-SS-JL0015-REG | JL0015 | 02-Apr-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-116Q-MW08-DS-JL0016-REG | JL0016 | 02-Apr-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-116Q-MW09 | HR-116Q-MW09-SS-JL0017-REG | JL0017 | 03-Apr-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-116Q-MW09-DS-JL0018-REG | JL0018 | 03-Apr-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-116Q-MW10 | HR-116Q-MW10-SS-JL0019-REG | JL0019 | 13-Dec-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-116Q-MW10-DS-JL0020-REG | JL0020 | 13-Dec-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-116Q-MW11 | HR-116Q-MW11-SS-JL0021-REG | JL0021 | 01-Feb-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-116Q-MW11-DS-JL0022-REG | JL0022 | 01-Feb-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-116Q-MW12 | HR-116Q-MW12-SS-JL0023-REG | JL0023 | 30-Jan-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-116Q-MW12-DS-JL0024-REG | JL0024 | 30-Jan-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-116Q-MW13 | HR-116Q-MW13-SS-JL0025-REG | JL0025 | 30-Jan-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-116Q-MW13-DS-JL0026-REG | JL0026 | 30-Jan-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-116Q-MW14 | HR-116Q-MW14-SS-JL0027-REG | JL0027 | 30-Jan-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-116Q-MW14-DS-JL0028-REG | JL0028 | 30-Jan-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-116Q-MW15 | HR-116Q-MW15-SS-JL0029-REG | JL0029 | 14-Dec-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-116Q-MW15-DS-JL0030-REG | JL0030 | 14-Dec-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |

# Ft. McClellan
# Parcel HR-116Q
# Ranges West of Iron Mountain Road
# Analytical Summary
# Project No. 796887

| HR-116Q Soil Sampling | | | | |
|---|---|---|---|---|
| **Sample Location** | **Sample Name** | **Sample Number** | **Date Sampled** | **Analytical Suite** |
| HR-116Q-GP01 | HR-116Q-GP01-SS-JL0031-REG | JL0031 | 07-Feb-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-116Q-GP01-SS-JL0032-FD | JL0032 | 07-Feb-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-116Q-GP01-DS-JL0034-REG | JL0034 | 07-Feb-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-116Q-GP02 | HR-116Q-GP02-SS-JL0035-REG | JL0035 | 13-Dec-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-116Q-GP02-DS-JL0036-REG | JL0036 | 13-Dec-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-116Q-GP03 | HR-116Q-GP03-SS-JL0037-REG | JL0037 | 09-Apr-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-116Q-GP03-DS-JL0038-REG | JL0038 | 09-Apr-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-116Q-GP04 | HR-116Q-GP04-SS-JL0039-REG | JL0039 | 30-Jan-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-116Q-GP04-DS-JL0040-REG | JL0040 | 30-Mar-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-116Q-GP05 | HR-116Q-GP05-SS-JL0041-REG | JL0041 | 02-Feb-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-116Q-GP05-DS-JL0042-REG | JL0042 | 02-Feb-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-116Q-GP06 | HR-116Q-GP06-SS-JL0043-REG | JL0043 | 01-Feb-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-116Q-GP06-SS-JL0043-MS | JL0043-MS | 01-Feb-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-116Q-GP06-SS-JL0043-MSD | JL0043-MSD | 01-Feb-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-116Q-GP06-DS-JL0044-REG | JL0044 | 01-Feb-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-116Q-GP06-DS-JL0045-FD | JL0045 | 01-Feb-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |

# Ft. McClellan
# Parcel HR-116Q
# Ranges West of Iron Mountain Road
# Analytical Summary
# Project No. 796887

## HR-116Q Groundwater Sampling

| Sample Location | Sample Name | Sample Number | Date Sampled | Analytical Suite |
|---|---|---|---|---|
| HR-116Q-MW01 | HR-116Q-MW01-GW-JL3001-REG | JL3001 | Not Sampled | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-116Q-MW02 | HR-116Q-MW02-GW-JL3002-REG | JL3002 | 16-May-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-116Q-MW03 | HR-116Q-MW03-GW-JL3003-REG | JL3003 | 15-May-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-116Q-MW04 | HR-116Q-MW04-GW-JL3004-REG | JL3004 | Not Sampled | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-116Q-MW05 | HR-116Q-MW05-GW-JL3005-REG | JL3005 | 26-Apr-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-116Q-MW05-GW-JL3006-FD | JL3006 | 26-Apr-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-116Q-MW06 | HR-116Q-MW06-GW-JL3007-REG | JL3007 | 17-May-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-116Q-MW07 | HR-116Q-MW07-GW-JL3008-REG | JL3008 | 17-May-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-116Q-MW08 | HR-116Q-MW08-GW-JL3009-REG | JL3009 | 30-May-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-116Q-MW09 | HR-116Q-MW09-GW-JL3010-REG | JL3010 | Not Sampled | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-116Q-MW10 | HR-116Q-MW10-GW-JL3011-REG | JL3011 | Not Sampled | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-116Q-MW11 | HR-116Q-MW11-GW-JL3012-REG | JL3012 | Not Sampled | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-116Q-MW12 | HR-116Q-MW12-GW-JL3013-REG | JL3013 | Not Sampled | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-116Q-MW13 | HR-116Q-MW13-GW-JL3014-REG | JL3014 | Not Sampled | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-116Q-MW14 | HR-116Q-MW14-GW-JL3015-REG | JL3015 | Not Sampled | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-116Q-MW15 | HR-116Q-MW15-GW-JL3016-REG | JL3016 | Not Sampled | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |

## HR-116Q Sediment-Surface Water Sampling

| Sample Location | Sample Name | Sample Number | Date Sampled | Analytical Suite |
|---|---|---|---|---|
| HR-116Q-SW/SD01 | HR-116Q-SW/SD01-SD-JL1001-REG | JL1001 | 27-Feb-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330, Perchlorate by EPA 314.0, TOC by SW9060 and Grain size by ASTM 421/422. |
| | HR-116Q-SW/SD01-SW-JL2001-REG | JL2001 | 27-Feb-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-116Q-SW/SD02 | HR-116Q-SW/SD02-SD-JL1002-REG | JL1002 | 27-Feb-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330, Perchlorate by EPA 314.0, TOC by SW9060 and Grain size by ASTM 421/422. |
| | HR-116Q-SW/SD02-SW-JL2002-REG | JL2002 | 27-Feb-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-116Q-SW/SD02-SW-JL2002-MS | JL2002-MS | 27-Feb-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-116Q-SW/SD02-SW-JL2002-MSD | JL2002-MSD | 27-Feb-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-116Q-SW/SD03 | HR-116Q-SW/SD03-SD-JL1003-REG | JL1003 | 27-Feb-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330, Perchlorate by EPA 314.0, TOC by SW9060 and Grain size by ASTM 421/422. |
| | HR-116Q-SW/SD03-SW-JL2003-REG | JL2003 | 27-Feb-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-116Q-SW/SD04 | HR-116Q-SW/SD04-SD-JL1004-REG | JL1004 | 27-Feb-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330, Perchlorate by EPA 314.0, TOC by SW9060 and Grain size by ASTM 421/422. |
| | HR-116Q-SW/SD04-SW-JL2004-REG | JL2004 | 27-Feb-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |

# ATTACHMENT B

# DATA VALIDATION SUMMARY REPORT

***Data Validation Summary Report***
***for the Site Investigation Performed at the***
***Ranges West of Iron Mountain Road (Parcel HR-116Q)***
***Fort McClellan***

## *1.0 Introduction*

Level III data validation was performed on 100% of the environmental samples collected at Ranges West of Iron Mountain Road (Parcel HR-116Q). The analytical data consisted of twelve sample delivery groups (SDG) 10116Q-01, 10116Q-02, 10116Q-03, 10116Q-04, 10116Q-05, 10116Q-06, 10116Q-07, 10116Q-08, 10116Q-09, 10116Q-10, 10116Q-11 and 10116Q-12, 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) |
|---|
| Volatile Organics by GC/MS SW846 8260B |
| TAL Metals by SW846 6010B/7470A/7471A |
| Nitroaromatic and Nitramine Explosives by SW846 8330 |
| Perchlorate by EPA 314.0 |
| Total Organic Carbon (TOC) by 9060 |

## *2.0 Procedures*

The sample data were validated following the logic identified in the *USEPA Contract Laboratory Program (CLP) National Functional Guidelines For Inorganic Data Review (February 1994)* and *USEPA Contract Laboratory Program National Functional Guidelines For Organic Review (October 1999)* for all areas except Blanks. *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's) were applied to all sample results. As the result of the use of Update III SW846 test methods for the analytical data and the application of the 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 Chromatograph (GC) and Gas Chromatograph/Mass Spectra (GC/MS) calibration areas and is due to the fact that the analytical methods are "performance-based", and allows 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, CFR, SOP's, QAP) 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 qualification. The only rejected data ('R' qualified) were due to "poor performing" volatile compounds (ketones, some halogenated hydrocarbons, e.g.), which exhibited poor calibration responses in the associated calibration data, and samples that were reanalyzed and have more than one set of results reported. The "R" qualifier was assigned to the samples with more than one set of results to indicate that a given result should not be used to characterize a particular constituent or an analysis for a given sample.

Individual validation reports have been prepared for each parameter in each SDG 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 Parcel HR-116Q. 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 Volatile Organics by GC/MS SW846 8260B*

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:

<u>Holding Times</u>

Technical holding time criteria were met for all samples.

Initial and Continuing Calibration

The initial calibration and continuing calibrations associated with the project samples met QC criteria, with the exception of the following:

- The following exhibited individual ICAL/CCAL RRF<.1 and/or RSD>30%, CCAL %D's > 20%:

| SDG Number | Samples Affected | Compound(s) | Validation Qualifier |
|---|---|---|---|
| 10116Q-09 | JL3005, JL3006 | 1,2-Dibromo-3-Chloropropane, Acetone, 2-Hexanone, Bromochloromethane, Hexachlorobutadiene | R/UJ |
| 10116Q-10 | JL3002, JL3003 | Acetone, 2-Hexanone, Bromomethane, Chloromethane, Dichlorodifluoromethane | R/UJ |
| | JL3002 | 1,2-Dibromo-3-Chloropropane | R |
| | JL3003 | 1,1,2,2-Tetrachloroethane, Bromochloromethane, Trichloroethene | UJ |
| 10116Q-11 | JL3007, JL3008 | 1,2-Dibromo-3-Chloropropane, Acetone, 2-Hexanone, Chloromethane, Dichlorodifluoromethane | R/UJ |
| 10116Q-12 | JL3009 | 2-Butanone, Dichlorodifluoromethane | UJ |

Blanks

The 5X/10X rule for contaminants found in the associated equipment rinses, trip blanks, and method blanks was applied to all sample results. All were found to be acceptable.

Surrogate Recoveries

All surrogate recoveries were within acceptable QC criteria.

Matrix Spike / Matrix Spike Duplicate

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

Laboratory Control Sample (LCS)

LCS 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.

Internal Standards

All internal standards met QC criteria

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.

### *4.2 TAL Metals by SW846 6010B/7470A/7471A*

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 with the exception of the following:

| SDG | Samples Affected | Element/Elements | Validation Qualifier |
|---|---|---|---|
| 10116Q-01 | JL0029, JL0030, JL0036 | Thallium | UJ |

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 exception of the following:

Note: 'B' Qualifiers were applied to all of the following sample results.

| SDG | Samples Affected | Element/Elements | Associated Blank Contamination |
|---|---|---|---|
| 10116Q-01 | JL0006, JL0013, JL0014, JL0019, JL0020, JL0029, JL0035, JL0036 | Potassium | Method |
| | JL0019, JL0020 | Arsenic | Calibration |
| 10116Q-02 | JL0004 | Beryllium | Calibration |
| | JL0001, JL0002, JL0004, JL0011, JL0021, JL0022, JL0023, JL0024, JL0025, JL0028, JL0040 | Cobalt | Calibration |
| 10116Q-03 | JL0010, JL0042 | Calcium | Calibration |
| | JL0010 | Arsenic, Zinc | Calibration |
| | JL0009, JL0041, JL0043 | Aluminum | Method |
| 10116Q-04 | JL0034 | Silver, Magnesium | Calibration |
| 10116Q-05 | JL2001, JL2004 | Silver | Calibration |
| 10116Q-06 | JL1001, JL1002, JL1004 | Cobalt | Calibration |
| | JL1004 | Potassium | Calibration |
| 10116Q-07 | JL0015, JL0017, JL0018 | Potassium | Calibration |
| 10116Q-08 | JL0037 | Silver | Method/Calibration |
| | JL0038 | Zinc | Calibration |
| | JL0037, JL0038 | Potassium, Cobalt | Calibration |
| 10116Q-09 | JL3006 | Copper, Selenium, Silver | Calibration/ER |
| | JL3005, JL3006 | Calcium, Magnesium, Zinc | ER |
| 10116Q-10 | JL3003 | Silver, Cobalt, Copper, Nickel | Method/Calibration/ER |
| 10116Q-11 | JL3007, JL3008 | Magnesium, Iron | Calibration/ER |

'B' qualifiers assigned to designate blank contamination, which are identification qualifiers, take precedence over estimating qualifiers, assigned due to quantitation.

Matrix Spike / Matrix Spike Duplicate

Batch QC was performed for the project samples and all QC criteria were met, with the exception of the following:

| SDG | Samples Affected | Element/Elements | Validation Qualifier |
|---|---|---|---|
| 10116Q-01 | ALL | Antimony | J/UJ |
| 10116Q-02 | ALL | Antimony, Arsenic, Manganese, Selenium, Vanadium, Zinc | J/UJ |
| 10116Q-03 | ALL | Antimony, Manganese | J/UJ |
| 10116Q-06 | ALL | Antimony, Iron, Manganese | J/UJ |

Laboratory Control Sample (LCS)

All QC criteria were met for the LCS associated with the project sample analyses.

Interference Check Sample (ICS)

All ICS % recoveries for the project samples were acceptable.

ICP Serial Dilutions

All QC criteria were met, with the exception of the following:

| SDG | Samples Affected | Element/Elements | Validation Qualifier |
|---|---|---|---|
| 10116Q-02 | ALL | Arsenic | J |
| 10116Q-03 | ALL | Lead, Zinc | J/B |

Field Duplicates

Original and field duplicate results were evaluated and no problems were identified, with the exception of the following:

| SDG | Samples Affected | Element/Elements | Validation Qualifier |
|---|---|---|---|
| 10116Q-03 | JL0044 (Original), JL0045 (Duplicate) | Manganese | J |

Sample Quantitation

Results quantified between the IDL and the RL ("J" flagged by the laboratory) were qualified as estimated (J).

### *4.3 Nitroaromatic and Nitramine Explosives by SW846 8330*

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 Calibration

The initial calibration and continuing calibrations associated with the project samples met QC criteria with the exceptions noted below:

| SDG | Samples Affected | Compounds | Validation Qualifier |
|---|---|---|---|
| 10116Q-03 | JL0045 | 1,3,5-Trinitrobenzene, 1,3-Dinitrobenzene, 2,4,6-Trinitrotoluene, 2,4-Dinitrotoluene, 2-Amino-4,6-dinitrotoluene, 2-Nitrotoluene, 3-Nitrotoluene, 4-Amino-2,6-dinitrotoluene, HMX, Nitrobenzene, RDX, Tetryl, p-Nitrotoluene | UJ |

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 acceptable QC ranges.

Matrix Spike / Matrix Spike Duplicate

MS/MSD was performed for the project samples and all QC criteria were met with the exceptions noted below:

| SDG | Samples Affected | Compounds | Validation Qualifier |
|---|---|---|---|
| 10116Q-05 | JL2001, JL2002, JL2003, JL2004 | 2,4,6-Trinitrotoluene | UJ |
| 10116Q-06 | JL1001, JL1002, JL1003, JL1004 | Tetryl | UJ |

Laboratory Control Sample (LCS)

LCS 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.

### *4.4 Perchlorate by EPA 314.0*

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

Laboratory Control Sample (LCS)

All QC criteria were met for the LCS associated with the project sample analyses.

Field Duplicates

Original and field duplicate results were evaluated and no problems were noted.

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.

### *4.5. Total Organic Carbon by 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. All was acceptable no qualification was necessary.

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, no qualification was necessary.

Matrix Spike / Matrix Spike Duplicate

MS/MSD were performed for the project samples, and all QC criteria were met. No qualification was necessary.

Laboratory Control Sample

Laboratory Control Sample (LCS) was performed for the project samples and all QC criteria were met. No qualification was necessary.

Field Duplicates

Original and field duplicate results were evaluated and no problems were noted.

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 "nondetect" may be inaccurate or imprecise. The nondetect result should be estimated.

## Validation Reason Code Definitions

| Reason Code | Definition |
|---|---|
| 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

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10116Q-01** | | | | | | | | | | | | | | | | | | |
| JL0005 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 8300 | mg/kg | | Y | Y | P | | | | | | | L162-01 | 23:13 |
| | | | | ANTIMONY | 11.7 | mg/kg | U | N | Y | U | UJ | | 08A | | | | L162-01 | 23:13 |
| | | | | ARSENIC | 1.83 | mg/kg | | Y | Y | P | | | | | | | L162-01 | 13:13 |
| | | | | BARIUM | 82.6 | mg/kg | | Y | Y | P | | | | | | | L162-01 | 23:13 |
| | | | | BERYLLIUM | .465 | mg/kg | J | Y | Y | P | J | | 15 | | | | L162-01 | 23:13 |
| | | | | CADMIUM | .583 | mg/kg | U | N | Y | U | U | | | | | | L162-01 | 23:13 |
| | | | | CALCIUM | 256 | mg/kg | | Y | Y | P | | | | | | | L162-01 | 23:13 |
| | | | | CHROMIUM | 7.36 | mg/kg | | Y | Y | P | | | | | | | L162-01 | 23:13 |
| | | | | COBALT | 2.71 | mg/kg | | Y | Y | P | | | | | | | L162-01 | 23:13 |
| | | | | COPPER | 3.7 | mg/kg | | Y | Y | P | | | | | | | L162-01 | 23:13 |
| | | | | IRON | 7900 | mg/kg | | Y | Y | P | | | | | | | L162-01 | 23:13 |
| | | | | LEAD | 13.8 | mg/kg | | Y | Y | P | | | | | | | L162-01 | 13:13 |
| | | | | MAGNESIUM | 267 | mg/kg | | Y | Y | P | | | | | | | L162-01 | 23:13 |
| | | | | MANGANESE | 247 | mg/kg | | Y | Y | P | | | | | | | L162-01 | 23:13 |
| | | | | NICKEL | 3.68 | mg/kg | | Y | Y | P | | | | | | | L162-01 | 23:13 |
| | | | | POTASSIUM | 583 | mg/kg | U | N | Y | U | U | | | | | | L162-01 | 23:13 |
| | | | | SELENIUM | .514 | mg/kg | J | Y | Y | P | J | | 15 | | | | L162-01 | 13:13 |
| | | | | SILVER | 1.17 | mg/kg | U | N | Y | U | U | | | | | | L162-01 | 23:13 |
| | | | | SODIUM | 117 | mg/kg | U | N | Y | U | U | | | | | | L162-01 | 23:13 |
| | | | | THALLIUM | 2.33 | mg/kg | U | N | Y | U | U | | | | | | L162-01 | 13:13 |
| | | | | VANADIUM | 11.8 | mg/kg | | Y | Y | P | | | | | | | L162-01 | 23:13 |
| | | | | ZINC | 21.2 | mg/kg | | Y | Y | P | | | | | | | L162-01 | 23:13 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .117 | mg/kg | U | N | Y | U | U | | | | | | L162-01 | 11:12 |
| JL0006 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 9190 | mg/kg | | Y | Y | P | | | | | | | L162-02 | 23:18 |
| | | | | ANTIMONY | 10.9 | mg/kg | U | N | Y | U | UJ | | 08A | | | | L162-02 | 23:18 |
| | | | | ARSENIC | 2.88 | mg/kg | | Y | Y | P | | | | | | | L162-02 | 13:18 |
| | | | | BARIUM | 33.9 | mg/kg | | Y | Y | P | | | | | | | L162-02 | 23:18 |
| | | | | BERYLLIUM | .327 | mg/kg | J | Y | Y | P | J | | 15 | | | | L162-02 | 23:18 |
| | | | | CADMIUM | .546 | mg/kg | U | N | Y | U | U | | | | | | L162-02 | 23:18 |
| | | | | CALCIUM | 53.2 | mg/kg | J | Y | Y | P | J | | 15 | | | | L162-02 | 23:18 |
| | | | | CHROMIUM | 16.2 | mg/kg | | Y | Y | P | | | | | | | L162-02 | 23:18 |
| | | | | COBALT | 3.92 | mg/kg | | Y | Y | P | | | | | | | L162-02 | 23:18 |
| | | | | COPPER | 3.1 | mg/kg | | Y | Y | P | | | | | | | L162-02 | 23:18 |
| | | | | IRON | 18000 | mg/kg | | Y | Y | P | | | | | | | L162-02 | 23:18 |
| | | | | LEAD | 5.17 | mg/kg | | Y | Y | P | | | | | | | L162-02 | 13:18 |
| | | | | MAGNESIUM | 339 | mg/kg | | Y | Y | P | | | | | | | L162-02 | 23:18 |
| | | | | MANGANESE | 135 | mg/kg | | Y | Y | P | | | | | | | L162-02 | 23:18 |
| | | | | NICKEL | 5.01 | mg/kg | | Y | Y | P | | | | | | | L162-02 | 23:18 |
| | | | | POTASSIUM | 309 | mg/kg | J | Y | Y | F | B | | 06A | | | | L162-02 | 23:18 |
| | | | | SELENIUM | 1.09 | mg/kg | U | N | Y | U | U | | | | | | L162-02 | 13:18 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10116Q-01** | | | | | | | | | | | | | | | | | | |
| JL0006 | SW6010B | SW3050 | N 0 1 | SILVER | 1.09 | mg/kg | U | N | Y | U | U | | | | | | L162-02 | 23:18 |
| | | | | SODIUM | 109 | mg/kg | U | N | Y | U | U | | | | | | L162-02 | 23:18 |
| | | | | THALLIUM | .729 | mg/kg | J | Y | Y | P | J | | | | | | L162-02 | 13:18 |
| | | | | VANADIUM | 23 | mg/kg | | Y | Y | P | | | | | | | L162-02 | 23:18 |
| | | | | ZINC | 9.65 | mg/kg | | Y | Y | P | | | | | | | L162-02 | 23:18 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .109 | mg/kg | U | N | Y | U | U | | | | | | L162-02 | 11:15 |
| JL0013 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 11500 | mg/kg | | Y | Y | P | | | | | | | L162-03 | 23:23 |
| | | | | ANTIMONY | 11.2 | mg/kg | U | N | Y | U | UJ | | 08A | | | | L162-03 | 23:23 |
| | | | | ARSENIC | 4.98 | mg/kg | | Y | Y | P | | | | | | | L162-03 | 13:23 |
| | | | | BARIUM | 36.8 | mg/kg | | Y | Y | P | | | | | | | L162-03 | 23:23 |
| | | | | BERYLLIUM | .674 | mg/kg | J | Y | Y | P | J | | 15 | | | | L162-03 | 23:23 |
| | | | | CADMIUM | .562 | mg/kg | U | N | Y | U | U | | | | | | L162-03 | 23:23 |
| | | | | CALCIUM | 96.1 | mg/kg | J | Y | Y | P | J | | 15 | | | | L162-03 | 23:23 |
| | | | | CHROMIUM | 13.4 | mg/kg | | Y | Y | P | | | | | | | L162-03 | 23:23 |
| | | | | COBALT | 7.11 | mg/kg | | Y | Y | P | | | | | | | L162-03 | 23:23 |
| | | | | COPPER | 8.01 | mg/kg | | Y | Y | P | | | | | | | L162-03 | 23:23 |
| | | | | IRON | 28700 | mg/kg | | Y | Y | P | | | | | | | L162-03 | 23:23 |
| | | | | LEAD | 23.5 | mg/kg | | Y | Y | P | | | | | | | L162-03 | 13:23 |
| | | | | MAGNESIUM | 456 | mg/kg | | Y | Y | P | | | | | | | L162-03 | 23:23 |
| | | | | MANGANESE | 189 | mg/kg | | Y | Y | P | | | | | | | L162-03 | 23:23 |
| | | | | NICKEL | 10.8 | mg/kg | | Y | Y | P | | | | | | | L162-03 | 23:23 |
| | | | | POTASSIUM | 275 | mg/kg | J | Y | Y | F | B | | 06A | | | | L162-03 | 23:23 |
| | | | | SELENIUM | 1.12 | mg/kg | U | N | Y | U | U | | | | | | L162-03 | 13:23 |
| | | | | SILVER | 1.12 | mg/kg | U | N | Y | U | U | | | | | | L162-03 | 23:23 |
| | | | | SODIUM | 112 | mg/kg | U | N | Y | U | U | | | | | | L162-03 | 23:23 |
| | | | | THALLIUM | 1.68 | mg/kg | J | Y | Y | P | J | | 15 | | | | L162-03 | 13:23 |
| | | | | VANADIUM | 23.9 | mg/kg | | Y | Y | P | | | | | | | L162-03 | 23:23 |
| | | | | ZINC | 31.3 | mg/kg | | Y | Y | P | | | | | | | L162-03 | 23:23 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .037 | mg/kg | J | Y | Y | P | J | | 15 | | | | L162-03 | 11:25 |
| JL0014 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 10300 | mg/kg | | Y | Y | P | | | | | | | L162-04 | 23:28 |
| | | | | ANTIMONY | 11.1 | mg/kg | U | N | Y | U | UJ | | 08A | | | | L162-04 | 23:28 |
| | | | | ARSENIC | 5.1 | mg/kg | | Y | Y | P | | | | | | | L162-04 | 13:28 |
| | | | | BARIUM | 16.3 | mg/kg | | Y | Y | P | | | | | | | L162-04 | 23:28 |
| | | | | BERYLLIUM | .421 | mg/kg | J | Y | Y | P | J | | 15 | | | | L162-04 | 23:28 |
| | | | | CADMIUM | .554 | mg/kg | U | N | Y | U | U | | | | | | L162-04 | 23:28 |
| | | | | CALCIUM | 50.2 | mg/kg | J | Y | Y | P | J | | 15 | | | | L162-04 | 23:28 |
| | | | | CHROMIUM | 14.6 | mg/kg | | Y | Y | P | | | | | | | L162-04 | 23:28 |
| | | | | COBALT | 3.69 | mg/kg | | Y | Y | P | | | | | | | L162-04 | 23:28 |
| | | | | COPPER | 9.78 | mg/kg | | Y | Y | P | | | | | | | L162-04 | 23:28 |
| | | | | IRON | 24800 | mg/kg | | Y | Y | P | | | | | | | L162-04 | 23:28 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10116Q-01** | | | | | | | | | | | | | | | | | | | | |
| JL0014 | SW6010B | SW3050 | N | 0 | 1 | LEAD | 15 | mg/kg | | Y | Y | P | | | | | | | L162-04 | 13:28 |
| | | | | | | MAGNESIUM | 386 | mg/kg | | Y | Y | P | | | | | | | L162-04 | 23:28 |
| | | | | | | MANGANESE | 82.7 | mg/kg | | Y | Y | P | | | | | | | L162-04 | 23:28 |
| | | | | | | NICKEL | 7.15 | mg/kg | | Y | Y | P | | | | | | | L162-04 | 23:28 |
| | | | | | | POTASSIUM | 297 | mg/kg | J | Y | Y | F | B | | 06A | | | | L162-04 | 23:28 |
| | | | | | | SELENIUM | 1.11 | mg/kg | U | N | Y | U | U | | | | | | L162-04 | 13:28 |
| | | | | | | SILVER | 1.11 | mg/kg | U | N | Y | U | U | | | | | | L162-04 | 23:28 |
| | | | | | | SODIUM | 111 | mg/kg | U | N | Y | U | U | | | | | | L162-04 | 23:28 |
| | | | | | | THALLIUM | 1.39 | mg/kg | J | Y | Y | P | J | | 15 | | | | L162-04 | 13:28 |
| | | | | | | VANADIUM | 28.4 | mg/kg | | Y | Y | P | | | | | | | L162-04 | 23:28 |
| | | | | | | ZINC | 17.8 | mg/kg | | Y | Y | P | | | | | | | L162-04 | 23:28 |
| | SW7471A | TOTAL | N | 0 | 1 | MERCURY | .111 | mg/kg | U | N | Y | U | U | | | | | | L162-04 | 11:27 |
| JL0019 | SW6010B | SW3050 | N | 0 | 1 | ALUMINUM | 6960 | mg/kg | | Y | Y | P | | | | | | | L162-05 | 23:44 |
| | | | | | | ANTIMONY | 11.5 | mg/kg | U | N | Y | U | UJ | | 08A | | | | L162-05 | 23:44 |
| | | | | | | ARSENIC | 1.32 | mg/kg | | Y | Y | F | B | | 06B | | | | L162-05 | 13:33 |
| | | | | | | BARIUM | 68.1 | mg/kg | | Y | Y | P | | | | | | | L162-05 | 23:44 |
| | | | | | | BERYLLIUM | .311 | mg/kg | J | Y | Y | P | J | | 15 | | | | L162-05 | 23:44 |
| | | | | | | CADMIUM | .573 | mg/kg | U | N | Y | U | U | | | | | | L162-05 | 23:44 |
| | | | | | | CALCIUM | 147 | mg/kg | | Y | Y | P | | | | | | | L162-05 | 23:44 |
| | | | | | | CHROMIUM | 7.88 | mg/kg | | Y | Y | P | | | | | | | L162-05 | 23:44 |
| | | | | | | COBALT | 2.33 | mg/kg | | Y | Y | P | | | | | | | L162-05 | 23:44 |
| | | | | | | COPPER | 4.25 | mg/kg | | Y | Y | P | | | | | | | L162-05 | 23:44 |
| | | | | | | IRON | 7570 | mg/kg | | Y | Y | P | | | | | | | L162-05 | 23:44 |
| | | | | | | LEAD | 11 | mg/kg | | Y | Y | P | | | | | | | L162-05 | 13:33 |
| | | | | | | MAGNESIUM | 220 | mg/kg | | Y | Y | P | | | | | | | L162-05 | 23:44 |
| | | | | | | MANGANESE | 250 | mg/kg | | Y | Y | P | | | | | | | L162-05 | 23:44 |
| | | | | | | NICKEL | 4.12 | mg/kg | | Y | Y | P | | | | | | | L162-05 | 23:44 |
| | | | | | | POTASSIUM | 208 | mg/kg | J | Y | Y | F | B | | 06A | | | | L162-05 | 23:44 |
| | | | | | | SELENIUM | 1.15 | mg/kg | U | N | Y | U | U | | | | | | L162-05 | 13:33 |
| | | | | | | SILVER | 1.15 | mg/kg | U | N | Y | U | U | | | | | | L162-05 | 23:44 |
| | | | | | | SODIUM | 115 | mg/kg | U | N | Y | U | U | | | | | | L162-05 | 23:44 |
| | | | | | | THALLIUM | 2.29 | mg/kg | U | N | Y | U | U | | | | | | L162-05 | 13:33 |
| | | | | | | VANADIUM | 13.6 | mg/kg | | Y | Y | P | | | | | | | L162-05 | 23:44 |
| | | | | | | ZINC | 20.8 | mg/kg | | Y | Y | P | | | | | | | L162-05 | 23:44 |
| | SW7471A | TOTAL | N | 0 | 1 | MERCURY | .038 | mg/kg | J | Y | Y | P | J | | 15 | | | | L162-05 | 11:29 |
| JL0020 | SW6010B | SW3050 | N | 0 | 1 | ALUMINUM | 6700 | mg/kg | | Y | Y | P | | | | | | | L162-06 | 23:49 |
| | | | | | | ANTIMONY | 11 | mg/kg | U | N | Y | U | UJ | | 08A | | | | L162-06 | 23:49 |
| | | | | | | ARSENIC | 1.62 | mg/kg | | Y | Y | F | B | | 06B | | | | L162-06 | 13:38 |
| | | | | | | BARIUM | 7.04 | mg/kg | | Y | Y | P | | | | | | | L162-06 | 23:49 |
| | | | | | | BERYLLIUM | .607 | mg/kg | J | Y | Y | P | J | | 15 | | | | L162-06 | 23:49 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10116Q-01** | | | | | | | | | | | | | | | | | | |
| JL0020 | SW6010B | SW3050 | N 0 1 | CADMIUM | .551 | mg/kg | U | N | Y | U | U | | | | | | L162-06 | 23:49 |
| | | | | CALCIUM | 42.8 | mg/kg | J | Y | Y | P | J | | 15 | | | | L162-06 | 23:49 |
| | | | | CHROMIUM | 47.1 | mg/kg | | Y | Y | P | | | | | | | L162-06 | 23:49 |
| | | | | COBALT | 3.09 | mg/kg | | Y | Y | P | | | | | | | L162-06 | 23:49 |
| | | | | COPPER | 16.1 | mg/kg | | Y | Y | P | | | | | | | L162-06 | 23:49 |
| | | | | IRON | 41700 | mg/kg | | Y | Y | P | | | | | | | L162-06 | 23:49 |
| | | | | LEAD | 4.42 | mg/kg | | Y | Y | P | | | | | | | L162-06 | 13:38 |
| | | | | MAGNESIUM | 51 | mg/kg | J | Y | Y | P | J | | 15 | | | | L162-06 | 23:49 |
| | | | | MANGANESE | 19.9 | mg/kg | | Y | Y | P | | | | | | | L162-06 | 23:49 |
| | | | | NICKEL | 7.81 | mg/kg | | Y | Y | P | | | | | | | L162-06 | 23:49 |
| | | | | POTASSIUM | 121 | mg/kg | J | Y | Y | F | B | | 06A | | | | L162-06 | 23:49 |
| | | | | SELENIUM | 1.1 | mg/kg | U | N | Y | U | U | | | | | | L162-06 | 13:38 |
| | | | | SILVER | 1.1 | mg/kg | U | N | Y | U | U | | | | | | L162-06 | 23:49 |
| | | | | SODIUM | 110 | mg/kg | U | N | Y | U | U | | | | | | L162-06 | 23:49 |
| | | | | THALLIUM | 1.91 | mg/kg | J | Y | Y | P | J | | 15 | | | | L162-06 | 13:38 |
| | | | | VANADIUM | 64 | mg/kg | | Y | Y | P | | | | | | | L162-06 | 23:49 |
| | | | | ZINC | 22.3 | mg/kg | | Y | Y | P | | | | | | | L162-06 | 23:49 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .11 | mg/kg | U | N | Y | U | U | | | | | | L162-06 | 11:32 |
| JL0029 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 8810 | mg/kg | | Y | Y | P | | | | | | | L185-01 | 22:07 |
| | | | | ANTIMONY | 11.1 | mg/kg | U | N | Y | U | UJ | | 08A | | | | L185-01 | 22:07 |
| | | | | ARSENIC | 2.76 | mg/kg | | Y | Y | P | | | | | | | L185-01 | 21:47 |
| | | | | BARIUM | 35.3 | mg/kg | | Y | Y | P | | | | | | | L185-01 | 22:07 |
| | | | | BERYLLIUM | .193 | mg/kg | J | Y | Y | P | J | | 15 | | | | L185-01 | 22:07 |
| | | | | CADMIUM | .556 | mg/kg | U | N | Y | U | U | | | | | | L185-01 | 22:07 |
| | | | | CALCIUM | 128 | mg/kg | | Y | Y | P | | | | | | | L185-01 | 22:07 |
| | | | | CHROMIUM | 12.3 | mg/kg | | Y | Y | P | | | | | | | L185-01 | 22:07 |
| | | | | COBALT | .758 | mg/kg | J | Y | Y | P | J | | 15 | | | | L185-01 | 22:07 |
| | | | | COPPER | 3.38 | mg/kg | | Y | Y | P | | | | | | | L185-01 | 22:07 |
| | | | | IRON | 12900 | mg/kg | | Y | Y | P | | | | | | | L185-01 | 22:07 |
| | | | | LEAD | 5.47 | mg/kg | | Y | Y | P | | | | | | | L185-01 | 21:47 |
| | | | | MAGNESIUM | 297 | mg/kg | | Y | Y | P | | | | | | | L185-01 | 22:07 |
| | | | | MANGANESE | 24.1 | mg/kg | | Y | Y | P | | | | | | | L185-01 | 22:07 |
| | | | | NICKEL | 3.1 | mg/kg | | Y | Y | P | | | | | | | L185-01 | 22:07 |
| | | | | POTASSIUM | 316 | mg/kg | J | Y | Y | F | B | | 06A | | | | L185-01 | 22:07 |
| | | | | SELENIUM | 1.11 | mg/kg | U | N | Y | U | U | | | | | | L185-01 | 21:47 |
| | | | | SILVER | 1.11 | mg/kg | U | N | Y | U | U | | | | | | L185-01 | 22:07 |
| | | | | SODIUM | 111 | mg/kg | U | N | Y | U | U | | | | | | L185-01 | 22:07 |
| | | | | THALLIUM | 2.22 | mg/kg | U | N | Y | U | UJ | | 05B | | | | L185-01 | 21:47 |
| | | | | VANADIUM | 19 | mg/kg | | Y | Y | P | | | | | | | L185-01 | 22:07 |
| | | | | ZINC | 10.4 | mg/kg | | Y | Y | P | | | | | | | L185-01 | 22:07 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10116Q-01** | | | | | | | | | | | | | | | | | | |
| JL0029 | SW7471A | TOTAL | N 0 1 | MERCURY | .111 | mg/kg | U | N | Y | U | U | | | | | | L185-01 | 11:40 |
| JL0030 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 10600 | mg/kg | | Y | Y | P | | | | | | | L185-02 | 22:12 |
| | | | | ANTIMONY | 11.4 | mg/kg | U | N | Y | U | UJ | | 08A | | | | L185-02 | 22:12 |
| | | | | ARSENIC | 5.87 | mg/kg | | Y | Y | P | | | | | | | L185-02 | 22:06 |
| | | | | BARIUM | 99.6 | mg/kg | | Y | Y | P | | | | | | | L185-02 | 22:12 |
| | | | | BERYLLIUM | .622 | mg/kg | J | Y | Y | P | J | | 15 | | | | L185-02 | 22:12 |
| | | | | CADMIUM | .569 | mg/kg | U | N | Y | U | U | | | | | | L185-02 | 22:12 |
| | | | | CALCIUM | 91.1 | mg/kg | J | Y | Y | P | J | | 15 | | | | L185-02 | 22:12 |
| | | | | CHROMIUM | 16.1 | mg/kg | | Y | Y | P | | | | | | | L185-02 | 22:12 |
| | | | | COBALT | .536 | mg/kg | J | Y | Y | P | J | | 15 | | | | L185-02 | 22:12 |
| | | | | COPPER | 5.6 | mg/kg | | Y | Y | P | | | | | | | L185-02 | 22:12 |
| | | | | IRON | 21900 | mg/kg | | Y | Y | P | | | | | | | L185-02 | 22:12 |
| | | | | LEAD | 10.4 | mg/kg | | Y | Y | P | | | | | | | L185-02 | 22:06 |
| | | | | MAGNESIUM | 311 | mg/kg | | Y | Y | P | | | | | | | L185-02 | 22:12 |
| | | | | MANGANESE | 6.23 | mg/kg | | Y | Y | P | | | | | | | L185-02 | 22:12 |
| | | | | NICKEL | 2.85 | mg/kg | | Y | Y | P | | | | | | | L185-02 | 22:12 |
| | | | | POTASSIUM | 1040 | mg/kg | | Y | Y | P | | | | | | | L185-02 | 22:12 |
| | | | | SELENIUM | .69 | mg/kg | J | Y | Y | P | J | | 15 | | | | L185-02 | 22:06 |
| | | | | SILVER | 1.14 | mg/kg | U | N | Y | U | U | | | | | | L185-02 | 22:12 |
| | | | | SODIUM | 114 | mg/kg | U | N | Y | U | U | | | | | | L185-02 | 22:12 |
| | | | | THALLIUM | 2.28 | mg/kg | U | N | Y | U | UJ | | 05B | | | | L185-02 | 22:06 |
| | | | | VANADIUM | 31.1 | mg/kg | | Y | Y | P | | | | | | | L185-02 | 22:12 |
| | | | | ZINC | 8.86 | mg/kg | | Y | Y | P | | | | | | | L185-02 | 22:12 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .114 | mg/kg | U | N | Y | U | U | | | | | | L185-02 | 11:42 |
| JL0035 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 16000 | mg/kg | | Y | Y | P | | | | | | | L162-07 | 23:54 |
| | | | | ANTIMONY | 5.21 | mg/kg | J | Y | Y | P | J | | 08A | | | | L162-07 | 23:54 |
| | | | | ARSENIC | 5.5 | mg/kg | | Y | Y | P | | | | | | | L162-07 | 13:43 |
| | | | | BARIUM | 60.4 | mg/kg | | Y | Y | P | | | | | | | L162-07 | 23:54 |
| | | | | BERYLLIUM | 1.66 | mg/kg | | Y | Y | P | | | | | | | L162-07 | 23:54 |
| | | | | CADMIUM | .585 | mg/kg | U | N | Y | U | U | | | | | | L162-07 | 23:54 |
| | | | | CALCIUM | 138 | mg/kg | | Y | Y | P | | | | | | | L162-07 | 23:54 |
| | | | | CHROMIUM | 20.6 | mg/kg | | Y | Y | P | | | | | | | L162-07 | 23:54 |
| | | | | COBALT | 22.1 | mg/kg | | Y | Y | P | | | | | | | L162-07 | 23:54 |
| | | | | COPPER | 9.99 | mg/kg | | Y | Y | P | | | | | | | L162-07 | 23:54 |
| | | | | IRON | 55900 | mg/kg | | Y | Y | P | | | | | | | L162-07 | 23:54 |
| | | | | LEAD | 27.1 | mg/kg | | Y | Y | P | | | | | | | L162-07 | 13:43 |
| | | | | MAGNESIUM | 699 | mg/kg | | Y | Y | P | | | | | | | L162-07 | 23:54 |
| | | | | MANGANESE | 425 | mg/kg | | Y | Y | P | | | | | | | L162-07 | 23:54 |
| | | | | NICKEL | 18.4 | mg/kg | | Y | Y | P | | | | | | | L162-07 | 23:54 |
| | | | | POTASSIUM | 303 | mg/kg | J | Y | Y | F | B | | 06A | | | | L162-07 | 23:54 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10116Q-01** | | | | | | | | | | | | | | | | | | |
| JL0035 | SW6010B | SW3050 | N 0 1 | SELENIUM | 1.17 | mg/kg | U | N | Y | U | U | | | | | | L162-07 | 13:43 |
| | | | | SILVER | 1.17 | mg/kg | U | N | Y | U | U | | | | | | L162-07 | 23:54 |
| | | | | SODIUM | 117 | mg/kg | U | N | Y | U | U | | | | | | L162-07 | 23:54 |
| | | | | THALLIUM | 3.48 | mg/kg | | Y | Y | P | | | | | | | L162-07 | 13:43 |
| | | | | VANADIUM | 33.6 | mg/kg | | Y | Y | P | | | | | | | L162-07 | 23:54 |
| | | | | ZINC | 53.8 | mg/kg | | Y | Y | P | | | | | | | L162-07 | 23:54 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .053 | mg/kg | J | Y | Y | P | J | | 15 | | | | L162-07 | 11:34 |
| JL0036 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 17800 | mg/kg | | Y | Y | P | | | | | | | L162-08 | 23:59 |
| | | | | ANTIMONY | 11.2 | mg/kg | U | N | Y | U | UJ | | 08A | | | | L162-08 | 23:59 |
| | | | | ARSENIC | 6.44 | mg/kg | | Y | Y | P | | | | | | | L162-08 | 21:08 |
| | | | | BARIUM | 28.6 | mg/kg | | Y | Y | P | | | | | | | L162-08 | 23:59 |
| | | | | BERYLLIUM | 1.03 | mg/kg | J | Y | Y | P | J | | 15 | | | | L162-08 | 23:59 |
| | | | | CADMIUM | .559 | mg/kg | U | N | Y | U | U | | | | | | L162-08 | 23:59 |
| | | | | CALCIUM | 56.9 | mg/kg | J | Y | Y | P | J | | 15 | | | | L162-08 | 23:59 |
| | | | | CHROMIUM | 16.1 | mg/kg | | Y | Y | P | | | | | | | L162-08 | 23:59 |
| | | | | COBALT | 9.39 | mg/kg | | Y | Y | P | | | | | | | L162-08 | 23:59 |
| | | | | COPPER | 17.2 | mg/kg | | Y | Y | P | | | | | | | L162-08 | 23:59 |
| | | | | IRON | 45100 | mg/kg | | Y | Y | P | | | | | | | L162-08 | 23:59 |
| | | | | LEAD | 22 | mg/kg | | Y | Y | P | | | | | | | L162-08 | 21:08 |
| | | | | MAGNESIUM | 507 | mg/kg | | Y | Y | P | | | | | | | L162-08 | 23:59 |
| | | | | MANGANESE | 225 | mg/kg | | Y | Y | P | | | | | | | L162-08 | 23:59 |
| | | | | NICKEL | 15.5 | mg/kg | | Y | Y | P | | | | | | | L162-08 | 23:59 |
| | | | | POTASSIUM | 304 | mg/kg | J | Y | Y | F | B | | 06A | | | | L162-08 | 23:59 |
| | | | | SELENIUM | 1.09 | mg/kg | J | Y | Y | P | J | | 15 | | | | L162-08 | 21:08 |
| | | | | SILVER | 1.12 | mg/kg | U | N | Y | U | U | | | | | | L162-08 | 23:59 |
| | | | | SODIUM | 112 | mg/kg | U | N | Y | U | U | | | | | | L162-08 | 23:59 |
| | | | | THALLIUM | 2.33 | mg/kg | | Y | Y | P | J | | 05B | | | | L162-08 | 21:08 |
| | | | | VANADIUM | 45.2 | mg/kg | | Y | Y | P | | | | | | | L162-08 | 23:59 |
| | | | | ZINC | 42.1 | mg/kg | | Y | Y | P | | | | | | | L162-08 | 23:59 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .112 | mg/kg | U | N | Y | U | U | | | | | | L162-08 | 11:37 |
| JL0005 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-01 | 20:42 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-01 | 20:42 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-01 | 20:42 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-01 | 20:42 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-01 | 20:42 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-01 | 20:42 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-01 | 20:42 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-01 | 20:42 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-01 | 20:42 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-01 | 20:42 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10116Q-01** | | | | | | | | | | | | | | | | | | | | |
| JL0005 | SW8330 | METHOD | N | 0 | 1 | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-01 | 20:42 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-01 | 20:42 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-01 | 20:42 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-01 | 20:42 |
| JL0006 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-02 | 22:44 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-02 | 22:44 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-02 | 22:44 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-02 | 22:44 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-02 | 22:44 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-02 | 22:44 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-02 | 22:44 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-02 | 22:44 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-02 | 22:44 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-02 | 22:44 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-02 | 22:44 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-02 | 22:44 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-02 | 22:44 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-02 | 22:44 |
| JL0013 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-03 | 23:24 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-03 | 23:24 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-03 | 23:24 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-03 | 23:24 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-03 | 23:24 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-03 | 23:24 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-03 | 23:24 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-03 | 23:24 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-03 | 23:24 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-03 | 23:24 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-03 | 23:24 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-03 | 23:24 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-03 | 23:24 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-03 | 23:24 |
| JL0014 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-04 | 00:05 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-04 | 00:05 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-04 | 00:05 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-04 | 00:05 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-04 | 00:05 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-04 | 00:05 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-04 | 00:05 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-04 | 00:05 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10116Q-01** | | | | | | | | | | | | | | | | | | |
| JL0014 | SW8330 | METHOD | N 0 1 | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-04 | 00:05 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-04 | 00:05 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-04 | 00:05 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-04 | 00:05 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-04 | 00:05 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-04 | 00:05 |
| JL0019 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-05 | 00:45 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-05 | 00:45 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-05 | 00:45 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-05 | 00:45 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-05 | 00:45 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-05 | 00:45 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-05 | 00:45 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-05 | 00:45 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-05 | 00:45 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-05 | 00:45 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-05 | 00:45 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-05 | 00:45 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-05 | 00:45 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-05 | 00:45 |
| JL0020 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-06 | 01:26 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-06 | 01:26 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-06 | 01:26 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-06 | 01:26 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-06 | 01:26 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-06 | 01:26 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-06 | 01:26 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-06 | 01:26 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-06 | 01:26 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-06 | 01:26 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-06 | 01:26 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-06 | 01:26 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-06 | 01:26 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-06 | 01:26 |
| JL0029 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | L185-01 | 03:27 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | L185-01 | 03:27 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L185-01 | 03:27 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L185-01 | 03:27 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L185-01 | 03:27 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L185-01 | 03:27 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10116Q-01** | | | | | | | | | | | | | | | | | | |
| JL0029 | SW8330 | METHOD | N 0 1 | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L185-01 | 03:27 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L185-01 | 03:27 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L185-01 | 03:27 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L185-01 | 03:27 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | L185-01 | 03:27 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L185-01 | 03:27 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | L185-01 | 03:27 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | L185-01 | 03:27 |
| JL0030 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | L185-02 | 04:07 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | L185-02 | 04:07 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L185-02 | 04:07 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L185-02 | 04:07 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L185-02 | 04:07 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L185-02 | 04:07 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L185-02 | 04:07 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L185-02 | 04:07 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L185-02 | 04:07 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L185-02 | 04:07 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | L185-02 | 04:07 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L185-02 | 04:07 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | L185-02 | 04:07 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | L185-02 | 04:07 |
| JL0035 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-07 | 02:06 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-07 | 02:06 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-07 | 02:06 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-07 | 02:06 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-07 | 02:06 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-07 | 02:06 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-07 | 02:06 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-07 | 02:06 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-07 | 02:06 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-07 | 02:06 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-07 | 02:06 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-07 | 02:06 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-07 | 02:06 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-07 | 02:06 |
| JL0036 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-08 | 02:46 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-08 | 02:46 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-08 | 02:46 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-08 | 02:46 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10116Q-01** | | | | | | | | | | | | | | | | | | |
| JL0036 | SW8330 | METHOD | N 0 1 | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-08 | 02:46 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-08 | 02:46 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-08 | 02:46 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-08 | 02:46 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-08 | 02:46 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-08 | 02:46 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-08 | 02:46 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-08 | 02:46 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-08 | 02:46 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | L162-08 | 02:46 |
| JL0005 | EPA314.0 | NONE | N 0 1 | PERCHLORATE | .0583 | mg/kg | U | N | Y | U | U | | | | | | L162-01 | 23:44 |
| JL0006 | EPA314.0 | NONE | N 0 1 | PERCHLORATE | .0546 | mg/kg | U | N | Y | U | U | | | | | | L162-02 | 00:18 |
| JL0013 | EPA314.0 | NONE | N 0 1 | PERCHLORATE | .0562 | mg/kg | U | N | Y | U | U | | | | | | L162-03 | 00:35 |
| JL0014 | EPA314.0 | NONE | N 0 1 | PERCHLORATE | .0554 | mg/kg | U | N | Y | U | U | | | | | | L162-04 | 01:27 |
| JL0019 | EPA314.0 | NONE | N 0 1 | PERCHLORATE | .0573 | mg/kg | U | N | Y | U | U | | | | | | L162-05 | 01:44 |
| JL0020 | EPA314.0 | NONE | N 0 1 | PERCHLORATE | .0551 | mg/kg | U | N | Y | U | U | | | | | | L162-06 | 02:01 |
| JL0029 | EPA314.0 | NONE | N 0 1 | PERCHLORATE | .0556 | mg/kg | U | N | Y | U | U | | | | | | L185-01 | 03:27 |
| JL0030 | EPA314.0 | NONE | N 0 1 | PERCHLORATE | .0569 | mg/kg | U | N | Y | U | U | | | | | | L185-02 | 03:44 |
| JL0035 | EPA314.0 | NONE | N 0 1 | PERCHLORATE | .0585 | mg/kg | U | N | Y | U | U | | | | | | L162-07 | 02:18 |
| JL0036 | EPA314.0 | NONE | N 0 1 | PERCHLORATE | .0559 | mg/kg | U | N | Y | U | U | | | | | | L162-08 | 02:35 |
| **10116Q-02** | | | | | | | | | | | | | | | | | | |
| JL0001 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 6310 | mg/kg | | Y | Y | P | | | | | | | B008-01 | 00:49 |
| | | | | ANTIMONY | 11.4 | mg/kg | U | N | Y | U | UJ | | 08A | | | | B008-01 | 00:49 |
| | | | | ARSENIC | 2.97 | mg/kg | | Y | Y | P | J | | 08A | 13 | | | B008-01 | 11:05 |
| | | | | BARIUM | 27.3 | mg/kg | | Y | Y | P | | | | | | | B008-01 | 00:49 |
| | | | | BERYLLIUM | .2 | mg/kg | J | Y | Y | P | J | | 15 | | | | B008-01 | 00:49 |
| | | | | CADMIUM | .57 | mg/kg | U | N | Y | U | U | | | | | | B008-01 | 00:49 |
| | | | | CALCIUM | 70.6 | mg/kg | J | Y | Y | P | J | | 15 | | | | B008-01 | 00:49 |
| | | | | CHROMIUM | 11.9 | mg/kg | | Y | Y | P | | | | | | | B008-01 | 00:49 |
| | | | | COBALT | 1.66 | mg/kg | J | Y | Y | F | B | | 06B | | | | B008-01 | 00:49 |
| | | | | COPPER | 2.04 | mg/kg | J | Y | Y | P | J | | 15 | | | | B008-01 | 00:49 |
| | | | | IRON | 10200 | mg/kg | | Y | Y | P | | | | | | | B008-01 | 00:49 |
| | | | | LEAD | 10.8 | mg/kg | | Y | Y | P | | | | | | | B008-01 | 11:05 |
| | | | | MAGNESIUM | 174 | mg/kg | | Y | Y | P | | | | | | | B008-01 | 00:49 |
| | | | | MANGANESE | 104 | mg/kg | | Y | Y | P | J | | 08A | 08B | | | B008-01 | 00:49 |
| | | | | NICKEL | 2.03 | mg/kg | J | Y | Y | P | J | | 15 | | | | B008-01 | 00:49 |
| | | | | POTASSIUM | 151 | mg/kg | J | Y | Y | P | J | | 15 | | | | B008-01 | 00:49 |
| | | | | SELENIUM | 1.14 | mg/kg | U | N | Y | U | UJ | | 08A | | | | B008-01 | 11:05 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10116Q-02** | | | | | | | | | | | | | | | | | | |
| JL0001 | SW6010B | SW3050 | N 0 1 | SILVER | 1.14 | mg/kg | U | N | Y | U | U | | | | | | B008-01 | 00:49 |
| | | | | SODIUM | 114 | mg/kg | U | N | Y | U | U | | | | | | B008-01 | 00:49 |
| | | | | THALLIUM | 2.28 | mg/kg | U | N | Y | U | U | | | | | | B008-01 | 11:05 |
| | | | | VANADIUM | 19.8 | mg/kg | | Y | Y | P | J | | 08A | | | | B008-01 | 00:49 |
| | | | | ZINC | 14.2 | mg/kg | | Y | Y | P | J | | 08A | | | | B008-01 | 00:49 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .030 | mg/kg | J | Y | Y | P | J | | 15 | | | | B008-01 | 10:45 |
| JL0002 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 1760 | mg/kg | | Y | Y | P | | | | | | | B008-02 | 00:55 |
| | | | | ANTIMONY | 10.9 | mg/kg | U | N | Y | U | UJ | | 08A | | | | B008-02 | 00:55 |
| | | | | ARSENIC | .441 | mg/kg | J | Y | Y | P | J | | 08A | 13 | | | B008-02 | 11:09 |
| | | | | BARIUM | 1.85 | mg/kg | | Y | Y | P | | | | | | | B008-02 | 00:55 |
| | | | | BERYLLIUM | .147 | mg/kg | J | Y | Y | P | J | | 15 | | | | B008-02 | 00:55 |
| | | | | CADMIUM | .545 | mg/kg | U | N | Y | U | U | | | | | | B008-02 | 00:55 |
| | | | | CALCIUM | 11.7 | mg/kg | J | Y | Y | P | J | | 15 | | | | B008-02 | 00:55 |
| | | | | CHROMIUM | 27.5 | mg/kg | | Y | Y | P | | | | | | | B008-02 | 00:55 |
| | | | | COBALT | .515 | mg/kg | J | Y | Y | F | B | | 06B | | | | B008-02 | 00:55 |
| | | | | COPPER | 1.44 | mg/kg | J | Y | Y | P | J | | 15 | | | | B008-02 | 00:55 |
| | | | | IRON | 15400 | mg/kg | | Y | Y | P | | | | | | | B008-02 | 00:55 |
| | | | | LEAD | 2.93 | mg/kg | | Y | Y | P | | | | | | | B008-02 | 11:09 |
| | | | | MAGNESIUM | 14 | mg/kg | J | Y | Y | P | J | | 15 | | | | B008-02 | 00:55 |
| | | | | MANGANESE | 11.5 | mg/kg | | Y | Y | P | J | | 08A | 08B | | | B008-02 | 00:55 |
| | | | | NICKEL | 2.18 | mg/kg | U | N | Y | U | U | | | | | | B008-02 | 00:55 |
| | | | | POTASSIUM | 545 | mg/kg | U | N | Y | U | U | | | | | | B008-02 | 00:55 |
| | | | | SELENIUM | 1.09 | mg/kg | U | N | Y | U | UJ | | 08A | | | | B008-02 | 11:09 |
| | | | | SILVER | 1.09 | mg/kg | U | N | Y | U | U | | | | | | B008-02 | 00:55 |
| | | | | SODIUM | 109 | mg/kg | U | N | Y | U | U | | | | | | B008-02 | 00:55 |
| | | | | THALLIUM | 2.18 | mg/kg | U | N | Y | U | U | | | | | | B008-02 | 11:09 |
| | | | | VANADIUM | 32.9 | mg/kg | | Y | Y | P | J | | 08A | | | | B008-02 | 00:55 |
| | | | | ZINC | 4.23 | mg/kg | | Y | Y | P | J | | 08A | | | | B008-02 | 00:55 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .109 | mg/kg | U | N | Y | U | U | | | | | | B008-02 | 10:47 |
| JL0003 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 8770 | mg/kg | | Y | Y | P | | | | | | | B008-03 | 01:00 |
| | | | | ANTIMONY | 12.5 | mg/kg | U | N | Y | U | UJ | | 08A | | | | B008-03 | 01:00 |
| | | | | ARSENIC | 2.45 | mg/kg | | Y | Y | P | J | | 08A | 13 | | | B008-03 | 11:14 |
| | | | | BARIUM | 59.8 | mg/kg | | Y | Y | P | | | | | | | B008-03 | 01:00 |
| | | | | BERYLLIUM | .328 | mg/kg | J | Y | Y | P | J | | 15 | | | | B008-03 | 01:00 |
| | | | | CADMIUM | .627 | mg/kg | U | N | Y | U | U | | | | | | B008-03 | 01:00 |
| | | | | CALCIUM | 231 | mg/kg | | Y | Y | P | | | | | | | B008-03 | 01:00 |
| | | | | CHROMIUM | 6.65 | mg/kg | | Y | Y | P | | | | | | | B008-03 | 01:00 |
| | | | | COBALT | 4.11 | mg/kg | | Y | Y | P | | | | | | | B008-03 | 01:00 |
| | | | | COPPER | 3.96 | mg/kg | | Y | Y | P | | | | | | | B008-03 | 01:00 |
| | | | | IRON | 6070 | mg/kg | | Y | Y | P | | | | | | | B008-03 | 01:00 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10116Q-02** | | | | | | | | | | | | | | | | | | |
| JL0003 | SW6010B | SW3050 | N 0 1 | LEAD | 18.5 | mg/kg | | Y | Y | P | | | | | | | B008-03 | 11:14 |
| | | | | MAGNESIUM | 375 | mg/kg | | Y | Y | P | | | | | | | B008-03 | 01:00 |
| | | | | MANGANESE | 284 | mg/kg | | Y | Y | P | J | | 08A | 08B | | | B008-03 | 01:00 |
| | | | | NICKEL | 4.64 | mg/kg | | Y | Y | P | | | | | | | B008-03 | 01:00 |
| | | | | POTASSIUM | 247 | mg/kg | J | Y | Y | P | J | | 15 | | | | B008-03 | 01:00 |
| | | | | SELENIUM | 1.25 | mg/kg | U | N | Y | U | UJ | | 08A | | | | B008-03 | 11:14 |
| | | | | SILVER | 1.25 | mg/kg | U | N | Y | U | U | | | | | | B008-03 | 01:00 |
| | | | | SODIUM | 125 | mg/kg | U | N | Y | U | U | | | | | | B008-03 | 01:00 |
| | | | | THALLIUM | 2.51 | mg/kg | U | N | Y | U | U | | | | | | B008-03 | 11:14 |
| | | | | VANADIUM | 11.7 | mg/kg | | Y | Y | P | J | | 08A | | | | B008-03 | 01:00 |
| | | | | ZINC | 21.2 | mg/kg | | Y | Y | P | J | | 08A | | | | B008-03 | 01:00 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .040 | mg/kg | J | Y | Y | P | J | | 15 | | | | B008-03 | 10:57 |
| JL0004 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 3220 | mg/kg | | Y | Y | P | | | | | | | B008-04 | 01:05 |
| | | | | ANTIMONY | 10.6 | mg/kg | U | N | Y | U | UJ | | 08A | | | | B008-04 | 01:05 |
| | | | | ARSENIC | 1.61 | mg/kg | | Y | Y | P | J | | 08A | 13 | | | B008-04 | 11:18 |
| | | | | BARIUM | 15.9 | mg/kg | | Y | Y | P | | | | | | | B008-04 | 01:05 |
| | | | | BERYLLIUM | .0662 | mg/kg | J | Y | Y | F | B | | 06B | | | | B008-04 | 01:05 |
| | | | | CADMIUM | .531 | mg/kg | U | N | Y | U | U | | | | | | B008-04 | 01:05 |
| | | | | CALCIUM | 42.9 | mg/kg | J | Y | Y | P | J | | 15 | | | | B008-04 | 01:05 |
| | | | | CHROMIUM | 9.28 | mg/kg | | Y | Y | P | | | | | | | B008-04 | 01:05 |
| | | | | COBALT | 2.06 | mg/kg | J | Y | Y | F | B | | 06B | | | | B008-04 | 01:05 |
| | | | | COPPER | 1.72 | mg/kg | J | Y | Y | P | J | | 15 | | | | B008-04 | 01:05 |
| | | | | IRON | 3890 | mg/kg | | Y | Y | P | | | | | | | B008-04 | 01:05 |
| | | | | LEAD | 1.98 | mg/kg | | Y | Y | P | | | | | | | B008-04 | 11:18 |
| | | | | MAGNESIUM | 102 | mg/kg | J | Y | Y | P | J | | 15 | | | | B008-04 | 01:05 |
| | | | | MANGANESE | 120 | mg/kg | | Y | Y | P | J | | 08B | | | | B008-04 | 01:05 |
| | | | | NICKEL | 1.23 | mg/kg | J | Y | Y | P | J | | 15 | | | | B008-04 | 01:05 |
| | | | | POTASSIUM | 149 | mg/kg | J | Y | Y | P | J | | 15 | | | | B008-04 | 01:05 |
| | | | | SELENIUM | 1.06 | mg/kg | U | N | Y | U | UJ | | 08A | | | | B008-04 | 11:18 |
| | | | | SILVER | 1.06 | mg/kg | U | N | Y | U | U | | | | | | B008-04 | 01:05 |
| | | | | SODIUM | 106 | mg/kg | U | N | Y | U | U | | | | | | B008-04 | 01:05 |
| | | | | THALLIUM | 2.13 | mg/kg | U | N | Y | U | U | | | | | | B008-04 | 11:18 |
| | | | | VANADIUM | 6.92 | mg/kg | | Y | Y | P | J | | 08A | | | | B008-04 | 01:05 |
| | | | | ZINC | 2.82 | mg/kg | | Y | Y | P | J | | 08A | | | | B008-04 | 01:05 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .106 | mg/kg | U | N | Y | U | U | | | | | | B008-04 | 10:59 |
| JL0007 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 8490 | mg/kg | | Y | Y | P | | | | | | | A256-01 | 23:48 |
| | | | | ANTIMONY | 12.2 | mg/kg | U | N | Y | U | UJ | | 08A | | | | A256-01 | 23:48 |
| | | | | ARSENIC | 2.11 | mg/kg | | Y | Y | P | J | | 08A | 13 | | | A256-01 | 12:05 |
| | | | | BARIUM | 23.5 | mg/kg | | Y | Y | P | | | | | | | A256-01 | 23:48 |
| | | | | BERYLLIUM | .118 | mg/kg | J | Y | Y | P | J | | 15 | | | | A256-01 | 23:48 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10116Q-02** | | | | | | | | | | | | | | | | | | |
| JL0007 | SW6010B | SW3050 | N 0 1 | CADMIUM | .61 | mg/kg | U | N | Y | U | U | | | | | | A256-01 | 23:48 |
| | | | | CALCIUM | 30.1 | mg/kg | J | Y | Y | P | J | | 15 | | | | A256-01 | 23:48 |
| | | | | CHROMIUM | 20.3 | mg/kg | | Y | Y | P | | | | | | | A256-01 | 23:48 |
| | | | | COBALT | 2.44 | mg/kg | U | N | Y | U | U | | | | | | A256-01 | 23:48 |
| | | | | COPPER | 1.81 | mg/kg | J | Y | Y | P | J | | 15 | | | | A256-01 | 23:48 |
| | | | | IRON | 11900 | mg/kg | | Y | Y | P | | | | | | | A256-01 | 23:48 |
| | | | | LEAD | 3.58 | mg/kg | | Y | Y | P | | | | | | | A256-01 | 12:05 |
| | | | | MAGNESIUM | 178 | mg/kg | | Y | Y | P | | | | | | | A256-01 | 23:48 |
| | | | | MANGANESE | 11.2 | mg/kg | | Y | Y | P | J | | 08A | 08B | | | A256-01 | 23:48 |
| | | | | NICKEL | 1.7 | mg/kg | J | Y | Y | P | J | | 15 | | | | A256-01 | 23:48 |
| | | | | POTASSIUM | 610 | mg/kg | U | N | Y | U | U | | | | | | A256-01 | 23:48 |
| | | | | SELENIUM | 1.22 | mg/kg | U | N | Y | U | UJ | | 08A | | | | A256-01 | 12:05 |
| | | | | SILVER | 1.22 | mg/kg | U | N | Y | U | U | | | | | | A256-01 | 23:48 |
| | | | | SODIUM | 122 | mg/kg | U | N | Y | U | U | | | | | | A256-01 | 23:48 |
| | | | | THALLIUM | 2.44 | mg/kg | U | N | Y | U | U | | | | | | A256-01 | 12:05 |
| | | | | VANADIUM | 33.6 | mg/kg | | Y | Y | P | J | | 08A | | | | A256-01 | 23:48 |
| | | | | ZINC | 5.83 | mg/kg | | Y | Y | P | J | | 08A | | | | A256-01 | 23:48 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .028 | mg/kg | J | Y | Y | P | J | | 15 | | | | A256-01 | 11:09 |
| JL0008 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 3170 | mg/kg | | Y | Y | P | | | | | | | A256-02 | 23:53 |
| | | | | ANTIMONY | 11.6 | mg/kg | U | N | Y | U | UJ | | 08A | | | | A256-02 | 23:53 |
| | | | | ARSENIC | .727 | mg/kg | J | Y | Y | P | J | | 08A | 13 | | | A256-02 | 12:09 |
| | | | | BARIUM | 13.6 | mg/kg | | Y | Y | P | | | | | | | A256-02 | 23:53 |
| | | | | BERYLLIUM | .0666 | mg/kg | J | Y | Y | P | J | | 15 | | | | A256-02 | 23:53 |
| | | | | CADMIUM | .582 | mg/kg | U | N | Y | U | U | | | | | | A256-02 | 23:53 |
| | | | | CALCIUM | 11.9 | mg/kg | J | Y | Y | P | J | | 15 | | | | A256-02 | 23:53 |
| | | | | CHROMIUM | 24.5 | mg/kg | | Y | Y | P | | | | | | | A256-02 | 23:53 |
| | | | | COBALT | 2.33 | mg/kg | U | N | Y | U | U | | | | | | A256-02 | 23:53 |
| | | | | COPPER | 1.29 | mg/kg | J | Y | Y | P | J | | 15 | | | | A256-02 | 23:53 |
| | | | | IRON | 8410 | mg/kg | | Y | Y | P | | | | | | | A256-02 | 23:53 |
| | | | | LEAD | 3.45 | mg/kg | | Y | Y | P | | | | | | | A256-02 | 12:09 |
| | | | | MAGNESIUM | 18.9 | mg/kg | J | Y | Y | P | J | | 15 | | | | A256-02 | 23:53 |
| | | | | MANGANESE | 1.66 | mg/kg | | Y | Y | P | J | | 08A | 08B | | | A256-02 | 23:53 |
| | | | | NICKEL | 2.33 | mg/kg | U | N | Y | U | U | | | | | | A256-02 | 23:53 |
| | | | | POTASSIUM | 170 | mg/kg | J | Y | Y | P | J | | 15 | | | | A256-02 | 23:53 |
| | | | | SELENIUM | 1.16 | mg/kg | U | N | Y | U | UJ | | 08A | | | | A256-02 | 12:09 |
| | | | | SILVER | 1.16 | mg/kg | U | N | Y | U | U | | | | | | A256-02 | 23:53 |
| | | | | SODIUM | 116 | mg/kg | U | N | Y | U | U | | | | | | A256-02 | 23:53 |
| | | | | THALLIUM | 2.33 | mg/kg | U | N | Y | U | U | | | | | | A256-02 | 12:09 |
| | | | | VANADIUM | 33.7 | mg/kg | | Y | Y | P | J | | 08A | | | | A256-02 | 23:53 |
| | | | | ZINC | 2.33 | mg/kg | U | N | Y | U | J | | 08A | | | | A256-02 | 23:53 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10116Q-02** | | | | | | | | | | | | | | | | | | |
| JL0008 | SW7471A | TOTAL | N 0 1 | MERCURY | .116 | mg/kg | U | N | Y | U | U | | | | | | A256-02 | 11:11 |
| JL0011 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 6070 | mg/kg | | Y | Y | P | | | | | | | B008-05 | 01:46 |
| | | | | ANTIMONY | 11.8 | mg/kg | U | N | Y | U | UJ | | 08A | | | | B008-05 | 01:46 |
| | | | | ARSENIC | .855 | mg/kg | J | Y | Y | P | J | | 08A | 13 | | | B008-05 | 11:52 |
| | | | | BARIUM | 31.5 | mg/kg | | Y | Y | P | | | | | | | B008-05 | 01:46 |
| | | | | BERYLLIUM | .169 | mg/kg | J | Y | Y | P | J | | 15 | | | | B008-05 | 01:46 |
| | | | | CADMIUM | .588 | mg/kg | U | N | Y | U | U | | | | | | B008-05 | 01:46 |
| | | | | CALCIUM | 57.7 | mg/kg | J | Y | Y | P | J | | 15 | | | | B008-05 | 01:46 |
| | | | | CHROMIUM | 3.85 | mg/kg | | Y | Y | P | | | | | | | B008-05 | 01:46 |
| | | | | COBALT | 1.75 | mg/kg | J | Y | Y | F | B | | 06B | | | | B008-05 | 01:46 |
| | | | | COPPER | 2.61 | mg/kg | | Y | Y | P | | | | | | | B008-05 | 01:46 |
| | | | | IRON | 3360 | mg/kg | | Y | Y | P | | | | | | | B008-05 | 01:46 |
| | | | | LEAD | 6.13 | mg/kg | | Y | Y | P | | | | | | | B008-05 | 11:52 |
| | | | | MAGNESIUM | 185 | mg/kg | | Y | Y | P | | | | | | | B008-05 | 01:46 |
| | | | | MANGANESE | 42.2 | mg/kg | | Y | Y | P | J | | 08A | 08B | | | B008-05 | 01:46 |
| | | | | NICKEL | 2.48 | mg/kg | | Y | Y | P | | | | | | | B008-05 | 01:46 |
| | | | | POTASSIUM | 184 | mg/kg | J | Y | Y | P | J | | 15 | | | | B008-05 | 01:46 |
| | | | | SELENIUM | 1.18 | mg/kg | U | N | Y | U | UJ | | 08A | | | | B008-05 | 11:52 |
| | | | | SILVER | 1.18 | mg/kg | U | N | Y | U | U | | | | | | B008-05 | 01:46 |
| | | | | SODIUM | 118 | mg/kg | U | N | Y | U | U | | | | | | B008-05 | 01:46 |
| | | | | THALLIUM | 2.35 | mg/kg | U | N | Y | U | U | | | | | | B008-05 | 11:52 |
| | | | | VANADIUM | 6.98 | mg/kg | | Y | Y | P | J | | 08A | | | | B008-05 | 01:46 |
| | | | | ZINC | 11.6 | mg/kg | | Y | Y | P | J | | 08A | | | | B008-05 | 01:46 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .034 | mg/kg | J | Y | Y | P | J | | 15 | | | | B008-05 | 11:02 |
| JL0012 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 15900 | mg/kg | | Y | Y | P | | | | | | | B008-06 | 01:40 |
| | | | | ANTIMONY | 7.91 | mg/kg | J | Y | Y | P | J | | 08A | | | | B008-06 | 01:40 |
| | | | | ARSENIC | 15.1 | mg/kg | | Y | Y | P | J | | 08A | 13 | | | B008-06 | 11:48 |
| | | | | BARIUM | 34.7 | mg/kg | | Y | Y | P | | | | | | | B008-06 | 01:40 |
| | | | | BERYLLIUM | 1.31 | mg/kg | | Y | Y | P | | | | | | | B008-06 | 01:40 |
| | | | | CADMIUM | .6 | mg/kg | U | N | Y | U | U | | | | | | B008-06 | 01:40 |
| | | | | CALCIUM | 17.7 | mg/kg | J | Y | Y | P | J | | 15 | | | | B008-06 | 01:40 |
| | | | | CHROMIUM | 43.6 | mg/kg | | Y | Y | P | | | | | | | B008-06 | 01:40 |
| | | | | COBALT | 4.19 | mg/kg | | Y | Y | P | | | | | | | B008-06 | 01:40 |
| | | | | COPPER | 32.3 | mg/kg | | Y | Y | P | | | | | | | B008-06 | 01:40 |
| | | | | IRON | 68000 | mg/kg | | Y | Y | P | | | | | | | B008-06 | 01:40 |
| | | | | LEAD | 18.6 | mg/kg | | Y | Y | P | | | | | | | B008-06 | 11:48 |
| | | | | MAGNESIUM | 452 | mg/kg | | Y | Y | P | | | | | | | B008-06 | 01:40 |
| | | | | MANGANESE | 307 | mg/kg | | Y | Y | P | J | | 08A | 08B | | | B008-06 | 01:40 |
| | | | | NICKEL | 15.2 | mg/kg | | Y | Y | P | | | | | | | B008-06 | 01:40 |
| | | | | POTASSIUM | 673 | mg/kg | | Y | Y | P | | | | | | | B008-06 | 01:40 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10116Q-02** | | | | | | | | | | | | | | | | | | |
| JL0012 | SW6010B | SW3050 | N 0 1 | SELENIUM | 1.2 | mg/kg | U | N | Y | U | UJ | | 08A | | | | B008-06 | 11:48 |
| | | | | SILVER | 1.2 | mg/kg | U | N | Y | U | U | | | | | | B008-06 | 01:40 |
| | | | | SODIUM | 120 | mg/kg | U | N | Y | U | U | | | | | | B008-06 | 01:40 |
| | | | | THALLIUM | .987 | mg/kg | J | Y | Y | P | J | | 15 | | | | B008-06 | 11:48 |
| | | | | VANADIUM | 121 | mg/kg | | Y | Y | P | J | | 08A | | | | B008-06 | 01:40 |
| | | | | ZINC | 57.6 | mg/kg | | Y | Y | P | J | | 08A | | | | B008-06 | 01:40 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .054 | mg/kg | J | Y | Y | P | J | | 15 | | | | B008-06 | 10:35 |
| JL0021 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 6850 | mg/kg | | Y | Y | P | | | | | | | B024-01 | 01:51 |
| | | | | ANTIMONY | 11.8 | mg/kg | U | N | Y | U | UJ | | 08A | | | | B024-01 | 01:51 |
| | | | | ARSENIC | 1.39 | mg/kg | | Y | Y | P | J | | 08A | 13 | | | B024-01 | 11:56 |
| | | | | BARIUM | 30.2 | mg/kg | | Y | Y | P | | | | | | | B024-01 | 01:51 |
| | | | | BERYLLIUM | .203 | mg/kg | J | Y | Y | P | J | | 15 | | | | B024-01 | 01:51 |
| | | | | CADMIUM | .59 | mg/kg | U | N | Y | U | U | | | | | | B024-01 | 01:51 |
| | | | | CALCIUM | 49.4 | mg/kg | J | Y | Y | P | J | | 15 | | | | B024-01 | 01:51 |
| | | | | CHROMIUM | 9.77 | mg/kg | | Y | Y | P | | | | | | | B024-01 | 01:51 |
| | | | | COBALT | 1.53 | mg/kg | J | Y | Y | F | B | | 06B | | | | B024-01 | 01:51 |
| | | | | COPPER | 2.56 | mg/kg | | Y | Y | P | | | | | | | B024-01 | 01:51 |
| | | | | IRON | 6000 | mg/kg | | Y | Y | P | | | | | | | B024-01 | 01:51 |
| | | | | LEAD | 7.4 | mg/kg | | Y | Y | P | | | | | | | B024-01 | 11:56 |
| | | | | MAGNESIUM | 177 | mg/kg | | Y | Y | P | | | | | | | B024-01 | 01:51 |
| | | | | MANGANESE | 112 | mg/kg | | Y | Y | P | J | | 08A | 08B | | | B024-01 | 01:51 |
| | | | | NICKEL | 1.24 | mg/kg | J | Y | Y | P | J | | 15 | | | | B024-01 | 01:51 |
| | | | | POTASSIUM | 590 | mg/kg | U | N | Y | U | U | | | | | | B024-01 | 01:51 |
| | | | | SELENIUM | 1.18 | mg/kg | U | N | Y | U | UJ | | 08A | | | | B024-01 | 11:56 |
| | | | | SILVER | 1.18 | mg/kg | U | N | Y | U | U | | | | | | B024-01 | 01:51 |
| | | | | SODIUM | 118 | mg/kg | U | N | Y | U | U | | | | | | B024-01 | 01:51 |
| | | | | THALLIUM | 2.36 | mg/kg | U | N | Y | U | U | | | | | | B024-01 | 11:56 |
| | | | | VANADIUM | 13.6 | mg/kg | | Y | Y | P | J | | 08A | | | | B024-01 | 01:51 |
| | | | | ZINC | 9.76 | mg/kg | | Y | Y | P | J | | 08A | | | | B024-01 | 01:51 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .024 | mg/kg | J | Y | Y | P | J | | 15 | | | | B024-01 | 11:04 |
| JL0022 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 2300 | mg/kg | | Y | Y | P | | | | | | | B024-02 | 01:56 |
| | | | | ANTIMONY | 11.7 | mg/kg | U | N | Y | U | UJ | | 08A | | | | B024-02 | 01:56 |
| | | | | ARSENIC | 1 | mg/kg | J | Y | Y | P | J | | 08A | 13 | | | B024-02 | 12:01 |
| | | | | BARIUM | 22 | mg/kg | | Y | Y | P | | | | | | | B024-02 | 01:56 |
| | | | | BERYLLIUM | .182 | mg/kg | J | Y | Y | P | J | | 15 | | | | B024-02 | 01:56 |
| | | | | CADMIUM | .583 | mg/kg | U | N | Y | U | U | | | | | | B024-02 | 01:56 |
| | | | | CALCIUM | 19.6 | mg/kg | J | Y | Y | P | J | | 15 | | | | B024-02 | 01:56 |
| | | | | CHROMIUM | 18.7 | mg/kg | | Y | Y | P | | | | | | | B024-02 | 01:56 |
| | | | | COBALT | .862 | mg/kg | J | Y | Y | F | B | | 06B | | | | B024-02 | 01:56 |
| | | | | COPPER | 3.33 | mg/kg | | Y | Y | P | | | | | | | B024-02 | 01:56 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10116Q-02** | | | | | | | | | | | | | | | | | | |
| JL0022 | SW6010B | SW3050 | N 0 1 | IRON | 10300 | mg/kg | | Y | Y | P | | | | | | | B024-02 | 01:56 |
| | | | | LEAD | 2.34 | mg/kg | | Y | Y | P | | | | | | | B024-02 | 12:01 |
| | | | | MAGNESIUM | 26.4 | mg/kg | J | Y | Y | P | J | | 15 | | | | B024-02 | 01:56 |
| | | | | MANGANESE | 13.5 | mg/kg | | Y | Y | P | J | | 08A | 08B | | | B024-02 | 01:56 |
| | | | | NICKEL | 2.08 | mg/kg | J | Y | Y | P | J | | 15 | | | | B024-02 | 01:56 |
| | | | | POTASSIUM | 330 | mg/kg | J | Y | Y | P | J | | 15 | | | | B024-02 | 01:56 |
| | | | | SELENIUM | 1.17 | mg/kg | U | N | Y | U | UJ | | 08A | | | | B024-02 | 12:01 |
| | | | | SILVER | 1.17 | mg/kg | U | N | Y | U | U | | | | | | B024-02 | 01:56 |
| | | | | SODIUM | 117 | mg/kg | U | N | Y | U | U | | | | | | B024-02 | 01:56 |
| | | | | THALLIUM | 2.33 | mg/kg | U | N | Y | U | U | | | | | | B024-02 | 12:01 |
| | | | | VANADIUM | 22 | mg/kg | | Y | Y | P | J | | 08A | | | | B024-02 | 01:56 |
| | | | | ZINC | 1.84 | mg/kg | J | Y | Y | P | J | | 15 | 08A | | | B024-02 | 01:56 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .117 | mg/kg | U | N | Y | U | U | | | | | | B024-02 | 11:06 |
| JL0023 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 9540 | mg/kg | | Y | Y | P | | | | | | | A256-03 | 23:58 |
| | | | | ANTIMONY | 12.1 | mg/kg | U | N | Y | U | UJ | | 08A | | | | A256-03 | 23:58 |
| | | | | ARSENIC | 2.04 | mg/kg | | Y | Y | P | J | | 08A | 13 | | | A256-03 | 12:13 |
| | | | | BARIUM | 43.3 | mg/kg | | Y | Y | P | | | | | | | A256-03 | 23:58 |
| | | | | BERYLLIUM | .285 | mg/kg | J | Y | Y | P | J | | 15 | | | | A256-03 | 23:58 |
| | | | | CADMIUM | .605 | mg/kg | U | N | Y | U | U | | | | | | A256-03 | 23:58 |
| | | | | CALCIUM | 77.4 | mg/kg | J | Y | Y | P | J | | 15 | | | | A256-03 | 23:58 |
| | | | | CHROMIUM | 8.2 | mg/kg | | Y | Y | P | | | | | | | A256-03 | 23:58 |
| | | | | COBALT | 1.17 | mg/kg | J | Y | Y | F | B | | 06B | | | | A256-03 | 23:58 |
| | | | | COPPER | 1.97 | mg/kg | J | Y | Y | P | J | | 15 | | | | A256-03 | 23:58 |
| | | | | IRON | 8100 | mg/kg | | Y | Y | P | | | | | | | A256-03 | 23:58 |
| | | | | LEAD | 12.5 | mg/kg | | Y | Y | P | | | | | | | A256-03 | 12:13 |
| | | | | MAGNESIUM | 272 | mg/kg | | Y | Y | P | | | | | | | A256-03 | 23:58 |
| | | | | MANGANESE | 97.1 | mg/kg | | Y | Y | P | J | | 08A | 08B | | | A256-03 | 23:58 |
| | | | | NICKEL | 2.77 | mg/kg | | Y | Y | P | | | | | | | A256-03 | 23:58 |
| | | | | POTASSIUM | 208 | mg/kg | J | Y | Y | P | J | | 15 | | | | A256-03 | 23:58 |
| | | | | SELENIUM | 1.21 | mg/kg | U | N | Y | U | UJ | | 08A | | | | A256-03 | 12:13 |
| | | | | SILVER | 1.21 | mg/kg | U | N | Y | U | U | | | | | | A256-03 | 23:58 |
| | | | | SODIUM | 121 | mg/kg | U | N | Y | U | U | | | | | | A256-03 | 23:58 |
| | | | | THALLIUM | 2.42 | mg/kg | U | N | Y | U | U | | | | | | A256-03 | 12:13 |
| | | | | VANADIUM | 14.6 | mg/kg | | Y | Y | P | J | | 08A | | | | A256-03 | 23:58 |
| | | | | ZINC | 21.6 | mg/kg | | Y | Y | P | J | | 08A | | | | A256-03 | 23:58 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .033 | mg/kg | J | Y | Y | P | J | | 15 | | | | A256-03 | 11:14 |
| JL0024 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 3370 | mg/kg | | Y | Y | P | | | | | | | A256-04 | 00:04 |
| | | | | ANTIMONY | 11.7 | mg/kg | U | N | Y | U | UJ | | 08A | | | | A256-04 | 00:04 |
| | | | | ARSENIC | 1.69 | mg/kg | | Y | Y | P | J | | 08A | 13 | | | A256-04 | 12:18 |
| | | | | BARIUM | 10.5 | mg/kg | | Y | Y | P | | | | | | | A256-04 | 00:04 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10116Q-02** | | | | | | | | | | | | | | | | | | |
| JL0024 | SW6010B | SW3050 | N 0 1 | BERYLLIUM | .313 | mg/kg | J | Y | Y | P | J | | 15 | | | | A256-04 | 00:04 |
| | | | | CADMIUM | .583 | mg/kg | U | N | Y | U | U | | | | | | A256-04 | 00:04 |
| | | | | CALCIUM | 19.6 | mg/kg | J | Y | Y | P | J | | 15 | | | | A256-04 | 00:04 |
| | | | | CHROMIUM | 8.7 | mg/kg | | Y | Y | P | | | | | | | A256-04 | 00:04 |
| | | | | COBALT | 1.46 | mg/kg | J | Y | Y | F | B | | 06B | | | | A256-04 | 00:04 |
| | | | | COPPER | 2.08 | mg/kg | J | Y | Y | P | J | | 15 | | | | A256-04 | 00:04 |
| | | | | IRON | 10600 | mg/kg | | Y | Y | P | | | | | | | A256-04 | 00:04 |
| | | | | LEAD | 2.91 | mg/kg | | Y | Y | P | | | | | | | A256-04 | 12:18 |
| | | | | MAGNESIUM | 108 | mg/kg | J | Y | Y | P | J | | 15 | | | | A256-04 | 00:04 |
| | | | | MANGANESE | 16.7 | mg/kg | | Y | Y | P | J | | 08A | 08B | | | A256-04 | 00:04 |
| | | | | NICKEL | 2.06 | mg/kg | J | Y | Y | P | J | | 15 | | | | A256-04 | 00:04 |
| | | | | POTASSIUM | 1230 | mg/kg | | Y | Y | P | | | | | | | A256-04 | 00:04 |
| | | | | SELENIUM | 1.17 | mg/kg | U | N | Y | U | UJ | | 08A | | | | A256-04 | 12:18 |
| | | | | SILVER | 1.17 | mg/kg | U | N | Y | U | U | | | | | | A256-04 | 00:04 |
| | | | | SODIUM | 117 | mg/kg | U | N | Y | U | U | | | | | | A256-04 | 00:04 |
| | | | | THALLIUM | 2.33 | mg/kg | U | N | Y | U | U | | | | | | A256-04 | 12:18 |
| | | | | VANADIUM | 9.46 | mg/kg | | Y | Y | P | J | | 08A | | | | A256-04 | 00:04 |
| | | | | ZINC | 2.43 | mg/kg | | Y | Y | P | J | | 08A | | | | A256-04 | 00:04 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .117 | mg/kg | U | N | Y | U | U | | | | | | A256-04 | 11:17 |
| JL0025 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 13600 | mg/kg | | Y | Y | P | | | | | | | A256-05 | 00:09 |
| | | | | ANTIMONY | 11.6 | mg/kg | U | N | Y | U | UJ | | 08A | | | | A256-05 | 00:09 |
| | | | | ARSENIC | 3.69 | mg/kg | | Y | Y | P | J | | 08A | 13 | | | A256-05 | 12:22 |
| | | | | BARIUM | 22.5 | mg/kg | | Y | Y | P | | | | | | | A256-05 | 00:09 |
| | | | | BERYLLIUM | .214 | mg/kg | J | Y | Y | P | J | | 15 | | | | A256-05 | 00:09 |
| | | | | CADMIUM | .579 | mg/kg | U | N | Y | U | U | | | | | | A256-05 | 00:09 |
| | | | | CALCIUM | 109 | mg/kg | J | Y | Y | P | J | | 15 | | | | A256-05 | 00:09 |
| | | | | CHROMIUM | 16.3 | mg/kg | | Y | Y | P | | | | | | | A256-05 | 00:09 |
| | | | | COBALT | .695 | mg/kg | J | Y | Y | F | B | | 06B | | | | A256-05 | 00:09 |
| | | | | COPPER | 2.28 | mg/kg | J | Y | Y | P | J | | 15 | | | | A256-05 | 00:09 |
| | | | | IRON | 15100 | mg/kg | | Y | Y | P | | | | | | | A256-05 | 00:09 |
| | | | | LEAD | 8.45 | mg/kg | | Y | Y | P | | | | | | | A256-05 | 12:22 |
| | | | | MAGNESIUM | 324 | mg/kg | | Y | Y | P | | | | | | | A256-05 | 00:09 |
| | | | | MANGANESE | 10.4 | mg/kg | | Y | Y | P | J | | 08A | 08B | | | A256-05 | 00:09 |
| | | | | NICKEL | 2.99 | mg/kg | | Y | Y | P | | | | | | | A256-05 | 00:09 |
| | | | | POTASSIUM | 274 | mg/kg | J | Y | Y | P | J | | 15 | | | | A256-05 | 00:09 |
| | | | | SELENIUM | 1.16 | mg/kg | U | N | Y | U | UJ | | 08A | | | | A256-05 | 12:22 |
| | | | | SILVER | 1.16 | mg/kg | U | N | Y | U | U | | | | | | A256-05 | 00:09 |
| | | | | SODIUM | 116 | mg/kg | U | N | Y | U | U | | | | | | A256-05 | 00:09 |
| | | | | THALLIUM | 2.32 | mg/kg | U | N | Y | U | U | | | | | | A256-05 | 12:22 |
| | | | | VANADIUM | 27.8 | mg/kg | | Y | Y | P | J | | 08A | | | | A256-05 | 00:09 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10116Q-02** | | | | | | | | | | | | | | | | | | | | |
| JL0025 | SW6010B | SW3050 | N | 0 | 1 | ZINC | 10.3 | mg/kg | | Y | Y | P | J | | 08A | | | | A256-05 | 00:09 |
| | SW7471A | TOTAL | N | 0 | 1 | MERCURY | .116 | mg/kg | U | N | Y | U | U | | | | | | A256-05 | 11:26 |
| JL0026 | SW6010B | SW3050 | N | 0 | 1 | ALUMINUM | 2670 | mg/kg | | Y | Y | P | | | | | | | A256-06 | 00:14 |
| | | | | | | ANTIMONY | 11.2 | mg/kg | U | N | Y | U | UJ | | 08A | | | | A256-06 | 00:14 |
| | | | | | | ARSENIC | 1.41 | mg/kg | | Y | Y | P | J | | 08A | 13 | | | A256-06 | 12:35 |
| | | | | | | BARIUM | 38.6 | mg/kg | | Y | Y | P | | | | | | | A256-06 | 00:14 |
| | | | | | | BERYLLIUM | .118 | mg/kg | J | Y | Y | P | J | | 15 | | | | A256-06 | 00:14 |
| | | | | | | CADMIUM | .56 | mg/kg | U | N | Y | U | U | | | | | | A256-06 | 00:14 |
| | | | | | | CALCIUM | 16.6 | mg/kg | J | Y | Y | P | J | | 15 | | | | A256-06 | 00:14 |
| | | | | | | CHROMIUM | 2.95 | mg/kg | | Y | Y | P | | | | | | | A256-06 | 00:14 |
| | | | | | | COBALT | 2.24 | mg/kg | U | N | Y | U | U | | | | | | A256-06 | 00:14 |
| | | | | | | COPPER | .759 | mg/kg | J | Y | Y | P | J | | 15 | | | | A256-06 | 00:14 |
| | | | | | | IRON | 1620 | mg/kg | | Y | Y | P | | | | | | | A256-06 | 00:14 |
| | | | | | | LEAD | 6.97 | mg/kg | | Y | Y | P | | | | | | | A256-06 | 12:35 |
| | | | | | | MAGNESIUM | 31.2 | mg/kg | J | Y | Y | P | J | | 15 | | | | A256-06 | 00:14 |
| | | | | | | MANGANESE | 1.07 | mg/kg | J | Y | Y | P | J | | 08A | 08B | | | A256-06 | 00:14 |
| | | | | | | NICKEL | 2.24 | mg/kg | U | N | Y | U | U | | | | | | A256-06 | 00:14 |
| | | | | | | POTASSIUM | 378 | mg/kg | J | Y | Y | P | J | | 15 | | | | A256-06 | 00:14 |
| | | | | | | SELENIUM | 1.12 | mg/kg | U | N | Y | U | UJ | | 08A | | | | A256-06 | 12:35 |
| | | | | | | SILVER | 1.12 | mg/kg | U | N | Y | U | U | | | | | | A256-06 | 00:14 |
| | | | | | | SODIUM | 112 | mg/kg | U | N | Y | U | U | | | | | | A256-06 | 00:14 |
| | | | | | | THALLIUM | 2.24 | mg/kg | U | N | Y | U | U | | | | | | A256-06 | 12:35 |
| | | | | | | VANADIUM | 3.81 | mg/kg | | Y | Y | P | J | | 08A | | | | A256-06 | 00:14 |
| | | | | | | ZINC | .717 | mg/kg | J | Y | Y | P | J | | 15 | 08A | | | A256-06 | 00:14 |
| | SW7471A | TOTAL | N | 0 | 1 | MERCURY | .112 | mg/kg | U | N | Y | U | U | | | | | | A256-06 | 11:28 |
| JL0027 | SW6010B | SW3050 | N | 0 | 1 | ALUMINUM | 9890 | mg/kg | | Y | Y | P | | | | | | | A256-07 | 00:19 |
| | | | | | | ANTIMONY | 12.1 | mg/kg | U | N | Y | U | UJ | | 08A | | | | A256-07 | 00:19 |
| | | | | | | ARSENIC | 1.4 | mg/kg | | Y | Y | P | J | | 08A | 13 | | | A256-07 | 12:39 |
| | | | | | | BARIUM | 42.4 | mg/kg | | Y | Y | P | | | | | | | A256-07 | 00:19 |
| | | | | | | BERYLLIUM | .223 | mg/kg | J | Y | Y | P | J | | 15 | | | | A256-07 | 00:19 |
| | | | | | | CADMIUM | .603 | mg/kg | U | N | Y | U | U | | | | | | A256-07 | 00:19 |
| | | | | | | CALCIUM | 79.3 | mg/kg | J | Y | Y | P | J | | 15 | | | | A256-07 | 00:19 |
| | | | | | | CHROMIUM | 6.57 | mg/kg | | Y | Y | P | | | | | | | A256-07 | 00:19 |
| | | | | | | COBALT | 2.57 | mg/kg | | Y | Y | P | | | | | | | A256-07 | 00:19 |
| | | | | | | COPPER | 2.17 | mg/kg | J | Y | Y | P | J | | 15 | | | | A256-07 | 00:19 |
| | | | | | | IRON | 6460 | mg/kg | | Y | Y | P | | | | | | | A256-07 | 00:19 |
| | | | | | | LEAD | 5.82 | mg/kg | | Y | Y | P | | | | | | | A256-07 | 12:39 |
| | | | | | | MAGNESIUM | 318 | mg/kg | | Y | Y | P | | | | | | | A256-07 | 00:19 |
| | | | | | | MANGANESE | 58.7 | mg/kg | | Y | Y | P | J | | 08A | 08B | | | A256-07 | 00:19 |
| | | | | | | NICKEL | 2.83 | mg/kg | | Y | Y | P | | | | | | | A256-07 | 00:19 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10116Q-02** | | | | | | | | | | | | | | | | | | |
| JL0027 | SW6010B | SW3050 | N 0 1 | POTASSIUM | 193 | mg/kg | J | Y | Y | P | J | | 15 | | | | A256-07 | 00:19 |
| | | | | SELENIUM | 1.21 | mg/kg | U | N | Y | U | UJ | | 08A | | | | A256-07 | 12:39 |
| | | | | SILVER | 1.21 | mg/kg | U | N | Y | U | U | | | | | | A256-07 | 00:19 |
| | | | | SODIUM | 121 | mg/kg | U | N | Y | U | U | | | | | | A256-07 | 00:19 |
| | | | | THALLIUM | 2.41 | mg/kg | U | N | Y | U | U | | | | | | A256-07 | 12:39 |
| | | | | VANADIUM | 11.5 | mg/kg | | Y | Y | P | J | | 08A | | | | A256-07 | 00:19 |
| | | | | ZINC | 10.3 | mg/kg | | Y | Y | P | J | | 08A | | | | A256-07 | 00:19 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .121 | mg/kg | U | N | Y | U | U | | | | | | A256-07 | 11:31 |
| JL0028 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 16600 | mg/kg | | Y | Y | P | | | | | | | A256-08 | 00:34 |
| | | | | ANTIMONY | 12 | mg/kg | U | N | Y | U | UJ | | 08A | | | | A256-08 | 00:34 |
| | | | | ARSENIC | 5.86 | mg/kg | | Y | Y | P | J | | 08A | 13 | | | A256-08 | 12:44 |
| | | | | BARIUM | 36.2 | mg/kg | | Y | Y | P | | | | | | | A256-08 | 00:34 |
| | | | | BERYLLIUM | .331 | mg/kg | J | Y | Y | P | J | | 15 | | | | A256-08 | 00:34 |
| | | | | CADMIUM | .602 | mg/kg | U | N | Y | U | U | | | | | | A256-08 | 00:34 |
| | | | | CALCIUM | 25.4 | mg/kg | J | Y | Y | P | J | | 15 | | | | A256-08 | 00:34 |
| | | | | CHROMIUM | 34.4 | mg/kg | | Y | Y | P | | | | | | | A256-08 | 00:34 |
| | | | | COBALT | 1.51 | mg/kg | J | Y | Y | F | B | | 06B | | | | A256-08 | 00:34 |
| | | | | COPPER | 4.37 | mg/kg | | Y | Y | P | | | | | | | A256-08 | 00:34 |
| | | | | IRON | 33600 | mg/kg | | Y | Y | P | | | | | | | A256-08 | 00:34 |
| | | | | LEAD | 9.25 | mg/kg | | Y | Y | P | | | | | | | A256-08 | 12:44 |
| | | | | MAGNESIUM | 343 | mg/kg | | Y | Y | P | | | | | | | A256-08 | 00:34 |
| | | | | MANGANESE | 43.6 | mg/kg | | Y | Y | P | J | | 08A | 08B | | | A256-08 | 00:34 |
| | | | | NICKEL | 3.98 | mg/kg | | Y | Y | P | | | | | | | A256-08 | 00:34 |
| | | | | POTASSIUM | 546 | mg/kg | J | Y | Y | P | J | | 15 | | | | A256-08 | 00:34 |
| | | | | SELENIUM | 1.2 | mg/kg | U | N | Y | U | UJ | | 08A | | | | A256-08 | 12:44 |
| | | | | SILVER | 1.2 | mg/kg | U | N | Y | U | U | | | | | | A256-08 | 00:34 |
| | | | | SODIUM | 120 | mg/kg | U | N | Y | U | U | | | | | | A256-08 | 00:34 |
| | | | | THALLIUM | 2.41 | mg/kg | U | N | Y | U | U | | | | | | A256-08 | 12:44 |
| | | | | VANADIUM | 44.1 | mg/kg | | Y | Y | P | J | | 08A | | | | A256-08 | 00:34 |
| | | | | ZINC | 10.7 | mg/kg | | Y | Y | P | J | | 08A | | | | A256-08 | 00:34 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .036 | mg/kg | J | Y | Y | P | J | | 15 | | | | A256-08 | 11:33 |
| JL0039 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 12000 | mg/kg | | Y | Y | P | | | | | | | A256-09 | 00:39 |
| | | | | ANTIMONY | 12 | mg/kg | U | N | Y | U | UJ | | 08A | | | | A256-09 | 00:39 |
| | | | | ARSENIC | 3.7 | mg/kg | | Y | Y | P | J | | 08A | 13 | | | A256-09 | 12:48 |
| | | | | BARIUM | 141 | mg/kg | | Y | Y | P | | | | | | | A256-09 | 00:39 |
| | | | | BERYLLIUM | .791 | mg/kg | J | Y | Y | P | J | | 15 | | | | A256-09 | 00:39 |
| | | | | CADMIUM | .602 | mg/kg | U | N | Y | U | U | | | | | | A256-09 | 00:39 |
| | | | | CALCIUM | 316 | mg/kg | | Y | Y | P | | | | | | | A256-09 | 00:39 |
| | | | | CHROMIUM | 17.5 | mg/kg | | Y | Y | P | | | | | | | A256-09 | 00:39 |
| | | | | COBALT | 4.39 | mg/kg | | Y | Y | P | | | | | | | A256-09 | 00:39 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10116Q-02** | | | | | | | | | | | | | | | | | | |
| JL0039 | SW6010B | SW3050 | N 0 1 | COPPER | 3.12 | mg/kg | | Y | Y | P | | | | | | | A256-09 | 00:39 |
| | | | | IRON | 12200 | mg/kg | | Y | Y | P | | | | | | | A256-09 | 00:39 |
| | | | | LEAD | 16.6 | mg/kg | | Y | Y | P | | | | | | | A256-09 | 12:48 |
| | | | | MAGNESIUM | 394 | mg/kg | | Y | Y | P | | | | | | | A256-09 | 00:39 |
| | | | | MANGANESE | 1110 | mg/kg | | Y | Y | P | J | | 08A | 08B | | | A256-09 | 00:39 |
| | | | | NICKEL | 4.19 | mg/kg | | Y | Y | P | | | | | | | A256-09 | 00:39 |
| | | | | POTASSIUM | 189 | mg/kg | J | Y | Y | P | J | | 15 | | | | A256-09 | 00:39 |
| | | | | SELENIUM | 1.2 | mg/kg | U | N | Y | U | UJ | | 08A | | | | A256-09 | 12:48 |
| | | | | SILVER | 1.2 | mg/kg | U | N | Y | U | U | | | | | | A256-09 | 00:39 |
| | | | | SODIUM | 120 | mg/kg | U | N | Y | U | U | | | | | | A256-09 | 00:39 |
| | | | | THALLIUM | 2.41 | mg/kg | U | N | Y | U | U | | | | | | A256-09 | 12:48 |
| | | | | VANADIUM | 19.7 | mg/kg | | Y | Y | P | J | | 08A | | | | A256-09 | 00:39 |
| | | | | ZINC | 21.3 | mg/kg | | Y | Y | P | J | | 08A | | | | A256-09 | 00:39 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .039 | mg/kg | J | Y | Y | P | J | | 15 | | | | A256-09 | 11:36 |
| JL0040 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 10800 | mg/kg | | Y | Y | P | | | | | | | A256-10 | 00:44 |
| | | | | ANTIMONY | 11.7 | mg/kg | U | N | Y | U | UJ | | 08A | | | | A256-10 | 00:44 |
| | | | | ARSENIC | 6.16 | mg/kg | | Y | Y | P | J | | 08A | 13 | | | A256-10 | 12:52 |
| | | | | BARIUM | 49 | mg/kg | | Y | Y | P | | | | | | | A256-10 | 00:44 |
| | | | | BERYLLIUM | .309 | mg/kg | J | Y | Y | P | J | | 15 | | | | A256-10 | 00:44 |
| | | | | CADMIUM | .586 | mg/kg | U | N | Y | U | U | | | | | | A256-10 | 00:44 |
| | | | | CALCIUM | 27.3 | mg/kg | J | Y | Y | P | J | | 15 | | | | A256-10 | 00:44 |
| | | | | CHROMIUM | 46.1 | mg/kg | | Y | Y | P | | | | | | | A256-10 | 00:44 |
| | | | | COBALT | .428 | mg/kg | J | Y | Y | F | B | | 06B | | | | A256-10 | 00:44 |
| | | | | COPPER | 6.53 | mg/kg | | Y | Y | P | | | | | | | A256-10 | 00:44 |
| | | | | IRON | 39400 | mg/kg | | Y | Y | P | | | | | | | A256-10 | 00:44 |
| | | | | LEAD | 4.65 | mg/kg | | Y | Y | P | | | | | | | A256-10 | 12:52 |
| | | | | MAGNESIUM | 276 | mg/kg | | Y | Y | P | | | | | | | A256-10 | 00:44 |
| | | | | MANGANESE | 7.52 | mg/kg | | Y | Y | P | J | | 08A | 08B | | | A256-10 | 00:44 |
| | | | | NICKEL | 2.78 | mg/kg | | Y | Y | P | | | | | | | A256-10 | 00:44 |
| | | | | POTASSIUM | 843 | mg/kg | | Y | Y | P | | | | | | | A256-10 | 00:44 |
| | | | | SELENIUM | 1.17 | mg/kg | U | N | Y | U | UJ | | 08A | | | | A256-10 | 12:52 |
| | | | | SILVER | 1.17 | mg/kg | U | N | Y | U | U | | | | | | A256-10 | 00:44 |
| | | | | SODIUM | 117 | mg/kg | U | N | Y | U | U | | | | | | A256-10 | 00:44 |
| | | | | THALLIUM | 2.34 | mg/kg | U | N | Y | U | U | | | | | | A256-10 | 12:52 |
| | | | | VANADIUM | 59.5 | mg/kg | | Y | Y | P | J | | 08A | | | | A256-10 | 00:44 |
| | | | | ZINC | 4.48 | mg/kg | | Y | Y | P | J | | 08A | | | | A256-10 | 00:44 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .117 | mg/kg | U | N | Y | U | U | | | | | | A256-10 | 11:38 |
| JL0001 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-01 | 21:43 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-01 | 21:43 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-01 | 21:43 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10116Q-02** | | | | | | | | | | | | | | | | | | | | |
| JL0001 | SW8330 | METHOD | N | 0 | 1 | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-01 | 21:43 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-01 | 21:43 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-01 | 21:43 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-01 | 21:43 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-01 | 21:43 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-01 | 21:43 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-01 | 21:43 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-01 | 21:43 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-01 | 21:43 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-01 | 21:43 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-01 | 21:43 |
| JL0002 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-02 | 22:23 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-02 | 22:23 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-02 | 22:23 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-02 | 22:23 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-02 | 22:23 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-02 | 22:23 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-02 | 22:23 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-02 | 22:23 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-02 | 22:23 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-02 | 22:23 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-02 | 22:23 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-02 | 22:23 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-02 | 22:23 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-02 | 22:23 |
| JL0003 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-03 | 23:04 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-03 | 23:04 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-03 | 23:04 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-03 | 23:04 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-03 | 23:04 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-03 | 23:04 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-03 | 23:04 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-03 | 23:04 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-03 | 23:04 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-03 | 23:04 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-03 | 23:04 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-03 | 23:04 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-03 | 23:04 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-03 | 23:04 |
| JL0004 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-04 | 23:44 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10116Q-02** | | | | | | | | | | | | | | | | | | | | |
| JL0004 | SW8330 | METHOD | N | 0 | 1 | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-04 | 23:44 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-04 | 23:44 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-04 | 23:44 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-04 | 23:44 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-04 | 23:44 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-04 | 23:44 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-04 | 23:44 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-04 | 23:44 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-04 | 23:44 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-04 | 23:44 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-04 | 23:44 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-04 | 23:44 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-04 | 23:44 |
| JL0007 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-01 | 14:19 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-01 | 14:19 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-01 | 14:19 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-01 | 14:19 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-01 | 14:19 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-01 | 14:19 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-01 | 14:19 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-01 | 14:19 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-01 | 14:19 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-01 | 14:19 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-01 | 14:19 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-01 | 14:19 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-01 | 14:19 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-01 | 14:19 |
| JL0008 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-02 | 14:59 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-02 | 14:59 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-02 | 14:59 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-02 | 14:59 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-02 | 14:59 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-02 | 14:59 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-02 | 14:59 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-02 | 14:59 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-02 | 14:59 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-02 | 14:59 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-02 | 14:59 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-02 | 14:59 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-02 | 14:59 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10116Q-02** | | | | | | | | | | | | | | | | | | | | |
| JL0008 | SW8330 | METHOD | N | 0 | 1 | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-02 | 14:59 |
| JL0011 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-05 | 00:25 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-05 | 00:25 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-05 | 00:25 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-05 | 00:25 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-05 | 00:25 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-05 | 00:25 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-05 | 00:25 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-05 | 00:25 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-05 | 00:25 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-05 | 00:25 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-05 | 00:25 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-05 | 00:25 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-05 | 00:25 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-05 | 00:25 |
| JL0012 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-06 | 01:05 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-06 | 01:05 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-06 | 01:05 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-06 | 01:05 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-06 | 01:05 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-06 | 01:05 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-06 | 01:05 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-06 | 01:05 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-06 | 01:05 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-06 | 01:05 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-06 | 01:05 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-06 | 01:05 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-06 | 01:05 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | B008-06 | 01:05 |
| JL0021 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B024-01 | 03:47 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B024-01 | 03:47 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B024-01 | 03:47 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B024-01 | 03:47 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B024-01 | 03:47 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B024-01 | 03:47 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B024-01 | 03:47 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B024-01 | 03:47 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B024-01 | 03:47 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B024-01 | 03:47 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | B024-01 | 03:47 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10116Q-02** | | | | | | | | | | | | | | | | | | |
| JL0021 | SW8330 | METHOD | N 0 1 | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B024-01 | 03:47 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | B024-01 | 03:47 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | B024-01 | 03:47 |
| JL0022 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B024-02 | 04:27 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B024-02 | 04:27 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B024-02 | 04:27 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B024-02 | 04:27 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B024-02 | 04:27 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B024-02 | 04:27 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B024-02 | 04:27 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B024-02 | 04:27 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B024-02 | 04:27 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B024-02 | 04:27 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | B024-02 | 04:27 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B024-02 | 04:27 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | B024-02 | 04:27 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | B024-02 | 04:27 |
| JL0023 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-03 | 15:40 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-03 | 15:40 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-03 | 15:40 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-03 | 15:40 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-03 | 15:40 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-03 | 15:40 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-03 | 15:40 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-03 | 15:40 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-03 | 15:40 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-03 | 15:40 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-03 | 15:40 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-03 | 15:40 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-03 | 15:40 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-03 | 15:40 |
| JL0024 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-04 | 16:20 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-04 | 16:20 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-04 | 16:20 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-04 | 16:20 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-04 | 16:20 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-04 | 16:20 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-04 | 16:20 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-04 | 16:20 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-04 | 16:20 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10116Q-02** | | | | | | | | | | | | | | | | | | |
| JL0024 | SW8330 | METHOD | N 0 1 | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-04 | 16:20 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-04 | 16:20 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-04 | 16:20 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-04 | 16:20 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-04 | 16:20 |
| JL0025 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-05 | 17:01 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-05 | 17:01 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-05 | 17:01 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-05 | 17:01 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-05 | 17:01 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-05 | 17:01 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-05 | 17:01 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-05 | 17:01 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-05 | 17:01 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-05 | 17:01 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-05 | 17:01 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-05 | 17:01 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-05 | 17:01 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-05 | 17:01 |
| JL0026 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-06 | 17:40 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-06 | 17:40 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-06 | 17:40 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-06 | 17:40 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-06 | 17:40 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-06 | 17:40 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-06 | 17:40 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-06 | 17:40 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-06 | 17:40 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-06 | 17:40 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-06 | 17:40 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-06 | 17:40 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-06 | 17:40 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-06 | 17:40 |
| JL0027 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-07 | 19:01 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-07 | 19:01 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-07 | 19:01 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-07 | 19:01 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-07 | 19:01 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-07 | 19:01 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-07 | 19:01 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10116Q-02** | | | | | | | | | | | | | | | | | | | | |
| JL0027 | SW8330 | METHOD | N | 0 | 1 | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-07 | 19:01 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-07 | 19:01 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-07 | 19:01 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-07 | 19:01 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-07 | 19:01 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-07 | 19:01 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-07 | 19:01 |
| JL0028 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-08 | 19:42 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-08 | 19:42 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-08 | 19:42 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-08 | 19:42 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-08 | 19:42 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-08 | 19:42 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-08 | 19:42 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-08 | 19:42 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-08 | 19:42 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-08 | 19:42 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-08 | 19:42 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-08 | 19:42 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-08 | 19:42 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-08 | 19:42 |
| JL0039 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-09 | 20:22 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-09 | 20:22 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-09 | 20:22 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-09 | 20:22 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-09 | 20:22 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-09 | 20:22 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-09 | 20:22 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-09 | 20:22 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-09 | 20:22 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-09 | 20:22 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-09 | 20:22 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-09 | 20:22 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-09 | 20:22 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-09 | 20:22 |
| JL0040 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-10 | 21:02 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-10 | 21:02 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-10 | 21:02 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-10 | 21:02 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-10 | 21:02 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10116Q-02** | | | | | | | | | | | | | | | | | | |
| JL0040 | SW8330 | METHOD | N 0 1 | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-10 | 21:02 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-10 | 21:02 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-10 | 21:02 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-10 | 21:02 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-10 | 21:02 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-10 | 21:02 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-10 | 21:02 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-10 | 21:02 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | A256-10 | 21:02 |
| JL0001 | EPA314.0 | NONE | N 0 1 | PERCHLORATE | .057 | mg/kg | U | N | Y | U | U | | | | | | B008-01 | 21:20 |
| JL0002 | EPA314.0 | NONE | N 0 1 | PERCHLORATE | .0545 | mg/kg | U | N | Y | U | U | | | | | | B008-02 | 21:37 |
| JL0003 | EPA314.0 | NONE | N 0 1 | PERCHLORATE | .0627 | mg/kg | U | N | Y | U | U | | | | | | B008-03 | 21:55 |
| JL0004 | EPA314.0 | NONE | N 0 1 | PERCHLORATE | .0531 | mg/kg | U | N | Y | U | U | | | | | | B008-04 | 22:12 |
| JL0007 | EPA314.0 | NONE | N 0 1 | PERCHLORATE | .061 | mg/kg | U | N | Y | U | U | | | | | | A256-01 | 17:54 |
| JL0008 | EPA314.0 | NONE | N 0 1 | PERCHLORATE | .0582 | mg/kg | U | N | Y | U | U | | | | | | A256-02 | 18:12 |
| JL0011 | EPA314.0 | NONE | N 0 1 | PERCHLORATE | .0588 | mg/kg | U | N | Y | U | U | | | | | | B008-05 | 22:29 |
| JL0012 | EPA314.0 | NONE | N 0 1 | PERCHLORATE | .06 | mg/kg | U | N | Y | U | U | | | | | | B008-06 | 22:46 |
| JL0021 | EPA314.0 | NONE | N 0 1 | PERCHLORATE | .059 | mg/kg | U | N | Y | U | U | | | | | | B024-01 | 23:37 |
| JL0022 | EPA314.0 | NONE | N 0 1 | PERCHLORATE | .0583 | mg/kg | U | N | Y | U | U | | | | | | B024-02 | 23:55 |
| JL0023 | EPA314.0 | NONE | N 0 1 | PERCHLORATE | .0605 | mg/kg | U | N | Y | U | U | | | | | | A256-03 | 18:29 |
| JL0024 | EPA314.0 | NONE | N 0 1 | PERCHLORATE | .0583 | mg/kg | U | N | Y | U | U | | | | | | A256-04 | 18:46 |
| JL0025 | EPA314.0 | NONE | N 0 1 | PERCHLORATE | .0579 | mg/kg | U | N | Y | U | U | | | | | | A256-05 | 19:03 |
| JL0026 | EPA314.0 | NONE | N 0 1 | PERCHLORATE | .056 | mg/kg | U | N | Y | U | U | | | | | | A256-06 | 19:20 |
| JL0027 | EPA314.0 | NONE | N 0 1 | PERCHLORATE | .0603 | mg/kg | U | N | Y | U | U | | | | | | A256-07 | 19:37 |
| JL0028 | EPA314.0 | NONE | N 0 1 | PERCHLORATE | .0602 | mg/kg | U | N | Y | U | U | | | | | | A256-08 | 19:54 |
| JL0039 | EPA314.0 | NONE | N 0 1 | PERCHLORATE | .0602 | mg/kg | U | N | Y | U | U | | | | | | A256-09 | 20:12 |
| JL0040 | EPA314.0 | NONE | N 0 1 | PERCHLORATE | .0586 | mg/kg | U | N | Y | U | U | | | | | | A256-10 | 20:29 |
| **10116Q-03** | | | | | | | | | | | | | | | | | | |
| JL0009 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 6540 | mg/kg | | Y | Y | P | | | | | | | B030-01 | 22:33 |
| | | | | ANTIMONY | 11.8 | mg/kg | U | N | Y | U | UJ | 08A | | | | | B030-01 | 22:33 |
| | | | | ARSENIC | 1.7 | mg/kg | | Y | Y | P | | | | | | | B030-01 | 17:54 |
| | | | | BARIUM | 33.4 | mg/kg | | Y | Y | P | | | | | | | B030-01 | 22:33 |
| | | | | BERYLLIUM | .224 | mg/kg | J | Y | Y | P | J | 15 | | | | | B030-01 | 22:33 |
| | | | | CADMIUM | .59 | mg/kg | U | N | Y | U | U | | | | | | B030-01 | 22:33 |
| | | | | CALCIUM | 63.3 | mg/kg | J | Y | Y | P | J | 15 | | | | | B030-01 | 22:33 |
| | | | | CHROMIUM | 11.8 | mg/kg | | Y | Y | P | | | | | | | B030-01 | 22:33 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10116Q-03** | | | | | | | | | | | | | | | | | | |
| JL0009 | SW6010B | SW3050 | N 0 1 | COBALT | 1.38 | mg/kg | J | Y | Y | P | J | | 15 | | | | B030-01 | 22:33 |
| | | | | COPPER | 2.42 | mg/kg | | Y | Y | P | | | | | | | B030-01 | 22:33 |
| | | | | IRON | 10800 | mg/kg | | Y | Y | P | | | | | | | B030-01 | 22:33 |
| | | | | LEAD | 5.12 | mg/kg | | Y | Y | P | J | | 13 | | | | B030-01 | 17:54 |
| | | | | MAGNESIUM | 180 | mg/kg | | Y | Y | P | | | | | | | B030-01 | 22:33 |
| | | | | MANGANESE | 17.3 | mg/kg | | Y | Y | P | J | | 08A | | | | B030-01 | 22:33 |
| | | | | NICKEL | 2.34 | mg/kg | J | Y | Y | P | J | | 15 | | | | B030-01 | 22:33 |
| | | | | POTASSIUM | 299 | mg/kg | J | Y | Y | F | B | | 06B | | | | B030-01 | 22:33 |
| | | | | SELENIUM | 1.18 | mg/kg | U | N | Y | U | U | | | | | | B030-01 | 17:54 |
| | | | | SILVER | 1.18 | mg/kg | U | N | Y | U | U | | | | | | B030-01 | 22:33 |
| | | | | SODIUM | 32.7 | mg/kg | J | Y | Y | P | J | | 08A | 08B | 15 | | B030-01 | 22:33 |
| | | | | THALLIUM | 2.36 | mg/kg | U | N | Y | U | U | | | | | | B030-01 | 17:54 |
| | | | | VANADIUM | 16.5 | mg/kg | | Y | Y | P | | | | | | | B030-01 | 22:33 |
| | | | | ZINC | 8.09 | mg/kg | | Y | Y | P | J | | 13 | | | | B030-01 | 22:33 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .118 | mg/kg | U | N | Y | U | U | | | | | | B030-01 | 15:30 |
| JL0010 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 1940 | mg/kg | | Y | Y | P | | | | | | | B030-02 | 22:38 |
| | | | | ANTIMONY | 10.8 | mg/kg | U | N | Y | U | UJ | | 08A | | | | B030-02 | 22:38 |
| | | | | ARSENIC | .465 | mg/kg | J | Y | Y | F | B | | 06B | | | | B030-02 | 17:58 |
| | | | | BARIUM | 16.7 | mg/kg | | Y | Y | P | | | | | | | B030-02 | 22:38 |
| | | | | BERYLLIUM | .0707 | mg/kg | J | Y | Y | P | J | | 15 | | | | B030-02 | 22:38 |
| | | | | CADMIUM | .542 | mg/kg | U | N | Y | U | U | | | | | | B030-02 | 22:38 |
| | | | | CALCIUM | 19.6 | mg/kg | J | Y | Y | F | B | | 06B | | | | B030-02 | 22:38 |
| | | | | CHROMIUM | 4.96 | mg/kg | | Y | Y | P | | | | | | | B030-02 | 22:38 |
| | | | | COBALT | 2.17 | mg/kg | U | N | Y | U | U | | | | | | B030-02 | 22:38 |
| | | | | COPPER | .788 | mg/kg | J | Y | Y | P | J | | 15 | | | | B030-02 | 22:38 |
| | | | | IRON | 4070 | mg/kg | | Y | Y | P | | | | | | | B030-02 | 22:38 |
| | | | | LEAD | 4.16 | mg/kg | | Y | Y | P | J | | 13 | | | | B030-02 | 17:58 |
| | | | | MAGNESIUM | 17 | mg/kg | J | Y | Y | P | J | | 15 | | | | B030-02 | 22:38 |
| | | | | MANGANESE | 7.8 | mg/kg | | Y | Y | P | J | | 08A | | | | B030-02 | 22:38 |
| | | | | NICKEL | 2.17 | mg/kg | U | N | Y | U | U | | | | | | B030-02 | 22:38 |
| | | | | POTASSIUM | 542 | mg/kg | U | N | Y | U | U | | | | | | B030-02 | 22:38 |
| | | | | SELENIUM | 1.08 | mg/kg | U | N | Y | U | U | | | | | | B030-02 | 17:58 |
| | | | | SILVER | 1.08 | mg/kg | U | N | Y | U | U | | | | | | B030-02 | 22:38 |
| | | | | SODIUM | 108 | mg/kg | U | N | Y | U | UJ | | 08A | 08B | | | B030-02 | 22:38 |
| | | | | THALLIUM | 2.17 | mg/kg | U | N | Y | U | U | | | | | | B030-02 | 17:58 |
| | | | | VANADIUM | 4.12 | mg/kg | | Y | Y | P | | | | | | | B030-02 | 22:38 |
| | | | | ZINC | 2.6 | mg/kg | | Y | Y | F | B | | 06B | 13 | | | B030-02 | 22:38 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .108 | mg/kg | U | N | Y | U | U | | | | | | B030-02 | 15:33 |
| JL0041 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 13100 | mg/kg | | Y | Y | P | | | | | | | B030-03 | 22:43 |
| | | | | ANTIMONY | 12 | mg/kg | U | N | Y | U | UJ | | 08A | | | | B030-03 | 22:43 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10116Q-03** | | | | | | | | | | | | | | | | | | |
| JL0041 | SW6010B | SW3050 | N 0 1 | ARSENIC | 2.03 | mg/kg | | Y | Y | P | | | | | | | B030-03 | 18:03 |
| | | | | BARIUM | 56.9 | mg/kg | | Y | Y | P | | | | | | | B030-03 | 22:43 |
| | | | | BERYLLIUM | .316 | mg/kg | J | Y | Y | P | J | | 15 | | | | B030-03 | 22:43 |
| | | | | CADMIUM | .602 | mg/kg | U | N | Y | U | U | | | | | | B030-03 | 22:43 |
| | | | | CALCIUM | 128 | mg/kg | | Y | Y | P | | | | | | | B030-03 | 22:43 |
| | | | | CHROMIUM | 9.65 | mg/kg | | Y | Y | P | | | | | | | B030-03 | 22:43 |
| | | | | COBALT | 1.08 | mg/kg | J | Y | Y | P | J | | 15 | | | | B030-03 | 22:43 |
| | | | | COPPER | 2.04 | mg/kg | J | Y | Y | P | J | | 15 | | | | B030-03 | 22:43 |
| | | | | IRON | 8120 | mg/kg | | Y | Y | P | | | | | | | B030-03 | 22:43 |
| | | | | LEAD | 8.84 | mg/kg | | Y | Y | P | J | | 13 | | | | B030-03 | 18:03 |
| | | | | MAGNESIUM | 310 | mg/kg | | Y | Y | P | | | | | | | B030-03 | 22:43 |
| | | | | MANGANESE | 42 | mg/kg | | Y | Y | P | J | | 08A | | | | B030-03 | 22:43 |
| | | | | NICKEL | 3.28 | mg/kg | | Y | Y | P | | | | | | | B030-03 | 22:43 |
| | | | | POTASSIUM | 149 | mg/kg | J | Y | Y | F | B | | 06B | | | | B030-03 | 22:43 |
| | | | | SELENIUM | 1.2 | mg/kg | U | N | Y | U | U | | | | | | B030-03 | 18:03 |
| | | | | SILVER | 1.2 | mg/kg | U | N | Y | U | U | | | | | | B030-03 | 22:43 |
| | | | | SODIUM | 120 | mg/kg | U | N | Y | U | UJ | | 08A | 08B | | | B030-03 | 22:43 |
| | | | | THALLIUM | 2.41 | mg/kg | U | N | Y | U | U | | | | | | B030-03 | 18:03 |
| | | | | VANADIUM | 14.9 | mg/kg | | Y | Y | P | | | | | | | B030-03 | 22:43 |
| | | | | ZINC | 19 | mg/kg | | Y | Y | P | J | | 13 | | | | B030-03 | 22:43 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .12 | mg/kg | U | N | Y | U | U | | | | | | B030-03 | 15:35 |
| JL0042 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 7800 | mg/kg | | Y | Y | P | | | | | | | B030-04 | 22:48 |
| | | | | ANTIMONY | 11.8 | mg/kg | U | N | Y | U | UJ | | 08B | | | | B030-04 | 22:48 |
| | | | | ARSENIC | 2.88 | mg/kg | | Y | Y | P | | | | | | | B030-04 | 18:07 |
| | | | | BARIUM | 9.41 | mg/kg | | Y | Y | P | | | | | | | B030-04 | 22:48 |
| | | | | BERYLLIUM | .614 | mg/kg | J | Y | Y | P | J | | 15 | | | | B030-04 | 22:48 |
| | | | | CADMIUM | .588 | mg/kg | U | N | Y | U | U | | | | | | B030-04 | 22:48 |
| | | | | CALCIUM | 13.3 | mg/kg | J | Y | Y | F | B | | 06B | | | | B030-04 | 22:48 |
| | | | | CHROMIUM | 16.1 | mg/kg | | Y | Y | P | | | | | | | B030-04 | 22:48 |
| | | | | COBALT | 1.4 | mg/kg | J | Y | Y | P | J | | 15 | | | | B030-04 | 22:48 |
| | | | | COPPER | 2.42 | mg/kg | | Y | Y | P | | | | | | | B030-04 | 22:48 |
| | | | | IRON | 24400 | mg/kg | | Y | Y | P | | | | | | | B030-04 | 22:48 |
| | | | | LEAD | 4.06 | mg/kg | | Y | Y | P | J | | 13 | | | | B030-04 | 18:07 |
| | | | | MAGNESIUM | 196 | mg/kg | | Y | Y | P | | | | | | | B030-04 | 22:48 |
| | | | | MANGANESE | 41.2 | mg/kg | | Y | Y | P | J | | 08A | | | | B030-04 | 22:48 |
| | | | | NICKEL | 2.89 | mg/kg | | Y | Y | P | | | | | | | B030-04 | 22:48 |
| | | | | POTASSIUM | 1110 | mg/kg | | Y | Y | P | | | | | | | B030-04 | 22:48 |
| | | | | SELENIUM | 1.18 | mg/kg | U | N | Y | U | U | | | | | | B030-04 | 18:07 |
| | | | | SILVER | 1.18 | mg/kg | U | N | Y | U | U | | | | | | B030-04 | 22:48 |
| | | | | SODIUM | 118 | mg/kg | U | N | Y | U | UJ | | 08A | 08B | | | B030-04 | 22:48 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10116Q-03** | | | | | | | | | | | | | | | | | | |
| JL0042 | SW6010B | SW3050 | N 0 1 | THALLIUM | 2.35 | mg/kg | U | N | Y | U | U | | | | | | B030-04 | 18:07 |
| | | | | VANADIUM | 26.2 | mg/kg | | Y | Y | P | | | | | | | B030-04 | 22:48 |
| | | | | ZINC | 6.06 | mg/kg | | Y | Y | P | J | | 13 | | | | B030-04 | 22:48 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .118 | mg/kg | U | N | Y | U | U | | | | | | B030-04 | 15:38 |
| JL0043 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 14200 | mg/kg | | Y | Y | P | | | | | | | B030-05 | 23:24 |
| | | | | ANTIMONY | 13.3 | mg/kg | U | N | Y | U | UJ | | 08A | | | | B030-05 | 23:24 |
| | | | | ARSENIC | 3.75 | mg/kg | | Y | Y | P | | | | | | | B030-05 | 18:37 |
| | | | | BARIUM | 80.8 | mg/kg | | Y | Y | P | | | | | | | B030-05 | 23:24 |
| | | | | BERYLLIUM | .329 | mg/kg | J | Y | Y | P | J | | 15 | | | | B030-05 | 23:24 |
| | | | | CADMIUM | .663 | mg/kg | U | N | Y | U | U | | | | | | B030-05 | 23:24 |
| | | | | CALCIUM | 133 | mg/kg | | Y | Y | P | | | | | | | B030-05 | 23:24 |
| | | | | CHROMIUM | 20.9 | mg/kg | | Y | Y | P | | | | | | | B030-05 | 23:24 |
| | | | | COBALT | 2.24 | mg/kg | J | Y | Y | P | J | | 15 | | | | B030-05 | 23:24 |
| | | | | COPPER | 25 | mg/kg | | Y | Y | P | | | | | | | B030-05 | 23:24 |
| | | | | IRON | 18900 | mg/kg | | Y | Y | P | | | | | | | B030-05 | 23:24 |
| | | | | LEAD | 8.78 | mg/kg | | Y | Y | P | J | | 13 | | | | B030-05 | 18:37 |
| | | | | MAGNESIUM | 439 | mg/kg | | Y | Y | P | | | | | | | B030-05 | 23:24 |
| | | | | MANGANESE | 67.3 | mg/kg | | Y | Y | P | J | | 08A | | | | B030-05 | 23:24 |
| | | | | NICKEL | 4.73 | mg/kg | | Y | Y | P | | | | | | | B030-05 | 23:24 |
| | | | | POTASSIUM | 306 | mg/kg | J | Y | Y | F | B | | 06B | | | | B030-05 | 23:24 |
| | | | | SELENIUM | 1.33 | mg/kg | U | N | Y | U | U | | | | | | B030-05 | 18:37 |
| | | | | SILVER | 1.33 | mg/kg | U | N | Y | U | U | | | | | | B030-05 | 23:24 |
| | | | | SODIUM | 133 | mg/kg | U | N | Y | U | UJ | | 08A | 08B | | | B030-05 | 23:24 |
| | | | | THALLIUM | 2.65 | mg/kg | U | N | Y | U | U | | | | | | B030-05 | 18:37 |
| | | | | VANADIUM | 30.6 | mg/kg | | Y | Y | P | | | | | | | B030-05 | 23:24 |
| | | | | ZINC | 16.2 | mg/kg | | Y | Y | P | J | | 13 | | | | B030-05 | 23:24 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .031 | mg/kg | J | Y | Y | P | J | | 15 | | | | B030-05 | 15:40 |
| JL0044 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 16600 | mg/kg | | Y | Y | P | | | | | | | B030-06 | 23:29 |
| | | | | ANTIMONY | 11.5 | mg/kg | U | N | Y | U | UJ | | 08A | | | | B030-06 | 23:29 |
| | | | | ARSENIC | 4.36 | mg/kg | | Y | Y | P | | | | | | | B030-06 | 18:41 |
| | | | | BARIUM | 59.2 | mg/kg | | Y | Y | P | | | | | | | B030-06 | 23:29 |
| | | | | BERYLLIUM | .452 | mg/kg | J | Y | Y | P | J | | 15 | | | | B030-06 | 23:29 |
| | | | | CADMIUM | .577 | mg/kg | U | N | Y | U | U | | | | | | B030-06 | 23:29 |
| | | | | CALCIUM | 34.3 | mg/kg | J | Y | Y | P | J | | 15 | | | | B030-06 | 23:29 |
| | | | | CHROMIUM | 26.4 | mg/kg | | Y | Y | P | | | | | | | B030-06 | 23:29 |
| | | | | COBALT | 2.23 | mg/kg | J | Y | Y | P | J | | 15 | | | | B030-06 | 23:29 |
| | | | | COPPER | 7.58 | mg/kg | | Y | Y | P | | | | | | | B030-06 | 23:29 |
| | | | | IRON | 28700 | mg/kg | | Y | Y | P | | | | | | | B030-06 | 23:29 |
| | | | | LEAD | 6.88 | mg/kg | | Y | Y | P | J | | 13 | | | | B030-06 | 18:41 |
| | | | | MAGNESIUM | 531 | mg/kg | | Y | Y | P | | | | | | | B030-06 | 23:29 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10116Q-03** | | | | | | | | | | | | | | | | | | |
| JL0044 | SW6010B | SW3050 | N 0 1 | MANGANESE | 43 | mg/kg | | Y | Y | P | J | | 08A | 17 | | | B030-06 | 23:29 |
| | | | | NICKEL | 5.12 | mg/kg | | Y | Y | P | | | | | | | B030-06 | 23:29 |
| | | | | POTASSIUM | 1150 | mg/kg | | Y | Y | P | | | | | | | B030-06 | 23:29 |
| | | | | SELENIUM | 1.15 | mg/kg | U | N | Y | U | U | | | | | | B030-06 | 18:41 |
| | | | | SILVER | 1.15 | mg/kg | U | N | Y | U | U | | | | | | B030-06 | 23:29 |
| | | | | SODIUM | 115 | mg/kg | U | N | Y | U | UJ | | 08A | 08B | | | B030-06 | 23:29 |
| | | | | THALLIUM | .742 | mg/kg | J | Y | Y | P | J | | 15 | | | | B030-06 | 18:41 |
| | | | | VANADIUM | 35.4 | mg/kg | | Y | Y | P | | | | | | | B030-06 | 23:29 |
| | | | | ZINC | 13.4 | mg/kg | | Y | Y | P | J | | 13 | | | | B030-06 | 23:29 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .115 | mg/kg | U | N | Y | U | U | | | | | | B030-06 | 15:59 |
| JL0045 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 17200 | mg/kg | | Y | Y | | | | | | | | B030-07 | 23:34 |
| | | | | ANTIMONY | 11.4 | mg/kg | U | N | Y | | UJ | | 08A | | | | B030-07 | 23:34 |
| | | | | ARSENIC | 4.14 | mg/kg | | Y | Y | | | | | | | | B030-07 | 18:45 |
| | | | | BARIUM | 59.9 | mg/kg | | Y | Y | | | | | | | | B030-07 | 23:34 |
| | | | | BERYLLIUM | .398 | mg/kg | J | Y | Y | | J | | 15 | | | | B030-07 | 23:34 |
| | | | | CADMIUM | .568 | mg/kg | U | N | Y | | U | | | | | | B030-07 | 23:34 |
| | | | | CALCIUM | 36.9 | mg/kg | J | Y | Y | | J | | 15 | | | | B030-07 | 23:34 |
| | | | | CHROMIUM | 23.7 | mg/kg | | Y | Y | | | | | | | | B030-07 | 23:34 |
| | | | | COBALT | 1.71 | mg/kg | J | Y | Y | | J | | 15 | | | | B030-07 | 23:34 |
| | | | | COPPER | 6.55 | mg/kg | | Y | Y | | | | | | | | B030-07 | 23:34 |
| | | | | IRON | 26300 | mg/kg | | Y | Y | | | | | | | | B030-07 | 23:34 |
| | | | | LEAD | 6.73 | mg/kg | | Y | Y | | J | | 13 | | | | B030-07 | 18:45 |
| | | | | MAGNESIUM | 541 | mg/kg | | Y | Y | | | | | | | | B030-07 | 23:34 |
| | | | | MANGANESE | 25.5 | mg/kg | | Y | Y | | J | | 08A | 17 | | | B030-07 | 23:34 |
| | | | | NICKEL | 4.76 | mg/kg | | Y | Y | | | | | | | | B030-07 | 23:34 |
| | | | | POTASSIUM | 1160 | mg/kg | | Y | Y | | | | | | | | B030-07 | 23:34 |
| | | | | SELENIUM | 1.14 | mg/kg | U | N | Y | | U | | | | | | B030-07 | 18:45 |
| | | | | SILVER | 1.14 | mg/kg | U | N | Y | | U | | | | | | B030-07 | 23:34 |
| | | | | SODIUM | 22.7 | mg/kg | J | Y | Y | | J | | 08A | 08B | 15 | | B030-07 | 23:34 |
| | | | | THALLIUM | 2.27 | mg/kg | U | N | Y | | U | | | | | | B030-07 | 18:45 |
| | | | | VANADIUM | 34.1 | mg/kg | | Y | Y | | | | | | | | B030-07 | 23:34 |
| | | | | ZINC | 13.4 | mg/kg | | Y | Y | | J | | 13 | | | | B030-07 | 23:34 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .114 | mg/kg | U | N | Y | | U | | | | | | B030-07 | 16:02 |
| JL0009 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-01 | 02:08 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-01 | 02:08 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-01 | 02:08 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-01 | 02:08 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-01 | 02:08 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-01 | 02:08 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-01 | 02:08 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10116Q-03** | | | | | | | | | | | | | | | | | | |
| JL0009 | SW8330 | METHOD | N 0 1 | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-01 | 02:08 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-01 | 02:08 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-01 | 02:08 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-01 | 02:08 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-01 | 02:08 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-01 | 02:08 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-01 | 02:08 |
| JL0010 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-02 | 02:48 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-02 | 02:48 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-02 | 02:48 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-02 | 02:48 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-02 | 02:48 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-02 | 02:48 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-02 | 02:48 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-02 | 02:48 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-02 | 02:48 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-02 | 02:48 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-02 | 02:48 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-02 | 02:48 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-02 | 02:48 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-02 | 02:48 |
| JL0041 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-03 | 03:29 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-03 | 03:29 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-03 | 03:29 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-03 | 03:29 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-03 | 03:29 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-03 | 03:29 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-03 | 03:29 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-03 | 03:29 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-03 | 03:29 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-03 | 03:29 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-03 | 03:29 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-03 | 03:29 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-03 | 03:29 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-03 | 03:29 |
| JL0042 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-04 | 04:09 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-04 | 04:09 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-04 | 04:09 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-04 | 04:09 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-04 | 04:09 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10116Q-03** | | | | | | | | | | | | | | | | | |
| JL0042 | SW8330 | METHOD N 0 1 | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-04 | 04:09 |
| | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-04 | 04:09 |
| | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-04 | 04:09 |
| | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-04 | 04:09 |
| | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-04 | 04:09 |
| | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-04 | 04:09 |
| | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-04 | 04:09 |
| | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-04 | 04:09 |
| | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-04 | 04:09 |
| JL0043 | SW8330 | METHOD N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-05 | 04:50 |
| | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-05 | 04:50 |
| | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-05 | 04:50 |
| | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-05 | 04:50 |
| | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-05 | 04:50 |
| | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-05 | 04:50 |
| | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-05 | 04:50 |
| | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-05 | 04:50 |
| | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-05 | 04:50 |
| | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-05 | 04:50 |
| | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-05 | 04:50 |
| | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-05 | 04:50 |
| | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-05 | 04:50 |
| | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-05 | 04:50 |
| JL0044 | SW8330 | METHOD N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-06 | 06:51 |
| | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-06 | 06:51 |
| | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-06 | 06:51 |
| | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-06 | 06:51 |
| | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-06 | 06:51 |
| | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-06 | 06:51 |
| | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-06 | 06:51 |
| | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-06 | 06:51 |
| | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-06 | 06:51 |
| | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-06 | 06:51 |
| | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-06 | 06:51 |
| | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-06 | 06:51 |
| | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-06 | 06:51 |
| | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | B030-06 | 06:51 |
| JL0045 | SW8330 | METHOD N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | | UJ | | 05B | | | | B030-07 | 08:12 |
| | | | 1,3-DNB | .4 | mg/kg | U | N | Y | | UJ | | 05B | | | | B030-07 | 08:12 |
| | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | | UJ | | 05B | | | | B030-07 | 08:12 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10116Q-03** | | | | | | | | | | | | | | | | | | |
| JL0045 | SW8330 | METHOD | N 0 1 | 2,4-DNT | .4 | mg/kg | U | N | Y | | UJ | | 05B | | | | B030-07 | 08:12 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | | UJ | | 05B | | | | B030-07 | 08:12 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | | UJ | | 05B | | | | B030-07 | 08:12 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | | UJ | | 05B | | | | B030-07 | 08:12 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | | UJ | | 05B | | | | B030-07 | 08:12 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | | UJ | | 05B | | | | B030-07 | 08:12 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | | UJ | | 05B | | | | B030-07 | 08:12 |
| | | | | HMX | .4 | mg/kg | U | N | Y | | UJ | | 05B | | | | B030-07 | 08:12 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | | UJ | | 05B | | | | B030-07 | 08:12 |
| | | | | RDX | .4 | mg/kg | U | N | Y | | UJ | | 05B | | | | B030-07 | 08:12 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | | UJ | | 05B | | | | B030-07 | 08:12 |
| JL0009 | EPA314.0 | NONE | N 0 1 | PERCHLORATE | .059 | mg/kg | U | N | Y | U | U | | | | | | B030-01 | 17:08 |
| JL0010 | EPA314.0 | NONE | N 0 1 | PERCHLORATE | .0542 | mg/kg | U | N | Y | U | U | | | | | | B030-02 | 17:26 |
| JL0041 | EPA314.0 | NONE | N 0 1 | PERCHLORATE | .0602 | mg/kg | U | N | Y | U | U | | | | | | B030-03 | 17:43 |
| JL0042 | EPA314.0 | NONE | N 0 1 | PERCHLORATE | .0588 | mg/kg | U | N | Y | U | U | | | | | | B030-04 | 18:00 |
| JL0043 | EPA314.0 | NONE | N 0 1 | PERCHLORATE | .0663 | mg/kg | U | N | Y | U | U | | | | | | B030-05 | 18:17 |
| JL0044 | EPA314.0 | NONE | N 0 1 | PERCHLORATE | .0577 | mg/kg | U | N | Y | U | U | | | | | | B030-06 | 19:08 |
| JL0045 | EPA314.0 | NONE | N 0 1 | PERCHLORATE | .0568 | mg/kg | U | N | Y | | U | | | | | | B030-07 | 19:26 |
| **10116Q-04** | | | | | | | | | | | | | | | | | | |
| JL0031 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 4360 | mg/kg | | Y | Y | P | | | | | | | B075-01 | 23:39 |
| | | | | ANTIMONY | 11.4 | mg/kg | U | N | Y | U | U | | | | | | B075-01 | 23:39 |
| | | | | ARSENIC | 1.28 | mg/kg | | Y | Y | P | | | | | | | B075-01 | 23:23 |
| | | | | BARIUM | 14.8 | mg/kg | | Y | Y | P | | | | | | | B075-01 | 23:39 |
| | | | | BERYLLIUM | .0842 | mg/kg | J | Y | Y | P | J | | 15 | | | | B075-01 | 23:39 |
| | | | | CADMIUM | .571 | mg/kg | U | N | Y | U | U | | | | | | B075-01 | 23:39 |
| | | | | CALCIUM | 66.8 | mg/kg | J | Y | Y | P | J | | 15 | | | | B075-01 | 23:39 |
| | | | | CHROMIUM | 3.86 | mg/kg | | Y | Y | P | | | | | | | B075-01 | 23:39 |
| | | | | COBALT | .515 | mg/kg | J | Y | Y | P | J | | 15 | | | | B075-01 | 23:39 |
| | | | | COPPER | 1.38 | mg/kg | J | Y | Y | P | J | | 15 | | | | B075-01 | 23:39 |
| | | | | IRON | 3420 | mg/kg | | Y | Y | P | | | | | | | B075-01 | 23:39 |
| | | | | LEAD | 7.2 | mg/kg | | Y | Y | P | | | | | | | B075-01 | 23:23 |
| | | | | MAGNESIUM | 101 | mg/kg | J | Y | Y | P | J | | 15 | | | | B075-01 | 23:39 |
| | | | | MANGANESE | 12.7 | mg/kg | | Y | Y | P | | | | | | | B075-01 | 23:39 |
| | | | | NICKEL | 2.28 | mg/kg | U | N | Y | U | U | | | | | | B075-01 | 23:39 |
| | | | | POTASSIUM | 571 | mg/kg | U | N | Y | U | U | | | | | | B075-01 | 23:39 |
| | | | | SELENIUM | 1.14 | mg/kg | U | N | Y | U | U | | | | | | B075-01 | 23:23 |
| | | | | SILVER | 1.14 | mg/kg | U | N | Y | U | U | | | | | | B075-01 | 23:39 |
| | | | | SODIUM | 114 | mg/kg | U | N | Y | U | U | | | | | | B075-01 | 23:39 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10116Q-04** | | | | | | | | | | | | | | | | | | |
| JL0031 | SW6010B | SW3050 | N 0 1 | THALLIUM | 2.28 | mg/kg | U | N | Y | U | U | | | | | | B075-01 | 23:23 |
| | | | | VANADIUM | 6.38 | mg/kg | | Y | Y | P | | | | | | | B075-01 | 23:39 |
| | | | | ZINC | 8.06 | mg/kg | | Y | Y | P | | | | | | | B075-01 | 23:39 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .114 | mg/kg | U | N | Y | U | U | | | | | | B075-01 | 12:13 |
| JL0032 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 4780 | mg/kg | | Y | Y | | | | | | | | B075-02 | 23:44 |
| | | | | ANTIMONY | 11.4 | mg/kg | U | N | Y | | U | | | | | | B075-02 | 23:44 |
| | | | | ARSENIC | 1.1 | mg/kg | J | Y | Y | | J | | 15 | | | | B075-02 | 23:27 |
| | | | | BARIUM | 17.5 | mg/kg | | Y | Y | | | | | | | | B075-02 | 23:44 |
| | | | | BERYLLIUM | .0791 | mg/kg | J | Y | Y | | J | | 15 | | | | B075-02 | 23:44 |
| | | | | CADMIUM | .571 | mg/kg | U | N | Y | | U | | | | | | B075-02 | 23:44 |
| | | | | CALCIUM | 83.7 | mg/kg | J | Y | Y | | J | | 15 | | | | B075-02 | 23:44 |
| | | | | CHROMIUM | 3.17 | mg/kg | | Y | Y | | | | | | | | B075-02 | 23:44 |
| | | | | COBALT | 2.29 | mg/kg | U | N | Y | | U | | | | | | B075-02 | 23:44 |
| | | | | COPPER | 1.34 | mg/kg | J | Y | Y | | J | | 15 | | | | B075-02 | 23:44 |
| | | | | IRON | 3230 | mg/kg | | Y | Y | | | | | | | | B075-02 | 23:44 |
| | | | | LEAD | 7.33 | mg/kg | | Y | Y | | | | | | | | B075-02 | 23:27 |
| | | | | MAGNESIUM | 134 | mg/kg | | Y | Y | | | | | | | | B075-02 | 23:44 |
| | | | | MANGANESE | 13 | mg/kg | | Y | Y | | | | | | | | B075-02 | 23:44 |
| | | | | NICKEL | 2.29 | mg/kg | U | N | Y | | U | | | | | | B075-02 | 23:44 |
| | | | | POTASSIUM | 571 | mg/kg | U | N | Y | | U | | | | | | B075-02 | 23:44 |
| | | | | SELENIUM | 1.14 | mg/kg | U | N | Y | | U | | | | | | B075-02 | 23:27 |
| | | | | SILVER | 1.14 | mg/kg | U | N | Y | | U | | | | | | B075-02 | 23:44 |
| | | | | SODIUM | 114 | mg/kg | U | N | Y | | U | | | | | | B075-02 | 23:44 |
| | | | | THALLIUM | 2.29 | mg/kg | U | N | Y | | U | | | | | | B075-02 | 23:27 |
| | | | | VANADIUM | 6.54 | mg/kg | | Y | Y | | | | | | | | B075-02 | 23:44 |
| | | | | ZINC | 9.46 | mg/kg | | Y | Y | | | | | | | | B075-02 | 23:44 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .114 | mg/kg | U | N | Y | | U | | | | | | B075-02 | 12:15 |
| JL0034 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 2360 | mg/kg | | Y | Y | P | | | | | | | B075-03 | 23:48 |
| | | | | ANTIMONY | 11.5 | mg/kg | U | N | Y | U | U | | | | | | B075-03 | 23:48 |
| | | | | ARSENIC | 1.78 | mg/kg | | Y | Y | P | | | | | | | B075-03 | 23:31 |
| | | | | BARIUM | 2.77 | mg/kg | | Y | Y | P | | | | | | | B075-03 | 23:48 |
| | | | | BERYLLIUM | .0515 | mg/kg | J | Y | Y | P | J | | 15 | | | | B075-03 | 23:48 |
| | | | | CADMIUM | .575 | mg/kg | U | N | Y | U | U | | | | | | B075-03 | 23:48 |
| | | | | CALCIUM | 25.3 | mg/kg | J | Y | Y | P | J | | 15 | | | | B075-03 | 23:48 |
| | | | | CHROMIUM | 22.9 | mg/kg | | Y | Y | P | | | | | | | B075-03 | 23:48 |
| | | | | COBALT | .44 | mg/kg | J | Y | Y | P | J | | 15 | | | | B075-03 | 23:48 |
| | | | | COPPER | 1.41 | mg/kg | J | Y | Y | P | J | | 15 | | | | B075-03 | 23:48 |
| | | | | IRON | 10300 | mg/kg | | Y | Y | P | | | | | | | B075-03 | 23:48 |
| | | | | LEAD | 1.62 | mg/kg | | Y | Y | P | | | | | | | B075-03 | 23:31 |
| | | | | MAGNESIUM | 34.1 | mg/kg | J | Y | Y | F | B | | 06B | | | | B075-03 | 23:48 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10116Q-04** | | | | | | | | | | | | | | | | | | |
| JL0034 | SW6010B | SW3050 | N 0 1 | MANGANESE | 1.77 | mg/kg | | Y | Y | P | | | | | | | B075-03 | 23:48 |
| | | | | NICKEL | 2.3 | mg/kg | U | N | Y | U | U | | | | | | B075-03 | 23:48 |
| | | | | POTASSIUM | 575 | mg/kg | U | N | Y | U | U | | | | | | B075-03 | 23:48 |
| | | | | SELENIUM | 1.15 | mg/kg | U | N | Y | U | U | | | | | | B075-03 | 23:31 |
| | | | | SILVER | .612 | mg/kg | J | Y | Y | F | B | | 06B | | | | B075-03 | 23:48 |
| | | | | SODIUM | 115 | mg/kg | U | N | Y | U | U | | | | | | B075-03 | 23:48 |
| | | | | THALLIUM | 2.3 | mg/kg | U | N | Y | U | U | | | | | | B075-03 | 23:31 |
| | | | | VANADIUM | 37.4 | mg/kg | | Y | Y | P | | | | | | | B075-03 | 23:48 |
| | | | | ZINC | 2.3 | mg/kg | U | N | Y | U | U | | | | | | B075-03 | 23:48 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .115 | mg/kg | U | N | Y | U | U | | | | | | B075-03 | 12:18 |
| JL0031 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B075-01 | 04:29 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B075-01 | 04:29 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B075-01 | 04:29 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B075-01 | 04:29 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B075-01 | 04:29 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B075-01 | 04:29 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B075-01 | 04:29 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B075-01 | 04:29 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B075-01 | 04:29 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B075-01 | 04:29 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | B075-01 | 04:29 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B075-01 | 04:29 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | B075-01 | 04:29 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | B075-01 | 04:29 |
| JL0032 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | | U | | | | | | B075-02 | 05:09 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | | U | | | | | | B075-02 | 05:09 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | | U | | | | | | B075-02 | 05:09 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | | U | | | | | | B075-02 | 05:09 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | | U | | | | | | B075-02 | 05:09 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | | U | | | | | | B075-02 | 05:09 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | | U | | | | | | B075-02 | 05:09 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | | U | | | | | | B075-02 | 05:09 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | | U | | | | | | B075-02 | 05:09 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | | U | | | | | | B075-02 | 05:09 |
| | | | | HMX | .4 | mg/kg | U | N | Y | | U | | | | | | B075-02 | 05:09 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | | U | | | | | | B075-02 | 05:09 |
| | | | | RDX | .4 | mg/kg | U | N | Y | | U | | | | | | B075-02 | 05:09 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | | U | | | | | | B075-02 | 05:09 |
| JL0034 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B075-03 | 05:50 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B075-03 | 05:50 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10116Q-04** | | | | | | | | | | | | | | | | | | |
| JL0034 | SW8330 | METHOD | N 0 1 | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B075-03 | 05:50 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B075-03 | 05:50 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B075-03 | 05:50 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B075-03 | 05:50 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B075-03 | 05:50 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B075-03 | 05:50 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B075-03 | 05:50 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B075-03 | 05:50 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | B075-03 | 05:50 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B075-03 | 05:50 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | B075-03 | 05:50 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | B075-03 | 05:50 |
| JL0031 | EPA314.0 | NONE | N 0 1 | PERCHLORATE | .05 | mg/kg | U | N | Y | U | U | | | | | | B075-01 | 00:48 |
| JL0032 | EPA314.0 | NONE | N 0 1 | PERCHLORATE | .05 | mg/kg | U | N | Y | | U | | | | | | B075-02 | 01:06 |
| JL0034 | EPA314.0 | NONE | N 0 1 | PERCHLORATE | .05 | mg/kg | U | N | Y | U | U | | | | | | B075-03 | 01:23 |
| **10116Q-05** | | | | | | | | | | | | | | | | | | |
| JL2001 | SW6010B | SW3010 | N 0 1 | ALUMINUM | .846 | mg/L | | Y | Y | P | | | | | | | C012-02 | 16:55 |
| | | | | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | C012-02 | 16:55 |
| | | | | ARSENIC | .00243 | mg/L | J | Y | Y | P | J | | 15 | | | | C012-02 | 17:36 |
| | | | | BARIUM | .0505 | mg/L | | Y | Y | P | | | | | | | C012-02 | 16:55 |
| | | | | BERYLLIUM | .001 | mg/L | U | N | Y | U | U | | | | | | C012-02 | 16:55 |
| | | | | CADMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | C012-02 | 16:55 |
| | | | | CALCIUM | 1.66 | mg/L | | Y | Y | P | | | | | | | C012-02 | 16:55 |
| | | | | CHROMIUM | .0058 | mg/L | J | Y | Y | P | J | | 15 | | | | C012-02 | 16:55 |
| | | | | COBALT | .02 | mg/L | U | N | Y | U | U | | | | | | C012-02 | 16:55 |
| | | | | COPPER | .02 | mg/L | U | N | Y | U | U | | | | | | C012-02 | 16:55 |
| | | | | IRON | .542 | mg/L | | Y | Y | P | | | | | | | C012-02 | 16:55 |
| | | | | LEAD | .00273 | mg/L | J | Y | Y | P | J | | 15 | | | | C012-02 | 17:36 |
| | | | | MAGNESIUM | .908 | mg/L | J | Y | Y | P | J | | 15 | | | | C012-02 | 16:55 |
| | | | | MANGANESE | .0806 | mg/L | | Y | Y | P | | | | | | | C012-02 | 16:55 |
| | | | | NICKEL | .02 | mg/L | U | N | Y | U | U | | | | | | C012-02 | 16:55 |
| | | | | POTASSIUM | 5 | mg/L | U | N | Y | U | U | | | | | | C012-02 | 16:55 |
| | | | | SELENIUM | .0024 | mg/L | J | Y | Y | P | J | | 15 | | | | C012-02 | 17:36 |
| | | | | SILVER | .00602 | mg/L | J | Y | Y | F | B | | 06B | | | | C012-02 | 16:55 |
| | | | | SODIUM | .752 | mg/L | J | Y | Y | P | J | | 15 | | | | C012-02 | 16:55 |
| | | | | THALLIUM | .01 | mg/L | U | N | Y | U | U | | | | | | C012-02 | 17:36 |
| | | | | VANADIUM | .01 | mg/L | U | N | Y | U | U | | | | | | C012-02 | 16:55 |
| | | | | ZINC | .00751 | mg/L | J | Y | Y | P | J | | 15 | | | | C012-02 | 16:55 |
| | SW7470A | TOTAL | N 0 1 | MERCURY | .0005 | mg/L | U | N | Y | U | U | | | | | | C012-02 | 15:31 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10116Q-05** | | | | | | | | | | | | | | | | | | |
| JL2002 | SW6010B | SW3010 | N 0 1 | ALUMINUM | .47 | mg/L | | Y | Y | P | | | | | | | B262-02 | 16:29 |
| | | | | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | B262-02 | 16:29 |
| | | | | ARSENIC | .01 | mg/L | U | N | Y | U | U | | | | | | B262-02 | 18:16 |
| | | | | BARIUM | .0273 | mg/L | | Y | Y | P | | | | | | | B262-02 | 16:29 |
| | | | | BERYLLIUM | .001 | mg/L | U | N | Y | U | U | | | | | | B262-02 | 16:29 |
| | | | | CADMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | B262-02 | 16:29 |
| | | | | CALCIUM | .709 | mg/L | J | Y | Y | P | J | | 15 | | | | B262-02 | 16:29 |
| | | | | CHROMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | B262-02 | 16:29 |
| | | | | COBALT | .02 | mg/L | U | N | Y | U | U | | | | | | B262-02 | 16:29 |
| | | | | COPPER | .00442 | mg/L | J | Y | Y | P | J | | 15 | | | | B262-02 | 16:29 |
| | | | | IRON | .382 | mg/L | | Y | Y | P | | | | | | | B262-02 | 16:29 |
| | | | | LEAD | .01 | mg/L | U | N | Y | U | U | | | | | | B262-02 | 18:16 |
| | | | | MAGNESIUM | .636 | mg/L | J | Y | Y | P | J | | 15 | | | | B262-02 | 16:29 |
| | | | | MANGANESE | .0605 | mg/L | | Y | Y | P | | | | | | | B262-02 | 16:29 |
| | | | | NICKEL | .02 | mg/L | U | N | Y | U | U | | | | | | B262-02 | 16:29 |
| | | | | POTASSIUM | 5 | mg/L | U | N | Y | U | U | | | | | | B262-02 | 16:29 |
| | | | | SELENIUM | .01 | mg/L | U | N | Y | U | U | | | | | | B262-02 | 18:16 |
| | | | | SILVER | .01 | mg/L | U | N | Y | U | U | | | | | | B262-02 | 16:29 |
| | | | | SODIUM | .83 | mg/L | J | Y | Y | P | J | | 15 | | | | B262-02 | 16:29 |
| | | | | THALLIUM | .01 | mg/L | U | N | Y | U | U | | | | | | B262-02 | 18:16 |
| | | | | VANADIUM | .01 | mg/L | U | N | Y | U | U | | | | | | B262-02 | 16:29 |
| | | | | ZINC | .00781 | mg/L | J | Y | Y | P | J | | 15 | | | | B262-02 | 16:29 |
| | SW7470A | TOTAL | N 0 1 | MERCURY | .0005 | mg/L | U | N | Y | U | U | | | | | | B262-02 | 15:16 |
| JL2003 | SW6010B | SW3010 | N 0 1 | ALUMINUM | .111 | mg/L | J | Y | Y | F | B | | 06B | 15 | | | B262-03 | 16:34 |
| | | | | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | B262-03 | 16:34 |
| | | | | ARSENIC | .01 | mg/L | U | N | Y | U | U | | | | | | B262-03 | 18:20 |
| | | | | BARIUM | .0231 | mg/L | | Y | Y | P | | | | | | | B262-03 | 16:34 |
| | | | | BERYLLIUM | .001 | mg/L | U | N | Y | U | U | | | | | | B262-03 | 16:34 |
| | | | | CADMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | B262-03 | 16:34 |
| | | | | CALCIUM | .689 | mg/L | J | Y | Y | P | J | | 15 | | | | B262-03 | 16:34 |
| | | | | CHROMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | B262-03 | 16:34 |
| | | | | COBALT | .02 | mg/L | U | N | Y | U | U | | | | | | B262-03 | 16:34 |
| | | | | COPPER | .02 | mg/L | U | N | Y | U | U | | | | | | B262-03 | 16:34 |
| | | | | IRON | .0398 | mg/L | J | Y | Y | P | J | | 15 | | | | B262-03 | 16:34 |
| | | | | LEAD | .01 | mg/L | U | N | Y | U | U | | | | | | B262-03 | 18:20 |
| | | | | MAGNESIUM | .637 | mg/L | J | Y | Y | P | J | | 15 | | | | B262-03 | 16:34 |
| | | | | MANGANESE | .0234 | mg/L | | Y | Y | P | | | | | | | B262-03 | 16:34 |
| | | | | NICKEL | .02 | mg/L | U | N | Y | U | U | | | | | | B262-03 | 16:34 |
| | | | | POTASSIUM | 5 | mg/L | U | N | Y | U | U | | | | | | B262-03 | 16:34 |
| | | | | SELENIUM | .01 | mg/L | U | N | Y | U | U | | | | | | B262-03 | 18:20 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10116Q-05** | | | | | | | | | | | | | | | | | | | | |
| JL2003 | SW6010B | SW3010 | N | 0 | 1 | SILVER | .01 | mg/L | U | N | Y | U | U | | | | | | B262-03 | 16:34 |
| | | | | | | SODIUM | .83 | mg/L | J | Y | Y | P | J | | 15 | | | | B262-03 | 16:34 |
| | | | | | | THALLIUM | .01 | mg/L | U | N | Y | U | U | | | | | | B262-03 | 18:20 |
| | | | | | | VANADIUM | .01 | mg/L | U | N | Y | U | U | | | | | | B262-03 | 16:34 |
| | | | | | | ZINC | .02 | mg/L | U | N | Y | U | U | | | | | | B262-03 | 16:34 |
| | SW7470A | TOTAL | N | 0 | 1 | MERCURY | .0005 | mg/L | U | N | Y | U | U | | | | | | B262-03 | 15:26 |
| JL2004 | SW6010B | SW3010 | N | 0 | 1 | ALUMINUM | .0589 | mg/L | J | Y | Y | P | J | | 15 | | | | B262-04 | 16:51 |
| | | | | | | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | B262-04 | 16:51 |
| | | | | | | ARSENIC | .01 | mg/L | U | N | Y | U | U | | | | | | B262-04 | 18:23 |
| | | | | | | BARIUM | .0216 | mg/L | | Y | Y | P | | | | | | | B262-04 | 16:51 |
| | | | | | | BERYLLIUM | .001 | mg/L | U | N | Y | U | U | | | | | | B262-04 | 16:51 |
| | | | | | | CADMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | B262-04 | 16:51 |
| | | | | | | CALCIUM | .617 | mg/L | J | Y | Y | P | J | | 15 | | | | B262-04 | 16:51 |
| | | | | | | CHROMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | B262-04 | 16:51 |
| | | | | | | COBALT | .02 | mg/L | U | N | Y | U | U | | | | | | B262-04 | 16:51 |
| | | | | | | COPPER | .00358 | mg/L | J | Y | Y | P | J | | 15 | | | | B262-04 | 16:51 |
| | | | | | | IRON | .2 | mg/L | U | N | Y | U | U | | | | | | B262-04 | 16:51 |
| | | | | | | LEAD | .01 | mg/L | U | N | Y | U | U | | | | | | B262-04 | 18:23 |
| | | | | | | MAGNESIUM | .661 | mg/L | J | Y | Y | P | J | | 15 | | | | B262-04 | 16:51 |
| | | | | | | MANGANESE | .0249 | mg/L | | Y | Y | P | | | | | | | B262-04 | 16:51 |
| | | | | | | NICKEL | .02 | mg/L | U | N | Y | U | U | | | | | | B262-04 | 16:51 |
| | | | | | | POTASSIUM | 5 | mg/L | U | N | Y | U | U | | | | | | B262-04 | 16:51 |
| | | | | | | SELENIUM | .01 | mg/L | U | N | Y | U | U | | | | | | B262-04 | 18:23 |
| | | | | | | SILVER | .00476 | mg/L | J | Y | Y | F | B | | 06B | 15 | | | B262-04 | 16:51 |
| | | | | | | SODIUM | .83 | mg/L | J | Y | Y | P | J | | 15 | | | | B262-04 | 16:51 |
| | | | | | | THALLIUM | .01 | mg/L | U | N | Y | U | U | | | | | | B262-04 | 18:23 |
| | | | | | | VANADIUM | .01 | mg/L | U | N | Y | U | U | | | | | | B262-04 | 16:51 |
| | | | | | | ZINC | .02 | mg/L | U | N | Y | U | U | | | | | | B262-04 | 16:51 |
| | SW7470A | TOTAL | N | 0 | 1 | MERCURY | .0005 | mg/L | U | N | Y | U | U | | | | | | B262-04 | 15:28 |
| JL2001 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | U | U | | | | | | C012-02 | 05:08 |
| | | | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | U | U | | | | | | C012-02 | 05:08 |
| | | | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | U | UJ | | 08A | | | | C012-02 | 05:08 |
| | | | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | C012-02 | 05:08 |
| | | | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | C012-02 | 05:08 |
| | | | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | C012-02 | 05:08 |
| | | | | | | 2-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | C012-02 | 05:08 |
| | | | | | | 3-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | C012-02 | 05:08 |
| | | | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | C012-02 | 05:08 |
| | | | | | | 4-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | C012-02 | 05:08 |
| | | | | | | HMX | .001 | mg/L | U | N | Y | U | U | | | | | | C012-02 | 05:08 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10116Q-05** | | | | | | | | | | | | | | | | | | | | |
| JL2001 | SW8330 | METHOD | N | 0 | 1 | NITROBENZENE | .0004 | mg/L | U | N | Y | U | U | | | | | | C012-02 | 05:08 |
| | | | | | | RDX | .0004 | mg/L | U | N | Y | U | U | | | | | | C012-02 | 05:08 |
| | | | | | | TETRYL | .0004 | mg/L | U | N | Y | U | U | | | | | | C012-02 | 05:08 |
| JL2002 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | U | U | | | | | | B262-02 | 01:56 |
| | | | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | U | U | | | | | | B262-02 | 01:56 |
| | | | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | U | UJ | | 08A | | | | B262-02 | 01:56 |
| | | | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | B262-02 | 01:56 |
| | | | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | B262-02 | 01:56 |
| | | | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | B262-02 | 01:56 |
| | | | | | | 2-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | B262-02 | 01:56 |
| | | | | | | 3-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | B262-02 | 01:56 |
| | | | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | B262-02 | 01:56 |
| | | | | | | 4-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | B262-02 | 01:56 |
| | | | | | | HMX | .001 | mg/L | U | N | Y | U | U | | | | | | B262-02 | 01:56 |
| | | | | | | NITROBENZENE | .0004 | mg/L | U | N | Y | U | U | | | | | | B262-02 | 01:56 |
| | | | | | | RDX | .0004 | mg/L | U | N | Y | U | U | | | | | | B262-02 | 01:56 |
| | | | | | | TETRYL | .0004 | mg/L | U | N | Y | U | U | | | | | | B262-02 | 01:56 |
| JL2003 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | U | U | | | | | | B262-03 | 03:51 |
| | | | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | U | U | | | | | | B262-03 | 03:51 |
| | | | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | U | UJ | | 08A | | | | B262-03 | 03:51 |
| | | | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | B262-03 | 03:51 |
| | | | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | B262-03 | 03:51 |
| | | | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | B262-03 | 03:51 |
| | | | | | | 2-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | B262-03 | 03:51 |
| | | | | | | 3-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | B262-03 | 03:51 |
| | | | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | B262-03 | 03:51 |
| | | | | | | 4-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | B262-03 | 03:51 |
| | | | | | | HMX | .001 | mg/L | U | N | Y | U | U | | | | | | B262-03 | 03:51 |
| | | | | | | NITROBENZENE | .0004 | mg/L | U | N | Y | U | U | | | | | | B262-03 | 03:51 |
| | | | | | | RDX | .0004 | mg/L | U | N | Y | U | U | | | | | | B262-03 | 03:51 |
| | | | | | | TETRYL | .0004 | mg/L | U | N | Y | U | U | | | | | | B262-03 | 03:51 |
| JL2004 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | U | U | | | | | | B262-04 | 04:30 |
| | | | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | U | U | | | | | | B262-04 | 04:30 |
| | | | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | U | UJ | | 08A | | | | B262-04 | 04:30 |
| | | | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | B262-04 | 04:30 |
| | | | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | B262-04 | 04:30 |
| | | | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | B262-04 | 04:30 |
| | | | | | | 2-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | B262-04 | 04:30 |
| | | | | | | 3-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | B262-04 | 04:30 |
| | | | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | B262-04 | 04:30 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10116Q-05** | | | | | | | | | | | | | | | | | | | | |
| JL2004 | SW8330 | METHOD | N | 0 | 1 | 4-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | B262-04 | 04:30 |
| | | | | | | HMX | .001 | mg/L | U | N | Y | U | U | | | | | | B262-04 | 04:30 |
| | | | | | | NITROBENZENE | .0004 | mg/L | U | N | Y | U | U | | | | | | B262-04 | 04:30 |
| | | | | | | RDX | .0004 | mg/L | U | N | Y | U | U | | | | | | B262-04 | 04:30 |
| | | | | | | TETRYL | .0004 | mg/L | U | N | Y | U | U | | | | | | B262-04 | 04:30 |
| JL2001 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .005 | mg/L | U | N | Y | U | U | | | | | | C012-02 | 11:02 |
| JL2002 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .005 | mg/L | U | N | Y | U | U | | | | | | B262-02 | 09:37 |
| JL2003 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .00266 | mg/L | J | Y | Y | P | J | | | | | | B262-03 | 10:28 |
| JL2004 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .005 | mg/L | U | N | Y | U | U | | | | | | B262-04 | 10:45 |
| **10116Q-06** | | | | | | | | | | | | | | | | | | | | |
| JL1001 | SW6010B | SW3050 | N | 0 | 1 | ALUMINUM | 3620 | mg/kg | | Y | Y | P | | | | | | | C009-01 | 19:48 |
| | | | | | | ANTIMONY | 12.9 | mg/kg | U | N | Y | U | UJ | | 08A | | | | C009-01 | 19:48 |
| | | | | | | ARSENIC | .978 | mg/kg | J | Y | Y | P | J | | 15 | | | | C009-01 | 22:48 |
| | | | | | | BARIUM | 35.4 | mg/kg | | Y | Y | P | | | | | | | C009-01 | 19:48 |
| | | | | | | BERYLLIUM | .165 | mg/kg | J | Y | Y | P | J | | 15 | | | | C009-01 | 19:48 |
| | | | | | | CADMIUM | .644 | mg/kg | U | N | Y | U | U | | | | | | C009-01 | 19:48 |
| | | | | | | CALCIUM | 297 | mg/kg | | Y | Y | P | | | | | | | C009-01 | 19:48 |
| | | | | | | CHROMIUM | 3.21 | mg/kg | | Y | Y | P | | | | | | | C009-01 | 19:48 |
| | | | | | | COBALT | 2.25 | mg/kg | J | Y | Y | F | B | | 06B | | | | C009-01 | 19:48 |
| | | | | | | COPPER | 1.7 | mg/kg | J | Y | Y | P | J | | 15 | | | | C009-01 | 19:48 |
| | | | | | | IRON | 3000 | mg/kg | | Y | Y | P | J | | 08A | | | | C009-01 | 19:48 |
| | | | | | | LEAD | 8.28 | mg/kg | | Y | Y | P | | | | | | | C009-01 | 22:48 |
| | | | | | | MAGNESIUM | 157 | mg/kg | | Y | Y | P | | | | | | | C009-01 | 19:48 |
| | | | | | | MANGANESE | 247 | mg/kg | | Y | Y | P | J | | 08A | | | | C009-01 | 19:48 |
| | | | | | | NICKEL | 2.21 | mg/kg | J | Y | Y | P | J | | 15 | | | | C009-01 | 19:48 |
| | | | | | | POTASSIUM | 644 | mg/kg | U | N | Y | U | U | | | | | | C009-01 | 19:48 |
| | | | | | | SELENIUM | 1.29 | mg/kg | U | N | Y | U | U | | | | | | C009-01 | 22:48 |
| | | | | | | SILVER | 1.29 | mg/kg | U | N | Y | U | U | | | | | | C009-01 | 19:48 |
| | | | | | | SODIUM | 129 | mg/kg | U | N | Y | U | U | | | | | | C009-01 | 19:48 |
| | | | | | | THALLIUM | 2.58 | mg/kg | U | N | Y | U | U | | | | | | C009-01 | 22:48 |
| | | | | | | VANADIUM | 5.15 | mg/kg | | Y | Y | P | | | | | | | C009-01 | 19:48 |
| | | | | | | ZINC | 11.2 | mg/kg | | Y | Y | P | | | | | | | C009-01 | 19:48 |
| | SW7471A | TOTAL | N | 0 | 1 | MERCURY | .129 | mg/kg | U | N | Y | U | U | | | | | | C009-01 | 13:51 |
| JL1002 | SW6010B | SW3050 | N | 0 | 1 | ALUMINUM | 8430 | mg/kg | | Y | Y | P | | | | | | | B264-01 | 18:52 |
| | | | | | | ANTIMONY | 16.6 | mg/kg | U | N | Y | U | UJ | | 08A | | | | B264-01 | 18:52 |
| | | | | | | ARSENIC | 1.68 | mg/kg | | Y | Y | P | | | | | | | B264-01 | 22:29 |
| | | | | | | BARIUM | 73.7 | mg/kg | | Y | Y | P | | | | | | | B264-01 | 18:52 |
| | | | | | | BERYLLIUM | .46 | mg/kg | J | Y | Y | P | J | | 15 | | | | B264-01 | 18:52 |
| | | | | | | CADMIUM | .829 | mg/kg | U | N | Y | U | U | | | | | | B264-01 | 18:52 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10116Q-06** | | | | | | | | | | | | | | | | | | |
| JL1002 | SW6010B | SW3050 | N 0 1 | CALCIUM | 249 | mg/kg | | Y | Y | P | | | | | | | B264-01 | 18:52 |
| | | | | CHROMIUM | 7.81 | mg/kg | | Y | Y | P | | | | | | | B264-01 | 18:52 |
| | | | | COBALT | 2.3 | mg/kg | J | Y | Y | F | B | | 06B | | | | B264-01 | 18:52 |
| | | | | COPPER | 3 | mg/kg | J | Y | Y | P | J | | 15 | | | | B264-01 | 18:52 |
| | | | | IRON | 6530 | mg/kg | | Y | Y | P | J | | 08A | | | | B264-01 | 18:52 |
| | | | | LEAD | 10.7 | mg/kg | | Y | Y | P | | | | | | | B264-01 | 22:29 |
| | | | | MAGNESIUM | 324 | mg/kg | | Y | Y | P | | | | | | | B264-01 | 18:52 |
| | | | | MANGANESE | 343 | mg/kg | | Y | Y | P | J | | 08A | | | | B264-01 | 18:52 |
| | | | | NICKEL | 3.03 | mg/kg | J | Y | Y | P | J | | 15 | | | | B264-01 | 18:52 |
| | | | | POTASSIUM | 829 | mg/kg | U | N | Y | U | U | | | | | | B264-01 | 18:52 |
| | | | | SELENIUM | 1.66 | mg/kg | U | N | Y | U | U | | | | | | B264-01 | 22:29 |
| | | | | SILVER | 1.66 | mg/kg | U | N | Y | U | U | | | | | | B264-01 | 18:52 |
| | | | | SODIUM | 166 | mg/kg | U | N | Y | U | U | | | | | | B264-01 | 18:52 |
| | | | | THALLIUM | 3.32 | mg/kg | U | N | Y | U | U | | | | | | B264-01 | 22:29 |
| | | | | VANADIUM | 12.3 | mg/kg | | Y | Y | P | | | | | | | B264-01 | 18:52 |
| | | | | ZINC | 11.6 | mg/kg | | Y | Y | P | | | | | | | B264-01 | 18:52 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .108 | mg/kg | J | Y | Y | P | J | | 15 | | | | B264-01 | 13:30 |
| JL1003 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 3750 | mg/kg | | Y | Y | P | | | | | | | B264-02 | 18:57 |
| | | | | ANTIMONY | 14.9 | mg/kg | U | N | Y | U | UJ | | 08A | | | | B264-02 | 18:57 |
| | | | | ARSENIC | 1.28 | mg/kg | J | Y | Y | P | J | | 15 | | | | B264-02 | 22:33 |
| | | | | BARIUM | 29.6 | mg/kg | | Y | Y | P | | | | | | | B264-02 | 18:57 |
| | | | | BERYLLIUM | .155 | mg/kg | J | Y | Y | P | J | | 15 | | | | B264-02 | 18:57 |
| | | | | CADMIUM | .745 | mg/kg | U | N | Y | U | U | | | | | | B264-02 | 18:57 |
| | | | | CALCIUM | 89.7 | mg/kg | J | Y | Y | P | J | | 15 | | | | B264-02 | 18:57 |
| | | | | CHROMIUM | 4.44 | mg/kg | | Y | Y | P | | | | | | | B264-02 | 18:57 |
| | | | | COBALT | 2.98 | mg/kg | U | N | Y | U | U | | | | | | B264-02 | 18:57 |
| | | | | COPPER | 2.98 | mg/kg | U | N | Y | U | U | | | | | | B264-02 | 18:57 |
| | | | | IRON | 4270 | mg/kg | | Y | Y | P | J | | 08A | | | | B264-02 | 18:57 |
| | | | | LEAD | 2.81 | mg/kg | | Y | Y | P | | | | | | | B264-02 | 22:33 |
| | | | | MAGNESIUM | 146 | mg/kg | J | Y | Y | P | J | | 15 | | | | B264-02 | 18:57 |
| | | | | MANGANESE | 60.1 | mg/kg | | Y | Y | P | J | | 08A | | | | B264-02 | 18:57 |
| | | | | NICKEL | 2.98 | mg/kg | U | N | Y | U | U | | | | | | B264-02 | 18:57 |
| | | | | POTASSIUM | 745 | mg/kg | U | N | Y | U | U | | | | | | B264-02 | 18:57 |
| | | | | SELENIUM | 1.49 | mg/kg | U | N | Y | U | U | | | | | | B264-02 | 22:33 |
| | | | | SILVER | 1.49 | mg/kg | U | N | Y | U | U | | | | | | B264-02 | 18:57 |
| | | | | SODIUM | 149 | mg/kg | U | N | Y | U | U | | | | | | B264-02 | 18:57 |
| | | | | THALLIUM | 2.98 | mg/kg | U | N | Y | U | U | | | | | | B264-02 | 22:33 |
| | | | | VANADIUM | 6.5 | mg/kg | | Y | Y | P | | | | | | | B264-02 | 18:57 |
| | | | | ZINC | 4.31 | mg/kg | | Y | Y | P | | | | | | | B264-02 | 18:57 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .038 | mg/kg | J | Y | Y | P | J | | | | | | B264-02 | 13:32 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10116Q-06** | | | | | | | | | | | | | | | | | | |
| JL1004 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 4580 | mg/kg | | Y | Y | P | | | | | | | B264-03 | 19:02 |
| | | | | ANTIMONY | 12.9 | mg/kg | U | N | Y | U | UJ | | 08A | | | | B264-03 | 19:02 |
| | | | | ARSENIC | .863 | mg/kg | J | Y | Y | P | J | | 15 | | | | B264-03 | 22:38 |
| | | | | BARIUM | 33.9 | mg/kg | | Y | Y | P | | | | | | | B264-03 | 19:02 |
| | | | | BERYLLIUM | .126 | mg/kg | J | Y | Y | P | J | | 15 | | | | B264-03 | 19:02 |
| | | | | CADMIUM | .644 | mg/kg | U | N | Y | U | U | | | | | | B264-03 | 19:02 |
| | | | | CALCIUM | 78.2 | mg/kg | J | Y | Y | P | J | | 15 | | | | B264-03 | 19:02 |
| | | | | CHROMIUM | 5.71 | mg/kg | | Y | Y | P | | | | | | | B264-03 | 19:02 |
| | | | | COBALT | .903 | mg/kg | J | Y | Y | F | B | | 06B | | | | B264-03 | 19:02 |
| | | | | COPPER | 1.07 | mg/kg | J | Y | Y | P | J | | 15 | | | | B264-03 | 19:02 |
| | | | | IRON | 3680 | mg/kg | | Y | Y | P | J | | 08A | | | | B264-03 | 19:02 |
| | | | | LEAD | 3.94 | mg/kg | | Y | Y | P | | | | | | | B264-03 | 22:38 |
| | | | | MAGNESIUM | 159 | mg/kg | | Y | Y | P | | | | | | | B264-03 | 19:02 |
| | | | | MANGANESE | 96 | mg/kg | | Y | Y | P | J | | 08A | | | | B264-03 | 19:02 |
| | | | | NICKEL | 2.57 | mg/kg | U | N | Y | U | U | | | | | | B264-03 | 19:02 |
| | | | | POTASSIUM | 164 | mg/kg | J | Y | Y | F | B | | 06B | | | | B264-03 | 19:02 |
| | | | | SELENIUM | 1.29 | mg/kg | U | N | Y | U | U | | | | | | B264-03 | 22:38 |
| | | | | SILVER | 1.29 | mg/kg | U | N | Y | U | U | | | | | | B264-03 | 19:02 |
| | | | | SODIUM | 129 | mg/kg | U | N | Y | U | U | | | | | | B264-03 | 19:02 |
| | | | | THALLIUM | 2.57 | mg/kg | U | N | Y | U | U | | | | | | B264-03 | 22:38 |
| | | | | VANADIUM | 9.23 | mg/kg | | Y | Y | P | | | | | | | B264-03 | 19:02 |
| | | | | ZINC | 4.84 | mg/kg | | Y | Y | P | | | | | | | B264-03 | 19:02 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .091 | mg/kg | J | Y | Y | P | J | | 15 | | | | B264-03 | 13:41 |
| JL1001 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C009-01 | 14:53 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C009-01 | 14:53 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C009-01 | 14:53 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C009-01 | 14:53 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C009-01 | 14:53 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C009-01 | 14:53 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C009-01 | 14:53 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C009-01 | 14:53 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C009-01 | 14:53 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C009-01 | 14:53 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | C009-01 | 14:53 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C009-01 | 14:53 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | C009-01 | 14:53 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | UJ | | 08A | | | | C009-01 | 14:53 |
| JL1002 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B264-01 | 12:57 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B264-01 | 12:57 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B264-01 | 12:57 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10116Q-06** | | | | | | | | | | | | | | | | | | |
| JL1002 | SW8330 | METHOD | N 0 1 | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B264-01 | 12:57 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B264-01 | 12:57 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B264-01 | 12:57 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B264-01 | 12:57 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B264-01 | 12:57 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B264-01 | 12:57 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B264-01 | 12:57 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | B264-01 | 12:57 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B264-01 | 12:57 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | B264-01 | 12:57 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | UJ | | 08A | | | | B264-01 | 12:57 |
| JL1003 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B264-02 | 13:36 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B264-02 | 13:36 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B264-02 | 13:36 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B264-02 | 13:36 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B264-02 | 13:36 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B264-02 | 13:36 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B264-02 | 13:36 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B264-02 | 13:36 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B264-02 | 13:36 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B264-02 | 13:36 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | B264-02 | 13:36 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B264-02 | 13:36 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | B264-02 | 13:36 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | UJ | | 08A | | | | B264-02 | 13:36 |
| JL1004 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B264-03 | 14:14 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B264-03 | 14:14 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B264-03 | 14:14 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B264-03 | 14:14 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B264-03 | 14:14 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B264-03 | 14:14 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B264-03 | 14:14 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B264-03 | 14:14 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B264-03 | 14:14 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B264-03 | 14:14 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | B264-03 | 14:14 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B264-03 | 14:14 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | B264-03 | 14:14 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | UJ | | 08A | | | | B264-03 | 14:14 |
| JL1001 | EPA314.0 | NONE | N 0 1 | PERCHLORATE | .0644 | mg/kg | U | N | Y | U | U | | | | | | C009-01 | 01:53 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10116Q-06** | | | | | | | | | | | | | | | | | | |
| JL1002 | EPA314.0 | NONE | N 0 1 | PERCHLORATE | .0829 | mg/kg | U | N | Y | U | U | | | | | | B264-01 | 01:02 |
| JL1003 | EPA314.0 | NONE | N 0 1 | PERCHLORATE | .0745 | mg/kg | U | N | Y | U | U | | | | | | B264-02 | 01:19 |
| JL1004 | EPA314.0 | NONE | N 0 1 | PERCHLORATE | .0644 | mg/kg | U | N | Y | U | U | | | | | | B264-03 | 01:36 |
| JL1001 | SW9060 | NONE | N 0 1 | TOC | 80.5 | mg/kg | | Y | Y | P | | | | | | | C009-01 | 15:25 |
| JL1002 | SW9060 | NONE | N 0 1 | TOC | 150 | mg/kg | | Y | Y | P | | | | | | | B264-01 | 11:30 |
| JL1003 | SW9060 | NONE | N 0 1 | TOC | 68.1 | mg/kg | | Y | Y | P | | | | | | | B264-02 | 12:00 |
| JL1004 | SW9060 | NONE | N 0 1 | TOC | 74.6 | mg/kg | | Y | Y | P | | | | | | | B264-03 | 13:30 |
| **10116Q-07** | | | | | | | | | | | | | | | | | | |
| JL0015 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 14300 | mg/kg | | Y | Y | P | | | | | | | D020-01 | 04:25 |
| | | | | ANTIMONY | 12 | mg/kg | U | N | Y | U | U | | | | | | D020-01 | 04:25 |
| | | | | ARSENIC | 4.72 | mg/kg | | Y | Y | P | | | | | | | D020-01 | 00:47 |
| | | | | BARIUM | 31.5 | mg/kg | | Y | Y | P | | | | | | | D020-01 | 04:25 |
| | | | | BERYLLIUM | .659 | mg/kg | J | Y | Y | P | J | | 15 | | | | D020-01 | 04:25 |
| | | | | CADMIUM | .601 | mg/kg | U | N | Y | U | U | | | | | | D020-01 | 04:25 |
| | | | | CALCIUM | 78.4 | mg/kg | J | Y | Y | P | J | | 15 | | | | D020-01 | 04:25 |
| | | | | CHROMIUM | 23.4 | mg/kg | | Y | Y | P | | | | | | | D020-01 | 04:25 |
| | | | | COBALT | 8.02 | mg/kg | | Y | Y | P | | | | | | | D020-01 | 04:25 |
| | | | | COPPER | 14.5 | mg/kg | | Y | Y | P | | | | | | | D020-01 | 04:25 |
| | | | | IRON | 24900 | mg/kg | | Y | Y | P | | | | | | | D020-01 | 04:25 |
| | | | | LEAD | 22.7 | mg/kg | | Y | Y | P | | | | | | | D020-01 | 00:47 |
| | | | | MAGNESIUM | 755 | mg/kg | | Y | Y | P | | | | | | | D020-01 | 04:25 |
| | | | | MANGANESE | 187 | mg/kg | | Y | Y | P | | | | | | | D020-01 | 04:25 |
| | | | | NICKEL | 12.9 | mg/kg | | Y | Y | P | | | | | | | D020-01 | 04:25 |
| | | | | POTASSIUM | 595 | mg/kg | J | Y | Y | F | B | | 06B | | | | D020-01 | 04:25 |
| | | | | SELENIUM | 1.2 | mg/kg | U | N | Y | U | U | | | | | | D020-01 | 00:47 |
| | | | | SILVER | 1.2 | mg/kg | U | N | Y | U | U | | | | | | D020-01 | 04:25 |
| | | | | SODIUM | 120 | mg/kg | U | N | Y | U | U | | | | | | D020-01 | 04:25 |
| | | | | THALLIUM | 1 | mg/kg | J | Y | Y | P | J | | 15 | | | | D020-01 | 00:47 |
| | | | | VANADIUM | 44 | mg/kg | | Y | Y | P | | | | | | | D020-01 | 04:25 |
| | | | | ZINC | 32.2 | mg/kg | | Y | Y | P | | | | | | | D020-01 | 04:25 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .167 | mg/kg | | Y | Y | P | | | | | | | D020-01 | 13:14 |
| JL0016 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 8600 | mg/kg | | Y | Y | P | | | | | | | D020-02 | 04:30 |
| | | | | ANTIMONY | 11.9 | mg/kg | U | N | Y | U | U | | | | | | D020-02 | 04:30 |
| | | | | ARSENIC | 3.36 | mg/kg | | Y | Y | P | | | | | | | D020-02 | 00:52 |
| | | | | BARIUM | 13.6 | mg/kg | | Y | Y | P | | | | | | | D020-02 | 04:30 |
| | | | | BERYLLIUM | 2.1 | mg/kg | | Y | Y | P | | | | | | | D020-02 | 04:30 |
| | | | | CADMIUM | .593 | mg/kg | U | N | Y | U | U | | | | | | D020-02 | 04:30 |
| | | | | CALCIUM | 31.4 | mg/kg | J | Y | Y | P | J | | 15 | | | | D020-02 | 04:30 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10116Q-07** | | | | | | | | | | | | | | | | | | |
| JL0016 | SW6010B | SW3050 | N 0 1 | CHROMIUM | 12.5 | mg/kg | | Y | Y | P | | | | | | | D020-02 | 04:30 |
| | | | | COBALT | 5.01 | mg/kg | | Y | Y | P | | | | | | | D020-02 | 04:30 |
| | | | | COPPER | 18.3 | mg/kg | | Y | Y | P | | | | | | | D020-02 | 04:30 |
| | | | | IRON | 25200 | mg/kg | | Y | Y | P | | | | | | | D020-02 | 04:30 |
| | | | | LEAD | 23.2 | mg/kg | | Y | Y | P | | | | | | | D020-02 | 00:52 |
| | | | | MAGNESIUM | 449 | mg/kg | | Y | Y | P | | | | | | | D020-02 | 04:30 |
| | | | | MANGANESE | 206 | mg/kg | | Y | Y | P | | | | | | | D020-02 | 04:30 |
| | | | | NICKEL | 15.3 | mg/kg | | Y | Y | P | | | | | | | D020-02 | 04:30 |
| | | | | POTASSIUM | 967 | mg/kg | | Y | Y | P | | | | | | | D020-02 | 04:30 |
| | | | | SELENIUM | 1.19 | mg/kg | U | N | Y | U | U | | | | | | D020-02 | 00:52 |
| | | | | SILVER | 1.19 | mg/kg | U | N | Y | U | U | | | | | | D020-02 | 04:30 |
| | | | | SODIUM | 119 | mg/kg | U | N | Y | U | U | | | | | | D020-02 | 04:30 |
| | | | | THALLIUM | 2.37 | mg/kg | U | N | Y | U | U | | | | | | D020-02 | 00:52 |
| | | | | VANADIUM | 52.2 | mg/kg | | Y | Y | P | | | | | | | D020-02 | 04:30 |
| | | | | ZINC | 71.7 | mg/kg | | Y | Y | P | | | | | | | D020-02 | 04:30 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .090 | mg/kg | J | Y | Y | P | J | | | | | | D020-02 | 13:16 |
| JL0017 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 15600 | mg/kg | | Y | Y | P | | | | | | | D020-03 | 04:35 |
| | | | | ANTIMONY | 11.2 | mg/kg | U | N | Y | U | U | | | | | | D020-03 | 04:35 |
| | | | | ARSENIC | 2.61 | mg/kg | | Y | Y | P | | | | | | | D020-03 | 00:57 |
| | | | | BARIUM | 45.8 | mg/kg | | Y | Y | P | | | | | | | D020-03 | 04:35 |
| | | | | BERYLLIUM | .314 | mg/kg | J | Y | Y | P | J | | 15 | | | | D020-03 | 04:35 |
| | | | | CADMIUM | .559 | mg/kg | U | N | Y | U | U | | | | | | D020-03 | 04:35 |
| | | | | CALCIUM | 104 | mg/kg | J | Y | Y | P | J | | 15 | | | | D020-03 | 04:35 |
| | | | | CHROMIUM | 11.3 | mg/kg | | Y | Y | P | | | | | | | D020-03 | 04:35 |
| | | | | COBALT | 4.53 | mg/kg | | Y | Y | P | | | | | | | D020-03 | 04:35 |
| | | | | COPPER | 4.09 | mg/kg | | Y | Y | P | | | | | | | D020-03 | 04:35 |
| | | | | IRON | 11200 | mg/kg | | Y | Y | P | | | | | | | D020-03 | 04:35 |
| | | | | LEAD | 9.83 | mg/kg | | Y | Y | P | | | | | | | D020-03 | 00:57 |
| | | | | MAGNESIUM | 569 | mg/kg | | Y | Y | P | | | | | | | D020-03 | 04:35 |
| | | | | MANGANESE | 94 | mg/kg | | Y | Y | P | | | | | | | D020-03 | 04:35 |
| | | | | NICKEL | 5.89 | mg/kg | | Y | Y | P | | | | | | | D020-03 | 04:35 |
| | | | | POTASSIUM | 372 | mg/kg | J | Y | Y | F | B | | 06B | | | | D020-03 | 04:35 |
| | | | | SELENIUM | 1.12 | mg/kg | U | N | Y | U | U | | | | | | D020-03 | 00:57 |
| | | | | SILVER | 1.12 | mg/kg | U | N | Y | U | U | | | | | | D020-03 | 04:35 |
| | | | | SODIUM | 112 | mg/kg | U | N | Y | U | U | | | | | | D020-03 | 04:35 |
| | | | | THALLIUM | .664 | mg/kg | J | Y | Y | P | J | | 15 | | | | D020-03 | 00:57 |
| | | | | VANADIUM | 21.7 | mg/kg | | Y | Y | P | | | | | | | D020-03 | 04:35 |
| | | | | ZINC | 19.4 | mg/kg | | Y | Y | P | | | | | | | D020-03 | 04:35 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .106 | mg/kg | J | Y | Y | P | J | | 15 | | | | D020-03 | 13:19 |
| JL0018 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 21200 | mg/kg | | Y | Y | P | | | | | | | D020-04 | 04:40 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10116Q-07** | | | | | | | | | | | | | | | | | | |
| JL0018 | SW6010B | SW3050 | N 0 1 | ANTIMONY | 11.7 | mg/kg | U | N | Y | U | U | | | | | | D020-04 | 04:40 |
| | | | | ARSENIC | 4.35 | mg/kg | | Y | Y | P | | | | | | | D020-04 | 01:02 |
| | | | | BARIUM | 29.8 | mg/kg | | Y | Y | P | | | | | | | D020-04 | 04:40 |
| | | | | BERYLLIUM | .254 | mg/kg | J | Y | Y | P | J | | 15 | | | | D020-04 | 04:40 |
| | | | | CADMIUM | .583 | mg/kg | U | N | Y | U | U | | | | | | D020-04 | 04:40 |
| | | | | CALCIUM | 41.4 | mg/kg | J | Y | Y | P | J | | 15 | | | | D020-04 | 04:40 |
| | | | | CHROMIUM | 17.7 | mg/kg | | Y | Y | P | | | | | | | D020-04 | 04:40 |
| | | | | COBALT | 2.8 | mg/kg | | Y | Y | P | | | | | | | D020-04 | 04:40 |
| | | | | COPPER | 7.83 | mg/kg | | Y | Y | P | | | | | | | D020-04 | 04:40 |
| | | | | IRON | 21600 | mg/kg | | Y | Y | P | | | | | | | D020-04 | 04:40 |
| | | | | LEAD | 9.24 | mg/kg | | Y | Y | P | | | | | | | D020-04 | 01:02 |
| | | | | MAGNESIUM | 554 | mg/kg | | Y | Y | P | | | | | | | D020-04 | 04:40 |
| | | | | MANGANESE | 45.2 | mg/kg | | Y | Y | P | | | | | | | D020-04 | 04:40 |
| | | | | NICKEL | 6.76 | mg/kg | | Y | Y | P | | | | | | | D020-04 | 04:40 |
| | | | | POTASSIUM | 446 | mg/kg | J | Y | Y | F | B | | 06B | | | | D020-04 | 04:40 |
| | | | | SELENIUM | 1.17 | mg/kg | U | N | Y | U | U | | | | | | D020-04 | 01:02 |
| | | | | SILVER | 1.17 | mg/kg | U | N | Y | U | U | | | | | | D020-04 | 04:40 |
| | | | | SODIUM | 117 | mg/kg | U | N | Y | U | U | | | | | | D020-04 | 04:40 |
| | | | | THALLIUM | .671 | mg/kg | J | Y | Y | P | J | | 15 | | | | D020-04 | 01:02 |
| | | | | VANADIUM | 36 | mg/kg | | Y | Y | P | | | | | | | D020-04 | 04:40 |
| | | | | ZINC | 18.7 | mg/kg | | Y | Y | P | | | | | | | D020-04 | 04:40 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .146 | mg/kg | | Y | Y | P | | | | | | | D020-04 | 13:22 |
| JL0015 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D020-01 | 12:20 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D020-01 | 12:20 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D020-01 | 12:20 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D020-01 | 12:20 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D020-01 | 12:20 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D020-01 | 12:20 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D020-01 | 12:20 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D020-01 | 12:20 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D020-01 | 12:20 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D020-01 | 12:20 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | D020-01 | 12:20 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D020-01 | 12:20 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | D020-01 | 12:20 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | D020-01 | 12:20 |
| JL0016 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D020-02 | 12:58 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D020-02 | 12:58 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D020-02 | 12:58 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D020-02 | 12:58 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10116Q-07** | | | | | | | | | | | | | | | | | | |
| JL0016 | SW8330 | METHOD | N 0 1 | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D020-02 | 12:58 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D020-02 | 12:58 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D020-02 | 12:58 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D020-02 | 12:58 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D020-02 | 12:58 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D020-02 | 12:58 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | D020-02 | 12:58 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D020-02 | 12:58 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | D020-02 | 12:58 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | D020-02 | 12:58 |
| JL0017 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D020-03 | 13:37 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D020-03 | 13:37 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D020-03 | 13:37 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D020-03 | 13:37 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D020-03 | 13:37 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D020-03 | 13:37 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D020-03 | 13:37 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D020-03 | 13:37 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D020-03 | 13:37 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D020-03 | 13:37 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | D020-03 | 13:37 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D020-03 | 13:37 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | D020-03 | 13:37 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | D020-03 | 13:37 |
| JL0018 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D020-04 | 14:15 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D020-04 | 14:15 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D020-04 | 14:15 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D020-04 | 14:15 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D020-04 | 14:15 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D020-04 | 14:15 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D020-04 | 14:15 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D020-04 | 14:15 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D020-04 | 14:15 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D020-04 | 14:15 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | D020-04 | 14:15 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D020-04 | 14:15 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | D020-04 | 14:15 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | D020-04 | 14:15 |
| JL0015 | E314.0 | NONE | N 0 1 | PERCHLORATE | .0601 | mg/kg | U | N | Y | U | U | | | | | | D020-01 | 20:13 |
| JL0016 | E314.0 | NONE | N 0 1 | PERCHLORATE | .0593 | mg/kg | U | N | Y | U | U | | | | | | D020-02 | 20:30 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10116Q-07** | | | | | | | | | | | | | | | | | | |
| JL0017 | E314.0 | NONE | N 0 1 | PERCHLORATE | .0559 | mg/kg | U | N | Y | U | U | | | | | | D020-03 | 20:48 |
| JL0018 | E314.0 | NONE | N 0 1 | PERCHLORATE | .0583 | mg/kg | U | N | Y | U | U | | | | | | D020-04 | 21:05 |
| **10116Q-08** | | | | | | | | | | | | | | | | | | |
| JL0037 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 12800 | mg/kg | | Y | Y | P | | | | | | | D081-01 | 22:43 |
| | | | | ANTIMONY | 11.5 | mg/kg | U | N | Y | U | U | | | | | | D081-01 | 22:43 |
| | | | | ARSENIC | 2.14 | mg/kg | | Y | Y | P | | | | | | | D081-01 | 23:46 |
| | | | | BARIUM | 48.4 | mg/kg | | Y | Y | P | | | | | | | D081-01 | 22:43 |
| | | | | BERYLLIUM | .334 | mg/kg | J | Y | Y | P | J | | 15 | | | | D081-01 | 22:43 |
| | | | | CADMIUM | .573 | mg/kg | U | N | Y | U | U | | | | | | D081-01 | 22:43 |
| | | | | CALCIUM | 151 | mg/kg | | Y | Y | P | | | | | | | D081-01 | 22:43 |
| | | | | CHROMIUM | 16.4 | mg/kg | | Y | Y | P | | | | | | | D081-01 | 22:43 |
| | | | | COBALT | 1.66 | mg/kg | J | Y | Y | F | B | | 06B | 15 | | | D081-01 | 22:43 |
| | | | | COPPER | 2.22 | mg/kg | J | Y | Y | P | J | | 15 | | | | D081-01 | 22:43 |
| | | | | IRON | 9980 | mg/kg | | Y | Y | P | | | | | | | D081-01 | 22:43 |
| | | | | LEAD | 6.05 | mg/kg | | Y | Y | P | | | | | | | D081-01 | 23:46 |
| | | | | MAGNESIUM | 402 | mg/kg | | Y | Y | P | | | | | | | D081-01 | 22:43 |
| | | | | MANGANESE | 49.6 | mg/kg | | Y | Y | P | | | | | | | D081-01 | 22:43 |
| | | | | NICKEL | 3.82 | mg/kg | | Y | Y | P | | | | | | | D081-01 | 22:43 |
| | | | | POTASSIUM | 412 | mg/kg | J | Y | Y | F | B | | 06B | 15 | | | D081-01 | 22:43 |
| | | | | SELENIUM | 1.15 | mg/kg | U | N | Y | U | U | | | | | | D081-01 | 23:46 |
| | | | | SILVER | .605 | mg/kg | J | Y | Y | F | B | | 06A | 06B | 15 | | D081-01 | 22:43 |
| | | | | SODIUM | 115 | mg/kg | U | N | Y | U | U | | | | | | D081-01 | 22:43 |
| | | | | THALLIUM | 2.29 | mg/kg | U | N | Y | U | U | | | | | | D081-01 | 23:46 |
| | | | | VANADIUM | 18.5 | mg/kg | | Y | Y | P | | | | | | | D081-01 | 22:43 |
| | | | | ZINC | 11.2 | mg/kg | | Y | Y | P | | | | | | | D081-01 | 22:43 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .046 | mg/kg | J | Y | Y | P | J | | 15 | | | | D081-01 | 16:40 |
| JL0038 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 18000 | mg/kg | | Y | Y | P | | | | | | | D081-02 | 22:48 |
| | | | | ANTIMONY | 8.98 | mg/kg | J | Y | Y | P | J | | 15 | | | | D081-02 | 22:48 |
| | | | | ARSENIC | 7.44 | mg/kg | | Y | Y | P | | | | | | | D081-02 | 23:51 |
| | | | | BARIUM | 39.3 | mg/kg | | Y | Y | P | | | | | | | D081-02 | 22:48 |
| | | | | BERYLLIUM | .329 | mg/kg | J | Y | Y | P | J | | 15 | | | | D081-02 | 22:48 |
| | | | | CADMIUM | .596 | mg/kg | U | N | Y | U | U | | | | | | D081-02 | 22:48 |
| | | | | CALCIUM | 61.3 | mg/kg | J | Y | Y | P | J | | 15 | | | | D081-02 | 22:48 |
| | | | | CHROMIUM | 102 | mg/kg | | Y | Y | P | | | | | | | D081-02 | 22:48 |
| | | | | COBALT | 1.27 | mg/kg | J | Y | Y | F | B | | 06B | 15 | | | D081-02 | 22:48 |
| | | | | COPPER | 14.4 | mg/kg | | Y | Y | P | | | | | | | D081-02 | 22:48 |
| | | | | IRON | 44300 | mg/kg | | Y | Y | P | | | | | | | D081-02 | 22:48 |
| | | | | LEAD | 9.61 | mg/kg | | Y | Y | P | | | | | | | D081-02 | 23:51 |
| | | | | MAGNESIUM | 385 | mg/kg | | Y | Y | P | | | | | | | D081-02 | 22:48 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10116Q-08** | | | | | | | | | | | | | | | | | | |
| JL0038 | SW6010B | SW3050 | N 0 1 | MANGANESE | 47.6 | mg/kg | | Y | Y | P | | | | | | | D081-02 | 22:48 |
| | | | | NICKEL | 4.37 | mg/kg | | Y | Y | P | | | | | | | D081-02 | 22:48 |
| | | | | POTASSIUM | 830 | mg/kg | | Y | Y | F | B | | 06B | | | | D081-02 | 22:48 |
| | | | | SELENIUM | 1.19 | mg/kg | U | N | Y | U | U | | | | | | D081-02 | 23:51 |
| | | | | SILVER | 1.19 | mg/kg | U | N | Y | U | U | | | | | | D081-02 | 22:48 |
| | | | | SODIUM | 119 | mg/kg | U | N | Y | U | U | | | | | | D081-02 | 22:48 |
| | | | | THALLIUM | .773 | mg/kg | J | Y | Y | P | J | | 15 | | | | D081-02 | 23:51 |
| | | | | VANADIUM | 93 | mg/kg | | Y | Y | P | | | | | | | D081-02 | 22:48 |
| | | | | ZINC | 7.96 | mg/kg | | Y | Y | F | B | | 06B | | | | D081-02 | 22:48 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .044 | mg/kg | J | Y | Y | P | J | | 15 | | | | D081-02 | 16:42 |
| JL0037 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D081-01 | 14:26 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D081-01 | 14:26 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D081-01 | 14:26 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D081-01 | 14:26 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D081-01 | 14:26 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D081-01 | 14:26 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D081-01 | 14:26 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D081-01 | 14:26 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D081-01 | 14:26 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D081-01 | 14:26 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | D081-01 | 14:26 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D081-01 | 14:26 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | D081-01 | 14:26 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | D081-01 | 14:26 |
| JL0038 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D081-02 | 15:05 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D081-02 | 15:05 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D081-02 | 15:05 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D081-02 | 15:05 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D081-02 | 15:05 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D081-02 | 15:05 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D081-02 | 15:05 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D081-02 | 15:05 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D081-02 | 15:05 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D081-02 | 15:05 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | D081-02 | 15:05 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D081-02 | 15:05 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | D081-02 | 15:05 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | D081-02 | 15:05 |
| JL0037 | E314.0 | NONE | N 0 1 | PERCHLORATE | .0573 | mg/kg | U | N | Y | U | U | | | | | | D081-01 | 19:29 |
| JL0038 | | | | PERCHLORATE | .0596 | mg/kg | U | N | Y | U | U | | | | | | D081-02 | 19:47 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10116Q-08** | | | | | | | | | | | | | | | | | | |
| JL0038 | E314.0 | NONE | N 0 1 | | | | | | | | | | | | | | | |
| **10116Q-09** | | | | | | | | | | | | | | | | | | |
| JL3005 | SW6010B | SW3010 | N 0 1 | ALUMINUM | .0978 | mg/L | J | Y | Y | P | J | | 15 | | | | D276-03 | 20:32 |
| | | | | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 20:32 |
| | | | | ARSENIC | .01 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 19:26 |
| | | | | BARIUM | .029 | mg/L | | Y | Y | P | | | | | | | D276-03 | 20:32 |
| | | | | BERYLLIUM | .001 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 20:32 |
| | | | | CADMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 20:32 |
| | | | | CALCIUM | .659 | mg/L | J | Y | Y | F | B | | 06C | 15 | | | D276-03 | 20:32 |
| | | | | CHROMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 20:32 |
| | | | | COBALT | .0114 | mg/L | J | Y | Y | P | J | | 15 | | | | D276-03 | 20:32 |
| | | | | COPPER | .02 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 20:32 |
| | | | | IRON | .0375 | mg/L | J | Y | Y | P | J | | 15 | | | | D276-03 | 20:32 |
| | | | | LEAD | .01 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 19:26 |
| | | | | MAGNESIUM | .329 | mg/L | J | Y | Y | F | B | | 06C | 15 | | | D276-03 | 20:32 |
| | | | | MANGANESE | .0413 | mg/L | | Y | Y | P | | | | | | | D276-03 | 20:32 |
| | | | | NICKEL | .02 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 20:32 |
| | | | | POTASSIUM | 5 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 20:32 |
| | | | | SELENIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 19:26 |
| | | | | SILVER | .01 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 20:32 |
| | | | | SODIUM | 1.06 | mg/L | | Y | Y | P | | | | | | | D276-03 | 20:32 |
| | | | | THALLIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 19:26 |
| | | | | VANADIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 20:32 |
| | | | | ZINC | .0126 | mg/L | J | Y | Y | F | B | | 06C | 15 | | | D276-03 | 20:32 |
| | SW7470A | TOTAL | N 0 1 | MERCURY | .0005 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 11:21 |
| JL3006 | SW6010B | SW3010 | N 0 1 | ALUMINUM | .0887 | mg/L | J | Y | Y | | J | | 15 | | | | D276-04 | 20:37 |
| | | | | ANTIMONY | .1 | mg/L | U | N | Y | | U | | | | | | D276-04 | 20:37 |
| | | | | ARSENIC | .01 | mg/L | U | N | Y | | U | | | | | | D276-04 | 19:30 |
| | | | | BARIUM | .0293 | mg/L | | Y | Y | | | | | | | | D276-04 | 20:37 |
| | | | | BERYLLIUM | .001 | mg/L | U | N | Y | | U | | | | | | D276-04 | 20:37 |
| | | | | CADMIUM | .01 | mg/L | U | N | Y | | U | | | | | | D276-04 | 20:37 |
| | | | | CALCIUM | .674 | mg/L | J | Y | Y | | B | | 06C | 15 | | | D276-04 | 20:37 |
| | | | | CHROMIUM | .01 | mg/L | U | N | Y | | U | | | | | | D276-04 | 20:37 |
| | | | | COBALT | .02 | mg/L | U | N | Y | | U | | | | | | D276-04 | 20:37 |
| | | | | COPPER | .00288 | mg/L | J | Y | Y | | B | | 06B | 15 | | | D276-04 | 20:37 |
| | | | | IRON | .0301 | mg/L | J | Y | Y | | J | | 15 | | | | D276-04 | 20:37 |
| | | | | LEAD | .01 | mg/L | U | N | Y | | U | | | | | | D276-04 | 19:30 |
| | | | | MAGNESIUM | .354 | mg/L | J | Y | Y | | B | | 06C | 15 | | | D276-04 | 20:37 |
| | | | | MANGANESE | .0427 | mg/L | | Y | Y | | | | | | | | D276-04 | 20:37 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10116Q-09** | | | | | | | | | | | | | | | | | | |
| JL3006 | SW6010B | SW3010 | N 0 1 | NICKEL | .02 | mg/L | U | N | Y | | U | | | | | | D276-04 | 20:37 |
| | | | | POTASSIUM | 5 | mg/L | U | N | Y | | U | | | | | | D276-04 | 20:37 |
| | | | | SELENIUM | .00186 | mg/L | J | Y | Y | | B | | 06C | 15 | | | D276-04 | 19:30 |
| | | | | SILVER | .00473 | mg/L | J | Y | Y | | B | | 15 | 06B | | | D276-04 | 20:37 |
| | | | | SODIUM | 1.06 | mg/L | | Y | Y | | | | | | | | D276-04 | 20:37 |
| | | | | THALLIUM | .01 | mg/L | U | N | Y | | U | | | | | | D276-04 | 19:30 |
| | | | | VANADIUM | .01 | mg/L | U | N | Y | | U | | | | | | D276-04 | 20:37 |
| | | | | ZINC | .0132 | mg/L | J | Y | Y | | B | | 06C | 15 | | | D276-04 | 20:37 |
| | SW7470A | TOTAL | N 0 1 | MERCURY | .0005 | mg/L | U | N | Y | | U | | | | | | D276-04 | 11:24 |
| JL3005 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 05:03 |
| | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 05:03 |
| | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 05:03 |
| | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 05:03 |
| | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 05:03 |
| | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 05:03 |
| | | | | 2-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 05:03 |
| | | | | 3-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 05:03 |
| | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 05:03 |
| | | | | 4-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 05:03 |
| | | | | HMX | .001 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 05:03 |
| | | | | NITROBENZENE | .0004 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 05:03 |
| | | | | RDX | .0004 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 05:03 |
| | | | | TETRYL | .0004 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 05:03 |
| JL3006 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | | U | | | | | | D276-04 | 05:42 |
| | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | | U | | | | | | D276-04 | 05:42 |
| | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | | U | | | | | | D276-04 | 05:42 |
| | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | | U | | | | | | D276-04 | 05:42 |
| | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | | U | | | | | | D276-04 | 05:42 |
| | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | | U | | | | | | D276-04 | 05:42 |
| | | | | 2-NITROTOLUENE | .00021 | mg/L | J | Y | Y | | J | | | | | | D276-04 | 05:42 |
| | | | | 3-NITROTOLUENE | .0004 | mg/L | U | N | Y | | U | | | | | | D276-04 | 05:42 |
| | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N | Y | | U | | | | | | D276-04 | 05:42 |
| | | | | 4-NITROTOLUENE | .0004 | mg/L | U | N | Y | | U | | | | | | D276-04 | 05:42 |
| | | | | HMX | .001 | mg/L | U | N | Y | | U | | | | | | D276-04 | 05:42 |
| | | | | NITROBENZENE | .0004 | mg/L | U | N | Y | | U | | | | | | D276-04 | 05:42 |
| | | | | RDX | .0004 | mg/L | U | N | Y | | U | | | | | | D276-04 | 05:42 |
| | | | | TETRYL | .0004 | mg/L | U | N | Y | | U | | | | | | D276-04 | 05:42 |
| JL3005 | E314.0 | NONE | N 0 1 | PERCHLORATE | .005 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 19:18 |
| JL3006 | E314.0 | NONE | N 0 1 | PERCHLORATE | .005 | mg/L | U | N | Y | | U | | | | | | D276-04 | 19:35 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10116Q-09** | | | | | | | | | | | | | | | | | | |
| JL3005 | SW8260B | SW5030 | N 0 1 | 1,1,1,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 23:04 |
| | | | | 1,1,1-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 23:04 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 23:04 |
| | | | | 1,1,2-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 23:04 |
| | | | | 1,1-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 23:04 |
| | | | | 1,1-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 23:04 |
| | | | | 1,1-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 23:04 |
| | | | | 1,2,3-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 23:04 |
| | | | | 1,2,3-TRICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 23:04 |
| | | | | 1,2,4-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 23:04 |
| | | | | 1,2,4-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 23:04 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .01 | mg/L | U | N | Y | U | R | 05A | | | | | D276-03 | 23:04 |
| | | | | 1,2-DIBROMOETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 23:04 |
| | | | | 1,2-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 23:04 |
| | | | | 1,2-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 23:04 |
| | | | | 1,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 23:04 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 23:04 |
| | | | | 1,3-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 23:04 |
| | | | | 1,3-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 23:04 |
| | | | | 1,4-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 23:04 |
| | | | | 2,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 23:04 |
| | | | | 2-BUTANONE | .02 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 23:04 |
| | | | | 2-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 23:04 |
| | | | | 2-HEXANONE | .02 | mg/L | U | N | Y | U | UJ | 05B | | | | | D276-03 | 23:04 |
| | | | | 4-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 23:04 |
| | | | | 4-METHYL-2-PENTANONE | .01 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 23:04 |
| | | | | ACETONE | .02 | mg/L | U | N | Y | U | R | 05A | | | | | D276-03 | 23:04 |
| | | | | BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 23:04 |
| | | | | BROMOBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 23:04 |
| | | | | BROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | UJ | 05B | | | | | D276-03 | 23:04 |
| | | | | BROMODICHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 23:04 |
| | | | | BROMOFORM | .005 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 23:04 |
| | | | | BROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 23:04 |
| | | | | CARBON DISULFIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 23:04 |
| | | | | CARBON TETRACHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 23:04 |
| | | | | CHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 23:04 |
| | | | | CHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 23:04 |
| | | | | CHLOROFORM | .005 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 23:04 |
| | | | | CHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 23:04 |
| | | | | CIS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 23:04 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10116Q-09** | | | | | | | | | | | | | | | | | | |
| JL3005 | SW8260B | SW5030 | N 0 1 | CIS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 23:04 |
| | | | | DIBROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 23:04 |
| | | | | DIBROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 23:04 |
| | | | | DICHLORODIFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 23:04 |
| | | | | ETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 23:04 |
| | | | | HEXACHLOROBUTADIENE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | D276-03 | 23:04 |
| | | | | ISOPROPYL BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 23:04 |
| | | | | M/P-XYLENES | .01 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 23:04 |
| | | | | METHYLENE CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 23:04 |
| | | | | N-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 23:04 |
| | | | | N-PROPYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 23:04 |
| | | | | NAPHTHALENE | .005 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 23:04 |
| | | | | O-XYLENE | .005 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 23:04 |
| | | | | P-ISOPROPYLTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 23:04 |
| | | | | SEC-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 23:04 |
| | | | | STYRENE | .005 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 23:04 |
| | | | | TERT-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 23:04 |
| | | | | TETRACHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 23:04 |
| | | | | TOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 23:04 |
| | | | | TRANS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 23:04 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 23:04 |
| | | | | TRICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 23:04 |
| | | | | TRICHLOROFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 23:04 |
| | | | | VINYL CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D276-03 | 23:04 |
| JL3006 | SW8260B | SW5030 | N 0 1 | 1,1,1,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | | U | | | | | | D276-04 | 23:39 |
| | | | | 1,1,1-TRICHLOROETHANE | .005 | mg/L | U | N | Y | | U | | | | | | D276-04 | 23:39 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | | U | | | | | | D276-04 | 23:39 |
| | | | | 1,1,2-TRICHLOROETHANE | .005 | mg/L | U | N | Y | | U | | | | | | D276-04 | 23:39 |
| | | | | 1,1-DICHLOROETHANE | .005 | mg/L | U | N | Y | | U | | | | | | D276-04 | 23:39 |
| | | | | 1,1-DICHLOROETHENE | .005 | mg/L | U | N | Y | | U | | | | | | D276-04 | 23:39 |
| | | | | 1,1-DICHLOROPROPENE | .005 | mg/L | U | N | Y | | U | | | | | | D276-04 | 23:39 |
| | | | | 1,2,3-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | | U | | | | | | D276-04 | 23:39 |
| | | | | 1,2,3-TRICHLOROPROPANE | .005 | mg/L | U | N | Y | | U | | | | | | D276-04 | 23:39 |
| | | | | 1,2,4-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | | U | | | | | | D276-04 | 23:39 |
| | | | | 1,2,4-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | | U | | | | | | D276-04 | 23:39 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .01 | mg/L | U | N | Y | | R | | 05A | | | | D276-04 | 23:39 |
| | | | | 1,2-DIBROMOETHANE | .005 | mg/L | U | N | Y | | U | | | | | | D276-04 | 23:39 |
| | | | | 1,2-DICHLOROBENZENE | .005 | mg/L | U | N | Y | | U | | | | | | D276-04 | 23:39 |
| | | | | 1,2-DICHLOROETHANE | .005 | mg/L | U | N | Y | | U | | | | | | D276-04 | 23:39 |
| | | | | 1,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | | U | | | | | | D276-04 | 23:39 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10116Q-09** | | | | | | | | | | | | | | | | |
| JL3006 | SW8260B | SW5030 | N 0 1 | 1,3,5-TRIMETHYLBENZENE | .005 | mg/L | U | N Y | U | | | | | | D276-04 | 23:39 |
| | | | | 1,3-DICHLOROBENZENE | .005 | mg/L | U | N Y | U | | | | | | D276-04 | 23:39 |
| | | | | 1,3-DICHLOROPROPANE | .005 | mg/L | U | N Y | U | | | | | | D276-04 | 23:39 |
| | | | | 1,4-DICHLOROBENZENE | .005 | mg/L | U | N Y | U | | | | | | D276-04 | 23:39 |
| | | | | 2,2-DICHLOROPROPANE | .005 | mg/L | U | N Y | U | | | | | | D276-04 | 23:39 |
| | | | | 2-BUTANONE | .02 | mg/L | U | N Y | U | | | | | | D276-04 | 23:39 |
| | | | | 2-CHLOROTOLUENE | .005 | mg/L | U | N Y | U | | | | | | D276-04 | 23:39 |
| | | | | 2-HEXANONE | .02 | mg/L | U | N Y | UJ | | 05B | | | | D276-04 | 23:39 |
| | | | | 4-CHLOROTOLUENE | .005 | mg/L | U | N Y | U | | | | | | D276-04 | 23:39 |
| | | | | 4-METHYL-2-PENTANONE | .01 | mg/L | U | N Y | U | | | | | | D276-04 | 23:39 |
| | | | | ACETONE | .02 | mg/L | U | N Y | R | | 05A | | | | D276-04 | 23:39 |
| | | | | BENZENE | .005 | mg/L | U | N Y | U | | | | | | D276-04 | 23:39 |
| | | | | BROMOBENZENE | .005 | mg/L | U | N Y | U | | | | | | D276-04 | 23:39 |
| | | | | BROMOCHLOROMETHANE | .005 | mg/L | U | N Y | UJ | | 05B | | | | D276-04 | 23:39 |
| | | | | BROMODICHLOROMETHANE | .005 | mg/L | U | N Y | U | | | | | | D276-04 | 23:39 |
| | | | | BROMOFORM | .005 | mg/L | U | N Y | U | | | | | | D276-04 | 23:39 |
| | | | | BROMOMETHANE | .005 | mg/L | U | N Y | U | | | | | | D276-04 | 23:39 |
| | | | | CARBON DISULFIDE | .005 | mg/L | U | N Y | U | | | | | | D276-04 | 23:39 |
| | | | | CARBON TETRACHLORIDE | .005 | mg/L | U | N Y | U | | | | | | D276-04 | 23:39 |
| | | | | CHLOROBENZENE | .005 | mg/L | U | N Y | U | | | | | | D276-04 | 23:39 |
| | | | | CHLOROETHANE | .005 | mg/L | U | N Y | U | | | | | | D276-04 | 23:39 |
| | | | | CHLOROFORM | .005 | mg/L | U | N Y | U | | | | | | D276-04 | 23:39 |
| | | | | CHLOROMETHANE | .005 | mg/L | U | N Y | U | | | | | | D276-04 | 23:39 |
| | | | | CIS-1,2-DICHLOROETHENE | .005 | mg/L | U | N Y | U | | | | | | D276-04 | 23:39 |
| | | | | CIS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N Y | U | | | | | | D276-04 | 23:39 |
| | | | | DIBROMOCHLOROMETHANE | .005 | mg/L | U | N Y | U | | | | | | D276-04 | 23:39 |
| | | | | DIBROMOMETHANE | .005 | mg/L | U | N Y | U | | | | | | D276-04 | 23:39 |
| | | | | DICHLORODIFLUOROMETHANE | .005 | mg/L | U | N Y | U | | | | | | D276-04 | 23:39 |
| | | | | ETHYLBENZENE | .005 | mg/L | U | N Y | U | | | | | | D276-04 | 23:39 |
| | | | | HEXACHLOROBUTADIENE | .005 | mg/L | U | N Y | UJ | | 05B | | | | D276-04 | 23:39 |
| | | | | ISOPROPYL BENZENE | .005 | mg/L | U | N Y | U | | | | | | D276-04 | 23:39 |
| | | | | M/P-XYLENES | .01 | mg/L | U | N Y | U | | | | | | D276-04 | 23:39 |
| | | | | METHYLENE CHLORIDE | .005 | mg/L | U | N Y | U | | | | | | D276-04 | 23:39 |
| | | | | N-BUTYLBENZENE | .005 | mg/L | U | N Y | U | | | | | | D276-04 | 23:39 |
| | | | | N-PROPYLBENZENE | .005 | mg/L | U | N Y | U | | | | | | D276-04 | 23:39 |
| | | | | NAPHTHALENE | .005 | mg/L | U | N Y | U | | | | | | D276-04 | 23:39 |
| | | | | O-XYLENE | .005 | mg/L | U | N Y | U | | | | | | D276-04 | 23:39 |
| | | | | P-ISOPROPYLTOLUENE | .005 | mg/L | U | N Y | U | | | | | | D276-04 | 23:39 |
| | | | | SEC-BUTYLBENZENE | .005 | mg/L | U | N Y | U | | | | | | D276-04 | 23:39 |
| | | | | STYRENE | .005 | mg/L | U | N Y | U | | | | | | D276-04 | 23:39 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10116Q-09** | | | | | | | | | | | | | | | | | | |
| JL3006 | SW8260B | SW5030 | N 0 1 | TERT-BUTYLBENZENE | .005 | mg/L | U | N | Y | | U | | | | | | D276-04 | 23:39 |
| | | | | TETRACHLOROETHENE | .005 | mg/L | U | N | Y | | U | | | | | | D276-04 | 23:39 |
| | | | | TOLUENE | .005 | mg/L | U | N | Y | | U | | | | | | D276-04 | 23:39 |
| | | | | TRANS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | | U | | | | | | D276-04 | 23:39 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | | U | | | | | | D276-04 | 23:39 |
| | | | | TRICHLOROETHENE | .005 | mg/L | U | N | Y | | U | | | | | | D276-04 | 23:39 |
| | | | | TRICHLOROFLUOROMETHANE | .005 | mg/L | U | N | Y | | U | | | | | | D276-04 | 23:39 |
| | | | | VINYL CHLORIDE | .005 | mg/L | U | N | Y | | U | | | | | | D276-04 | 23:39 |
| **10116Q-10** | | | | | | | | | | | | | | | | | | |
| JL3002 | SW6010B | SW3010 | N 0 1 | ALUMINUM | .291 | mg/L | | Y | Y | P | | | | | | | E149-01 | 21:42 |
| | | | | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 21:42 |
| | | | | ARSENIC | .01 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 21:42 |
| | | | | BARIUM | .0485 | mg/L | | Y | Y | P | | | | | | | E149-01 | 21:42 |
| | | | | BERYLLIUM | .001 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 21:42 |
| | | | | CADMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 21:42 |
| | | | | CALCIUM | 1.26 | mg/L | | Y | Y | P | | | | | | | E149-01 | 21:42 |
| | | | | CHROMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 21:42 |
| | | | | COBALT | .02 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 21:42 |
| | | | | COPPER | .02 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 21:42 |
| | | | | IRON | .641 | mg/L | | Y | Y | P | | | | | | | E149-01 | 21:42 |
| | | | | LEAD | .00224 | mg/L | J | Y | Y | P | J | | 15 | | | | E149-01 | 21:42 |
| | | | | MAGNESIUM | .47 | mg/L | J | Y | Y | P | J | | 15 | | | | E149-01 | 21:42 |
| | | | | MANGANESE | .284 | mg/L | | Y | Y | P | | | | | | | E149-01 | 21:42 |
| | | | | NICKEL | .02 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 21:42 |
| | | | | POTASSIUM | 5 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 21:42 |
| | | | | SELENIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 21:42 |
| | | | | SILVER | .01 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 21:42 |
| | | | | SODIUM | .773 | mg/L | J | Y | Y | P | J | | 15 | | | | E149-01 | 21:42 |
| | | | | THALLIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 21:42 |
| | | | | VANADIUM | .00492 | mg/L | J | Y | Y | P | J | | 15 | | | | E149-01 | 21:42 |
| | | | | ZINC | .00995 | mg/L | J | Y | Y | P | J | | 15 | | | | E149-01 | 21:42 |
| | SW7470A | TOTAL | N 0 1 | MERCURY | .0005 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 10:52 |
| JL3003 | SW6010B | SW3010 | N 0 1 | ALUMINUM | .201 | mg/L | | Y | Y | P | | | | | | | E131-01 | 21:38 |
| | | | | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | E131-01 | 21:38 |
| | | | | ARSENIC | .01 | mg/L | U | N | Y | U | U | | | | | | E131-01 | 21:37 |
| | | | | BARIUM | .0154 | mg/L | | Y | Y | P | | | | | | | E131-01 | 21:38 |
| | | | | BERYLLIUM | .001 | mg/L | U | N | Y | U | U | | | | | | E131-01 | 21:38 |
| | | | | CADMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E131-01 | 21:38 |
| | | | | CALCIUM | .446 | mg/L | J | Y | Y | P | J | | 15 | | | | E131-01 | 21:38 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10116Q-10** | | | | | | | | | | | | | | | | | | |
| JL3003 | SW6010B | SW3010 | N 0 1 | CHROMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E131-01 | 21:38 |
| | | | | COBALT | .0142 | mg/L | J | Y | Y | F | B | | 06B | 15 | 06C | | E131-01 | 21:38 |
| | | | | COPPER | .0042 | mg/L | J | Y | Y | F | B | | 06B | 15 | | | E131-01 | 21:38 |
| | | | | IRON | .118 | mg/L | J | Y | Y | P | J | | 15 | | | | E131-01 | 21:38 |
| | | | | LEAD | .01 | mg/L | U | N | Y | U | U | | | | | | E131-01 | 21:37 |
| | | | | MAGNESIUM | .302 | mg/L | J | Y | Y | P | J | | 15 | | | | E131-01 | 21:38 |
| | | | | MANGANESE | .0614 | mg/L | | Y | Y | P | | | | | | | E131-01 | 21:38 |
| | | | | NICKEL | .0119 | mg/L | J | Y | Y | F | B | | 06B | 15 | | | E131-01 | 21:38 |
| | | | | POTASSIUM | 5 | mg/L | U | N | Y | U | U | | | | | | E131-01 | 21:38 |
| | | | | SELENIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E131-01 | 21:37 |
| | | | | SILVER | .00623 | mg/L | J | Y | Y | F | B | | 06A | 15 | | | E131-01 | 21:38 |
| | | | | SODIUM | 1.35 | mg/L | | Y | Y | P | | | | | | | E131-01 | 21:38 |
| | | | | THALLIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E131-01 | 21:37 |
| | | | | VANADIUM | .00435 | mg/L | J | Y | Y | P | J | | 15 | | | | E131-01 | 21:38 |
| | | | | ZINC | .0156 | mg/L | J | Y | Y | P | J | | 15 | | | | E131-01 | 21:38 |
| | SW7470A | TOTAL | N 0 1 | MERCURY | .0005 | mg/L | U | N | Y | U | J | | 15 | | | | E131-01 | 10:49 |
| JL3002 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 01:07 |
| | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 01:07 |
| | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 01:07 |
| | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 01:07 |
| | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 01:07 |
| | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 01:07 |
| | | | | 2-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 01:07 |
| | | | | 3-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 01:07 |
| | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 01:07 |
| | | | | 4-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 01:07 |
| | | | | HMX | .001 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 01:07 |
| | | | | NITROBENZENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 01:07 |
| | | | | RDX | .0004 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 01:07 |
| | | | | TETRYL | .0004 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 01:07 |
| JL3003 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | U | U | | | | | | E131-01 | 22:33 |
| | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | U | U | | | | | | E131-01 | 22:33 |
| | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E131-01 | 22:33 |
| | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E131-01 | 22:33 |
| | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E131-01 | 22:33 |
| | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E131-01 | 22:33 |
| | | | | 2-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E131-01 | 22:33 |
| | | | | 3-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E131-01 | 22:33 |
| | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E131-01 | 22:33 |
| | | | | 4-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E131-01 | 22:33 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10116Q-10** | | | | | | | | | | | | | | | | | | |
| JL3003 | SW8330 | METHOD | N 0 1 | HMX | .001 | mg/L | U | N | Y | U | U | | | | | | E131-01 | 22:33 |
| | | | | NITROBENZENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E131-01 | 22:33 |
| | | | | RDX | .0004 | mg/L | U | N | Y | U | U | | | | | | E131-01 | 22:33 |
| | | | | TETRYL | .0004 | mg/L | U | N | Y | U | U | | | | | | E131-01 | 22:33 |
| JL3002 | E314.0 | NONE | N 0 1 | PERCHLORATE | .005 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 19:40 |
| JL3003 | E314.0 | NONE | N 0 1 | PERCHLORATE | .00122 | mg/L | J | Y | Y | P | J | | | | | | E131-01 | 03:20 |
| JL3002 | SW8260B | SW5030 | N 0 1 | 1,1,1,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 18:11 |
| | | | | 1,1,1-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 18:11 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 18:11 |
| | | | | 1,1,2-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 18:11 |
| | | | | 1,1-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 18:11 |
| | | | | 1,1-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 18:11 |
| | | | | 1,1-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 18:11 |
| | | | | 1,2,3-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 18:11 |
| | | | | 1,2,3-TRICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 18:11 |
| | | | | 1,2,4-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 18:11 |
| | | | | 1,2,4-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 18:11 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .01 | mg/L | U | N | Y | U | R | 05A | | | | | E149-01 | 18:11 |
| | | | | 1,2-DIBROMOETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 18:11 |
| | | | | 1,2-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 18:11 |
| | | | | 1,2-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 18:11 |
| | | | | 1,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 18:11 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 18:11 |
| | | | | 1,3-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 18:11 |
| | | | | 1,3-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 18:11 |
| | | | | 1,4-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 18:11 |
| | | | | 2,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 18:11 |
| | | | | 2-BUTANONE | .02 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 18:11 |
| | | | | 2-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 18:11 |
| | | | | 2-HEXANONE | .02 | mg/L | U | N | Y | U | UJ | 05B | | | | | E149-01 | 18:11 |
| | | | | 4-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 18:11 |
| | | | | 4-METHYL-2-PENTANONE | .01 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 18:11 |
| | | | | ACETONE | .02 | mg/L | U | N | Y | U | R | 05A | | | | | E149-01 | 18:11 |
| | | | | BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 18:11 |
| | | | | BROMOBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 18:11 |
| | | | | BROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 18:11 |
| | | | | BROMODICHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 18:11 |
| | | | | BROMOFORM | .005 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 18:11 |
| | | | | BROMOMETHANE | .005 | mg/L | U | N | Y | U | UJ | 05B | | | | | E149-01 | 18:11 |
| | | | | CARBON DISULFIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 18:11 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10116Q-10** | | | | | | | | | | | | | | | | | | |
| JL3002 | SW8260B | SW5030 | N 0 1 | CARBON TETRACHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 18:11 |
| | | | | CHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 18:11 |
| | | | | CHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 18:11 |
| | | | | CHLOROFORM | .005 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 18:11 |
| | | | | CHLOROMETHANE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | E149-01 | 18:11 |
| | | | | CIS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 18:11 |
| | | | | CIS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 18:11 |
| | | | | DIBROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 18:11 |
| | | | | DIBROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 18:11 |
| | | | | DICHLORODIFLUOROMETHANE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | E149-01 | 18:11 |
| | | | | ETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 18:11 |
| | | | | HEXACHLOROBUTADIENE | .005 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 18:11 |
| | | | | ISOPROPYL BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 18:11 |
| | | | | M/P-XYLENES | .01 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 18:11 |
| | | | | METHYLENE CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 18:11 |
| | | | | N-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 18:11 |
| | | | | N-PROPYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 18:11 |
| | | | | NAPHTHALENE | .005 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 18:11 |
| | | | | O-XYLENE | .005 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 18:11 |
| | | | | P-ISOPROPYLTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 18:11 |
| | | | | SEC-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 18:11 |
| | | | | STYRENE | .005 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 18:11 |
| | | | | TERT-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 18:11 |
| | | | | TETRACHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 18:11 |
| | | | | TOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 18:11 |
| | | | | TRANS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 18:11 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 18:11 |
| | | | | TRICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 18:11 |
| | | | | TRICHLOROFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 18:11 |
| | | | | VINYL CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E149-01 | 18:11 |
| JL3003 | SW8260B | SW5030 | N 0 1 | 1,1,1,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E131-01R | 11:12 |
| | | | | 1,1,1-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E131-01R | 11:12 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | E131-01R | 11:12 |
| | | | | 1,1,2-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E131-01R | 11:12 |
| | | | | 1,1-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E131-01R | 11:12 |
| | | | | 1,1-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E131-01R | 11:12 |
| | | | | 1,1-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | E131-01R | 11:12 |
| | | | | 1,2,3-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E131-01R | 11:12 |
| | | | | 1,2,3-TRICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E131-01R | 11:12 |
| | | | | 1,2,4-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E131-01R | 11:12 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10116Q-10** | | | | | | | | | | | | | | | | | | |
| JL3003 | SW8260B | SW5030 | N 0 1 | 1,2,4-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E131-01R | 11:12 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .01 | mg/L | U | N | Y | U | U | | | | | | E131-01R | 11:12 |
| | | | | 1,2-DIBROMOETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E131-01R | 11:12 |
| | | | | 1,2-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E131-01R | 11:12 |
| | | | | 1,2-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E131-01R | 11:12 |
| | | | | 1,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E131-01R | 11:12 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E131-01R | 11:12 |
| | | | | 1,3-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E131-01R | 11:12 |
| | | | | 1,3-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E131-01R | 11:12 |
| | | | | 1,4-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E131-01R | 11:12 |
| | | | | 2,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E131-01R | 11:12 |
| | | | | 2-BUTANONE | .02 | mg/L | U | N | Y | U | U | | | | | | E131-01R | 11:12 |
| | | | | 2-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E131-01R | 11:12 |
| | | | | 2-HEXANONE | .02 | mg/L | U | N | Y | U | UJ | | 05B | | | | E131-01R | 11:12 |
| | | | | 4-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E131-01R | 11:12 |
| | | | | 4-METHYL-2-PENTANONE | .01 | mg/L | U | N | Y | U | U | | | | | | E131-01R | 11:12 |
| | | | | ACETONE | .02 | mg/L | U | N | Y | U | R | | 05A | | | | E131-01R | 11:12 |
| | | | | BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E131-01R | 11:12 |
| | | | | BROMOBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E131-01R | 11:12 |
| | | | | BROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | E131-01R | 11:12 |
| | | | | BROMODICHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E131-01R | 11:12 |
| | | | | BROMOFORM | .005 | mg/L | U | N | Y | U | U | | | | | | E131-01R | 11:12 |
| | | | | BROMOMETHANE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | E131-01R | 11:12 |
| | | | | CARBON DISULFIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E131-01R | 11:12 |
| | | | | CARBON TETRACHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E131-01R | 11:12 |
| | | | | CHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E131-01R | 11:12 |
| | | | | CHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E131-01R | 11:12 |
| | | | | CHLOROFORM | .005 | mg/L | U | N | Y | U | U | | | | | | E131-01R | 11:12 |
| | | | | CHLOROMETHANE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | E131-01R | 11:12 |
| | | | | CIS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E131-01R | 11:12 |
| | | | | CIS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | E131-01R | 11:12 |
| | | | | DIBROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E131-01R | 11:12 |
| | | | | DIBROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E131-01R | 11:12 |
| | | | | DICHLORODIFLUOROMETHANE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | E131-01R | 11:12 |
| | | | | ETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E131-01R | 11:12 |
| | | | | HEXACHLOROBUTADIENE | .005 | mg/L | U | N | Y | U | U | | | | | | E131-01R | 11:12 |
| | | | | ISOPROPYL BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E131-01R | 11:12 |
| | | | | M/P-XYLENES | .01 | mg/L | U | N | Y | U | U | | | | | | E131-01R | 11:12 |
| | | | | METHYLENE CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E131-01R | 11:12 |
| | | | | N-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E131-01R | 11:12 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10116Q-10** | | | | | | | | | | | | | | | | |
| JL3003 | SW8260B | SW5030 | N 0 1 | N-PROPYLBENZENE | .005 | mg/L | U | N Y U | U | | | | | | E131-01R | 11:12 |
| | | | | NAPHTHALENE | .005 | mg/L | U | N Y U | U | | | | | | E131-01R | 11:12 |
| | | | | O-XYLENE | .005 | mg/L | U | N Y U | U | | | | | | E131-01R | 11:12 |
| | | | | P-ISOPROPYLTOLUENE | .005 | mg/L | U | N Y U | U | | | | | | E131-01R | 11:12 |
| | | | | SEC-BUTYLBENZENE | .005 | mg/L | U | N Y U | U | | | | | | E131-01R | 11:12 |
| | | | | STYRENE | .005 | mg/L | U | N Y U | U | | | | | | E131-01R | 11:12 |
| | | | | TERT-BUTYLBENZENE | .005 | mg/L | U | N Y U | U | | | | | | E131-01R | 11:12 |
| | | | | TETRACHLOROETHENE | .005 | mg/L | U | N Y U | U | | | | | | E131-01R | 11:12 |
| | | | | TOLUENE | .005 | mg/L | U | N Y U | U | | | | | | E131-01R | 11:12 |
| | | | | TRANS-1,2-DICHLOROETHENE | .005 | mg/L | U | N Y U | U | | | | | | E131-01R | 11:12 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N Y U | U | | | | | | E131-01R | 11:12 |
| | | | | TRICHLOROETHENE | .005 | mg/L | U | N Y U | UJ | 05B | | | | | E131-01R | 11:12 |
| | | | | TRICHLOROFLUOROMETHANE | .005 | mg/L | U | N Y U | U | | | | | | E131-01R | 11:12 |
| | | | | VINYL CHLORIDE | .005 | mg/L | U | N Y U | U | | | | | | E131-01R | 11:12 |
| **10116Q-11** | | | | | | | | | | | | | | | | |
| JL3007 | SW6010B | SW3010 | N 0 1 | ALUMINUM | .225 | mg/L | | Y Y P | | | | | | | E157-02 | 17:48 |
| | | | | ANTIMONY | .1 | mg/L | U | N Y U | U | | | | | | E157-02 | 17:48 |
| | | | | ARSENIC | .01 | mg/L | U | N Y U | U | | | | | | E157-02 | 17:39 |
| | | | | BARIUM | .0214 | mg/L | | Y Y P | | | | | | | E157-02 | 17:48 |
| | | | | BERYLLIUM | .001 | mg/L | U | N Y U | U | | | | | | E157-02 | 17:48 |
| | | | | CADMIUM | .01 | mg/L | U | N Y U | U | | | | | | E157-02 | 17:48 |
| | | | | CALCIUM | .464 | mg/L | J | Y Y P | J | 15 | | | | | E157-02 | 17:48 |
| | | | | CHROMIUM | .01 | mg/L | U | N Y U | U | | | | | | E157-02 | 17:48 |
| | | | | COBALT | .02 | mg/L | U | N Y U | U | | | | | | E157-02 | 17:48 |
| | | | | COPPER | .02 | mg/L | U | N Y U | U | | | | | | E157-02 | 17:48 |
| | | | | IRON | .387 | mg/L | | Y Y P | | | | | | | E157-02 | 17:48 |
| | | | | LEAD | .01 | mg/L | U | N Y U | U | | | | | | E157-02 | 17:39 |
| | | | | MAGNESIUM | .261 | mg/L | J | Y Y P | J | 15 | | | | | E157-02 | 17:48 |
| | | | | MANGANESE | .221 | mg/L | | Y Y P | | | | | | | E157-02 | 17:48 |
| | | | | NICKEL | .02 | mg/L | U | N Y U | U | | | | | | E157-02 | 17:48 |
| | | | | POTASSIUM | 5 | mg/L | U | N Y U | U | | | | | | E157-02 | 17:48 |
| | | | | SELENIUM | .01 | mg/L | U | N Y U | U | | | | | | E157-02 | 17:39 |
| | | | | SILVER | .01 | mg/L | U | N Y U | U | | | | | | E157-02 | 17:48 |
| | | | | SODIUM | .967 | mg/L | J | Y Y P | J | 15 | | | | | E157-02 | 17:48 |
| | | | | THALLIUM | .01 | mg/L | U | N Y U | U | | | | | | E157-02 | 17:39 |
| | | | | VANADIUM | .01 | mg/L | U | N Y U | U | | | | | | E157-02 | 17:48 |
| | | | | ZINC | .0492 | mg/L | | Y Y P | | | | | | | E157-02 | 17:48 |
| | SW7470A | TOTAL | N 0 1 | MERCURY | .0005 | mg/L | U | N Y U | U | | | | | | E157-02 | 11:16 |
| JL3008 | SW6010B | SW3010 | N 0 1 | ALUMINUM | .05 | mg/L | J | Y Y P | J | 15 | | | | | E157-03 | 17:53 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10116Q-11** | | | | | | | | | | | | | | | | | | |
| JL3008 | SW6010B | SW3010 | N 0 1 | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 17:53 |
| | | | | ARSENIC | .01 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 17:44 |
| | | | | BARIUM | .00683 | mg/L | J | Y | Y | P | J | | 15 | | | | E157-03 | 17:53 |
| | | | | BERYLLIUM | .001 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 17:53 |
| | | | | CADMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 17:53 |
| | | | | CALCIUM | 1 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 17:53 |
| | | | | CHROMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 17:53 |
| | | | | COBALT | .02 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 17:53 |
| | | | | COPPER | .02 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 17:53 |
| | | | | IRON | .0114 | mg/L | J | Y | Y | F | B | | 06C | 15 | | | E157-03 | 17:53 |
| | | | | LEAD | .01 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 17:44 |
| | | | | MAGNESIUM | .0825 | mg/L | J | Y | Y | F | B | | 06B | 15 | | | E157-03 | 17:53 |
| | | | | MANGANESE | .0121 | mg/L | | Y | Y | P | | | | | | | E157-03 | 17:53 |
| | | | | NICKEL | .02 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 17:53 |
| | | | | POTASSIUM | 5 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 17:53 |
| | | | | SELENIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 17:44 |
| | | | | SILVER | .01 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 17:53 |
| | | | | SODIUM | 1 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 17:53 |
| | | | | THALLIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 17:44 |
| | | | | VANADIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 17:53 |
| | | | | ZINC | .02 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 17:53 |
| | SW7470A | TOTAL | N 0 1 | MERCURY | .0005 | mg/L | U | N | Y | U | J | | 15 | | | | E157-03 | 11:19 |
| JL3007 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 17:00 |
| | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 17:00 |
| | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 17:00 |
| | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 17:00 |
| | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 17:00 |
| | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 17:00 |
| | | | | 2-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 17:00 |
| | | | | 3-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 17:00 |
| | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 17:00 |
| | | | | 4-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 17:00 |
| | | | | HMX | .001 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 17:00 |
| | | | | NITROBENZENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 17:00 |
| | | | | RDX | .0004 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 17:00 |
| | | | | TETRYL | .0004 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 17:00 |
| JL3008 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 17:39 |
| | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 17:39 |
| | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 17:39 |
| | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 17:39 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10116Q-11** | | | | | | | | | | | | | | | | | | |
| JL3008 | SW8330 | METHOD | N 0 1 | 2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 17:39 |
| | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 17:39 |
| | | | | 2-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 17:39 |
| | | | | 3-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 17:39 |
| | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 17:39 |
| | | | | 4-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 17:39 |
| | | | | HMX | .001 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 17:39 |
| | | | | NITROBENZENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 17:39 |
| | | | | RDX | .0004 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 17:39 |
| | | | | TETRYL | .0004 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 17:39 |
| JL3007 | E314.0 | NONE | N 0 1 | PERCHLORATE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 20:31 |
| JL3008 | E314.0 | NONE | N 0 1 | PERCHLORATE | .00133 | mg/L | J | Y | Y | P | J | | | | | | E157-03 | 20:48 |
| JL3007 | SW8260B | SW5030 | N 0 1 | 1,1,1,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 02:18 |
| | | | | 1,1,1-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 02:18 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 02:18 |
| | | | | 1,1,2-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 02:18 |
| | | | | 1,1-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 02:18 |
| | | | | 1,1-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 02:18 |
| | | | | 1,1-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 02:18 |
| | | | | 1,2,3-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 02:18 |
| | | | | 1,2,3-TRICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 02:18 |
| | | | | 1,2,4-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 02:18 |
| | | | | 1,2,4-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 02:18 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .01 | mg/L | U | N | Y | U | R | 05A | | | | | E157-02 | 02:18 |
| | | | | 1,2-DIBROMOETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 02:18 |
| | | | | 1,2-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 02:18 |
| | | | | 1,2-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 02:18 |
| | | | | 1,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 02:18 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 02:18 |
| | | | | 1,3-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 02:18 |
| | | | | 1,3-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 02:18 |
| | | | | 1,4-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 02:18 |
| | | | | 2,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 02:18 |
| | | | | 2-BUTANONE | .02 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 02:18 |
| | | | | 2-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 02:18 |
| | | | | 2-HEXANONE | .02 | mg/L | U | N | Y | U | UJ | 05B | | | | | E157-02 | 02:18 |
| | | | | 4-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 02:18 |
| | | | | 4-METHYL-2-PENTANONE | .01 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 02:18 |
| | | | | ACETONE | .02 | mg/L | U | N | Y | U | R | 05A | | | | | E157-02 | 02:18 |
| | | | | BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 02:18 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10116Q-11** | | | | | | | | | | | | | | | | | | |
| JL3007 | SW8260B | SW5030 | N 0 1 | BROMOBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 02:18 |
| | | | | BROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 02:18 |
| | | | | BROMODICHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 02:18 |
| | | | | BROMOFORM | .005 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 02:18 |
| | | | | BROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 02:18 |
| | | | | CARBON DISULFIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 02:18 |
| | | | | CARBON TETRACHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 02:18 |
| | | | | CHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 02:18 |
| | | | | CHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 02:18 |
| | | | | CHLOROFORM | .005 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 02:18 |
| | | | | CHLOROMETHANE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | E157-02 | 02:18 |
| | | | | CIS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 02:18 |
| | | | | CIS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 02:18 |
| | | | | DIBROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 02:18 |
| | | | | DIBROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 02:18 |
| | | | | DICHLORODIFLUOROMETHANE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | E157-02 | 02:18 |
| | | | | ETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 02:18 |
| | | | | HEXACHLOROBUTADIENE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 02:18 |
| | | | | ISOPROPYL BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 02:18 |
| | | | | M/P-XYLENES | .01 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 02:18 |
| | | | | METHYLENE CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 02:18 |
| | | | | N-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 02:18 |
| | | | | N-PROPYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 02:18 |
| | | | | NAPHTHALENE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 02:18 |
| | | | | O-XYLENE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 02:18 |
| | | | | P-ISOPROPYLTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 02:18 |
| | | | | SEC-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 02:18 |
| | | | | STYRENE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 02:18 |
| | | | | TERT-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 02:18 |
| | | | | TETRACHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 02:18 |
| | | | | TOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 02:18 |
| | | | | TRANS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 02:18 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 02:18 |
| | | | | TRICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 02:18 |
| | | | | TRICHLOROFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 02:18 |
| | | | | VINYL CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-02 | 02:18 |
| JL3008 | SW8260B | SW5030 | N 0 1 | 1,1,1,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 02:52 |
| | | | | 1,1,1-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 02:52 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 02:52 |
| | | | | 1,1,2-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 02:52 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10116Q-11** | | | | | | | | | | | | | | | | | | |
| JL3008 | SW8260B | SW5030 | N 0 1 | 1,1-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 02:52 |
| | | | | 1,1-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 02:52 |
| | | | | 1,1-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 02:52 |
| | | | | 1,2,3-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 02:52 |
| | | | | 1,2,3-TRICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 02:52 |
| | | | | 1,2,4-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 02:52 |
| | | | | 1,2,4-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 02:52 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .01 | mg/L | U | N | Y | U | R | | 05A | | | | E157-03 | 02:52 |
| | | | | 1,2-DIBROMOETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 02:52 |
| | | | | 1,2-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 02:52 |
| | | | | 1,2-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 02:52 |
| | | | | 1,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 02:52 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 02:52 |
| | | | | 1,3-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 02:52 |
| | | | | 1,3-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 02:52 |
| | | | | 1,4-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 02:52 |
| | | | | 2,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 02:52 |
| | | | | 2-BUTANONE | .02 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 02:52 |
| | | | | 2-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 02:52 |
| | | | | 2-HEXANONE | .02 | mg/L | U | N | Y | U | UJ | | 05B | | | | E157-03 | 02:52 |
| | | | | 4-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 02:52 |
| | | | | 4-METHYL-2-PENTANONE | .01 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 02:52 |
| | | | | ACETONE | .02 | mg/L | U | N | Y | U | R | | 05A | | | | E157-03 | 02:52 |
| | | | | BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 02:52 |
| | | | | BROMOBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 02:52 |
| | | | | BROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 02:52 |
| | | | | BROMODICHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 02:52 |
| | | | | BROMOFORM | .005 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 02:52 |
| | | | | BROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 02:52 |
| | | | | CARBON DISULFIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 02:52 |
| | | | | CARBON TETRACHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 02:52 |
| | | | | CHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 02:52 |
| | | | | CHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 02:52 |
| | | | | CHLOROFORM | .005 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 02:52 |
| | | | | CHLOROMETHANE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | E157-03 | 02:52 |
| | | | | CIS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 02:52 |
| | | | | CIS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 02:52 |
| | | | | DIBROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 02:52 |
| | | | | DIBROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 02:52 |
| | | | | DICHLORODIFLUOROMETHANE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | E157-03 | 02:52 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10116Q-11** | | | | | | | | | | | | | | | | | | |
| JL3008 | SW8260B | SW5030 | N 0 1 | ETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 02:52 |
| | | | | HEXACHLOROBUTADIENE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 02:52 |
| | | | | ISOPROPYL BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 02:52 |
| | | | | M/P-XYLENES | .01 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 02:52 |
| | | | | METHYLENE CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 02:52 |
| | | | | N-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 02:52 |
| | | | | N-PROPYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 02:52 |
| | | | | NAPHTHALENE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 02:52 |
| | | | | O-XYLENE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 02:52 |
| | | | | P-ISOPROPYLTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 02:52 |
| | | | | SEC-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 02:52 |
| | | | | STYRENE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 02:52 |
| | | | | TERT-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 02:52 |
| | | | | TETRACHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 02:52 |
| | | | | TOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 02:52 |
| | | | | TRANS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 02:52 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 02:52 |
| | | | | TRICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 02:52 |
| | | | | TRICHLOROFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 02:52 |
| | | | | VINYL CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E157-03 | 02:52 |
| **10116Q-12** | | | | | | | | | | | | | | | | | | |
| JL3009 | SW6010B | SW3010 | N 0 1 | ALUMINUM | .254 | mg/L | | Y | Y | P | | | | | | | F010-01 | 12:40 |
| | | | | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 12:40 |
| | | | | ARSENIC | .01 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 20:11 |
| | | | | BARIUM | .00688 | mg/L | J | Y | Y | P | J | | 15 | | | | F010-01 | 12:40 |
| | | | | BERYLLIUM | .00081 | mg/L | J | Y | Y | P | J | | 15 | | | | F010-01 | 12:40 |
| | | | | CADMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 12:40 |
| | | | | CALCIUM | 23.8 | mg/L | | Y | Y | P | | | | | | | F010-01 | 12:40 |
| | | | | CHROMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 12:40 |
| | | | | COBALT | .02 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 12:40 |
| | | | | COPPER | .02 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 12:40 |
| | | | | IRON | .296 | mg/L | | Y | Y | P | | | | | | | F010-01 | 12:40 |
| | | | | LEAD | .01 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 20:11 |
| | | | | MAGNESIUM | 14.3 | mg/L | | Y | Y | P | | | | | | | F010-01 | 12:40 |
| | | | | MANGANESE | .0275 | mg/L | | Y | Y | P | | | | | | | F010-01 | 12:40 |
| | | | | NICKEL | .02 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 12:40 |
| | | | | POTASSIUM | 5 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 12:40 |
| | | | | SELENIUM | .01 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 20:11 |
| | | | | SILVER | .01 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 12:40 |
| | | | | SODIUM | .817 | mg/L | J | Y | Y | P | J | | 15 | | | | F010-01 | 12:40 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10116Q-12** | | | | | | | | | | | | | | | | | | |
| JL3009 | SW6010B | SW3010 | N 0 1 | THALLIUM | .01 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 20:11 |
| | | | | VANADIUM | .01 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 12:40 |
| | | | | ZINC | .02 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 12:40 |
| | SW7470A | TOTAL | N 0 1 | MERCURY | .0005 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 11:16 |
| JL3009 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 23:59 |
| | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 23:59 |
| | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 23:59 |
| | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 23:59 |
| | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 23:59 |
| | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 23:59 |
| | | | | 2-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 23:59 |
| | | | | 3-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 23:59 |
| | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 23:59 |
| | | | | 4-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 23:59 |
| | | | | HMX | .001 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 23:59 |
| | | | | NITROBENZENE | .0004 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 23:59 |
| | | | | RDX | .0004 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 23:59 |
| | | | | TETRYL | .0004 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 23:59 |
| JL3009 | E314.0 | NONE | N 0 1 | PERCHLORATE | .005 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 04:24 |
| JL3009 | SW8260B | SW5030 | N 0 1 | 1,1,1,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 11:40 |
| | | | | 1,1,1-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 11:40 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 11:40 |
| | | | | 1,1,2-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 11:40 |
| | | | | 1,1-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 11:40 |
| | | | | 1,1-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 11:40 |
| | | | | 1,1-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 11:40 |
| | | | | 1,2,3-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 11:40 |
| | | | | 1,2,3-TRICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 11:40 |
| | | | | 1,2,4-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 11:40 |
| | | | | 1,2,4-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 11:40 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .01 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 11:40 |
| | | | | 1,2-DIBROMOETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 11:40 |
| | | | | 1,2-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 11:40 |
| | | | | 1,2-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 11:40 |
| | | | | 1,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 11:40 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 11:40 |
| | | | | 1,3-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 11:40 |
| | | | | 1,3-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 11:40 |
| | | | | 1,4-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 11:40 |
| | | | | 2,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 11:40 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10116Q-12** | | | | | | | | | | | | | | | | | | |
| JL3009 | SW8260B | SW5030 | N 0 1 | 2-BUTANONE | .02 | mg/L | U | N | Y | U | UJ | | 05B | | | | F010-01 | 11:40 |
| | | | | 2-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 11:40 |
| | | | | 2-HEXANONE | .02 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 11:40 |
| | | | | 4-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 11:40 |
| | | | | 4-METHYL-2-PENTANONE | .01 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 11:40 |
| | | | | ACETONE | .02 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 11:40 |
| | | | | BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 11:40 |
| | | | | BROMOBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 11:40 |
| | | | | BROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 11:40 |
| | | | | BROMODICHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 11:40 |
| | | | | BROMOFORM | .005 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 11:40 |
| | | | | BROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 11:40 |
| | | | | CARBON DISULFIDE | .005 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 11:40 |
| | | | | CARBON TETRACHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 11:40 |
| | | | | CHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 11:40 |
| | | | | CHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 11:40 |
| | | | | CHLOROFORM | .005 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 11:40 |
| | | | | CHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 11:40 |
| | | | | CIS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 11:40 |
| | | | | CIS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 11:40 |
| | | | | DIBROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 11:40 |
| | | | | DIBROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 11:40 |
| | | | | DICHLORODIFLUOROMETHANE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | F010-01 | 11:40 |
| | | | | ETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 11:40 |
| | | | | HEXACHLOROBUTADIENE | .005 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 11:40 |
| | | | | ISOPROPYL BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 11:40 |
| | | | | M/P-XYLENES | .01 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 11:40 |
| | | | | METHYLENE CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 11:40 |
| | | | | N-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 11:40 |
| | | | | N-PROPYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 11:40 |
| | | | | NAPHTHALENE | .005 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 11:40 |
| | | | | O-XYLENE | .005 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 11:40 |
| | | | | P-ISOPROPYLTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 11:40 |
| | | | | SEC-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 11:40 |
| | | | | STYRENE | .005 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 11:40 |
| | | | | TERT-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 11:40 |
| | | | | TETRACHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 11:40 |
| | | | | TOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 11:40 |
| | | | | TRANS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 11:40 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | F010-01 | 11:40 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10116Q-12** | | | | | | | | | | | | | | | | |
| JL3009 | SW8260B | SW5030 | N 0 1 | TRICHLOROETHENE | .005 | mg/L | U | N Y U | U | | | | | | F010-01 | 11:40 |
| | | | | TRICHLOROFLUOROMETHANE | .005 | mg/L | U | N Y U | U | | | | | | F010-01 | 11:40 |
| | | | | VINYL CHLORIDE | .005 | mg/L | U | N Y U | U | | | | | | F010-01 | 11:40 |

***Quality Assurance Report***
***For Ranges West of Iron Mountain Road***
***Parcel HR-117Q***
***IT Project No 796887***
***Fort McClellan Quality Assurance Report***

## *1.0 Overview*

Twenty soil, 2 sediment, 2 surface water, and 9 groundwater samples were collected in support of the investigation at Fort McClellan (FTMC) Parcel HR-117Q, Ranges West of Iron Mountain Road. All samples were submitted to EMAX Laboratories, Inc. for analysis. Soil, sediment, and surface water samples were analyzed for target analyte list (TAL) metals, nitroaromatic-nitramine explosives, and perchlorate. Groundwater samples were analyzed for (TAL) metals, nitroaromatic-nitramine explosives, perchlorate, and target compound list (TCL) volatiles. QC samples consisted of the following types and quantities: 3 field duplicates, 8 trip blanks, and 10 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 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 data and validation 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 (DQO) were met, laboratory analytical results and data packages were examined for compliance with SW846 SW6010B/SW7000 Series, SW8330, SW8260B, and U.S. Environmental Protection Agency (EPA) 314.0 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 analytical holding times were met.

## *2.2 Rejected Data*

Table 2.2-1 lists all rejected analytical data for soil and aqueous samples. Sample re-collection at this time is not warranted due to all rejected results being reported as non-detect.

**Table 2.2-1 Rejected Analytical Results**

| Sample Delivery Group | Sample Number | Contaminant | Reason |
|---|---|---|---|
| 10117Q-11 | JM3003 | 1,2,3-Trichloropropane<br>1,2-Dibromo-3-chloropropane<br>2-Butanone (MEK)<br>Acetone<br>Bromochloromethane<br>Dibromomethane | Calibration Relative Response Factor (RRF) <0.05. |

## *2.3 Blank Results*

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

- Trip blanks (TBs) consist of a VOC sample vial filled in the laboratory with ASTM Type II reagent grade water, transported to the sampling site, handled like an environmental sample and returned to the laboratory for analysis. Trip blanks are prepared only when VOC samples are collected and analyzed. Trip blanks are used to assess the potential introduction of contaminants from sample containers during the transportation and/or storage procedures. Trip blanks were sent with all aqueous samples shipped to the laboratory requiring volatile analysis.

- Equipment rinsates (ER) are samples of analyte-free deionized water poured into, or 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 an analyte-free matrix which is analyzed to verify the analysis system is free of contamination. ICBs and CCBs are analyzed immediately after the initial and continuing calibration is performed.

Field sample concentrations were evaluated to determine if the sample results could have been biased by the presence of any contamination measured in trip blanks, 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 |
|---|---|---|---|
| 10117Q-01 | JM0009, JM0016, JM0018 & JM0021 | Cobalt | Cobalt results for samples JM0009, JM0016, JM0018 & JM0021 were "B" qualified. |
| | JM0009, JM0017 & JM0018 | Lead | Lead results for samples JM0009, JM0017 & JM0018 were "B" qualified. |
| 10117Q-02 | JM0006 & JM0007 | Beryllium<br>Cobalt | Beryllium and cobalt results for samples JM0006 & JM0007 were "B" qualified. |
| 10117Q-03 | JM0004 | Antimony | Antimony result for JM0004 was "B" qualified. |
| 10117Q-04 | JM1001 & JM1002 | Cobalt<br>Potassium | Cobalt and potassium results for samples JM1001 & JM1002 were "B" qualified. |
| 10117Q-06 | JM3004 | Calcium<br>Magnesium | Calcium and magnesium results for sample JM3004 were "B" qualified. |
| 10117Q-07 | JM3008 & JM3009 | Calcium | Calcium results for samples JM3008 & JM3009 were "B" qualified. |
| | JM3008 | Aluminum | Aluminum result for sample JM3008 was "B" qualified. |
| 10117Q-08 | JM3007 | Lead<br>Copper | Lead and copper results for sample JM3007 were "B" qualified. |

**Table 2.3-1 (Continued)**
**Summary of Blank Contamination**

| Sample Delivery Group | Sample Number | Contaminant | Action |
|---|---|---|---|
| 10117Q-11 | JM3003 | Copper<br>Nickel<br>Magnesium<br><br>Bromomethane | Copper, nickel and magnesium results for sample JM3003 were "B" qualified.<br><br>Bromomethane result for sample JM3003 was "B" qualified. |
| 10117Q-12 | JM3006 | Barium<br>Magnesium<br><br>Methylene chloride | Barium and magnesium results for sample JM3006 were "B" qualified.<br><br>Methylene chloride result for sample JM3006 was "B" qualified. |

## *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.

Overall sampling and analysis precision for this task was assessed using field duplicate (FD) samples. Laboratory precision was assessed by laboratory control sample/laboratory control

sample duplicate (LCS/LCSD) and matrix spike/matrix spike duplicate (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 list field duplicate, LCS/LCSD and MS/MSD RPD anomalies.

**Table 2.4-1 Precision Acceptance Criteria**

| Field/Laboratory QC Type | Matrix | |
|---|---|---|
| | Aqueous | Soil |
| Field Duplicate (Both Organic & Inorganic) | RPD < 35% | RPD < 50% |
| Perchlorate LCS/LCSD and MS/MSD | RPD < 10% | RPD < 20% |
| Nitroaromatic and Nitramine Explosives LCS/LCSD and MS/MSD | Refer to Table 8-1of FTMC "Installation Wide Sample and Analysis Plan" | Refer to Table 8-1of FTMC "Installation Wide Sample and Analysis Plan" |
| Metals LCS/LCSD and MS/MSD | RPD < 20% | 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 |
|---|---|---|---|
| 10117Q-01 | JM0017 (Parent) / JM0018 (FD) | Calcium (73%)<br>Zinc (80%) | Calcium and zinc results for samples JM0017 and JM0018 were "J" qualified due to RPD between parent sample and its corresponding field duplicate exceeding QC criteria. |
| 10117Q-02 | JM0006 (Parent) / JM0007 (FD) | Arsenic (53%) | Arsenic results for samples JM0006 and JM0007 were "J" qualified due RPD between parent sample and its corresponding field duplicate exceedinc QC criteria. |
| 10117Q-06 | EXE003WL (LCS) / EXE003WY (LCSD) | 1,3,5-Trinitrobenzene (44%)<br>1,3-Dinitrobenzene (36%)<br>2,4,6-Trinitrotoluene (38%)<br>Tetryl (50%)<br>HMX (38%) | 1,3,5-Trinitrobenzene, 1,3-Dinitrobenzene, 2,4,6-Trinitrotoluene, Tetryl and HMX results for sample JM3004 were "UJ" qualified due to LCS / LCSD RPD exceeding QC criteria. |

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

| Sample Delivery Group | Sample Number | Contaminant | Assigned Validation Qualifier |
|---|---|---|---|
| 10117Q-07 | JM3008 (Parent) / JM3009 (FD) | Aluminum (89%)<br>Iron (85%)<br>Zinc (114%) | Iron and zinc results for samples JM3008 and JM3009 were "J" qualified due to RPD between parent sample and its corresponding field duplicate exceeding QC criteria.<br><br>Aluminum result for sample JM3008 was "B" qualified due to blank contamination which takes precedence over "J" qualification due to failing RPD between parent sample and its corresponding field duplicate. |

## *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 SW846 SW6010B/SW7000 Series methodology, nitroaromatic-nitramine explosives by SW8330, perchlorate by EPA 314.0 and TCL volatiles by SW8260B. Reported results indicate that an acceptable level of analytical accuracy was achieved.

## *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. Soil sample data are being used to assess potential impacts to terrestrial biota that might use the site for food and/or habitat purposes. Monitoring

well locations where chosen to establish groundwater flow direction and site-specific geology, and provide 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-117Q Ranges West of Iron Mountain Road. 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-117Q requirement for completeness is 95% for both aqueous and soil samples. The % Completeness for this task is calculated to be 99.7%

- % Completeness = (1826 / 1832) x 100 = 99.7%.

### *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-117Q
## Ranges West of Iron Mountain Road
## Analytical Summary
## Project No. 796887

| HR-117Q Soil Sampling | | | | |
|---|---|---|---|---|
| **Sample Location** | **Sample Name** | **Sample Number** | **Date Sampled** | **Analytical Suite** |
| HR-117Q-MW01 | HR-117Q-MW01-SS-JM0001-REG | JM0001 | 31-Jan-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-117Q-MW01-DS-JM0002-REG | JM0002 | 31-Jan-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-117Q-MW02 | HR-117Q-MW02-SS-JM0003-REG | JM0003 | 05-Feb-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-117Q-MW02-DS-JM0004-REG | JM0004 | 05-Feb-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-117Q-MW03 | HR-117Q-MW03-SS-JM0005-REG | JM0005 | 31-Jan-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-117Q-MW03-DS-JM0006-REG | JM0006 | 31-Jan-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-117Q-MW03-DS-JM0007-FD | JM0007 | 31-Jan-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-117Q-MW04 | HR-117Q-MW04-SS-JM0008-REG | JM0008 | 12-Dec-00 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-117Q-MW04-DS-JM0009-REG | JM0009 | 12-Dec-00 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-117Q-MW05 | HR-117Q-MW05-SS-JM0010-REG | JM0010 | 31-Jan-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-117Q-MW05-DS-JM0011-REG | JM0011 | 31-Jan-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-117Q-MW06 | HR-117Q-MW06-SS-JM0012-REG | JM0012 | 05-Dec-00 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-117Q-MW06-DS-JM0013-REG | JM0013 | 05-Dec-00 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-117Q-MW07 | HR-117Q-MW07-SS-JM0014-REG | JM0014 | 31-Jan-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-117Q-MW07-DS-JM0015-REG | JM0015 | 31-Jan-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-117Q-MW08 | HR-117Q-MW08-SS-JM0020-REG | JM0020 | 12-Dec-00 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-117Q-MW08-DS-JM0021-REG | JM0021 | 12-Dec-00 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-117Q-GP01 | HR-117Q-GP01-SS-JM0016-REG | JM0016 | 12-Dec-00 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-117Q-GP01-DS-JM0017-REG | JM0017 | 12-Dec-00 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-117Q-GP01-DS-JM0018-FD | JM0018 | 12-Dec-00 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |

# Ft. McClellan
# Parcel HR-117Q
# Ranges West of Iron Mountain Road
# Analytical Summary
# Project No. 796887

## HR-117Q Groundwater Sampling

| Sample Location | Sample Name | Sample Number | Date Sampled | Analytical Suite |
|---|---|---|---|---|
| HR-117Q-MW01 | HR-117Q-MW01-GW-JM3001-REG | JM3001 | 15-May-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-117Q-MW02 | HR-117Q-MW02-GW-JM3002-REG | JM3002 | 30-May-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-117Q-MW03 | HR-117Q-MW03-GW-JM3003-REG | JM3003 | 06-Jun-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-117Q-MW04 | HR-117Q-MW04-GW-JM3004-REG | JM3004 | 02-May-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-117Q-MW05 | HR-117Q-MW05-GW-JM3005-REG | JM3005 | 15-May-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-117Q-MW06 | HR-117Q-MW06-GW-JM3006-REG | JM3006 | 27-Jun-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-117Q-MW07 | HR-117Q-MW07-GW-JM3007-REG | JM3007 | 11-May-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-117Q-MW08 | HR-117Q-MW08-GW-JM3008-REG | JM3008 | 07-May-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-117Q-MW08-GW-JM3009-FD | JM3009 | 07-May-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |

## HR-117Q Sediment-Surface Water Sampling

| Sample Location | Sample Name | Sample Number | Date Sampled | Analytical Suite |
|---|---|---|---|---|
| HR-117Q-SW/SD01 | HR-117Q-SW/SD01-SD-JM1001-REG | JM1001 | 28-Feb-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330, Perchlorate by EPA 314.0, TOC by SW9060 and Grain size by ASTM 421/422. |
| | HR-117Q-SW/SD01-SW-JM2001-REG | JM2001 | 28-Feb-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-117Q-SW/SD02 | HR-117Q-SW/SD02-SD-JM1002-REG | JM1002 | 28-Feb-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330, Perchlorate by EPA 314.0, TOC by SW9060 and Grain size by ASTM 421/422. |
| | HR-117Q-SW/SD02-SW-JM2002-REG | JM2002 | 28-Feb-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |

# ATTACHMENT B

# DATA VALIDATION SUMMARY REPORT

***Data Validation Summary Report***
***for the Site Investigation Performed at the***
***Ranges West of Iron Mountain (Parcel 117Q)***
***Fort McCellan***

## *1.0 Introduction*

Level III data validation was performed on 100% of the environmental samples collected at Parcel HR-117Q. The analytical data consisted of twelve sample delivery groups (SDG) 10117Q-01, -02, -03, -04, -05, -06, -07, -08, -09, -10, -11, and -12, 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 |
| Nitroaromatics and Nitramines Explosives by SW846 8330 |
| Perchlorate by EPA 314.0 and TOC by SW846 9060 |
| Volatiles by SW846 8260B |

## *2.0 Procedures*

The sample data were validated following the logic identified in the *USEPA Contract Laboratory Program (CLP) National Functional Guidelines For Inorganic Data Review (February 1994)* and *USEPA Contract Laboratory Program National Functional Guidelines For Organic Review (October 1999)* for all areas except Blanks. *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's) were applied to all sample results. As the result of the use of Update III SW846 test methods for the analytical data and the application of the 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 Chromatograph (GC) and Gas Chromatograph/Mass Spectra (GC/MS) calibration areas and is due to the fact that the analytical methods are "performance-based", and allows 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, CFR, SOP's, QAP) 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 qualification. The only rejected data ("R" qualified) was due to "poor performing" volatile compounds (Ketones, some halogenated hydrocarbons, etc.), which experienced poor calibration responses in the associated calibration data, and samples that were reanalyzed and have more than one results reported. The "R" qualifier was assigned to the samples with more than one set of results to indicate that a given result should not be use to characterize a particular constituent or an analysis for a given sample.

Individual validation reports have been prepared for each parameter in each SDG 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 Parcel HR-117Q. 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*

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:

<u>Holding Times</u>

Technical holding time criteria were met for all samples.

<u>Initial and Continuing calibrations</u>

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

<u>Blanks</u>

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 exceptions noted below:

Note: 'B' Qualifiers were applied to all of the following sample results.

| SDG | Samples Affected | Element/Elements | Associated Blank Contamination |
|---|---|---|---|
| 10117Q-01 | JM0009, JM0016, JM0018, JM0021 | Cobalt | Method/Calibration |
| | JM0009, JM0017, JM0018 | Lead | Method |
| 10117Q-02 | JM0006, JM0007 | Beryllium, Cobalt | Calibration |
| 10117Q-03 | JM0004 | Antimony | Calibration |
| 10117Q-04 | JM1001, JM1002 | Cobalt, Potassium | Calibration |
| 10117Q-06 | JM3004 | Calcium, Magnesium | Calibration/ER |
| 10117Q-07 | JM3008, JM3009 | Calcium | Calibration |
| | JM3008 | Aluminum | Calibration |
| 10117Q-08 | JM3007 | Lead, Copper | Method/Calibration |
| 10117Q-11 | JM3003 | Copper, Nickel, Magnesium | Calibration/ER |
| 10117Q-12 | JM3006 | Barium, Magnesium | Calibration |

Matrix Spike / Matrix Spike Duplicate

Batch QC was performed for the project samples and all QC criteria were met.

Laboratory Control Sample (LCS)

All QC criteria were met for the LCS associated with the project sample analyses.

Interference Check Sample (ICS)

All ICS % recoveries for the project samples were acceptable.

ICP Serial Dilutions

All QC criteria were met for the serial dilutions associated with the project samples.

Field Duplicates

Field duplicates were performed for the project samples and all QC criteria were met with the exception of the following:

| SDG | Samples Affected | Analyte/Analytes | Validation Qualifier |
|---|---|---|---|
| 10117Q-01 | JM0017 (original), JM0018 (duplicate) | Calcium, Zinc | J |
| 10117Q-02 | JM0006 (original), JM0007 (duplicate) | Arsenic | J |
| 10117Q-07 | JM3008 (original), JM3009 (duplicate) | Aluminum, Iron, Zinc | J/B |

Sample Quantitation

Results quantified between the IDL and the RL ("J" flagged by the laboratory) were qualified as estimated (J).

### *4.2 Nitroaromatics and Nitramines 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 are within acceptable QC ranges for the surrogates applied.

Matrix Spike / Matrix Spike Duplicate

Batch QC was performed for the project samples and all QC criteria were met.

Laboratory Control Sample (LCS)

LCS was performed for the project samples and all QC criteria were met with the exception of the following:

| SDG | Samples Affected | Analyte/Analytes | Validation Qualifier |
|---|---|---|---|
| 10117Q-06 | JM3004 | 1,3,5-Trinitrobenzene, 1,3-Dinitrobenzene, 2,4,6-Trinitrotoluene, Tetryl, HMX | UJ |

Field Duplicates

Field duplicates were performed for the project samples and all QC criteria were met.

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.

### *4.3 Perchlorate by EPA 314.0 and TOC 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

Batch QC was performed for the project samples and all QC criteria were met.

Laboratory Control Sample (LCS)

All QC criteria were met for the LCS associated with the project sample analyses.

Field Duplicates

Field duplicates were performed for the project samples and all QC criteria were met.

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.

### *4.4 Volatile Organics by GC/MS SW846 8260B*

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 Calibration

The initial calibration and continuing calibrations associated with the project samples met QC criteria, with the exception of the following:

- The following exhibited individual RRF < 0.1:

| SDG Number | Samples Affected | Compound(s) | Validation Qualifier |
|---|---|---|---|
| 10117Q-11 | JM3003 | 1,2,3-Trichloropropane, 1,2-Dibromo-3-chloropropane, 2-Butanone, Acetone, Bromochloromethane, Dibromomethane | R |

- The following exhibited individual CCAL %D's > 20%:

| SDG Number | Samples Affected | Compound(s) | Validation Qualifier |
|---|---|---|---|
| 10117Q-06 | JM3004 | 2-Hexanone, 4-Methyl-2-pentanone, Bromomethane, Carbon disulfide, Dichlorodifluoromethane, Naphthalene | UJ |
| 10117Q-07 | JM3008, JM3009 | Bromomethane, Chloroethane | UJ |
| 10117Q-08 | JM3007 | Dichlorodifluoromethane | UJ |
| 10117Q-09 | JM3001, JM3005 | Dichlorodifluoromethane | UJ |
| 10117Q-10 | JM3002 | 2-Butanone, Dichlorodifluoromethane | UJ |
| 10117Q-12 | JM3006 | 1,2-Dichloroethane, Acetone, Carbon disulfide, Dibromochloromethane, Naphthalene, sec-Dichloropropane | UJ |

Blanks

The 5X/10X rule for contaminants found in the associated equipment rinses, trip blanks, and method blanks was applied to all sample results. All were found to be acceptable with the exception of the following:

Note: 'B' Qualifiers were applied to all of the following sample results.

| SDG | Samples Affected | Compound(s) | Associated Blank Contamination |
|---|---|---|---|
| 10117Q-11 | JM3003 | Bromomethane | Method/ER |
| 10117Q-12 | JM3006 | Methylene chloride | Method/TB |

Surrogate Recoveries

All surrogate recoveries are within acceptable QC limits.

Matrix Spike / Matrix Spike Duplicate

No MS/MSD were performed for the project samples.

Laboratory Control Sample (LCS)

LCS 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.

Internal Standards

All internal standards met QC criteria

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.

## *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 "nondetect" may be inaccurate or imprecise. The nondetect result should be estimated.

## Validation Reason Code Definitions

| Reason Code | Definition |
|---|---|
| 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

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10117Q-01** | | | | | | | | | | | | | | | | | | |
| JM0008 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 6760 | mg/kg | | Y | Y | P | | | | | | | L147-01 | 00:27 |
| | | | | ANTIMONY | 11.1 | mg/kg | U | N | Y | U | U | | | | | | L147-01 | 00:27 |
| | | | | ARSENIC | 1.5 | mg/kg | | Y | Y | P | | | | | | | L147-01 | 21:22 |
| | | | | BARIUM | 6.56 | mg/kg | | Y | Y | P | | | | | | | L147-01 | 00:27 |
| | | | | BERYLLIUM | .0438 | mg/kg | J | Y | Y | P | J | | 15 | | | | L147-01 | 00:27 |
| | | | | CADMIUM | .557 | mg/kg | U | N | Y | U | U | | | | | | L147-01 | 00:27 |
| | | | | CALCIUM | 74.4 | mg/kg | J | Y | Y | P | J | | 15 | | | | L147-01 | 00:27 |
| | | | | CHROMIUM | 9.48 | mg/kg | | Y | Y | P | | | | | | | L147-01 | 00:27 |
| | | | | COBALT | 2.23 | mg/kg | U | N | Y | U | U | | | | | | L147-01 | 00:27 |
| | | | | COPPER | 2.44 | mg/kg | | Y | Y | P | | | | | | | L147-01 | 00:27 |
| | | | | IRON | 8000 | mg/kg | | Y | Y | P | | | | | | | L147-01 | 00:27 |
| | | | | LEAD | 2.75 | mg/kg | | Y | Y | P | | | | | | | L147-01 | 21:22 |
| | | | | MAGNESIUM | 86.2 | mg/kg | J | Y | Y | P | J | | 15 | | | | L147-01 | 00:27 |
| | | | | MANGANESE | 10.1 | mg/kg | | Y | Y | P | | | | | | | L147-01 | 00:27 |
| | | | | NICKEL | 2.23 | mg/kg | U | N | Y | U | U | | | | | | L147-01 | 00:27 |
| | | | | POTASSIUM | 557 | mg/kg | U | N | Y | U | U | | | | | | L147-01 | 00:27 |
| | | | | SELENIUM | 1.11 | mg/kg | U | N | Y | U | U | | | | | | L147-01 | 21:22 |
| | | | | SILVER | 1.11 | mg/kg | U | N | Y | U | U | | | | | | L147-01 | 00:27 |
| | | | | SODIUM | 111 | mg/kg | U | N | Y | U | U | | | | | | L147-01 | 00:27 |
| | | | | THALLIUM | .677 | mg/kg | J | Y | Y | P | J | | 15 | | | | L147-01 | 21:22 |
| | | | | VANADIUM | 16.5 | mg/kg | | Y | Y | P | | | | | | | L147-01 | 00:27 |
| | | | | ZINC | 4.71 | mg/kg | | Y | Y | P | | | | | | | L147-01 | 00:27 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .036 | mg/kg | J | Y | Y | P | J | | 15 | | | | L147-01 | 15:22 |
| JM0009 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 2180 | mg/kg | | Y | Y | P | | | | | | | L147-02 | 00:32 |
| | | | | ANTIMONY | 11.5 | mg/kg | U | N | Y | U | U | | | | | | L147-02 | 00:32 |
| | | | | ARSENIC | .46 | mg/kg | J | Y | Y | P | J | | 15 | | | | L147-02 | 21:27 |
| | | | | BARIUM | 2.1 | mg/kg | | Y | Y | P | | | | | | | L147-02 | 00:32 |
| | | | | BERYLLIUM | .0929 | mg/kg | J | Y | Y | P | J | | 15 | | | | L147-02 | 00:32 |
| | | | | CADMIUM | .577 | mg/kg | U | N | Y | U | U | | | | | | L147-02 | 00:32 |
| | | | | CALCIUM | 36.1 | mg/kg | J | Y | Y | P | J | | 15 | | | | L147-02 | 00:32 |
| | | | | CHROMIUM | 19 | mg/kg | | Y | Y | P | | | | | | | L147-02 | 00:32 |
| | | | | COBALT | .443 | mg/kg | J | Y | Y | F | B | | 06B | | | | L147-02 | 00:32 |
| | | | | COPPER | 1.62 | mg/kg | J | Y | Y | P | J | | 15 | | | | L147-02 | 00:32 |
| | | | | IRON | 13000 | mg/kg | | Y | Y | P | | | | | | | L147-02 | 00:32 |
| | | | | LEAD | 1.29 | mg/kg | | Y | Y | F | B | | 06A | | | | L147-02 | 21:27 |
| | | | | MAGNESIUM | 16.3 | mg/kg | J | Y | Y | P | J | | 15 | | | | L147-02 | 00:32 |
| | | | | MANGANESE | .733 | mg/kg | J | Y | Y | P | J | | 15 | | | | L147-02 | 00:32 |
| | | | | NICKEL | 2.31 | mg/kg | U | N | Y | U | U | | | | | | L147-02 | 00:32 |
| | | | | POTASSIUM | 577 | mg/kg | U | N | Y | U | U | | | | | | L147-02 | 00:32 |
| | | | | SELENIUM | 1.15 | mg/kg | U | N | Y | U | U | | | | | | L147-02 | 21:27 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10117Q-01** | | | | | | | | | | | | | | | | | | |
| JM0009 | SW6010B | SW3050 | N 0 1 | SILVER | 1.15 | mg/kg | U | N | Y | U | U | | | | | | L147-02 | 00:32 |
| | | | | SODIUM | 115 | mg/kg | U | N | Y | U | U | | | | | | L147-02 | 00:32 |
| | | | | THALLIUM | 2.31 | mg/kg | U | N | Y | U | U | | | | | | L147-02 | 21:27 |
| | | | | VANADIUM | 33.1 | mg/kg | | Y | Y | P | | | | | | | L147-02 | 00:32 |
| | | | | ZINC | 2.85 | mg/kg | | Y | Y | P | | | | | | | L147-02 | 00:32 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .115 | mg/kg | U | N | Y | U | U | | | | | | L147-02 | 15:32 |
| JM0016 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 3920 | mg/kg | | Y | Y | P | | | | | | | L147-03 | 00:48 |
| | | | | ANTIMONY | 11.1 | mg/kg | U | N | Y | U | U | | | | | | L147-03 | 00:48 |
| | | | | ARSENIC | .787 | mg/kg | J | Y | Y | P | J | | 15 | | | | L147-03 | 21:42 |
| | | | | BARIUM | 12.6 | mg/kg | | Y | Y | P | | | | | | | L147-03 | 00:48 |
| | | | | BERYLLIUM | .0883 | mg/kg | J | Y | Y | P | J | | 15 | | | | L147-03 | 00:48 |
| | | | | CADMIUM | .557 | mg/kg | U | N | Y | U | U | | | | | | L147-03 | 00:48 |
| | | | | CALCIUM | 76.6 | mg/kg | J | Y | Y | P | J | | 15 | | | | L147-03 | 00:48 |
| | | | | CHROMIUM | 4.1 | mg/kg | | Y | Y | P | | | | | | | L147-03 | 00:48 |
| | | | | COBALT | .657 | mg/kg | J | Y | Y | F | B | | 06A | 06B | | | L147-03 | 00:48 |
| | | | | COPPER | 1.55 | mg/kg | J | Y | Y | P | J | | 15 | | | | L147-03 | 00:48 |
| | | | | IRON | 3330 | mg/kg | | Y | Y | P | | | | | | | L147-03 | 00:48 |
| | | | | LEAD | 5.95 | mg/kg | | Y | Y | P | | | | | | | L147-03 | 21:42 |
| | | | | MAGNESIUM | 81.8 | mg/kg | J | Y | Y | P | J | | 15 | | | | L147-03 | 00:48 |
| | | | | MANGANESE | 17.6 | mg/kg | | Y | Y | P | | | | | | | L147-03 | 00:48 |
| | | | | NICKEL | 2.23 | mg/kg | U | N | Y | U | U | | | | | | L147-03 | 00:48 |
| | | | | POTASSIUM | 557 | mg/kg | U | N | Y | U | U | | | | | | L147-03 | 00:48 |
| | | | | SELENIUM | .652 | mg/kg | J | Y | Y | P | J | | 15 | | | | L147-03 | 21:42 |
| | | | | SILVER | 1.11 | mg/kg | U | N | Y | U | U | | | | | | L147-03 | 00:48 |
| | | | | SODIUM | 111 | mg/kg | U | N | Y | U | U | | | | | | L147-03 | 00:48 |
| | | | | THALLIUM | 2.23 | mg/kg | U | N | Y | U | U | | | | | | L147-03 | 21:42 |
| | | | | VANADIUM | 7.12 | mg/kg | | Y | Y | P | | | | | | | L147-03 | 00:48 |
| | | | | ZINC | 9.58 | mg/kg | | Y | Y | P | | | | | | | L147-03 | 00:48 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .033 | mg/kg | J | Y | Y | P | J | | 15 | | | | L147-03 | 15:35 |
| JM0017 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 1280 | mg/kg | | Y | Y | P | | | | | | | L147-04 | 00:53 |
| | | | | ANTIMONY | 10.6 | mg/kg | U | N | Y | U | U | | | | | | L147-04 | 00:53 |
| | | | | ARSENIC | .38 | mg/kg | J | Y | Y | P | J | | 15 | | | | L147-04 | 21:47 |
| | | | | BARIUM | 1.05 | mg/kg | J | Y | Y | P | J | | 15 | | | | L147-04 | 00:53 |
| | | | | BERYLLIUM | 1.06 | mg/kg | U | N | Y | U | U | | | | | | L147-04 | 00:53 |
| | | | | CADMIUM | .53 | mg/kg | U | N | Y | U | U | | | | | | L147-04 | 00:53 |
| | | | | CALCIUM | 43.6 | mg/kg | J | Y | Y | P | J | | 17 | 15 | | | L147-04 | 00:53 |
| | | | | CHROMIUM | 3.55 | mg/kg | | Y | Y | P | | | | | | | L147-04 | 00:53 |
| | | | | COBALT | 2.12 | mg/kg | U | N | Y | U | U | | | | | | L147-04 | 00:53 |
| | | | | COPPER | 2.12 | mg/kg | U | N | Y | U | U | | | | | | L147-04 | 00:53 |
| | | | | IRON | 2240 | mg/kg | | Y | Y | P | | | | | | | L147-04 | 00:53 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10117Q-01** | | | | | | | | | | | | | | | | | | |
| JM0017 | SW6010B | SW3050 | N 0 1 | LEAD | .962 | mg/kg | J | Y | Y | F | B | | 06A | | | | L147-04 | 21:47 |
| | | | | MAGNESIUM | 15.7 | mg/kg | J | Y | Y | P | J | | 15 | | | | L147-04 | 00:53 |
| | | | | MANGANESE | 1.03 | mg/kg | J | Y | Y | P | J | | 15 | | | | L147-04 | 00:53 |
| | | | | NICKEL | 2.12 | mg/kg | U | N | Y | U | U | | | | | | L147-04 | 00:53 |
| | | | | POTASSIUM | 530 | mg/kg | U | N | Y | U | U | | | | | | L147-04 | 00:53 |
| | | | | SELENIUM | 1.06 | mg/kg | U | N | Y | U | U | | | | | | L147-04 | 21:47 |
| | | | | SILVER | 1.06 | mg/kg | U | N | Y | U | U | | | | | | L147-04 | 00:53 |
| | | | | SODIUM | 106 | mg/kg | U | N | Y | U | U | | | | | | L147-04 | 00:53 |
| | | | | THALLIUM | 2.12 | mg/kg | U | N | Y | U | U | | | | | | L147-04 | 21:47 |
| | | | | VANADIUM | 5.81 | mg/kg | | Y | Y | P | | | | | | | L147-04 | 00:53 |
| | | | | ZINC | 2.37 | mg/kg | | Y | Y | P | J | | 17 | | | | L147-04 | 00:53 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .106 | mg/kg | U | N | Y | U | U | | | | | | L147-04 | 15:45 |
| JM0018 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 1350 | mg/kg | | Y | Y | | | | | | | | L147-05 | 00:58 |
| | | | | ANTIMONY | 10.6 | mg/kg | U | N | Y | | U | | | | | | L147-05 | 00:58 |
| | | | | ARSENIC | .372 | mg/kg | J | Y | Y | | J | | 15 | | | | L147-05 | 21:52 |
| | | | | BARIUM | 1.09 | mg/kg | | Y | Y | | | | | | | | L147-05 | 00:58 |
| | | | | BERYLLIUM | .0202 | mg/kg | J | Y | Y | | J | | 15 | | | | L147-05 | 00:58 |
| | | | | CADMIUM | .529 | mg/kg | U | N | Y | | U | | | | | | L147-05 | 00:58 |
| | | | | CALCIUM | 20.2 | mg/kg | J | Y | Y | | J | | 15 | 17 | | | L147-05 | 00:58 |
| | | | | CHROMIUM | 3.81 | mg/kg | | Y | Y | | | | | | | | L147-05 | 00:58 |
| | | | | COBALT | .358 | mg/kg | J | Y | Y | F | B | | 06A | 06B | | | L147-05 | 00:58 |
| | | | | COPPER | 2.12 | mg/kg | U | N | Y | | U | | | | | | L147-05 | 00:58 |
| | | | | IRON | 2410 | mg/kg | | Y | Y | | | | | | | | L147-05 | 00:58 |
| | | | | LEAD | .964 | mg/kg | J | Y | Y | F | B | | 06A | | | | L147-05 | 21:52 |
| | | | | MAGNESIUM | 17.5 | mg/kg | J | Y | Y | | J | | 15 | | | | L147-05 | 00:58 |
| | | | | MANGANESE | 1.2 | mg/kg | | Y | Y | | | | | | | | L147-05 | 00:58 |
| | | | | NICKEL | 2.12 | mg/kg | U | N | Y | | U | | | | | | L147-05 | 00:58 |
| | | | | POTASSIUM | 529 | mg/kg | U | N | Y | | U | | | | | | L147-05 | 00:58 |
| | | | | SELENIUM | 1.06 | mg/kg | U | N | Y | | U | | | | | | L147-05 | 21:52 |
| | | | | SILVER | 1.06 | mg/kg | U | N | Y | | U | | | | | | L147-05 | 00:58 |
| | | | | SODIUM | 106 | mg/kg | U | N | Y | | U | | | | | | L147-05 | 00:58 |
| | | | | THALLIUM | 2.12 | mg/kg | U | N | Y | | U | | | | | | L147-05 | 21:52 |
| | | | | VANADIUM | 6.33 | mg/kg | | Y | Y | | | | | | | | L147-05 | 00:58 |
| | | | | ZINC | 1.02 | mg/kg | J | Y | Y | | J | | 15 | 17 | | | L147-05 | 00:58 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .106 | mg/kg | U | N | Y | | U | | | | | | L147-05 | 15:47 |
| JM0020 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 14300 | mg/kg | | Y | Y | P | | | | | | | L147-06 | 01:03 |
| | | | | ANTIMONY | 11.9 | mg/kg | U | N | Y | U | U | | | | | | L147-06 | 01:03 |
| | | | | ARSENIC | 2.55 | mg/kg | | Y | Y | P | | | | | | | L147-06 | 21:57 |
| | | | | BARIUM | 74.7 | mg/kg | | Y | Y | P | | | | | | | L147-06 | 01:03 |
| | | | | BERYLLIUM | .799 | mg/kg | J | Y | Y | P | J | | 15 | | | | L147-06 | 01:03 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10117Q-01** | | | | | | | | | | | | | | | | | | |
| JM0020 | SW6010B | SW3050 | N 0 1 | CADMIUM | .596 | mg/kg | U | N | Y | U | U | | | | | | L147-06 | 01:03 |
| | | | | CALCIUM | 164 | mg/kg | | Y | Y | P | | | | | | | L147-06 | 01:03 |
| | | | | CHROMIUM | 7.92 | mg/kg | | Y | Y | P | | | | | | | L147-06 | 01:03 |
| | | | | COBALT | 7.34 | mg/kg | | Y | Y | P | | | | | | | L147-06 | 01:03 |
| | | | | COPPER | 4.6 | mg/kg | | Y | Y | P | | | | | | | L147-06 | 01:03 |
| | | | | IRON | 7650 | mg/kg | | Y | Y | P | | | | | | | L147-06 | 01:03 |
| | | | | LEAD | 29.2 | mg/kg | | Y | Y | P | | | | | | | L147-06 | 21:57 |
| | | | | MAGNESIUM | 386 | mg/kg | | Y | Y | P | | | | | | | L147-06 | 01:03 |
| | | | | MANGANESE | 562 | mg/kg | | Y | Y | P | | | | | | | L147-06 | 01:03 |
| | | | | NICKEL | 5.6 | mg/kg | | Y | Y | P | | | | | | | L147-06 | 01:03 |
| | | | | POTASSIUM | 150 | mg/kg | J | Y | Y | P | J | | 15 | | | | L147-06 | 01:03 |
| | | | | SELENIUM | 1.19 | mg/kg | U | N | Y | U | U | | | | | | L147-06 | 21:57 |
| | | | | SILVER | 1.19 | mg/kg | U | N | Y | U | U | | | | | | L147-06 | 01:03 |
| | | | | SODIUM | 119 | mg/kg | U | N | Y | U | U | | | | | | L147-06 | 01:03 |
| | | | | THALLIUM | 2.38 | mg/kg | U | N | Y | U | U | | | | | | L147-06 | 21:57 |
| | | | | VANADIUM | 13.9 | mg/kg | | Y | Y | P | | | | | | | L147-06 | 01:03 |
| | | | | ZINC | 23.6 | mg/kg | | Y | Y | P | | | | | | | L147-06 | 01:03 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .059 | mg/kg | J | Y | Y | P | J | | 15 | | | | L147-06 | 15:50 |
| JM0021 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 11400 | mg/kg | | Y | Y | P | | | | | | | L147-07 | 01:08 |
| | | | | ANTIMONY | 4.15 | mg/kg | J | Y | Y | P | J | | 15 | | | | L147-07 | 01:08 |
| | | | | ARSENIC | 2.92 | mg/kg | | Y | Y | P | | | | | | | L147-07 | 22:02 |
| | | | | BARIUM | 18.5 | mg/kg | | Y | Y | P | | | | | | | L147-07 | 01:08 |
| | | | | BERYLLIUM | .18 | mg/kg | J | Y | Y | P | J | | 15 | | | | L147-07 | 01:08 |
| | | | | CADMIUM | .553 | mg/kg | U | N | Y | U | U | | | | | | L147-07 | 01:08 |
| | | | | CALCIUM | 46.3 | mg/kg | J | Y | Y | P | J | | 15 | | | | L147-07 | 01:08 |
| | | | | CHROMIUM | 18 | mg/kg | | Y | Y | P | | | | | | | L147-07 | 01:08 |
| | | | | COBALT | 1.17 | mg/kg | J | Y | Y | F | B | | 06A | 06B | | | L147-07 | 01:08 |
| | | | | COPPER | 3.34 | mg/kg | | Y | Y | P | | | | | | | L147-07 | 01:08 |
| | | | | IRON | 13600 | mg/kg | | Y | Y | P | | | | | | | L147-07 | 01:08 |
| | | | | LEAD | 5.88 | mg/kg | | Y | Y | P | | | | | | | L147-07 | 22:02 |
| | | | | MAGNESIUM | 291 | mg/kg | | Y | Y | P | | | | | | | L147-07 | 01:08 |
| | | | | MANGANESE | 56 | mg/kg | | Y | Y | P | | | | | | | L147-07 | 01:08 |
| | | | | NICKEL | 2.67 | mg/kg | | Y | Y | P | | | | | | | L147-07 | 01:08 |
| | | | | POTASSIUM | 387 | mg/kg | J | Y | Y | P | J | | 15 | | | | L147-07 | 01:08 |
| | | | | SELENIUM | .682 | mg/kg | J | Y | Y | P | J | | 15 | | | | L147-07 | 22:02 |
| | | | | SILVER | 1.11 | mg/kg | U | N | Y | U | U | | | | | | L147-07 | 01:08 |
| | | | | SODIUM | 111 | mg/kg | U | N | Y | U | U | | | | | | L147-07 | 01:08 |
| | | | | THALLIUM | .729 | mg/kg | J | Y | Y | P | J | | 15 | | | | L147-07 | 22:02 |
| | | | | VANADIUM | 21.1 | mg/kg | | Y | Y | P | | | | | | | L147-07 | 01:08 |
| | | | | ZINC | 8.77 | mg/kg | | Y | Y | P | | | | | | | L147-07 | 01:08 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10117Q-01** | | | | | | | | | | | | | | | | | | | | |
| JM0021 | SW7471A | TOTAL | N | 0 | 1 | MERCURY | .049 | mg/kg | J | Y | Y | P | J | | 15 | | | | L147-07 | 15:53 |
| JM0008 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-01 | 04:29 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-01 | 04:29 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-01 | 04:29 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-01 | 04:29 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-01 | 04:29 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-01 | 04:29 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-01 | 04:29 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-01 | 04:29 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-01 | 04:29 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-01 | 04:29 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-01 | 04:29 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-01 | 04:29 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-01 | 04:29 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-01 | 04:29 |
| JM0009 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-02 | 05:10 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-02 | 05:10 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-02 | 05:10 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-02 | 05:10 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-02 | 05:10 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-02 | 05:10 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-02 | 05:10 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-02 | 05:10 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-02 | 05:10 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-02 | 05:10 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-02 | 05:10 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-02 | 05:10 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-02 | 05:10 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-02 | 05:10 |
| JM0016 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-03 | 05:50 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-03 | 05:50 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-03 | 05:50 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-03 | 05:50 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-03 | 05:50 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-03 | 05:50 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-03 | 05:50 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-03 | 05:50 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-03 | 05:50 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-03 | 05:50 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-03 | 05:50 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10117Q-01** | | | | | | | | | | | | | | | | | | |
| JM0016 | SW8330 | METHOD | N 0 1 | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-03 | 05:50 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-03 | 05:50 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-03 | 05:50 |
| JM0017 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-04 | 07:51 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-04 | 07:51 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-04 | 07:51 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-04 | 07:51 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-04 | 07:51 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-04 | 07:51 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-04 | 07:51 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-04 | 07:51 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-04 | 07:51 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-04 | 07:51 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-04 | 07:51 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-04 | 07:51 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-04 | 07:51 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-04 | 07:51 |
| JM0018 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | | U | | | | | | L147-05 | 14:23 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | | U | | | | | | L147-05 | 14:23 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | | U | | | | | | L147-05 | 14:23 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | | U | | | | | | L147-05 | 14:23 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | | U | | | | | | L147-05 | 14:23 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | | U | | | | | | L147-05 | 14:23 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | | U | | | | | | L147-05 | 14:23 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | | U | | | | | | L147-05 | 14:23 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | | U | | | | | | L147-05 | 14:23 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | | U | | | | | | L147-05 | 14:23 |
| | | | | HMX | .4 | mg/kg | U | N | Y | | U | | | | | | L147-05 | 14:23 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | | U | | | | | | L147-05 | 14:23 |
| | | | | RDX | .4 | mg/kg | U | N | Y | | U | | | | | | L147-05 | 14:23 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | | U | | | | | | L147-05 | 14:23 |
| JM0020 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-06 | 15:04 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-06 | 15:04 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-06 | 15:04 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-06 | 15:04 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-06 | 15:04 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-06 | 15:04 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-06 | 15:04 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-06 | 15:04 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-06 | 15:04 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10117Q-01** | | | | | | | | | | | | | | | | | | | | |
| JM0020 | SW8330 | METHOD | N | 0 | 1 | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-06 | 15:04 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-06 | 15:04 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-06 | 15:04 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-06 | 15:04 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-06 | 15:04 |
| JM0021 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-07 | 15:44 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-07 | 15:44 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-07 | 15:44 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-07 | 15:44 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-07 | 15:44 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-07 | 15:44 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-07 | 15:44 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-07 | 15:44 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-07 | 15:44 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-07 | 15:44 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-07 | 15:44 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-07 | 15:44 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-07 | 15:44 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | L147-07 | 15:44 |
| JM0008 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0557 | mg/kg | U | N | Y | U | U | | | | | | L147-01 | 20:26 |
| JM0009 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0577 | mg/kg | U | N | Y | U | U | | | | | | L147-02 | 22:08 |
| JM0016 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0557 | mg/kg | U | N | Y | U | U | | | | | | L147-03 | 22:26 |
| JM0017 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .053 | mg/kg | U | N | Y | U | U | | | | | | L147-04 | 22:43 |
| JM0018 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0529 | mg/kg | U | N | Y | | U | | | | | | L147-05 | 23:00 |
| JM0020 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0596 | mg/kg | U | N | Y | U | U | | | | | | L147-06 | 23:17 |
| JM0021 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0553 | mg/kg | U | N | Y | U | U | | | | | | L147-07 | 23:34 |
| **10117Q-02** | | | | | | | | | | | | | | | | | | | | |
| JM0001 | SW6010B | SW3050 | N | 0 | 1 | ALUMINUM | 10400 | mg/kg | | Y | Y | P | | | | | | | B007-01 | 20:23 |
| | | | | | | ANTIMONY | 13 | mg/kg | U | N | Y | U | U | | | | | | B007-01 | 20:23 |
| | | | | | | ARSENIC | 3.39 | mg/kg | | Y | Y | P | | | | | | | B007-01 | 16:24 |
| | | | | | | BARIUM | 54 | mg/kg | | Y | Y | P | | | | | | | B007-01 | 20:23 |
| | | | | | | BERYLLIUM | .863 | mg/kg | J | Y | Y | P | J | | 15 | | | | B007-01 | 20:23 |
| | | | | | | CADMIUM | .649 | mg/kg | U | N | Y | U | U | | | | | | B007-01 | 20:23 |
| | | | | | | CALCIUM | 116 | mg/kg | J | Y | Y | P | J | | 15 | | | | B007-01 | 20:23 |
| | | | | | | CHROMIUM | 14.1 | mg/kg | | Y | Y | P | | | | | | | B007-01 | 20:23 |
| | | | | | | COBALT | 5.31 | mg/kg | | Y | Y | P | | | | | | | B007-01 | 20:23 |
| | | | | | | COPPER | 5.58 | mg/kg | | Y | Y | P | | | | | | | B007-01 | 20:23 |
| | | | | | | IRON | 9600 | mg/kg | | Y | Y | P | | | | | | | B007-01 | 20:23 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10117Q-02** | | | | | | | | | | | | | | | | | | |
| JM0001 | SW6010B | SW3050 | N 0 1 | LEAD | 28.4 | mg/kg | | Y | Y | P | | | | | | | B007-01 | 16:24 |
| | | | | MAGNESIUM | 237 | mg/kg | | Y | Y | P | | | | | | | B007-01 | 20:23 |
| | | | | MANGANESE | 424 | mg/kg | | Y | Y | P | | | | | | | B007-01 | 20:23 |
| | | | | NICKEL | 3.58 | mg/kg | | Y | Y | P | | | | | | | B007-01 | 20:23 |
| | | | | POTASSIUM | 214 | mg/kg | J | Y | Y | P | J | | 15 | | | | B007-01 | 20:23 |
| | | | | SELENIUM | 1.3 | mg/kg | U | N | Y | U | U | | | | | | B007-01 | 16:24 |
| | | | | SILVER | 1.3 | mg/kg | U | N | Y | U | U | | | | | | B007-01 | 20:23 |
| | | | | SODIUM | 130 | mg/kg | U | N | Y | U | U | | | | | | B007-01 | 20:23 |
| | | | | THALLIUM | 2.59 | mg/kg | U | N | Y | U | U | | | | | | B007-01 | 16:24 |
| | | | | VANADIUM | 18.9 | mg/kg | | Y | Y | P | | | | | | | B007-01 | 20:23 |
| | | | | ZINC | 17.5 | mg/kg | | Y | Y | P | | | | | | | B007-01 | 20:23 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .031 | mg/kg | J | Y | Y | P | J | | 15 | | | | B007-01 | 13:47 |
| JM0002 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 4450 | mg/kg | | Y | Y | P | | | | | | | B007-02 | 20:43 |
| | | | | ANTIMONY | 11.4 | mg/kg | U | N | Y | U | U | | | | | | B007-02 | 20:43 |
| | | | | ARSENIC | 1.62 | mg/kg | | Y | Y | P | | | | | | | B007-02 | 16:28 |
| | | | | BARIUM | 17.4 | mg/kg | | Y | Y | P | | | | | | | B007-02 | 20:43 |
| | | | | BERYLLIUM | .167 | mg/kg | J | Y | Y | P | J | | 15 | | | | B007-02 | 20:43 |
| | | | | CADMIUM | .569 | mg/kg | U | N | Y | U | U | | | | | | B007-02 | 20:43 |
| | | | | CALCIUM | 27.7 | mg/kg | J | Y | Y | P | J | | 15 | | | | B007-02 | 20:43 |
| | | | | CHROMIUM | 9.99 | mg/kg | | Y | Y | P | | | | | | | B007-02 | 20:43 |
| | | | | COBALT | 2.31 | mg/kg | | Y | Y | P | | | | | | | B007-02 | 20:43 |
| | | | | COPPER | 2.67 | mg/kg | | Y | Y | P | | | | | | | B007-02 | 20:43 |
| | | | | IRON | 9470 | mg/kg | | Y | Y | P | | | | | | | B007-02 | 20:43 |
| | | | | LEAD | 4.35 | mg/kg | | Y | Y | P | | | | | | | B007-02 | 16:28 |
| | | | | MAGNESIUM | 113 | mg/kg | J | Y | Y | P | J | | 15 | | | | B007-02 | 20:43 |
| | | | | MANGANESE | 132 | mg/kg | | Y | Y | P | | | | | | | B007-02 | 20:43 |
| | | | | NICKEL | 2.47 | mg/kg | | Y | Y | P | | | | | | | B007-02 | 20:43 |
| | | | | POTASSIUM | 277 | mg/kg | J | Y | Y | P | J | | 15 | | | | B007-02 | 20:43 |
| | | | | SELENIUM | 1.14 | mg/kg | U | N | Y | U | U | | | | | | B007-02 | 16:28 |
| | | | | SILVER | 1.14 | mg/kg | U | N | Y | U | U | | | | | | B007-02 | 20:43 |
| | | | | SODIUM | 114 | mg/kg | U | N | Y | U | U | | | | | | B007-02 | 20:43 |
| | | | | THALLIUM | 2.28 | mg/kg | U | N | Y | U | U | | | | | | B007-02 | 16:28 |
| | | | | VANADIUM | 15.6 | mg/kg | | Y | Y | P | | | | | | | B007-02 | 20:43 |
| | | | | ZINC | 5.46 | mg/kg | | Y | Y | P | | | | | | | B007-02 | 20:43 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .114 | mg/kg | U | N | Y | U | U | | | | | | B007-02 | 13:49 |
| JM0005 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 7180 | mg/kg | | Y | Y | P | | | | | | | B007-03 | 20:48 |
| | | | | ANTIMONY | 11.9 | mg/kg | U | N | Y | U | U | | | | | | B007-03 | 20:48 |
| | | | | ARSENIC | 2.57 | mg/kg | | Y | Y | P | | | | | | | B007-03 | 16:33 |
| | | | | BARIUM | 48.5 | mg/kg | | Y | Y | P | | | | | | | B007-03 | 20:48 |
| | | | | BERYLLIUM | .286 | mg/kg | J | Y | Y | P | J | | 15 | | | | B007-03 | 20:48 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10117Q-02** | | | | | | | | | | | | | | | | | | | | |
| JM0005 | SW6010B | SW3050 | N | 0 | 1 | CADMIUM | .595 | mg/kg | U | N | Y | U | U | | | | | | B007-03 | 20:48 |
| | | | | | | CALCIUM | 101 | mg/kg | J | Y | Y | P | J | | 15 | | | | B007-03 | 20:48 |
| | | | | | | CHROMIUM | 7.75 | mg/kg | | Y | Y | P | | | | | | | B007-03 | 20:48 |
| | | | | | | COBALT | 3.79 | mg/kg | | Y | Y | P | | | | | | | B007-03 | 20:48 |
| | | | | | | COPPER | 4.32 | mg/kg | | Y | Y | P | | | | | | | B007-03 | 20:48 |
| | | | | | | IRON | 7140 | mg/kg | | Y | Y | P | | | | | | | B007-03 | 20:48 |
| | | | | | | LEAD | 20.2 | mg/kg | | Y | Y | P | | | | | | | B007-03 | 16:33 |
| | | | | | | MAGNESIUM | 235 | mg/kg | | Y | Y | P | | | | | | | B007-03 | 20:48 |
| | | | | | | MANGANESE | 385 | mg/kg | | Y | Y | P | | | | | | | B007-03 | 20:48 |
| | | | | | | NICKEL | 3.55 | mg/kg | | Y | Y | P | | | | | | | B007-03 | 20:48 |
| | | | | | | POTASSIUM | 190 | mg/kg | J | Y | Y | P | J | | 15 | | | | B007-03 | 20:48 |
| | | | | | | SELENIUM | 1.19 | mg/kg | U | N | Y | U | U | | | | | | B007-03 | 16:33 |
| | | | | | | SILVER | 1.19 | mg/kg | U | N | Y | U | U | | | | | | B007-03 | 20:48 |
| | | | | | | SODIUM | 119 | mg/kg | U | N | Y | U | U | | | | | | B007-03 | 20:48 |
| | | | | | | THALLIUM | 2.38 | mg/kg | U | N | Y | U | U | | | | | | B007-03 | 16:33 |
| | | | | | | VANADIUM | 10.8 | mg/kg | | Y | Y | P | | | | | | | B007-03 | 20:48 |
| | | | | | | ZINC | 14.2 | mg/kg | | Y | Y | P | | | | | | | B007-03 | 20:48 |
| | SW7471A | TOTAL | N | 0 | 1 | MERCURY | .048 | mg/kg | J | Y | Y | P | J | | 15 | | | | B007-03 | 13:51 |
| JM0006 | SW6010B | SW3050 | N | 0 | 1 | ALUMINUM | 2430 | mg/kg | | Y | Y | P | | | | | | | B007-04 | 20:53 |
| | | | | | | ANTIMONY | 11 | mg/kg | U | N | Y | U | U | | | | | | B007-04 | 20:53 |
| | | | | | | ARSENIC | 2.02 | mg/kg | | Y | Y | P | J | | 17 | | | | B007-04 | 16:37 |
| | | | | | | BARIUM | 1.07 | mg/kg | J | Y | Y | P | J | | 15 | | | | B007-04 | 20:53 |
| | | | | | | BERYLLIUM | .0504 | mg/kg | J | Y | Y | F | B | | 06B | 15 | | | B007-04 | 20:53 |
| | | | | | | CADMIUM | .548 | mg/kg | U | N | Y | U | U | | | | | | B007-04 | 20:53 |
| | | | | | | CALCIUM | 16.9 | mg/kg | J | Y | Y | P | J | | 15 | | | | B007-04 | 20:53 |
| | | | | | | CHROMIUM | 22.7 | mg/kg | | Y | Y | P | | | | | | | B007-04 | 20:53 |
| | | | | | | COBALT | .528 | mg/kg | J | Y | Y | F | B | | 06B | 15 | | | B007-04 | 20:53 |
| | | | | | | COPPER | 2.19 | mg/kg | U | N | Y | U | U | | | | | | B007-04 | 20:53 |
| | | | | | | IRON | 16200 | mg/kg | | Y | Y | P | | | | | | | B007-04 | 20:53 |
| | | | | | | LEAD | 1.73 | mg/kg | | Y | Y | P | | | | | | | B007-04 | 16:37 |
| | | | | | | MAGNESIUM | 13.1 | mg/kg | J | Y | Y | P | J | | 15 | | | | B007-04 | 20:53 |
| | | | | | | MANGANESE | 4.98 | mg/kg | | Y | Y | P | | | | | | | B007-04 | 20:53 |
| | | | | | | NICKEL | 2.19 | mg/kg | U | N | Y | U | U | | | | | | B007-04 | 20:53 |
| | | | | | | POTASSIUM | 548 | mg/kg | U | N | Y | U | U | | | | | | B007-04 | 20:53 |
| | | | | | | SELENIUM | 1.1 | mg/kg | U | N | Y | U | U | | | | | | B007-04 | 16:37 |
| | | | | | | SILVER | 1.1 | mg/kg | U | N | Y | U | U | | | | | | B007-04 | 20:53 |
| | | | | | | SODIUM | 110 | mg/kg | U | N | Y | U | U | | | | | | B007-04 | 20:53 |
| | | | | | | THALLIUM | 2.19 | mg/kg | U | N | Y | U | U | | | | | | B007-04 | 16:37 |
| | | | | | | VANADIUM | 45 | mg/kg | | Y | Y | P | | | | | | | B007-04 | 20:53 |
| | | | | | | ZINC | 1.41 | mg/kg | J | Y | Y | P | J | | 15 | | | | B007-04 | 20:53 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10117Q-02** | | | | | | | | | | | | | | | | | | |
| JM0006 | SW7471A | TOTAL | N 0 1 | MERCURY | .11 | mg/kg | U | N | Y | U | U | | | | | | B007-04 | 13:54 |
| JM0007 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 3060 | mg/kg | | Y | Y | | | | | | | | B007-05 | 20:58 |
| | | | | ANTIMONY | 11 | mg/kg | U | N | Y | | U | | | | | | B007-05 | 20:58 |
| | | | | ARSENIC | 3.46 | mg/kg | | Y | Y | | J | | 17 | | | | B007-05 | 16:41 |
| | | | | BARIUM | 1.18 | mg/kg | | Y | Y | | | | | | | | B007-05 | 20:58 |
| | | | | BERYLLIUM | .0809 | mg/kg | J | Y | Y | F | B | | 06B | 15 | | | B007-05 | 20:58 |
| | | | | CADMIUM | .548 | mg/kg | U | N | Y | | U | | | | | | B007-05 | 20:58 |
| | | | | CALCIUM | 17.6 | mg/kg | J | Y | Y | | J | | 15 | | | | B007-05 | 20:58 |
| | | | | CHROMIUM | 28 | mg/kg | | Y | Y | | | | | | | | B007-05 | 20:58 |
| | | | | COBALT | .493 | mg/kg | J | Y | Y | F | B | | 06B | 15 | | | B007-05 | 20:58 |
| | | | | COPPER | 1.06 | mg/kg | J | Y | Y | | J | | 15 | | | | B007-05 | 20:58 |
| | | | | IRON | 21400 | mg/kg | | Y | Y | | | | | | | | B007-05 | 20:58 |
| | | | | LEAD | 2.31 | mg/kg | | Y | Y | | | | | | | | B007-05 | 16:41 |
| | | | | MAGNESIUM | 18.5 | mg/kg | J | Y | Y | | J | | 15 | | | | B007-05 | 20:58 |
| | | | | MANGANESE | 4.61 | mg/kg | | Y | Y | | | | | | | | B007-05 | 20:58 |
| | | | | NICKEL | 2.19 | mg/kg | U | N | Y | | U | | | | | | B007-05 | 20:58 |
| | | | | POTASSIUM | 548 | mg/kg | U | N | Y | | U | | | | | | B007-05 | 20:58 |
| | | | | SELENIUM | 1.1 | mg/kg | U | N | Y | | U | | | | | | B007-05 | 16:41 |
| | | | | SILVER | 1.1 | mg/kg | U | N | Y | | U | | | | | | B007-05 | 20:58 |
| | | | | SODIUM | 110 | mg/kg | U | N | Y | | U | | | | | | B007-05 | 20:58 |
| | | | | THALLIUM | 2.19 | mg/kg | U | N | Y | | U | | | | | | B007-05 | 16:41 |
| | | | | VANADIUM | 57.1 | mg/kg | | Y | Y | | | | | | | | B007-05 | 20:58 |
| | | | | ZINC | 1.99 | mg/kg | J | Y | Y | | J | | 15 | | | | B007-05 | 20:58 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .11 | mg/kg | U | N | Y | | U | | | | | | B007-05 | 14:03 |
| JM0010 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 8120 | mg/kg | | Y | Y | P | | | | | | | B007-06 | 21:03 |
| | | | | ANTIMONY | 11.7 | mg/kg | U | N | Y | U | U | | | | | | B007-06 | 21:03 |
| | | | | ARSENIC | 1.69 | mg/kg | | Y | Y | P | | | | | | | B007-06 | 16:45 |
| | | | | BARIUM | 54.4 | mg/kg | | Y | Y | P | | | | | | | B007-06 | 21:03 |
| | | | | BERYLLIUM | .269 | mg/kg | J | Y | Y | P | J | | 15 | | | | B007-06 | 21:03 |
| | | | | CADMIUM | .584 | mg/kg | U | N | Y | U | U | | | | | | B007-06 | 21:03 |
| | | | | CALCIUM | 77.1 | mg/kg | J | Y | Y | P | J | | 15 | | | | B007-06 | 21:03 |
| | | | | CHROMIUM | 5.41 | mg/kg | | Y | Y | P | | | | | | | B007-06 | 21:03 |
| | | | | COBALT | 3.17 | mg/kg | | Y | Y | P | | | | | | | B007-06 | 21:03 |
| | | | | COPPER | 3.42 | mg/kg | | Y | Y | P | | | | | | | B007-06 | 21:03 |
| | | | | IRON | 5130 | mg/kg | | Y | Y | P | | | | | | | B007-06 | 21:03 |
| | | | | LEAD | 9.31 | mg/kg | | Y | Y | P | | | | | | | B007-06 | 16:45 |
| | | | | MAGNESIUM | 247 | mg/kg | | Y | Y | P | | | | | | | B007-06 | 21:03 |
| | | | | MANGANESE | 220 | mg/kg | | Y | Y | P | | | | | | | B007-06 | 21:03 |
| | | | | NICKEL | 3.55 | mg/kg | | Y | Y | P | | | | | | | B007-06 | 21:03 |
| | | | | POTASSIUM | 164 | mg/kg | J | Y | Y | P | J | | 15 | | | | B007-06 | 21:03 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10117Q-02** | | | | | | | | | | | | | | | | | | |
| JM0010 | SW6010B | SW3050 | N 0 1 | SELENIUM | 1.17 | mg/kg | U | N | Y | U | U | | | | | | B007-06 | 16:45 |
| | | | | SILVER | 1.17 | mg/kg | U | N | Y | U | U | | | | | | B007-06 | 21:03 |
| | | | | SODIUM | 117 | mg/kg | U | N | Y | U | U | | | | | | B007-06 | 21:03 |
| | | | | THALLIUM | 2.34 | mg/kg | U | N | Y | U | U | | | | | | B007-06 | 16:45 |
| | | | | VANADIUM | 9.72 | mg/kg | | Y | Y | P | | | | | | | B007-06 | 21:03 |
| | | | | ZINC | 17.7 | mg/kg | | Y | Y | P | | | | | | | B007-06 | 21:03 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .027 | mg/kg | J | Y | Y | P | J | | 15 | | | | B007-06 | 14:06 |
| JM0011 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 7870 | mg/kg | | Y | Y | P | | | | | | | B007-07 | 21:09 |
| | | | | ANTIMONY | 5.01 | mg/kg | J | Y | Y | P | J | | 15 | | | | B007-07 | 21:09 |
| | | | | ARSENIC | 4.06 | mg/kg | | Y | Y | P | | | | | | | B007-07 | 16:50 |
| | | | | BARIUM | 138 | mg/kg | | Y | Y | P | | | | | | | B007-07 | 21:09 |
| | | | | BERYLLIUM | .26 | mg/kg | J | Y | Y | P | J | | 15 | | | | B007-07 | 21:09 |
| | | | | CADMIUM | .561 | mg/kg | U | N | Y | U | U | | | | | | B007-07 | 21:09 |
| | | | | CALCIUM | 25.2 | mg/kg | J | Y | Y | P | J | | 15 | | | | B007-07 | 21:09 |
| | | | | CHROMIUM | 12.8 | mg/kg | | Y | Y | P | | | | | | | B007-07 | 21:09 |
| | | | | COBALT | 8.82 | mg/kg | | Y | Y | P | | | | | | | B007-07 | 21:09 |
| | | | | COPPER | 9.44 | mg/kg | | Y | Y | P | | | | | | | B007-07 | 21:09 |
| | | | | IRON | 24300 | mg/kg | | Y | Y | P | | | | | | | B007-07 | 21:09 |
| | | | | LEAD | 8.23 | mg/kg | | Y | Y | P | | | | | | | B007-07 | 16:50 |
| | | | | MAGNESIUM | 113 | mg/kg | | Y | Y | P | | | | | | | B007-07 | 21:09 |
| | | | | MANGANESE | 946 | mg/kg | | Y | Y | P | | | | | | | B007-07 | 21:09 |
| | | | | NICKEL | 2.02 | mg/kg | J | Y | Y | P | J | | 15 | | | | B007-07 | 21:09 |
| | | | | POTASSIUM | 357 | mg/kg | J | Y | Y | P | J | | 15 | | | | B007-07 | 21:09 |
| | | | | SELENIUM | 1.12 | mg/kg | U | N | Y | U | U | | | | | | B007-07 | 16:50 |
| | | | | SILVER | 1.12 | mg/kg | U | N | Y | U | U | | | | | | B007-07 | 21:09 |
| | | | | SODIUM | 112 | mg/kg | U | N | Y | U | U | | | | | | B007-07 | 21:09 |
| | | | | THALLIUM | 2.24 | mg/kg | U | N | Y | U | U | | | | | | B007-07 | 16:50 |
| | | | | VANADIUM | 28.9 | mg/kg | | Y | Y | P | | | | | | | B007-07 | 21:09 |
| | | | | ZINC | 9.17 | mg/kg | | Y | Y | P | | | | | | | B007-07 | 21:09 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .024 | mg/kg | J | Y | Y | P | J | | 15 | | | | B007-07 | 14:08 |
| JM0014 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 9480 | mg/kg | | Y | Y | P | | | | | | | B007-08 | 21:14 |
| | | | | ANTIMONY | 12.1 | mg/kg | U | N | Y | U | U | | | | | | B007-08 | 21:14 |
| | | | | ARSENIC | 5.06 | mg/kg | | Y | Y | P | | | | | | | B007-08 | 16:54 |
| | | | | BARIUM | 40.4 | mg/kg | | Y | Y | P | | | | | | | B007-08 | 21:14 |
| | | | | BERYLLIUM | .549 | mg/kg | J | Y | Y | P | J | | 15 | | | | B007-08 | 21:14 |
| | | | | CADMIUM | .606 | mg/kg | U | N | Y | U | U | | | | | | B007-08 | 21:14 |
| | | | | CALCIUM | 244 | mg/kg | | Y | Y | P | | | | | | | B007-08 | 21:14 |
| | | | | CHROMIUM | 23.5 | mg/kg | | Y | Y | P | | | | | | | B007-08 | 21:14 |
| | | | | COBALT | 5.17 | mg/kg | | Y | Y | P | | | | | | | B007-08 | 21:14 |
| | | | | COPPER | 6.85 | mg/kg | | Y | Y | P | | | | | | | B007-08 | 21:14 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10117Q-02** | | | | | | | | | | | | | | | | | | |
| JM0014 | SW6010B | SW3050 | N 0 1 | IRON | 30800 | mg/kg | | Y | Y | P | | | | | | | B007-08 | 21:14 |
| | | | | LEAD | 13.2 | mg/kg | | Y | Y | P | | | | | | | B007-08 | 16:54 |
| | | | | MAGNESIUM | 239 | mg/kg | | Y | Y | P | | | | | | | B007-08 | 21:14 |
| | | | | MANGANESE | 219 | mg/kg | | Y | Y | P | | | | | | | B007-08 | 21:14 |
| | | | | NICKEL | 7.96 | mg/kg | | Y | Y | P | | | | | | | B007-08 | 21:14 |
| | | | | POTASSIUM | 292 | mg/kg | J | Y | Y | P | J | | 15 | | | | B007-08 | 21:14 |
| | | | | SELENIUM | 1.21 | mg/kg | U | N | Y | U | U | | | | | | B007-08 | 16:54 |
| | | | | SILVER | 1.21 | mg/kg | U | N | Y | U | U | | | | | | B007-08 | 21:14 |
| | | | | SODIUM | 121 | mg/kg | U | N | Y | U | U | | | | | | B007-08 | 21:14 |
| | | | | THALLIUM | 2.42 | mg/kg | U | N | Y | U | U | | | | | | B007-08 | 16:54 |
| | | | | VANADIUM | 44.2 | mg/kg | | Y | Y | P | | | | | | | B007-08 | 21:14 |
| | | | | ZINC | 37.8 | mg/kg | | Y | Y | P | | | | | | | B007-08 | 21:14 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .035 | mg/kg | J | Y | Y | P | J | | 15 | | | | B007-08 | 14:11 |
| JM0015 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 2160 | mg/kg | | Y | Y | P | | | | | | | B007-09 | 21:19 |
| | | | | ANTIMONY | 12.2 | mg/kg | U | N | Y | U | U | | | | | | B007-09 | 21:19 |
| | | | | ARSENIC | 5.13 | mg/kg | | Y | Y | P | | | | | | | B007-09 | 16:58 |
| | | | | BARIUM | 9.23 | mg/kg | | Y | Y | P | | | | | | | B007-09 | 21:19 |
| | | | | BERYLLIUM | 2.35 | mg/kg | | Y | Y | P | | | | | | | B007-09 | 21:19 |
| | | | | CADMIUM | .608 | mg/kg | U | N | Y | U | U | | | | | | B007-09 | 21:19 |
| | | | | CALCIUM | 17.4 | mg/kg | J | Y | Y | P | J | | 15 | | | | B007-09 | 21:19 |
| | | | | CHROMIUM | 14.8 | mg/kg | | Y | Y | P | | | | | | | B007-09 | 21:19 |
| | | | | COBALT | 25.6 | mg/kg | | Y | Y | P | | | | | | | B007-09 | 21:19 |
| | | | | COPPER | 34 | mg/kg | | Y | Y | P | | | | | | | B007-09 | 21:19 |
| | | | | IRON | 23300 | mg/kg | | Y | Y | P | | | | | | | B007-09 | 21:19 |
| | | | | LEAD | 8.65 | mg/kg | | Y | Y | P | | | | | | | B007-09 | 16:58 |
| | | | | MAGNESIUM | 53.8 | mg/kg | J | Y | Y | P | J | | 15 | | | | B007-09 | 21:19 |
| | | | | MANGANESE | 167 | mg/kg | | Y | Y | P | | | | | | | B007-09 | 21:19 |
| | | | | NICKEL | 30.4 | mg/kg | | Y | Y | P | | | | | | | B007-09 | 21:19 |
| | | | | POTASSIUM | 608 | mg/kg | U | N | Y | U | U | | | | | | B007-09 | 21:19 |
| | | | | SELENIUM | 1.22 | mg/kg | U | N | Y | U | U | | | | | | B007-09 | 16:58 |
| | | | | SILVER | 1.22 | mg/kg | U | N | Y | U | U | | | | | | B007-09 | 21:19 |
| | | | | SODIUM | 122 | mg/kg | U | N | Y | U | U | | | | | | B007-09 | 21:19 |
| | | | | THALLIUM | 2.43 | mg/kg | U | N | Y | U | U | | | | | | B007-09 | 16:58 |
| | | | | VANADIUM | 21.8 | mg/kg | | Y | Y | P | | | | | | | B007-09 | 21:19 |
| | | | | ZINC | 105 | mg/kg | | Y | Y | P | | | | | | | B007-09 | 21:19 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .122 | mg/kg | U | N | Y | U | U | | | | | | B007-09 | 14:13 |
| JM0001 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-01 | 18:03 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-01 | 18:03 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-01 | 18:03 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-01 | 18:03 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10117Q-02** | | | | | | | | | | | | | | | | | | |
| JM0001 | SW8330 | METHOD | N 0 1 | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-01 | 18:03 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | | | | | | | B007-01 | 18:03 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-01 | 18:03 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-01 | 18:03 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-01 | 18:03 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-01 | 18:03 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-01 | 18:03 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-01 | 18:03 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-01 | 18:03 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-01 | 18:03 |
| JM0002 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-02 | 18:43 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-02 | 18:43 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-02 | 18:43 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-02 | 18:43 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-02 | 18:43 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | | | | | | | B007-02 | 18:43 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-02 | 18:43 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-02 | 18:43 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-02 | 18:43 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-02 | 18:43 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-02 | 18:43 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-02 | 18:43 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-02 | 18:43 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-02 | 18:43 |
| JM0005 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-03 | 19:23 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-03 | 19:23 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-03 | 19:23 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-03 | 19:23 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-03 | 19:23 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | | | | | | | B007-03 | 19:23 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-03 | 19:23 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-03 | 19:23 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-03 | 19:23 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-03 | 19:23 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-03 | 19:23 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-03 | 19:23 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-03 | 19:23 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-03 | 19:23 |
| JM0006 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-04 | 20:04 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-04 | 20:04 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10117Q-02** | | | | | | | | | | | | | | | | | | |
| JM0006 | SW8330 | METHOD | N 0 1 | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-04 | 20:04 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-04 | 20:04 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-04 | 20:04 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | | | | | | | B007-04 | 20:04 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-04 | 20:04 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-04 | 20:04 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-04 | 20:04 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-04 | 20:04 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-04 | 20:04 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-04 | 20:04 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-04 | 20:04 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-04 | 20:04 |
| JM0007 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | | U | | | | | | B007-05 | 20:44 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | | U | | | | | | B007-05 | 20:44 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | | U | | | | | | B007-05 | 20:44 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | | U | | | | | | B007-05 | 20:44 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | | U | | | | | | B007-05 | 20:44 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | | | | | | | | B007-05 | 20:44 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | | U | | | | | | B007-05 | 20:44 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | | U | | | | | | B007-05 | 20:44 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | | U | | | | | | B007-05 | 20:44 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | | U | | | | | | B007-05 | 20:44 |
| | | | | HMX | .4 | mg/kg | U | N | Y | | U | | | | | | B007-05 | 20:44 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | | U | | | | | | B007-05 | 20:44 |
| | | | | RDX | .4 | mg/kg | U | N | Y | | U | | | | | | B007-05 | 20:44 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | | U | | | | | | B007-05 | 20:44 |
| JM0010 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-06 | 21:25 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-06 | 21:25 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-06 | 21:25 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-06 | 21:25 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-06 | 21:25 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | | | | | | | B007-06 | 21:25 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-06 | 21:25 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-06 | 21:25 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-06 | 21:25 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-06 | 21:25 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-06 | 21:25 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-06 | 21:25 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-06 | 21:25 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-06 | 21:25 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10117Q-02** | | | | | | | | | | | | | | | | | | |
| JM0011 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-07 | 22:05 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-07 | 22:05 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-07 | 22:05 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-07 | 22:05 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-07 | 22:05 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | | | | | | | B007-07 | 22:05 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-07 | 22:05 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-07 | 22:05 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-07 | 22:05 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-07 | 22:05 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-07 | 22:05 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-07 | 22:05 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-07 | 22:05 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-07 | 22:05 |
| JM0014 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-08 | 22:46 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-08 | 22:46 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-08 | 22:46 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-08 | 22:46 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-08 | 22:46 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | | | | | | | B007-08 | 22:46 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-08 | 22:46 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-08 | 22:46 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-08 | 22:46 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-08 | 22:46 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-08 | 22:46 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-08 | 22:46 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-08 | 22:46 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-08 | 22:46 |
| JM0015 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-09 | 23:26 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-09 | 23:26 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-09 | 23:26 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-09 | 23:26 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-09 | 23:26 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | | | | | | | B007-09 | 23:26 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-09 | 23:26 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-09 | 23:26 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-09 | 23:26 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-09 | 23:26 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-09 | 23:26 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-09 | 23:26 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10117Q-02** | | | | | | | | | | | | | | | | | | | | |
| JM0015 | SW8330 | METHOD | N | 0 | 1 | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-09 | 23:26 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | B007-09 | 23:26 |
| JM0001 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0649 | mg/kg | U | N | Y | U | U | | | | | | B007-01 | 19:42 |
| JM0002 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0569 | mg/kg | U | N | Y | U | U | | | | | | B007-02 | 20:16 |
| JM0005 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0595 | mg/kg | U | N | Y | U | U | | | | | | B007-03 | 20:33 |
| JM0006 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0548 | mg/kg | U | N | Y | U | U | | | | | | B007-04 | 20:50 |
| JM0007 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0548 | mg/kg | U | N | Y | | U | | | | | | B007-05 | 21:07 |
| JM0010 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0584 | mg/kg | U | N | Y | U | U | | | | | | B007-06 | 21:25 |
| JM0011 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0561 | mg/kg | U | N | Y | U | U | | | | | | B007-07 | 21:42 |
| JM0014 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0606 | mg/kg | U | N | Y | U | U | | | | | | B007-08 | 21:59 |
| JM0015 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0608 | mg/kg | U | N | Y | U | U | | | | | | B007-09 | 22:16 |
| **10117Q-03** | | | | | | | | | | | | | | | | | | | | |
| JM0003 | SW6010B | SW3050 | N | 0 | 1 | ALUMINUM | 3810 | mg/kg | | Y | Y | P | | | | | | | B057-01 | 23:53 |
| | | | | | | ANTIMONY | 12.3 | mg/kg | U | N | Y | U | U | | | | | | B057-01 | 23:53 |
| | | | | | | ARSENIC | 3.02 | mg/kg | | Y | Y | P | | | | | | | B057-01 | 23:36 |
| | | | | | | BARIUM | 21.7 | mg/kg | | Y | Y | P | | | | | | | B057-01 | 23:53 |
| | | | | | | BERYLLIUM | 1.41 | mg/kg | | Y | Y | P | | | | | | | B057-01 | 23:53 |
| | | | | | | CADMIUM | .617 | mg/kg | U | N | Y | U | U | | | | | | B057-01 | 23:53 |
| | | | | | | CALCIUM | 169 | mg/kg | | Y | Y | P | | | | | | | B057-01 | 23:53 |
| | | | | | | CHROMIUM | 15.9 | mg/kg | | Y | Y | P | | | | | | | B057-01 | 23:53 |
| | | | | | | COBALT | 6.92 | mg/kg | | Y | Y | P | | | | | | | B057-01 | 23:53 |
| | | | | | | COPPER | 25.6 | mg/kg | | Y | Y | P | | | | | | | B057-01 | 23:53 |
| | | | | | | IRON | 30500 | mg/kg | | Y | Y | P | | | | | | | B057-01 | 23:53 |
| | | | | | | LEAD | 178 | mg/kg | | Y | Y | P | | | | | | | B057-01 | 23:36 |
| | | | | | | MAGNESIUM | 139 | mg/kg | | Y | Y | P | | | | | | | B057-01 | 23:53 |
| | | | | | | MANGANESE | 408 | mg/kg | | Y | Y | P | | | | | | | B057-01 | 23:53 |
| | | | | | | NICKEL | 10.8 | mg/kg | | Y | Y | P | | | | | | | B057-01 | 23:53 |
| | | | | | | POTASSIUM | 617 | mg/kg | U | N | Y | U | U | | | | | | B057-01 | 23:53 |
| | | | | | | SELENIUM | 1.23 | mg/kg | U | N | Y | U | U | | | | | | B057-01 | 23:36 |
| | | | | | | SILVER | 1.23 | mg/kg | U | N | Y | U | U | | | | | | B057-01 | 23:53 |
| | | | | | | SODIUM | 123 | mg/kg | U | N | Y | U | U | | | | | | B057-01 | 23:53 |
| | | | | | | THALLIUM | 2.47 | mg/kg | U | N | Y | U | U | | | | | | B057-01 | 23:36 |
| | | | | | | VANADIUM | 40.1 | mg/kg | | Y | Y | P | | | | | | | B057-01 | 23:53 |
| | | | | | | ZINC | 56.6 | mg/kg | | Y | Y | P | | | | | | | B057-01 | 23:53 |
| | SW7471A | TOTAL | N | 0 | 1 | MERCURY | .024 | mg/kg | J | Y | Y | P | J | | 15 | | | | B057-01 | 19:27 |
| JM0004 | SW6010B | SW3050 | N | 0 | 1 | ALUMINUM | 3830 | mg/kg | | Y | Y | P | | | | | | | B057-02 | 23:57 |
| | | | | | | ANTIMONY | 5.33 | mg/kg | J | Y | Y | F | B | | 06B | 15 | | | B057-02 | 23:57 |
| | | | | | | ARSENIC | .718 | mg/kg | J | Y | Y | P | J | | 15 | | | | B057-02 | 23:40 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10117Q-03** | | | | | | | | | | | | | | | | | | |
| JM0004 | SW6010B | SW3050 | N 0 1 | BARIUM | 298 | mg/kg | | Y | Y | P | | | | | | | B057-02 | 23:57 |
| | | | | BERYLLIUM | 4.29 | mg/kg | | Y | Y | P | | | | | | | B057-02 | 23:57 |
| | | | | CADMIUM | .63 | mg/kg | U | N | Y | U | U | | | | | | B057-02 | 23:57 |
| | | | | CALCIUM | 61.6 | mg/kg | J | Y | Y | P | J | | 15 | | | | B057-02 | 23:57 |
| | | | | CHROMIUM | 9.45 | mg/kg | | Y | Y | P | | | | | | | B057-02 | 23:57 |
| | | | | COBALT | 30.3 | mg/kg | | Y | Y | P | | | | | | | B057-02 | 23:57 |
| | | | | COPPER | 33.8 | mg/kg | | Y | Y | P | | | | | | | B057-02 | 23:57 |
| | | | | IRON | 88900 | mg/kg | | Y | Y | P | | | | | | | B057-02 | 23:57 |
| | | | | LEAD | 73.1 | mg/kg | | Y | Y | P | | | | | | | B057-02 | 23:40 |
| | | | | MAGNESIUM | 470 | mg/kg | | Y | Y | P | | | | | | | B057-02 | 23:57 |
| | | | | MANGANESE | 5740 | mg/kg | | Y | Y | P | | | | | | | B057-02 | 23:57 |
| | | | | NICKEL | 27 | mg/kg | | Y | Y | P | | | | | | | B057-02 | 23:57 |
| | | | | POTASSIUM | 630 | mg/kg | U | N | Y | U | U | | | | | | B057-02 | 23:57 |
| | | | | SELENIUM | 1.26 | mg/kg | U | N | Y | U | U | | | | | | B057-02 | 23:40 |
| | | | | SILVER | 1.26 | mg/kg | U | N | Y | U | U | | | | | | B057-02 | 23:57 |
| | | | | SODIUM | 126 | mg/kg | U | N | Y | U | U | | | | | | B057-02 | 23:57 |
| | | | | THALLIUM | 2.52 | mg/kg | U | N | Y | U | U | | | | | | B057-02 | 23:40 |
| | | | | VANADIUM | 34.6 | mg/kg | | Y | Y | P | | | | | | | B057-02 | 23:57 |
| | | | | ZINC | 96.5 | mg/kg | | Y | Y | P | | | | | | | B057-02 | 23:57 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .126 | mg/kg | U | N | Y | U | U | | | | | | B057-02 | 19:29 |
| JM0012 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 5470 | mg/kg | | Y | Y | P | | | | | | | B057-03 | 00:02 |
| | | | | ANTIMONY | 11.7 | mg/kg | U | N | Y | U | U | | | | | | B057-03 | 00:02 |
| | | | | ARSENIC | 1.65 | mg/kg | | Y | Y | P | | | | | | | B057-03 | 23:44 |
| | | | | BARIUM | 45.5 | mg/kg | | Y | Y | P | | | | | | | B057-03 | 00:02 |
| | | | | BERYLLIUM | .432 | mg/kg | J | Y | Y | P | J | | 15 | | | | B057-03 | 00:02 |
| | | | | CADMIUM | .583 | mg/kg | U | N | Y | U | U | | | | | | B057-03 | 00:02 |
| | | | | CALCIUM | 98 | mg/kg | J | Y | Y | P | J | | 15 | | | | B057-03 | 00:02 |
| | | | | CHROMIUM | 6.46 | mg/kg | | Y | Y | P | | | | | | | B057-03 | 00:02 |
| | | | | COBALT | 2.94 | mg/kg | | Y | Y | P | | | | | | | B057-03 | 00:02 |
| | | | | COPPER | 3.16 | mg/kg | | Y | Y | P | | | | | | | B057-03 | 00:02 |
| | | | | IRON | 5780 | mg/kg | | Y | Y | P | | | | | | | B057-03 | 00:02 |
| | | | | LEAD | 7.33 | mg/kg | | Y | Y | P | | | | | | | B057-03 | 23:44 |
| | | | | MAGNESIUM | 168 | mg/kg | | Y | Y | P | | | | | | | B057-03 | 00:02 |
| | | | | MANGANESE | 339 | mg/kg | | Y | Y | P | | | | | | | B057-03 | 00:02 |
| | | | | NICKEL | 2.59 | mg/kg | | Y | Y | P | | | | | | | B057-03 | 00:02 |
| | | | | POTASSIUM | 583 | mg/kg | U | N | Y | U | U | | | | | | B057-03 | 00:02 |
| | | | | SELENIUM | 1.17 | mg/kg | U | N | Y | U | U | | | | | | B057-03 | 23:44 |
| | | | | SILVER | 1.17 | mg/kg | U | N | Y | U | U | | | | | | B057-03 | 00:02 |
| | | | | SODIUM | 117 | mg/kg | U | N | Y | U | U | | | | | | B057-03 | 00:02 |
| | | | | THALLIUM | 2.33 | mg/kg | U | N | Y | U | U | | | | | | B057-03 | 23:44 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10117Q-03** | | | | | | | | | | | | | | | | | | |
| JM0012 | SW6010B | SW3050 | N 0 1 | VANADIUM | 9.13 | mg/kg | | Y | Y | P | | | | | | | B057-03 | 00:02 |
| | | | | ZINC | 12.5 | mg/kg | | Y | Y | P | | | | | | | B057-03 | 00:02 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .117 | mg/kg | U | N | Y | U | U | | | | | | B057-03 | 19:32 |
| JM0013 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 9030 | mg/kg | | Y | Y | P | | | | | | | B057-04 | 00:16 |
| | | | | ANTIMONY | 12.5 | mg/kg | U | N | Y | U | U | | | | | | B057-04 | 00:16 |
| | | | | ARSENIC | 2.19 | mg/kg | | Y | Y | P | | | | | | | B057-04 | 23:57 |
| | | | | BARIUM | 50.2 | mg/kg | | Y | Y | P | | | | | | | B057-04 | 00:16 |
| | | | | BERYLLIUM | 1.1 | mg/kg | J | Y | Y | P | J | | 15 | | | | B057-04 | 00:16 |
| | | | | CADMIUM | .627 | mg/kg | U | N | Y | U | U | | | | | | B057-04 | 00:16 |
| | | | | CALCIUM | 118 | mg/kg | J | Y | Y | P | J | | 15 | | | | B057-04 | 00:16 |
| | | | | CHROMIUM | 8.88 | mg/kg | | Y | Y | P | | | | | | | B057-04 | 00:16 |
| | | | | COBALT | 3.62 | mg/kg | | Y | Y | P | | | | | | | B057-04 | 00:16 |
| | | | | COPPER | 4.36 | mg/kg | | Y | Y | P | | | | | | | B057-04 | 00:16 |
| | | | | IRON | 9400 | mg/kg | | Y | Y | P | | | | | | | B057-04 | 00:16 |
| | | | | LEAD | 7.79 | mg/kg | | Y | Y | P | | | | | | | B057-04 | 23:57 |
| | | | | MAGNESIUM | 261 | mg/kg | | Y | Y | P | | | | | | | B057-04 | 00:16 |
| | | | | MANGANESE | 376 | mg/kg | | Y | Y | P | | | | | | | B057-04 | 00:16 |
| | | | | NICKEL | 4.45 | mg/kg | | Y | Y | P | | | | | | | B057-04 | 00:16 |
| | | | | POTASSIUM | 627 | mg/kg | U | N | Y | U | U | | | | | | B057-04 | 00:16 |
| | | | | SELENIUM | 1.25 | mg/kg | U | N | Y | U | U | | | | | | B057-04 | 23:57 |
| | | | | SILVER | 1.25 | mg/kg | U | N | Y | U | U | | | | | | B057-04 | 00:16 |
| | | | | SODIUM | 125 | mg/kg | U | N | Y | U | U | | | | | | B057-04 | 00:16 |
| | | | | THALLIUM | 2.51 | mg/kg | U | N | Y | U | U | | | | | | B057-04 | 23:57 |
| | | | | VANADIUM | 14.5 | mg/kg | | Y | Y | P | | | | | | | B057-04 | 00:16 |
| | | | | ZINC | 10.7 | mg/kg | | Y | Y | P | | | | | | | B057-04 | 00:16 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .125 | mg/kg | U | N | Y | U | U | | | | | | B057-04 | 19:35 |
| JM0003 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B057-01 | 12:56 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B057-01 | 12:56 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B057-01 | 12:56 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B057-01 | 12:56 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B057-01 | 12:56 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B057-01 | 12:56 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B057-01 | 12:56 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B057-01 | 12:56 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B057-01 | 12:56 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B057-01 | 12:56 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | B057-01 | 12:56 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B057-01 | 12:56 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | B057-01 | 12:56 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | B057-01 | 12:56 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10117Q-03** | | | | | | | | | | | | | | | | | | |
| JM0004 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B057-02 | 13:35 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B057-02 | 13:35 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B057-02 | 13:35 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B057-02 | 13:35 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B057-02 | 13:35 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B057-02 | 13:35 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B057-02 | 13:35 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B057-02 | 13:35 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B057-02 | 13:35 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B057-02 | 13:35 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | B057-02 | 13:35 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B057-02 | 13:35 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | B057-02 | 13:35 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | B057-02 | 13:35 |
| JM0012 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B057-03 | 14:15 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B057-03 | 14:15 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B057-03 | 14:15 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B057-03 | 14:15 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B057-03 | 14:15 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B057-03 | 14:15 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B057-03 | 14:15 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B057-03 | 14:15 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B057-03 | 14:15 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B057-03 | 14:15 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | B057-03 | 14:15 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B057-03 | 14:15 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | B057-03 | 14:15 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | B057-03 | 14:15 |
| JM0013 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B057-04 | 14:56 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B057-04 | 14:56 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B057-04 | 14:56 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B057-04 | 14:56 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B057-04 | 14:56 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B057-04 | 14:56 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B057-04 | 14:56 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B057-04 | 14:56 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B057-04 | 14:56 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B057-04 | 14:56 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | B057-04 | 14:56 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B057-04 | 14:56 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10117Q-03** | | | | | | | | | | | | | | | | | | |
| JM0013 | SW8330 | METHOD | N 0 1 | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | B057-04 | 14:56 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | B057-04 | 14:56 |
| JM0003 | EPA314.0 | NONE | N 0 1 | PERCHLORATE | .0617 | mg/kg | U | N | Y | U | U | | | | | | B057-01 | 20:31 |
| JM0004 | EPA314.0 | NONE | N 0 1 | PERCHLORATE | .063 | mg/kg | U | N | Y | U | U | | | | | | B057-02 | 20:48 |
| JM0012 | EPA314.0 | NONE | N 0 1 | PERCHLORATE | .0583 | mg/kg | U | N | Y | U | U | | | | | | B057-03 | 21:05 |
| JM0013 | EPA314.0 | NONE | N 0 1 | PERCHLORATE | .0627 | mg/kg | U | N | Y | U | U | | | | | | B057-04 | 21:23 |
| **10117Q-04** | | | | | | | | | | | | | | | | | | |
| JM1001 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 8530 | mg/kg | | Y | Y | P | | | | | | | C008-01 | 20:03 |
| | | | | ANTIMONY | 14.3 | mg/kg | U | N | Y | U | U | | | | | | C008-01 | 20:03 |
| | | | | ARSENIC | 2.28 | mg/kg | | Y | Y | P | | | | | | | C008-01 | 23:02 |
| | | | | BARIUM | 68.4 | mg/kg | | Y | Y | P | | | | | | | C008-01 | 20:03 |
| | | | | BERYLLIUM | .536 | mg/kg | J | Y | Y | P | J | | 15 | | | | C008-01 | 20:03 |
| | | | | CADMIUM | .715 | mg/kg | U | N | Y | U | U | | | | | | C008-01 | 20:03 |
| | | | | CALCIUM | 230 | mg/kg | | Y | Y | P | | | | | | | C008-01 | 20:03 |
| | | | | CHROMIUM | 9.82 | mg/kg | | Y | Y | P | | | | | | | C008-01 | 20:03 |
| | | | | COBALT | 3.31 | mg/kg | | Y | Y | F | B | | 06B | | | | C008-01 | 20:03 |
| | | | | COPPER | 4.59 | mg/kg | | Y | Y | P | | | | | | | C008-01 | 20:03 |
| | | | | IRON | 9920 | mg/kg | | Y | Y | P | | | | | | | C008-01 | 20:03 |
| | | | | LEAD | 15.5 | mg/kg | | Y | Y | P | | | | | | | C008-01 | 23:02 |
| | | | | MAGNESIUM | 338 | mg/kg | | Y | Y | P | | | | | | | C008-01 | 20:03 |
| | | | | MANGANESE | 373 | mg/kg | | Y | Y | P | | | | | | | C008-01 | 20:03 |
| | | | | NICKEL | 5.63 | mg/kg | | Y | Y | P | | | | | | | C008-01 | 20:03 |
| | | | | POTASSIUM | 194 | mg/kg | J | Y | Y | F | B | | 06B | 15 | | | C008-01 | 20:03 |
| | | | | SELENIUM | 1.43 | mg/kg | U | N | Y | U | U | | | | | | C008-01 | 23:02 |
| | | | | SILVER | 1.43 | mg/kg | U | N | Y | U | U | | | | | | C008-01 | 20:03 |
| | | | | SODIUM | 143 | mg/kg | U | N | Y | U | U | | | | | | C008-01 | 20:03 |
| | | | | THALLIUM | 2.86 | mg/kg | U | N | Y | U | U | | | | | | C008-01 | 23:02 |
| | | | | VANADIUM | 16 | mg/kg | | Y | Y | P | | | | | | | C008-01 | 20:03 |
| | | | | ZINC | 14.5 | mg/kg | | Y | Y | P | | | | | | | C008-01 | 20:03 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .055 | mg/kg | J | Y | Y | P | J | | 15 | | | | C008-01 | 13:54 |
| JM1002 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 8050 | mg/kg | | Y | Y | P | | | | | | | C008-02 | 20:08 |
| | | | | ANTIMONY | 13.8 | mg/kg | U | N | Y | U | U | | | | | | C008-02 | 20:08 |
| | | | | ARSENIC | 2.14 | mg/kg | | Y | Y | P | | | | | | | C008-02 | 23:07 |
| | | | | BARIUM | 78.4 | mg/kg | | Y | Y | P | | | | | | | C008-02 | 20:08 |
| | | | | BERYLLIUM | .527 | mg/kg | J | Y | Y | P | J | | 15 | | | | C008-02 | 20:08 |
| | | | | CADMIUM | .691 | mg/kg | U | N | Y | U | U | | | | | | C008-02 | 20:08 |
| | | | | CALCIUM | 233 | mg/kg | | Y | Y | P | | | | | | | C008-02 | 20:08 |
| | | | | CHROMIUM | 8.55 | mg/kg | | Y | Y | P | | | | | | | C008-02 | 20:08 |
| | | | | COBALT | 2.93 | mg/kg | | Y | Y | F | B | | 06B | | | | C008-02 | 20:08 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10117Q-04** | | | | | | | | | | | | | | | | | | |
| JM1002 | SW6010B | SW3050 | N 0 1 | COPPER | 3.16 | mg/kg | | Y | Y | P | | | | | | | C008-02 | 20:08 |
| | | | | IRON | 8790 | mg/kg | | Y | Y | P | | | | | | | C008-02 | 20:08 |
| | | | | LEAD | 8.81 | mg/kg | | Y | Y | P | | | | | | | C008-02 | 23:07 |
| | | | | MAGNESIUM | 323 | mg/kg | | Y | Y | P | | | | | | | C008-02 | 20:08 |
| | | | | MANGANESE | 516 | mg/kg | | Y | Y | P | | | | | | | C008-02 | 20:08 |
| | | | | NICKEL | 4.86 | mg/kg | | Y | Y | P | | | | | | | C008-02 | 20:08 |
| | | | | POTASSIUM | 154 | mg/kg | J | Y | Y | F | B | | 06B | 15 | | | C008-02 | 20:08 |
| | | | | SELENIUM | 1.38 | mg/kg | U | N | Y | U | U | | | | | | C008-02 | 23:07 |
| | | | | SILVER | 1.38 | mg/kg | U | N | Y | U | U | | | | | | C008-02 | 20:08 |
| | | | | SODIUM | 138 | mg/kg | U | N | Y | U | U | | | | | | C008-02 | 20:08 |
| | | | | THALLIUM | 2.76 | mg/kg | U | N | Y | U | U | | | | | | C008-02 | 23:07 |
| | | | | VANADIUM | 13.7 | mg/kg | | Y | Y | P | | | | | | | C008-02 | 20:08 |
| | | | | ZINC | 14.7 | mg/kg | | Y | Y | P | | | | | | | C008-02 | 20:08 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .048 | mg/kg | J | Y | Y | P | J | | 15 | | | | C008-02 | 13:56 |
| JM1001 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C008-01 | 06:57 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C008-01 | 06:57 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C008-01 | 06:57 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C008-01 | 06:57 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C008-01 | 06:57 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C008-01 | 06:57 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C008-01 | 06:57 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C008-01 | 06:57 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C008-01 | 06:57 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C008-01 | 06:57 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | C008-01 | 06:57 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C008-01 | 06:57 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | C008-01 | 06:57 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | C008-01 | 06:57 |
| JM1002 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C008-02 | 07:36 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C008-02 | 07:36 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C008-02 | 07:36 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C008-02 | 07:36 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C008-02 | 07:36 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C008-02 | 07:36 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C008-02 | 07:36 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C008-02 | 07:36 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C008-02 | 07:36 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C008-02 | 07:36 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | C008-02 | 07:36 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C008-02 | 07:36 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10117Q-04** | | | | | | | | | | | | | | | | | | | | |
| JM1002 | SW8330 | METHOD | N | 0 | 1 | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | C008-02 | 07:36 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | C008-02 | 07:36 |
| JM1001 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0715 | mg/kg | U | N | Y | U | U | | | | | | C008-01 | 00:28 |
| JM1002 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0691 | mg/kg | U | N | Y | U | U | | | | | | C008-02 | 00:45 |
| JM1001 | SW9060 | NONE | N | 0 | 1 | TOC | 115 | mg/kg | | Y | Y | P | | | | | | | C008-01 | 14:00 |
| JM1002 | SW9060 | NONE | N | 0 | 1 | TOC | 107 | mg/kg | | Y | Y | P | | | | | | | C008-02 | 14:30 |
| **10117Q-05** | | | | | | | | | | | | | | | | | | | | |
| JM2001 | SW6010B | SW3010 | N | 0 | 1 | ALUMINUM | .148 | mg/L | J | Y | Y | P | J | | 15 | | | | C014-01 | 17:13 |
| | | | | | | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | C014-01 | 17:13 |
| | | | | | | ARSENIC | .01 | mg/L | U | N | Y | U | U | | | | | | C014-01 | 18:27 |
| | | | | | | BARIUM | .021 | mg/L | | Y | Y | P | | | | | | | C014-01 | 17:13 |
| | | | | | | BERYLLIUM | .001 | mg/L | U | N | Y | U | U | | | | | | C014-01 | 17:13 |
| | | | | | | CADMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | C014-01 | 17:13 |
| | | | | | | CALCIUM | .607 | mg/L | J | Y | Y | F | J | | 15 | | | | C014-01 | 17:13 |
| | | | | | | CHROMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | C014-01 | 17:13 |
| | | | | | | COBALT | .02 | mg/L | U | N | Y | U | U | | | | | | C014-01 | 17:13 |
| | | | | | | COPPER | .02 | mg/L | U | N | Y | U | U | | | | | | C014-01 | 17:13 |
| | | | | | | IRON | .0973 | mg/L | J | Y | Y | P | J | | 15 | | | | C014-01 | 17:13 |
| | | | | | | LEAD | .01 | mg/L | U | N | Y | U | U | | | | | | C014-01 | 18:27 |
| | | | | | | MAGNESIUM | .525 | mg/L | J | Y | Y | P | J | | 15 | | | | C014-01 | 17:13 |
| | | | | | | MANGANESE | .0182 | mg/L | | Y | Y | P | | | | | | | C014-01 | 17:13 |
| | | | | | | NICKEL | .02 | mg/L | U | N | Y | U | U | | | | | | C014-01 | 17:13 |
| | | | | | | POTASSIUM | 5 | mg/L | U | N | Y | U | U | | | | | | C014-01 | 17:13 |
| | | | | | | SELENIUM | .01 | mg/L | U | N | Y | U | U | | | | | | C014-01 | 18:27 |
| | | | | | | SILVER | .01 | mg/L | U | N | Y | U | U | | | | | | C014-01 | 17:13 |
| | | | | | | SODIUM | .647 | mg/L | J | Y | Y | P | J | | 15 | | | | C014-01 | 17:13 |
| | | | | | | THALLIUM | .01 | mg/L | U | N | Y | U | U | | | | | | C014-01 | 18:27 |
| | | | | | | VANADIUM | .01 | mg/L | U | N | Y | U | U | | | | | | C014-01 | 17:13 |
| | | | | | | ZINC | .02 | mg/L | U | N | Y | U | U | | | | | | C014-01 | 17:13 |
| | SW7470A | TOTAL | N | 0 | 1 | MERCURY | .0005 | mg/L | U | N | Y | U | U | | | | | | C014-01 | 11:37 |
| JM2002 | SW6010B | SW3010 | N | 0 | 1 | ALUMINUM | .229 | mg/L | | Y | Y | P | | | | | | | C014-02 | 17:17 |
| | | | | | | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | C014-02 | 17:17 |
| | | | | | | ARSENIC | .01 | mg/L | U | N | Y | U | U | | | | | | C014-02 | 18:31 |
| | | | | | | BARIUM | .0221 | mg/L | | Y | Y | P | | | | | | | C014-02 | 17:17 |
| | | | | | | BERYLLIUM | .001 | mg/L | U | N | Y | U | U | | | | | | C014-02 | 17:17 |
| | | | | | | CADMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | C014-02 | 17:17 |
| | | | | | | CALCIUM | .558 | mg/L | J | Y | Y | F | J | | 15 | | | | C014-02 | 17:17 |
| | | | | | | CHROMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | C014-02 | 17:17 |
| | | | | | | COBALT | .02 | mg/L | U | N | Y | U | U | | | | | | C014-02 | 17:17 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10117Q-05** | | | | | | | | | | | | | | | | | | |
| JM2002 | SW6010B | SW3010 | N 0 1 | COPPER | .02 | mg/L | U | N | Y | U | U | | | | | | C014-02 | 17:17 |
| | | | | IRON | .204 | mg/L | | Y | Y | P | | | | | | | C014-02 | 17:17 |
| | | | | LEAD | .01 | mg/L | U | N | Y | U | U | | | | | | C014-02 | 18:31 |
| | | | | MAGNESIUM | .532 | mg/L | J | Y | Y | P | J | | 15 | | | | C014-02 | 17:17 |
| | | | | MANGANESE | .032 | mg/L | | Y | Y | P | | | | | | | C014-02 | 17:17 |
| | | | | NICKEL | .02 | mg/L | U | N | Y | U | U | | | | | | C014-02 | 17:17 |
| | | | | POTASSIUM | 5 | mg/L | U | N | Y | U | U | | | | | | C014-02 | 17:17 |
| | | | | SELENIUM | .01 | mg/L | U | N | Y | U | U | | | | | | C014-02 | 18:31 |
| | | | | SILVER | .01 | mg/L | U | N | Y | U | U | | | | | | C014-02 | 17:17 |
| | | | | SODIUM | .621 | mg/L | J | Y | Y | P | J | | 15 | | | | C014-02 | 17:17 |
| | | | | THALLIUM | .01 | mg/L | U | N | Y | U | U | | | | | | C014-02 | 18:31 |
| | | | | VANADIUM | .01 | mg/L | U | N | Y | U | U | | | | | | C014-02 | 17:17 |
| | | | | ZINC | .02 | mg/L | U | N | Y | U | U | | | | | | C014-02 | 17:17 |
| | SW7470A | TOTAL | N 0 1 | MERCURY | .0005 | mg/L | U | N | Y | U | U | | | | | | C014-02 | 11:39 |
| JM2001 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | U | U | | | | | | C014-01 | 00:39 |
| | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | U | U | | | | | | C014-01 | 00:39 |
| | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | U | U | | | | | | C014-01 | 00:39 |
| | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | C014-01 | 00:39 |
| | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | C014-01 | 00:39 |
| | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | C014-01 | 00:39 |
| | | | | 2-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | C014-01 | 00:39 |
| | | | | 3-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | C014-01 | 00:39 |
| | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | C014-01 | 00:39 |
| | | | | 4-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | C014-01 | 00:39 |
| | | | | HMX | .001 | mg/L | U | N | Y | U | U | | | | | | C014-01 | 00:39 |
| | | | | NITROBENZENE | .0004 | mg/L | U | N | Y | U | U | | | | | | C014-01 | 00:39 |
| | | | | RDX | .0004 | mg/L | U | N | Y | U | U | | | | | | C014-01 | 00:39 |
| | | | | TETRYL | .0004 | mg/L | U | N | Y | U | U | | | | | | C014-01 | 00:39 |
| JM2002 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | U | U | | | | | | C014-02 | 01:17 |
| | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | U | U | | | | | | C014-02 | 01:17 |
| | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | U | U | | | | | | C014-02 | 01:17 |
| | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | C014-02 | 01:17 |
| | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | C014-02 | 01:17 |
| | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | C014-02 | 01:17 |
| | | | | 2-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | C014-02 | 01:17 |
| | | | | 3-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | C014-02 | 01:17 |
| | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | C014-02 | 01:17 |
| | | | | 4-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | C014-02 | 01:17 |
| | | | | HMX | .001 | mg/L | U | N | Y | U | U | | | | | | C014-02 | 01:17 |
| | | | | NITROBENZENE | .0004 | mg/L | U | N | Y | U | U | | | | | | C014-02 | 01:17 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10117Q-05** | | | | | | | | | | | | | | | | | | |
| JM2002 | SW8330 | METHOD | N 0 1 | RDX | .0004 | mg/L | U | N | Y | U | U | | | | | | C014-02 | 01:17 |
| | | | | TETRYL | .0004 | mg/L | U | N | Y | U | U | | | | | | C014-02 | 01:17 |
| JM2001 | EPA314.0 | NONE | N 0 1 | PERCHLORATE | .005 | mg/L | U | N | Y | U | U | | | | | | C014-01 | 08:45 |
| JM2002 | EPA314.0 | NONE | N 0 1 | PERCHLORATE | .005 | mg/L | U | N | Y | U | U | | | | | | C014-02 | 09:02 |
| **10117Q-06** | | | | | | | | | | | | | | | | | | |
| JM3004 | SW6010B | SW3010 | N 0 1 | ALUMINUM | .118 | mg/L | J | Y | Y | P | J | | 15 | | | | E043-05 | 21:57 |
| | | | | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 21:57 |
| | | | | ARSENIC | .01 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 23:10 |
| | | | | BARIUM | .00709 | mg/L | J | Y | Y | P | J | | 15 | | | | E043-05 | 21:57 |
| | | | | BERYLLIUM | .001 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 21:57 |
| | | | | CADMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 21:57 |
| | | | | CALCIUM | .118 | mg/L | J | Y | Y | F | B | | 06B | 06C | 15 | | E043-05 | 21:57 |
| | | | | CHROMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 21:57 |
| | | | | COBALT | .02 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 21:57 |
| | | | | COPPER | .02 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 21:57 |
| | | | | IRON | .0394 | mg/L | J | Y | Y | P | J | | 15 | | | | E043-05 | 21:57 |
| | | | | LEAD | .01 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 23:10 |
| | | | | MAGNESIUM | .101 | mg/L | J | Y | Y | F | B | | 06C | 15 | | | E043-05 | 21:57 |
| | | | | MANGANESE | .0127 | mg/L | | Y | Y | P | | | | | | | E043-05 | 21:57 |
| | | | | NICKEL | .00919 | mg/L | J | Y | Y | P | J | | 15 | | | | E043-05 | 21:57 |
| | | | | POTASSIUM | 5 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 21:57 |
| | | | | SELENIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 23:10 |
| | | | | SILVER | .01 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 21:57 |
| | | | | SODIUM | .789 | mg/L | J | Y | Y | P | J | | 15 | | | | E043-05 | 21:57 |
| | | | | THALLIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 23:10 |
| | | | | VANADIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 21:57 |
| | | | | ZINC | .02 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 21:57 |
| | SW7470A | TOTAL | N 0 1 | MERCURY | .0005 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 10:59 |
| JM3004 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | U | UJ | | 11B | | | | E043-05 | 06:13 |
| | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | U | UJ | | 11B | | | | E043-05 | 06:13 |
| | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | U | UJ | | 11B | | | | E043-05 | 06:13 |
| | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 06:13 |
| | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 06:13 |
| | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 06:13 |
| | | | | 2-NITROTOLUENE | .00087 | mg/L | | Y | Y | P | | | | | | | E043-05 | 06:13 |
| | | | | 3-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 06:13 |
| | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 06:13 |
| | | | | 4-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 06:13 |
| | | | | HMX | .001 | mg/L | U | N | Y | U | UJ | | 11B | | | | E043-05 | 06:13 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10117Q-06** | | | | | | | | | | | | | | | | | | |
| JM3004 | SW8330 | METHOD | N 0 1 | NITROBENZENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 06:13 |
| | | | | RDX | .0004 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 06:13 |
| | | | | TETRYL | .0004 | mg/L | U | N | Y | U | UJ | | 11B | | | | E043-05 | 06:13 |
| JM3004 | E314.0 | NONE | N 0 1 | PERCHLORATE | .00255 | mg/L | J | Y | Y | P | J | | 15 | | | | E043-05 | 02:10 |
| JM3004 | SW8260B | SW5030 | N 0 1 | 1,1,1,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 22:22 |
| | | | | 1,1,1-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 22:22 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 22:22 |
| | | | | 1,1,2-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 22:22 |
| | | | | 1,1-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 22:22 |
| | | | | 1,1-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 22:22 |
| | | | | 1,1-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 22:22 |
| | | | | 1,2,3-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 22:22 |
| | | | | 1,2,3-TRICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 22:22 |
| | | | | 1,2,4-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 22:22 |
| | | | | 1,2,4-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 22:22 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .01 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 22:22 |
| | | | | 1,2-DIBROMOETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 22:22 |
| | | | | 1,2-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 22:22 |
| | | | | 1,2-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 22:22 |
| | | | | 1,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 22:22 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 22:22 |
| | | | | 1,3-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 22:22 |
| | | | | 1,3-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 22:22 |
| | | | | 1,4-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 22:22 |
| | | | | 2,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 22:22 |
| | | | | 2-BUTANONE | .02 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 22:22 |
| | | | | 2-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 22:22 |
| | | | | 2-HEXANONE | .02 | mg/L | U | N | Y | U | UJ | | 05B | | | | E043-05 | 22:22 |
| | | | | 4-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 22:22 |
| | | | | 4-METHYL-2-PENTANONE | .01 | mg/L | U | N | Y | U | UJ | | 05B | | | | E043-05 | 22:22 |
| | | | | ACETONE | .02 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 22:22 |
| | | | | BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 22:22 |
| | | | | BROMOBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 22:22 |
| | | | | BROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 22:22 |
| | | | | BROMODICHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 22:22 |
| | | | | BROMOFORM | .005 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 22:22 |
| | | | | BROMOMETHANE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | E043-05 | 22:22 |
| | | | | CARBON DISULFIDE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | E043-05 | 22:22 |
| | | | | CARBON TETRACHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 22:22 |
| | | | | CHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 22:22 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10117Q-06** | | | | | | | | | | | | | | | | | | |
| JM3004 | SW8260B | SW5030 | N 0 1 | CHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 22:22 |
| | | | | CHLOROFORM | .005 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 22:22 |
| | | | | CHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 22:22 |
| | | | | CIS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 22:22 |
| | | | | CIS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 22:22 |
| | | | | DIBROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 22:22 |
| | | | | DIBROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 22:22 |
| | | | | DICHLORODIFLUOROMETHANE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | E043-05 | 22:22 |
| | | | | ETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 22:22 |
| | | | | HEXACHLOROBUTADIENE | .005 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 22:22 |
| | | | | ISOPROPYL BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 22:22 |
| | | | | M/P-XYLENES | .01 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 22:22 |
| | | | | METHYLENE CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 22:22 |
| | | | | N-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 22:22 |
| | | | | N-PROPYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 22:22 |
| | | | | NAPHTHALENE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | E043-05 | 22:22 |
| | | | | O-XYLENE | .005 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 22:22 |
| | | | | P-ISOPROPYLTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 22:22 |
| | | | | SEC-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 22:22 |
| | | | | STYRENE | .005 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 22:22 |
| | | | | TERT-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 22:22 |
| | | | | TETRACHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 22:22 |
| | | | | TOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 22:22 |
| | | | | TRANS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 22:22 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 22:22 |
| | | | | TRICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 22:22 |
| | | | | TRICHLOROFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 22:22 |
| | | | | VINYL CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E043-05 | 22:22 |
| **10117Q-07** | | | | | | | | | | | | | | | | | | |
| JM3008 | SW6010B | SW3010 | N 0 1 | ALUMINUM | .149 | mg/L | J | Y | Y | F | B | | 06B | 17 | 15 | | E067-04 | 00:30 |
| | | | | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 00:30 |
| | | | | ARSENIC | .01 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 19:42 |
| | | | | BARIUM | .00757 | mg/L | J | Y | Y | P | J | | 15 | | | | E067-04 | 00:30 |
| | | | | BERYLLIUM | .001 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 00:30 |
| | | | | CADMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 00:30 |
| | | | | CALCIUM | .149 | mg/L | J | Y | Y | F | B | | 06B | 15 | | | E067-04 | 00:30 |
| | | | | CHROMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 00:30 |
| | | | | COBALT | .02 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 00:30 |
| | | | | COPPER | .02 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 00:30 |
| | | | | IRON | .0804 | mg/L | J | Y | Y | P | J | | 17 | 15 | | | E067-04 | 00:30 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10117Q-07** | | | | | | | | | | | | | | | | | | | | |
| JM3008 | SW6010B | SW3010 | N | 0 | 1 | LEAD | .01 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 19:42 |
| | | | | | | MAGNESIUM | .421 | mg/L | J | Y | Y | P | J | | 15 | | | | E067-04 | 00:30 |
| | | | | | | MANGANESE | .00557 | mg/L | J | Y | Y | P | J | | 15 | | | | E067-04 | 00:30 |
| | | | | | | NICKEL | .02 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 00:30 |
| | | | | | | POTASSIUM | 5 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 00:30 |
| | | | | | | SELENIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 19:42 |
| | | | | | | SILVER | .01 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 00:30 |
| | | | | | | SODIUM | .918 | mg/L | J | Y | Y | P | J | | 15 | | | | E067-04 | 00:30 |
| | | | | | | THALLIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 19:42 |
| | | | | | | VANADIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 00:30 |
| | | | | | | ZINC | .00653 | mg/L | J | Y | Y | P | J | | 17 | 15 | | | E067-04 | 00:30 |
| | SW7470A | TOTAL | N | 0 | 1 | MERCURY | .0005 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 16:23 |
| JM3009 | SW6010B | SW3010 | N | 0 | 1 | ALUMINUM | .388 | mg/L | | Y | Y | | J | | 17 | | | | E067-05 | 00:35 |
| | | | | | | ANTIMONY | .1 | mg/L | U | N | Y | | U | | | | | | E067-05 | 00:35 |
| | | | | | | ARSENIC | .01 | mg/L | U | N | Y | | U | | | | | | E067-05 | 19:46 |
| | | | | | | BARIUM | .00937 | mg/L | J | Y | Y | | J | | 15 | | | | E067-05 | 00:35 |
| | | | | | | BERYLLIUM | .001 | mg/L | U | N | Y | | U | | | | | | E067-05 | 00:35 |
| | | | | | | CADMIUM | .01 | mg/L | U | N | Y | | U | | | | | | E067-05 | 00:35 |
| | | | | | | CALCIUM | .21 | mg/L | J | Y | Y | F | B | | 06B | 15 | | | E067-05 | 00:35 |
| | | | | | | CHROMIUM | .01 | mg/L | U | N | Y | | U | | | | | | E067-05 | 00:35 |
| | | | | | | COBALT | .02 | mg/L | U | N | Y | | U | | | | | | E067-05 | 00:35 |
| | | | | | | COPPER | .02 | mg/L | U | N | Y | | U | | | | | | E067-05 | 00:35 |
| | | | | | | IRON | .2 | mg/L | J | Y | Y | | J | | 17 | 15 | | | E067-05 | 00:35 |
| | | | | | | LEAD | .01 | mg/L | U | N | Y | | U | | | | | | E067-05 | 19:46 |
| | | | | | | MAGNESIUM | .411 | mg/L | J | Y | Y | | J | | 15 | | | | E067-05 | 00:35 |
| | | | | | | MANGANESE | .00561 | mg/L | J | Y | Y | | J | | 15 | | | | E067-05 | 00:35 |
| | | | | | | NICKEL | .02 | mg/L | U | N | Y | | U | | | | | | E067-05 | 00:35 |
| | | | | | | POTASSIUM | 5 | mg/L | U | N | Y | | U | | | | | | E067-05 | 00:35 |
| | | | | | | SELENIUM | .01 | mg/L | U | N | Y | | U | | | | | | E067-05 | 19:46 |
| | | | | | | SILVER | .01 | mg/L | U | N | Y | | U | | | | | | E067-05 | 00:35 |
| | | | | | | SODIUM | .89 | mg/L | J | Y | Y | | J | | 15 | | | | E067-05 | 00:35 |
| | | | | | | THALLIUM | .01 | mg/L | U | N | Y | | U | | | | | | E067-05 | 19:46 |
| | | | | | | VANADIUM | .01 | mg/L | U | N | Y | | U | | | | | | E067-05 | 00:35 |
| | | | | | | ZINC | .0239 | mg/L | | Y | Y | | J | | 17 | | | | E067-05 | 00:35 |
| | SW7470A | TOTAL | N | 0 | 1 | MERCURY | .0005 | mg/L | U | N | Y | | U | | | | | | E067-05 | 16:26 |
| JM3008 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 01:13 |
| | | | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 01:13 |
| | | | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 01:13 |
| | | | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 01:13 |
| | | | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 01:13 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10117Q-07** | | | | | | | | | | | | | | | | | | |
| JM3008 | SW8330 | METHOD | N 0 1 | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 01:13 |
| | | | | 2-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 01:13 |
| | | | | 3-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 01:13 |
| | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 01:13 |
| | | | | 4-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 01:13 |
| | | | | HMX | .001 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 01:13 |
| | | | | NITROBENZENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 01:13 |
| | | | | RDX | .0004 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 01:13 |
| | | | | TETRYL | .0004 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 01:13 |
| JM3009 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | | U | | | | | | E067-05 | 01:51 |
| | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | | U | | | | | | E067-05 | 01:51 |
| | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | | U | | | | | | E067-05 | 01:51 |
| | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | | U | | | | | | E067-05 | 01:51 |
| | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | | U | | | | | | E067-05 | 01:51 |
| | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | | U | | | | | | E067-05 | 01:51 |
| | | | | 2-NITROTOLUENE | .0004 | mg/L | U | N | Y | | U | | | | | | E067-05 | 01:51 |
| | | | | 3-NITROTOLUENE | .0004 | mg/L | U | N | Y | | U | | | | | | E067-05 | 01:51 |
| | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N | Y | | U | | | | | | E067-05 | 01:51 |
| | | | | 4-NITROTOLUENE | .0004 | mg/L | U | N | Y | | U | | | | | | E067-05 | 01:51 |
| | | | | HMX | .001 | mg/L | U | N | Y | | U | | | | | | E067-05 | 01:51 |
| | | | | NITROBENZENE | .0004 | mg/L | U | N | Y | | U | | | | | | E067-05 | 01:51 |
| | | | | RDX | .0004 | mg/L | U | N | Y | | U | | | | | | E067-05 | 01:51 |
| | | | | TETRYL | .0004 | mg/L | U | N | Y | | U | | | | | | E067-05 | 01:51 |
| JM3008 | E314.0 | NONE | N 0 1 | PERCHLORATE | .005 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 00:27 |
| JM3009 | E314.0 | NONE | N 0 1 | PERCHLORATE | .005 | mg/L | U | N | Y | | U | | | | | | E067-05 | 00:44 |
| JM3008 | SW8260B | SW5030 | N 0 1 | 1,1,1,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 09:42 |
| | | | | 1,1,1-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 09:42 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 09:42 |
| | | | | 1,1,2-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 09:42 |
| | | | | 1,1-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 09:42 |
| | | | | 1,1-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 09:42 |
| | | | | 1,1-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 09:42 |
| | | | | 1,2,3-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 09:42 |
| | | | | 1,2,3-TRICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 09:42 |
| | | | | 1,2,4-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 09:42 |
| | | | | 1,2,4-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 09:42 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .01 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 09:42 |
| | | | | 1,2-DIBROMOETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 09:42 |
| | | | | 1,2-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 09:42 |
| | | | | 1,2-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 09:42 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10117Q-07** | | | | | | | | | | | | | | | | | | |
| JM3008 | SW8260B | SW5030 | N 0 1 | 1,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 09:42 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 09:42 |
| | | | | 1,3-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 09:42 |
| | | | | 1,3-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 09:42 |
| | | | | 1,4-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 09:42 |
| | | | | 2,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 09:42 |
| | | | | 2-BUTANONE | .02 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 09:42 |
| | | | | 2-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 09:42 |
| | | | | 2-HEXANONE | .02 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 09:42 |
| | | | | 4-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 09:42 |
| | | | | 4-METHYL-2-PENTANONE | .01 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 09:42 |
| | | | | ACETONE | .02 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 09:42 |
| | | | | BENZENE | .00083 | mg/L | J | Y | Y | P | J | | 15 | | | | E067-04 | 09:42 |
| | | | | BROMOBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 09:42 |
| | | | | BROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 09:42 |
| | | | | BROMODICHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 09:42 |
| | | | | BROMOFORM | .005 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 09:42 |
| | | | | BROMOMETHANE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | E067-04 | 09:42 |
| | | | | CARBON DISULFIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 09:42 |
| | | | | CARBON TETRACHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 09:42 |
| | | | | CHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 09:42 |
| | | | | CHLOROETHANE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | E067-04 | 09:42 |
| | | | | CHLOROFORM | .005 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 09:42 |
| | | | | CHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 09:42 |
| | | | | CIS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 09:42 |
| | | | | CIS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 09:42 |
| | | | | DIBROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 09:42 |
| | | | | DIBROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 09:42 |
| | | | | DICHLORODIFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 09:42 |
| | | | | ETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 09:42 |
| | | | | HEXACHLOROBUTADIENE | .005 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 09:42 |
| | | | | ISOPROPYL BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 09:42 |
| | | | | M/P-XYLENES | .01 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 09:42 |
| | | | | METHYLENE CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 09:42 |
| | | | | N-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 09:42 |
| | | | | N-PROPYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 09:42 |
| | | | | NAPHTHALENE | .005 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 09:42 |
| | | | | O-XYLENE | .005 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 09:42 |
| | | | | P-ISOPROPYLTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 09:42 |
| | | | | SEC-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 09:42 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10117Q-07** | | | | | | | | | | | | | | | | | | |
| JM3008 | SW8260B | SW5030 | N 0 1 | STYRENE | .005 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 09:42 |
| | | | | TERT-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 09:42 |
| | | | | TETRACHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 09:42 |
| | | | | TOLUENE | .0016 | mg/L | J | Y | Y | P | J | | 15 | | | | E067-04 | 09:42 |
| | | | | TRANS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 09:42 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 09:42 |
| | | | | TRICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 09:42 |
| | | | | TRICHLOROFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 09:42 |
| | | | | VINYL CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E067-04 | 09:42 |
| JM3009 | SW8260B | SW5030 | N 0 1 | 1,1,1,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | | U | | | | | | E067-05 | 10:19 |
| | | | | 1,1,1-TRICHLOROETHANE | .005 | mg/L | U | N | Y | | U | | | | | | E067-05 | 10:19 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | | U | | | | | | E067-05 | 10:19 |
| | | | | 1,1,2-TRICHLOROETHANE | .005 | mg/L | U | N | Y | | U | | | | | | E067-05 | 10:19 |
| | | | | 1,1-DICHLOROETHANE | .005 | mg/L | U | N | Y | | U | | | | | | E067-05 | 10:19 |
| | | | | 1,1-DICHLOROETHENE | .005 | mg/L | U | N | Y | | U | | | | | | E067-05 | 10:19 |
| | | | | 1,1-DICHLOROPROPENE | .005 | mg/L | U | N | Y | | U | | | | | | E067-05 | 10:19 |
| | | | | 1,2,3-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | | U | | | | | | E067-05 | 10:19 |
| | | | | 1,2,3-TRICHLOROPROPANE | .005 | mg/L | U | N | Y | | U | | | | | | E067-05 | 10:19 |
| | | | | 1,2,4-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | | U | | | | | | E067-05 | 10:19 |
| | | | | 1,2,4-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | | U | | | | | | E067-05 | 10:19 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .01 | mg/L | U | N | Y | | U | | | | | | E067-05 | 10:19 |
| | | | | 1,2-DIBROMOETHANE | .005 | mg/L | U | N | Y | | U | | | | | | E067-05 | 10:19 |
| | | | | 1,2-DICHLOROBENZENE | .005 | mg/L | U | N | Y | | U | | | | | | E067-05 | 10:19 |
| | | | | 1,2-DICHLOROETHANE | .005 | mg/L | U | N | Y | | U | | | | | | E067-05 | 10:19 |
| | | | | 1,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | | U | | | | | | E067-05 | 10:19 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | | U | | | | | | E067-05 | 10:19 |
| | | | | 1,3-DICHLOROBENZENE | .005 | mg/L | U | N | Y | | U | | | | | | E067-05 | 10:19 |
| | | | | 1,3-DICHLOROPROPANE | .005 | mg/L | U | N | Y | | U | | | | | | E067-05 | 10:19 |
| | | | | 1,4-DICHLOROBENZENE | .005 | mg/L | U | N | Y | | U | | | | | | E067-05 | 10:19 |
| | | | | 2,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | | U | | | | | | E067-05 | 10:19 |
| | | | | 2-BUTANONE | .02 | mg/L | U | N | Y | | U | | | | | | E067-05 | 10:19 |
| | | | | 2-CHLOROTOLUENE | .005 | mg/L | U | N | Y | | U | | | | | | E067-05 | 10:19 |
| | | | | 2-HEXANONE | .02 | mg/L | U | N | Y | | U | | | | | | E067-05 | 10:19 |
| | | | | 4-CHLOROTOLUENE | .005 | mg/L | U | N | Y | | U | | | | | | E067-05 | 10:19 |
| | | | | 4-METHYL-2-PENTANONE | .01 | mg/L | U | N | Y | | U | | | | | | E067-05 | 10:19 |
| | | | | ACETONE | .02 | mg/L | U | N | Y | | U | | | | | | E067-05 | 10:19 |
| | | | | BENZENE | .00089 | mg/L | J | Y | Y | | J | | 15 | | | | E067-05 | 10:19 |
| | | | | BROMOBENZENE | .005 | mg/L | U | N | Y | | U | | | | | | E067-05 | 10:19 |
| | | | | BROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | | U | | | | | | E067-05 | 10:19 |
| | | | | BROMODICHLOROMETHANE | .005 | mg/L | U | N | Y | | U | | | | | | E067-05 | 10:19 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10117Q-07** | | | | | | | | | | | | | | | | | | |
| JM3009 | SW8260B | SW5030 | N 0 1 | BROMOFORM | .005 | mg/L | U | N | Y | | U | | | | | | E067-05 | 10:19 |
| | | | | BROMOMETHANE | .005 | mg/L | U | N | Y | | UJ | | 05B | | | | E067-05 | 10:19 |
| | | | | CARBON DISULFIDE | .005 | mg/L | U | N | Y | | U | | | | | | E067-05 | 10:19 |
| | | | | CARBON TETRACHLORIDE | .005 | mg/L | U | N | Y | | U | | | | | | E067-05 | 10:19 |
| | | | | CHLOROBENZENE | .005 | mg/L | U | N | Y | | U | | | | | | E067-05 | 10:19 |
| | | | | CHLOROETHANE | .005 | mg/L | U | N | Y | | UJ | | 05B | | | | E067-05 | 10:19 |
| | | | | CHLOROFORM | .005 | mg/L | U | N | Y | | U | | | | | | E067-05 | 10:19 |
| | | | | CHLOROMETHANE | .005 | mg/L | U | N | Y | | U | | | | | | E067-05 | 10:19 |
| | | | | CIS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | | U | | | | | | E067-05 | 10:19 |
| | | | | CIS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | | U | | | | | | E067-05 | 10:19 |
| | | | | DIBROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | | U | | | | | | E067-05 | 10:19 |
| | | | | DIBROMOMETHANE | .005 | mg/L | U | N | Y | | U | | | | | | E067-05 | 10:19 |
| | | | | DICHLORODIFLUOROMETHANE | .005 | mg/L | U | N | Y | | U | | | | | | E067-05 | 10:19 |
| | | | | ETHYLBENZENE | .005 | mg/L | U | N | Y | | U | | | | | | E067-05 | 10:19 |
| | | | | HEXACHLOROBUTADIENE | .005 | mg/L | U | N | Y | | U | | | | | | E067-05 | 10:19 |
| | | | | ISOPROPYL BENZENE | .005 | mg/L | U | N | Y | | U | | | | | | E067-05 | 10:19 |
| | | | | M/P-XYLENES | .01 | mg/L | U | N | Y | | U | | | | | | E067-05 | 10:19 |
| | | | | METHYLENE CHLORIDE | .005 | mg/L | U | N | Y | | U | | | | | | E067-05 | 10:19 |
| | | | | N-BUTYLBENZENE | .005 | mg/L | U | N | Y | | U | | | | | | E067-05 | 10:19 |
| | | | | N-PROPYLBENZENE | .005 | mg/L | U | N | Y | | U | | | | | | E067-05 | 10:19 |
| | | | | NAPHTHALENE | .005 | mg/L | U | N | Y | | U | | | | | | E067-05 | 10:19 |
| | | | | O-XYLENE | .005 | mg/L | U | N | Y | | U | | | | | | E067-05 | 10:19 |
| | | | | P-ISOPROPYLTOLUENE | .005 | mg/L | U | N | Y | | U | | | | | | E067-05 | 10:19 |
| | | | | SEC-BUTYLBENZENE | .005 | mg/L | U | N | Y | | U | | | | | | E067-05 | 10:19 |
| | | | | STYRENE | .005 | mg/L | U | N | Y | | U | | | | | | E067-05 | 10:19 |
| | | | | TERT-BUTYLBENZENE | .005 | mg/L | U | N | Y | | U | | | | | | E067-05 | 10:19 |
| | | | | TETRACHLOROETHENE | .005 | mg/L | U | N | Y | | U | | | | | | E067-05 | 10:19 |
| | | | | TOLUENE | .0018 | mg/L | J | Y | Y | | J | | 15 | | | | E067-05 | 10:19 |
| | | | | TRANS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | | U | | | | | | E067-05 | 10:19 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | | U | | | | | | E067-05 | 10:19 |
| | | | | TRICHLOROETHENE | .005 | mg/L | U | N | Y | | U | | | | | | E067-05 | 10:19 |
| | | | | TRICHLOROFLUOROMETHANE | .005 | mg/L | U | N | Y | | U | | | | | | E067-05 | 10:19 |
| | | | | VINYL CHLORIDE | .005 | mg/L | U | N | Y | | U | | | | | | E067-05 | 10:19 |
| **10117Q-08** | | | | | | | | | | | | | | | | | | |
| JM3007 | SW6010B | SW3010 | N 0 1 | ALUMINUM | 2.88 | mg/L | | Y | Y | P | | | | | | | E098-01 | 21:30 |
| | | | | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 21:30 |
| | | | | ARSENIC | .01 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 22:38 |
| | | | | BARIUM | .0496 | mg/L | | Y | Y | P | | | | | | | E098-01 | 21:30 |
| | | | | BERYLLIUM | .00512 | mg/L | | Y | Y | P | | | | | | | E098-01 | 21:30 |
| | | | | CADMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 21:30 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10117Q-08** | | | | | | | | | | | | | | | | | | |
| JM3007 | SW6010B | SW3010 | N 0 1 | CALCIUM | 21.6 | mg/L | | Y | Y | P | | | | | | | E098-01 | 21:30 |
| | | | | CHROMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 21:30 |
| | | | | COBALT | .02 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 21:30 |
| | | | | COPPER | .00309 | mg/L | J | Y | Y | F | B | | 06B | 15 | | | E098-01 | 21:30 |
| | | | | IRON | 1.96 | mg/L | | Y | Y | P | | | | | | | E098-01 | 21:30 |
| | | | | LEAD | .00756 | mg/L | J | Y | Y | F | B | | 06A | 15 | | | E098-01 | 22:38 |
| | | | | MAGNESIUM | 12.1 | mg/L | | Y | Y | P | | | | | | | E098-01 | 21:30 |
| | | | | MANGANESE | .249 | mg/L | | Y | Y | P | | | | | | | E098-01 | 21:30 |
| | | | | NICKEL | .02 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 21:30 |
| | | | | POTASSIUM | 5 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 21:30 |
| | | | | SELENIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 22:38 |
| | | | | SILVER | .01 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 21:30 |
| | | | | SODIUM | 1.06 | mg/L | | Y | Y | P | | | | | | | E098-01 | 21:30 |
| | | | | THALLIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 22:38 |
| | | | | VANADIUM | .00741 | mg/L | J | Y | Y | P | J | | 15 | | | | E098-01 | 21:30 |
| | | | | ZINC | .0378 | mg/L | | Y | Y | P | | | | | | | E098-01 | 21:30 |
| | SW7470A | TOTAL | N 0 1 | MERCURY | .0005 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 10:57 |
| JM3007 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 16:39 |
| | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 16:39 |
| | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 16:39 |
| | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 16:39 |
| | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 16:39 |
| | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 16:39 |
| | | | | 2-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 16:39 |
| | | | | 3-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 16:39 |
| | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 16:39 |
| | | | | 4-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 16:39 |
| | | | | HMX | .001 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 16:39 |
| | | | | NITROBENZENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 16:39 |
| | | | | RDX | .0004 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 16:39 |
| | | | | TETRYL | .0004 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 16:39 |
| JM3007 | E314.0 | NONE | N 0 1 | PERCHLORATE | .005 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 16:46 |
| JM3007 | SW8260B | SW5030 | N 0 1 | 1,1,1,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 01:30 |
| | | | | 1,1,1-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 01:30 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 01:30 |
| | | | | 1,1,2-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 01:30 |
| | | | | 1,1-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 01:30 |
| | | | | 1,1-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 01:30 |
| | | | | 1,1-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 01:30 |
| | | | | 1,2,3-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 01:30 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10117Q-08** | | | | | | | | | | | | | | | | | | |
| JM3007 | SW8260B | SW5030 | N 0 1 | 1,2,3-TRICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 01:30 |
| | | | | 1,2,4-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 01:30 |
| | | | | 1,2,4-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 01:30 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .01 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 01:30 |
| | | | | 1,2-DIBROMOETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 01:30 |
| | | | | 1,2-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 01:30 |
| | | | | 1,2-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 01:30 |
| | | | | 1,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 01:30 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 01:30 |
| | | | | 1,3-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 01:30 |
| | | | | 1,3-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 01:30 |
| | | | | 1,4-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 01:30 |
| | | | | 2,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 01:30 |
| | | | | 2-BUTANONE | .02 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 01:30 |
| | | | | 2-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 01:30 |
| | | | | 2-HEXANONE | .02 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 01:30 |
| | | | | 4-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 01:30 |
| | | | | 4-METHYL-2-PENTANONE | .01 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 01:30 |
| | | | | ACETONE | .02 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 01:30 |
| | | | | BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 01:30 |
| | | | | BROMOBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 01:30 |
| | | | | BROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 01:30 |
| | | | | BROMODICHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 01:30 |
| | | | | BROMOFORM | .005 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 01:30 |
| | | | | BROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 01:30 |
| | | | | CARBON DISULFIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 01:30 |
| | | | | CARBON TETRACHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 01:30 |
| | | | | CHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 01:30 |
| | | | | CHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 01:30 |
| | | | | CHLOROFORM | .005 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 01:30 |
| | | | | CHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 01:30 |
| | | | | CIS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 01:30 |
| | | | | CIS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 01:30 |
| | | | | DIBROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 01:30 |
| | | | | DIBROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 01:30 |
| | | | | DICHLORODIFLUOROMETHANE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | E098-01 | 01:30 |
| | | | | ETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 01:30 |
| | | | | HEXACHLOROBUTADIENE | .005 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 01:30 |
| | | | | ISOPROPYL BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 01:30 |
| | | | | M/P-XYLENES | .01 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 01:30 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10117Q-08** | | | | | | | | | | | | | | | | | | |
| JM3007 | SW8260B | SW5030 | N 0 1 | METHYLENE CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 01:30 |
| | | | | N-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 01:30 |
| | | | | N-PROPYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 01:30 |
| | | | | NAPHTHALENE | .005 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 01:30 |
| | | | | O-XYLENE | .005 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 01:30 |
| | | | | P-ISOPROPYLTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 01:30 |
| | | | | SEC-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 01:30 |
| | | | | STYRENE | .005 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 01:30 |
| | | | | TERT-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 01:30 |
| | | | | TETRACHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 01:30 |
| | | | | TOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 01:30 |
| | | | | TRANS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 01:30 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 01:30 |
| | | | | TRICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 01:30 |
| | | | | TRICHLOROFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 01:30 |
| | | | | VINYL CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E098-01 | 01:30 |
| **10117Q-09** | | | | | | | | | | | | | | | | | | |
| JM3001 | SW6010B | SW3010 | N 0 1 | ALUMINUM | .0947 | mg/L | J | Y | Y | P | J | | 15 | | | | E130-01 | 17:37 |
| | | | | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 17:37 |
| | | | | ARSENIC | .01 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 21:19 |
| | | | | BARIUM | .0257 | mg/L | | Y | Y | P | | | | | | | E130-01 | 17:37 |
| | | | | BERYLLIUM | .001 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 17:37 |
| | | | | CADMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 17:37 |
| | | | | CALCIUM | .556 | mg/L | J | Y | Y | P | J | | 15 | | | | E130-01 | 17:37 |
| | | | | CHROMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 17:37 |
| | | | | COBALT | .02 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 17:37 |
| | | | | COPPER | .02 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 17:37 |
| | | | | IRON | .2 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 17:37 |
| | | | | LEAD | .01 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 21:19 |
| | | | | MAGNESIUM | .635 | mg/L | J | Y | Y | P | J | | 15 | | | | E130-01 | 17:37 |
| | | | | MANGANESE | .0232 | mg/L | | Y | Y | P | | | | | | | E130-01 | 17:37 |
| | | | | NICKEL | .02 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 17:37 |
| | | | | POTASSIUM | 5 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 17:37 |
| | | | | SELENIUM | .00244 | mg/L | J | Y | Y | P | J | | 15 | | | | E130-01 | 21:19 |
| | | | | SILVER | .01 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 17:37 |
| | | | | SODIUM | .881 | mg/L | J | Y | Y | P | J | | 15 | | | | E130-01 | 17:37 |
| | | | | THALLIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 21:19 |
| | | | | VANADIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 17:37 |
| | | | | ZINC | .00913 | mg/L | J | Y | Y | P | J | | 15 | | | | E130-01 | 17:37 |
| | SW7470A | TOTAL | N 0 1 | MERCURY | .0005 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 16:18 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10117Q-09** | | | | | | | | | | | | | | | | | | |
| JM3005 | SW6010B | SW3010 | N 0 1 | ALUMINUM | .465 | mg/L | | Y | Y | P | | | | | | | E130-02 | 17:41 |
| | | | | ANTIMONY | .047 | mg/L | J | Y | Y | P | J | | 15 | | | | E130-02 | 17:41 |
| | | | | ARSENIC | .01 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 21:23 |
| | | | | BARIUM | .0259 | mg/L | | Y | Y | P | | | | | | | E130-02 | 17:41 |
| | | | | BERYLLIUM | .001 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 17:41 |
| | | | | CADMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 17:41 |
| | | | | CALCIUM | 4.17 | mg/L | | Y | Y | P | | | | | | | E130-02 | 17:41 |
| | | | | CHROMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 17:41 |
| | | | | COBALT | .02 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 17:41 |
| | | | | COPPER | .02 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 17:41 |
| | | | | IRON | .182 | mg/L | J | Y | Y | P | J | | 15 | | | | E130-02 | 17:41 |
| | | | | LEAD | .01 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 21:23 |
| | | | | MAGNESIUM | .984 | mg/L | J | Y | Y | P | J | | 15 | | | | E130-02 | 17:41 |
| | | | | MANGANESE | .563 | mg/L | | Y | Y | P | | | | | | | E130-02 | 17:41 |
| | | | | NICKEL | .02 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 17:41 |
| | | | | POTASSIUM | 6.35 | mg/L | | Y | Y | P | | | | | | | E130-02 | 17:41 |
| | | | | SELENIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 21:23 |
| | | | | SILVER | .01 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 17:41 |
| | | | | SODIUM | 2.78 | mg/L | | Y | Y | P | | | | | | | E130-02 | 17:41 |
| | | | | THALLIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 21:23 |
| | | | | VANADIUM | .00462 | mg/L | J | Y | Y | P | J | | 15 | | | | E130-02 | 17:41 |
| | | | | ZINC | .0435 | mg/L | | Y | Y | P | | | | | | | E130-02 | 17:41 |
| | SW7470A | TOTAL | N 0 1 | MERCURY | .0005 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 16:21 |
| JM3001 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 21:16 |
| | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 21:16 |
| | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 21:16 |
| | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 21:16 |
| | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 21:16 |
| | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 21:16 |
| | | | | 2-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 21:16 |
| | | | | 3-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 21:16 |
| | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 21:16 |
| | | | | 4-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 21:16 |
| | | | | HMX | .001 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 21:16 |
| | | | | NITROBENZENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 21:16 |
| | | | | RDX | .0004 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 21:16 |
| | | | | TETRYL | .0004 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 21:16 |
| JM3005 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 21:54 |
| | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 21:54 |
| | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 21:54 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10117Q-09** | | | | | | | | | | | | | | | | | | |
| JM3005 | SW8330 | METHOD | N 0 1 | 2,4-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 21:54 |
| | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 21:54 |
| | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 21:54 |
| | | | | 2-NITROTOLUENE | .0002 | mg/L | J | Y | Y | P | J | | 15 | | | | E130-02 | 21:54 |
| | | | | 3-NITROTOLUENE | .0017 | mg/L | | Y | Y | P | | | | | | | E130-02 | 21:54 |
| | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 21:54 |
| | | | | 4-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 21:54 |
| | | | | HMX | .001 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 21:54 |
| | | | | NITROBENZENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 21:54 |
| | | | | RDX | .0004 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 21:54 |
| | | | | TETRYL | .0004 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 21:54 |
| JM3001 | E314.0 | NONE | N 0 1 | PERCHLORATE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 19:06 |
| JM3005 | E314.0 | NONE | N 0 1 | PERCHLORATE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 19:23 |
| JM3001 | SW8260B | SW5030 | N 0 1 | 1,1,1,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 12:35 |
| | | | | 1,1,1-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 12:35 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 12:35 |
| | | | | 1,1,2-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 12:35 |
| | | | | 1,1-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 12:35 |
| | | | | 1,1-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 12:35 |
| | | | | 1,1-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 12:35 |
| | | | | 1,2,3-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 12:35 |
| | | | | 1,2,3-TRICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 12:35 |
| | | | | 1,2,4-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 12:35 |
| | | | | 1,2,4-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 12:35 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .01 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 12:35 |
| | | | | 1,2-DIBROMOETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 12:35 |
| | | | | 1,2-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 12:35 |
| | | | | 1,2-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 12:35 |
| | | | | 1,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 12:35 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 12:35 |
| | | | | 1,3-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 12:35 |
| | | | | 1,3-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 12:35 |
| | | | | 1,4-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 12:35 |
| | | | | 2,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 12:35 |
| | | | | 2-BUTANONE | .02 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 12:35 |
| | | | | 2-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 12:35 |
| | | | | 2-HEXANONE | .02 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 12:35 |
| | | | | 4-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 12:35 |
| | | | | 4-METHYL-2-PENTANONE | .01 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 12:35 |
| | | | | ACETONE | .02 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 12:35 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10117Q-09** | | | | | | | | | | | | | | | | | | |
| JM3001 | SW8260B | SW5030 | N 0 1 | BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 12:35 |
| | | | | BROMOBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 12:35 |
| | | | | BROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 12:35 |
| | | | | BROMODICHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 12:35 |
| | | | | BROMOFORM | .005 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 12:35 |
| | | | | BROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 12:35 |
| | | | | CARBON DISULFIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 12:35 |
| | | | | CARBON TETRACHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 12:35 |
| | | | | CHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 12:35 |
| | | | | CHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 12:35 |
| | | | | CHLOROFORM | .005 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 12:35 |
| | | | | CHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 12:35 |
| | | | | CIS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 12:35 |
| | | | | CIS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 12:35 |
| | | | | DIBROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 12:35 |
| | | | | DIBROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 12:35 |
| | | | | DICHLORODIFLUOROMETHANE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | E130-01 | 12:35 |
| | | | | ETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 12:35 |
| | | | | HEXACHLOROBUTADIENE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 12:35 |
| | | | | ISOPROPYL BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 12:35 |
| | | | | M/P-XYLENES | .01 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 12:35 |
| | | | | METHYLENE CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 12:35 |
| | | | | N-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 12:35 |
| | | | | N-PROPYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 12:35 |
| | | | | NAPHTHALENE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 12:35 |
| | | | | O-XYLENE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 12:35 |
| | | | | P-ISOPROPYLTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 12:35 |
| | | | | SEC-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 12:35 |
| | | | | STYRENE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 12:35 |
| | | | | TERT-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 12:35 |
| | | | | TETRACHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 12:35 |
| | | | | TOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 12:35 |
| | | | | TRANS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 12:35 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 12:35 |
| | | | | TRICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 12:35 |
| | | | | TRICHLOROFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 12:35 |
| | | | | VINYL CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-01 | 12:35 |
| JM3005 | SW8260B | SW5030 | N 0 1 | 1,1,1,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 13:13 |
| | | | | 1,1,1-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 13:13 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 13:13 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10117Q-09** | | | | | | | | | | | | | | | | | | |
| JM3005 | SW8260B | SW5030 | N 0 1 | 1,1,2-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 13:13 |
| | | | | 1,1-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 13:13 |
| | | | | 1,1-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 13:13 |
| | | | | 1,1-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 13:13 |
| | | | | 1,2,3-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 13:13 |
| | | | | 1,2,3-TRICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 13:13 |
| | | | | 1,2,4-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 13:13 |
| | | | | 1,2,4-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 13:13 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .01 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 13:13 |
| | | | | 1,2-DIBROMOETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 13:13 |
| | | | | 1,2-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 13:13 |
| | | | | 1,2-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 13:13 |
| | | | | 1,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 13:13 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 13:13 |
| | | | | 1,3-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 13:13 |
| | | | | 1,3-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 13:13 |
| | | | | 1,4-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 13:13 |
| | | | | 2,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 13:13 |
| | | | | 2-BUTANONE | .02 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 13:13 |
| | | | | 2-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 13:13 |
| | | | | 2-HEXANONE | .02 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 13:13 |
| | | | | 4-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 13:13 |
| | | | | 4-METHYL-2-PENTANONE | .01 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 13:13 |
| | | | | ACETONE | .02 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 13:13 |
| | | | | BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 13:13 |
| | | | | BROMOBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 13:13 |
| | | | | BROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 13:13 |
| | | | | BROMODICHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 13:13 |
| | | | | BROMOFORM | .005 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 13:13 |
| | | | | BROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 13:13 |
| | | | | CARBON DISULFIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 13:13 |
| | | | | CARBON TETRACHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 13:13 |
| | | | | CHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 13:13 |
| | | | | CHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 13:13 |
| | | | | CHLOROFORM | .005 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 13:13 |
| | | | | CHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 13:13 |
| | | | | CIS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 13:13 |
| | | | | CIS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 13:13 |
| | | | | DIBROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 13:13 |
| | | | | DIBROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 13:13 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10117Q-09** | | | | | | | | | | | | | | | | | | |
| JM3005 | SW8260B | SW5030 | N 0 1 | DICHLORODIFLUOROMETHANE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | E130-02 | 13:13 |
| | | | | ETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 13:13 |
| | | | | HEXACHLOROBUTADIENE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 13:13 |
| | | | | ISOPROPYL BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 13:13 |
| | | | | M/P-XYLENES | .01 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 13:13 |
| | | | | METHYLENE CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 13:13 |
| | | | | N-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 13:13 |
| | | | | N-PROPYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 13:13 |
| | | | | NAPHTHALENE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 13:13 |
| | | | | O-XYLENE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 13:13 |
| | | | | P-ISOPROPYLTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 13:13 |
| | | | | SEC-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 13:13 |
| | | | | STYRENE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 13:13 |
| | | | | TERT-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 13:13 |
| | | | | TETRACHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 13:13 |
| | | | | TOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 13:13 |
| | | | | TRANS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 13:13 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 13:13 |
| | | | | TRICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 13:13 |
| | | | | TRICHLOROFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 13:13 |
| | | | | VINYL CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E130-02 | 13:13 |
| **10117Q-10** | | | | | | | | | | | | | | | | | | |
| JM3002 | SW6010B | SW3010 | N 0 1 | ALUMINUM | .359 | mg/L | | Y | Y | P | | | | | | | F011-01 | 12:11 |
| | | | | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:11 |
| | | | | ARSENIC | .01 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 19:40 |
| | | | | BARIUM | .0193 | mg/L | | Y | Y | P | | | | | | | F011-01 | 12:11 |
| | | | | BERYLLIUM | .001 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:11 |
| | | | | CADMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:11 |
| | | | | CALCIUM | .59 | mg/L | J | Y | Y | P | J | | 15 | | | | F011-01 | 12:11 |
| | | | | CHROMIUM | .00496 | mg/L | J | Y | Y | P | J | | 15 | | | | F011-01 | 12:11 |
| | | | | COBALT | .02 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:11 |
| | | | | COPPER | .02 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:11 |
| | | | | IRON | .941 | mg/L | | Y | Y | P | | | | | | | F011-01 | 12:11 |
| | | | | LEAD | .01 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 19:40 |
| | | | | MAGNESIUM | .54 | mg/L | J | Y | Y | P | J | | 15 | | | | F011-01 | 12:11 |
| | | | | MANGANESE | .267 | mg/L | | Y | Y | P | | | | | | | F011-01 | 12:11 |
| | | | | NICKEL | .02 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:11 |
| | | | | POTASSIUM | 3.19 | mg/L | J | Y | Y | P | J | | 15 | | | | F011-01 | 12:11 |
| | | | | SELENIUM | .00177 | mg/L | J | Y | Y | P | J | | 15 | | | | F011-01 | 19:40 |
| | | | | SILVER | .01 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:11 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10117Q-10** | | | | | | | | | | | | | | | | | | |
| JM3002 | SW6010B | SW3010 | N 0 1 | SODIUM | 1.91 | mg/L | | Y | Y | P | | | | | | | F011-01 | 12:11 |
| | | | | THALLIUM | .01 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 19:40 |
| | | | | VANADIUM | .01 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:11 |
| | | | | ZINC | .032 | mg/L | | Y | Y | P | | | | | | | F011-01 | 12:11 |
| | SW7470A | TOTAL | N 0 1 | MERCURY | .0005 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 11:18 |
| JM3002 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 02:35 |
| | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 02:35 |
| | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 02:35 |
| | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 02:35 |
| | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 02:35 |
| | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 02:35 |
| | | | | 2-NITROTOLUENE | .0019 | mg/L | | Y | Y | P | | | | | | | F011-01 | 02:35 |
| | | | | 3-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 02:35 |
| | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 02:35 |
| | | | | 4-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 02:35 |
| | | | | HMX | .001 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 02:35 |
| | | | | NITROBENZENE | .0004 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 02:35 |
| | | | | RDX | .0004 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 02:35 |
| | | | | TETRYL | .0004 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 02:35 |
| JM3002 | E314.0 | NONE | N 0 1 | PERCHLORATE | .005 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 04:41 |
| JM3002 | SW8260B | SW5030 | N 0 1 | 1,1,1,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:18 |
| | | | | 1,1,1-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:18 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:18 |
| | | | | 1,1,2-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:18 |
| | | | | 1,1-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:18 |
| | | | | 1,1-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:18 |
| | | | | 1,1-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:18 |
| | | | | 1,2,3-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:18 |
| | | | | 1,2,3-TRICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:18 |
| | | | | 1,2,4-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:18 |
| | | | | 1,2,4-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:18 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .01 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:18 |
| | | | | 1,2-DIBROMOETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:18 |
| | | | | 1,2-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:18 |
| | | | | 1,2-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:18 |
| | | | | 1,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:18 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:18 |
| | | | | 1,3-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:18 |
| | | | | 1,3-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:18 |
| | | | | 1,4-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:18 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10117Q-10** | | | | | | | | | | | | | | | | | | |
| JM3002 | SW8260B | SW5030 | N 0 1 | 2,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:18 |
| | | | | 2-BUTANONE | .02 | mg/L | U | N | Y | U | UJ | | 05B | | | | F011-01 | 12:18 |
| | | | | 2-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:18 |
| | | | | 2-HEXANONE | .02 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:18 |
| | | | | 4-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:18 |
| | | | | 4-METHYL-2-PENTANONE | .01 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:18 |
| | | | | ACETONE | .02 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:18 |
| | | | | BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:18 |
| | | | | BROMOBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:18 |
| | | | | BROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:18 |
| | | | | BROMODICHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:18 |
| | | | | BROMOFORM | .005 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:18 |
| | | | | BROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:18 |
| | | | | CARBON DISULFIDE | .005 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:18 |
| | | | | CARBON TETRACHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:18 |
| | | | | CHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:18 |
| | | | | CHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:18 |
| | | | | CHLOROFORM | .005 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:18 |
| | | | | CHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:18 |
| | | | | CIS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:18 |
| | | | | CIS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:18 |
| | | | | DIBROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:18 |
| | | | | DIBROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:18 |
| | | | | DICHLORODIFLUOROMETHANE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | F011-01 | 12:18 |
| | | | | ETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:18 |
| | | | | HEXACHLOROBUTADIENE | .005 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:18 |
| | | | | ISOPROPYL BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:18 |
| | | | | M/P-XYLENES | .01 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:18 |
| | | | | METHYLENE CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:18 |
| | | | | N-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:18 |
| | | | | N-PROPYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:18 |
| | | | | NAPHTHALENE | .005 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:18 |
| | | | | O-XYLENE | .005 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:18 |
| | | | | P-ISOPROPYLTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:18 |
| | | | | SEC-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:18 |
| | | | | STYRENE | .005 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:18 |
| | | | | TERT-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:18 |
| | | | | TETRACHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:18 |
| | | | | TOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:18 |
| | | | | TRANS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:18 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10117Q-10** | | | | | | | | | | | | | | | | | | |
| JM3002 | SW8260B | SW5030 | N 0 1 | TRANS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:18 |
| | | | | TRICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:18 |
| | | | | TRICHLOROFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:18 |
| | | | | VINYL CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | F011-01 | 12:18 |
| **10117Q-12** | | | | | | | | | | | | | | | | | | |
| JM3006 | SW6010B | SW3010 | N 0 1 | ALUMINUM | 1.44 | mg/L | | Y | Y | P | | | | | | | F233-02 | 12:12 |
| | | | | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 12:12 |
| | | | | ARSENIC | .01 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 18:26 |
| | | | | BARIUM | .00535 | mg/L | J | Y | Y | F | B | | 06B | 15 | | | F233-02 | 12:12 |
| | | | | BERYLLIUM | .001 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 12:12 |
| | | | | CADMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 12:12 |
| | | | | CALCIUM | .232 | mg/L | J | Y | Y | P | J | | 15 | | | | F233-02 | 12:12 |
| | | | | CHROMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 12:12 |
| | | | | COBALT | .02 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 12:12 |
| | | | | COPPER | .02 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 12:12 |
| | | | | IRON | .623 | mg/L | | Y | Y | P | | | | | | | F233-02 | 12:12 |
| | | | | LEAD | .01 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 18:26 |
| | | | | MAGNESIUM | .11 | mg/L | J | Y | Y | F | B | | 06B | 15 | | | F233-02 | 12:12 |
| | | | | MANGANESE | .0219 | mg/L | | Y | Y | P | | | | | | | F233-02 | 12:12 |
| | | | | NICKEL | .02 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 12:12 |
| | | | | POTASSIUM | 2.61 | mg/L | J | Y | Y | P | J | | 15 | | | | F233-02 | 12:12 |
| | | | | SELENIUM | .01 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 18:26 |
| | | | | SILVER | .01 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 12:12 |
| | | | | SODIUM | 7.74 | mg/L | | Y | Y | P | | | | | | | F233-02 | 12:12 |
| | | | | THALLIUM | .01 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 18:26 |
| | | | | VANADIUM | .01 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 12:12 |
| | | | | ZINC | .02 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 12:12 |
| | SW7470A | TOTAL | N 0 1 | MERCURY | .0005 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 11:51 |
| JM3006 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 16:09 |
| | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 16:09 |
| | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 16:09 |
| | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 16:09 |
| | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 16:09 |
| | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 16:09 |
| | | | | 2-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 16:09 |
| | | | | 3-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 16:09 |
| | | | | 4-AM-2,6-DNT | .0012 | mg/L | | Y | Y | P | | | | | | | F233-02 | 16:09 |
| | | | | 4-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 16:09 |
| | | | | HMX | .001 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 16:09 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10117Q-12** | | | | | | | | | | | | | | | | | | | | |
| JM3006 | SW8330 | METHOD | N | 0 | 1 | NITROBENZENE | .0004 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 16:09 |
| | | | | | | RDX | .0004 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 16:09 |
| | | | | | | TETRYL | .00036 | mg/L | J | Y | Y | P | J | | 15 | | | | F233-02 | 16:09 |
| JM3006 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .005 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 15:03 |
| JM3006 | SW8260B | SW5030 | N | 0 | 1 | 1,1,1,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 10:58 |
| | | | | | | 1,1,1-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 10:58 |
| | | | | | | 1,1,2,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 10:58 |
| | | | | | | 1,1,2-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 10:58 |
| | | | | | | 1,1-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 10:58 |
| | | | | | | 1,1-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 10:58 |
| | | | | | | 1,1-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 10:58 |
| | | | | | | 1,2,3-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 10:58 |
| | | | | | | 1,2,3-TRICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 10:58 |
| | | | | | | 1,2,4-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 10:58 |
| | | | | | | 1,2,4-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 10:58 |
| | | | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .01 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 10:58 |
| | | | | | | 1,2-DIBROMOETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 10:58 |
| | | | | | | 1,2-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 10:58 |
| | | | | | | 1,2-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | F233-02 | 10:58 |
| | | | | | | 1,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 10:58 |
| | | | | | | 1,3,5-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 10:58 |
| | | | | | | 1,3-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 10:58 |
| | | | | | | 1,3-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 10:58 |
| | | | | | | 1,4-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 10:58 |
| | | | | | | 2,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | F233-02 | 10:58 |
| | | | | | | 2-BUTANONE | .02 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 10:58 |
| | | | | | | 2-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 10:58 |
| | | | | | | 2-HEXANONE | .02 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 10:58 |
| | | | | | | 4-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 10:58 |
| | | | | | | 4-METHYL-2-PENTANONE | .01 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 10:58 |
| | | | | | | ACETONE | .02 | mg/L | U | N | Y | U | UJ | | 05B | | | | F233-02 | 10:58 |
| | | | | | | BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 10:58 |
| | | | | | | BROMOBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 10:58 |
| | | | | | | BROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 10:58 |
| | | | | | | BROMODICHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 10:58 |
| | | | | | | BROMOFORM | .005 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 10:58 |
| | | | | | | BROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 10:58 |
| | | | | | | CARBON DISULFIDE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | F233-02 | 10:58 |
| | | | | | | CARBON TETRACHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 10:58 |
| | | | | | | CHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 10:58 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10117Q-12** | | | | | | | | | | | | | | | | | | |
| JM3006 | SW8260B | SW5030 | N 0 1 | CHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 10:58 |
| | | | | CHLOROFORM | .005 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 10:58 |
| | | | | CHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 10:58 |
| | | | | CIS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 10:58 |
| | | | | CIS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 10:58 |
| | | | | DIBROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | F233-02 | 10:58 |
| | | | | DIBROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 10:58 |
| | | | | DICHLORODIFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 10:58 |
| | | | | ETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 10:58 |
| | | | | HEXACHLOROBUTADIENE | .005 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 10:58 |
| | | | | ISOPROPYL BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 10:58 |
| | | | | M/P-XYLENES | .01 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 10:58 |
| | | | | METHYLENE CHLORIDE | .0018 | mg/L | J | Y | Y | F | B | | 06A | 06D | 15 | | F233-02 | 10:58 |
| | | | | N-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 10:58 |
| | | | | N-PROPYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 10:58 |
| | | | | NAPHTHALENE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | F233-02 | 10:58 |
| | | | | O-XYLENE | .005 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 10:58 |
| | | | | P-ISOPROPYLTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 10:58 |
| | | | | SEC-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 10:58 |
| | | | | STYRENE | .005 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 10:58 |
| | | | | TERT-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 10:58 |
| | | | | TETRACHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 10:58 |
| | | | | TOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 10:58 |
| | | | | TRANS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 10:58 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 10:58 |
| | | | | TRICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 10:58 |
| | | | | TRICHLOROFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 10:58 |
| | | | | VINYL CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | F233-02 | 10:58 |
| **10117Q11** | | | | | | | | | | | | | | | | | | |
| JM3003 | SW6010 | TOTREC | N 0 1 | ALUMINUM | .48 | mg/L | | Y | Y | P | | | | | | | EELPTW | 13:43 |
| | | | | ANTIMONY | .06 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 13:43 |
| | | | | ARSENIC | .01 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 13:43 |
| | | | | BARIUM | .0143 | mg/L | B | Y | Y | P | J | | 15 | | | | EELPTW | 13:43 |
| | | | | BERYLLIUM | .005 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 13:43 |
| | | | | CADMIUM | .005 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 13:43 |
| | | | | CALCIUM | 1.28 | mg/L | B | Y | Y | P | J | | 15 | | | | EELPTW | 13:43 |
| | | | | CHROMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 13:43 |
| | | | | COBALT | .0049 | mg/L | B | Y | Y | P | J | | 15 | | | | EELPTW | 13:43 |
| | | | | COPPER | .0042 | mg/L | B | Y | Y | F | B | | 06B | 15 | | | EELPTW | 13:43 |
| | | | | IRON | 2.5 | mg/L | | Y | Y | P | | | | | | | EELPTW | 13:43 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10117Q11** | | | | | | | | | | | | | | | | | | |
| JM3003 | SW6010 | TOTREC | N 0 1 | LEAD | .003 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 13:43 |
| | | | | MAGNESIUM | .252 | mg/L | B | Y | Y | F | B | | 06C | 15 | | | EELPTW | 13:43 |
| | | | | MANGANESE | .0701 | mg/L | | Y | Y | P | | | | | | | EELPTW | 13:43 |
| | | | | NICKEL | .0064 | mg/L | B | Y | Y | F | B | | 06B | 15 | | | EELPTW | 13:43 |
| | | | | POTASSIUM | 1.82 | mg/L | B | Y | Y | P | J | | 15 | | | | EELPTW | 13:43 |
| | | | | SELENIUM | .005 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 13:43 |
| | | | | SILVER | .01 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 13:43 |
| | | | | SODIUM | 1.82 | mg/L | B | Y | Y | P | J | | 15 | | | | EELPTW | 13:43 |
| | | | | THALLIUM | .01 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 13:43 |
| | | | | VANADIUM | .05 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 13:43 |
| | | | | ZINC | .198 | mg/L | | Y | Y | P | | | | | | | EELPTW | 13:43 |
| | SW7470 | TOTAL | N 0 1 | MERCURY | .0002 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 14:29 |
| JM3003 | SW8330 | METHOD | N 0 1 | 1,3,5-TRINITROBENZENE | .0028 | mg/L | G U | N | Y | U | U | | | | | | EELPTW | 23:31 |
| | | | | 1,3-DINITROBENZENE | .0002 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 23:31 |
| | | | | 2,4,6-TRINITROTOLUENE | .0002 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 23:31 |
| | | | | 2,4-DINITROTOLUENE | .0016 | mg/L | G U | N | Y | U | U | | | | | | EELPTW | 23:31 |
| | | | | 2,6-DINITROTOLUENE | .002 | mg/L | G U | N | Y | U | U | | | | | | EELPTW | 23:31 |
| | | | | 2-AMINO-4,6-DINITROTOLUENE | .0032 | mg/L | G U | N | Y | U | U | | | | | | EELPTW | 23:31 |
| | | | | 2-NITROTOLUENE | .0017 | mg/L | G U | N | Y | U | U | | | | | | EELPTW | 23:31 |
| | | | | 3-NITROTOLUENE | .0014 | mg/L | G U | N | Y | U | U | | | | | | EELPTW | 23:31 |
| | | | | 4-AMINO-2,6-DINITROTOLUENE | .001 | mg/L | G U | N | Y | U | U | | | | | | EELPTW | 23:31 |
| | | | | 4-NITROTOLUENE | .0058 | mg/L | G U | N | Y | U | U | | | | | | EELPTW | 23:31 |
| | | | | HMX | .0005 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 23:31 |
| | | | | NITROBENZENE | .00056 | mg/L | G U | N | Y | U | U | | | | | | EELPTW | 23:31 |
| | | | | RDX | .0005 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 23:31 |
| | | | | TETRYL | .0002 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 23:31 |
| JM3003 | E314.0 | NONE | N 0 1 | PERCHLORATE | .005 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 00:00 |
| JM3003 | SW8260 | SW5030 | N 0 1 | 1,1,1,2-TETRACHLOROETHANE | .001 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 18:46 |
| | | | | 1,1,1-TRICHLOROETHANE | .001 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 18:46 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .001 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 18:46 |
| | | | | 1,1,2-TRICHLOROETHANE | .001 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 18:46 |
| | | | | 1,1-DICHLOROETHANE | .001 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 18:46 |
| | | | | 1,1-DICHLOROETHENE | .001 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 18:46 |
| | | | | 1,1-DICHLOROPROPENE | .001 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 18:46 |
| | | | | 1,2,3-TRICHLOROBENZENE | .001 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 18:46 |
| | | | | 1,2,3-TRICHLOROPROPANE | .001 | mg/L | U | N | Y | U | R | | 04A | | | | EELPTW | 18:46 |
| | | | | 1,2,4-TRICHLOROBENZENE | .001 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 18:46 |
| | | | | 1,2,4-TRIMETHYLBENZENE | .001 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 18:46 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .002 | mg/L | U | N | Y | U | R | | 04A | | | | EELPTW | 18:46 |
| | | | | 1,2-DIBROMOETHANE | .001 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 18:46 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10117Q11** | | | | | | | | | | | | | | | | | | |
| JM3003 | SW8260 | SW5030 | N 0 1 | 1,2-DICHLOROBENZENE | .001 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 18:46 |
| | | | | 1,2-DICHLOROETHANE | .001 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 18:46 |
| | | | | 1,2-DICHLOROPROPANE | .001 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 18:46 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .001 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 18:46 |
| | | | | 1,3-DICHLOROBENZENE | .001 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 18:46 |
| | | | | 1,3-DICHLOROPROPANE | .001 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 18:46 |
| | | | | 1,4-DICHLOROBENZENE | .001 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 18:46 |
| | | | | 2,2-DICHLOROPROPANE | .001 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 18:46 |
| | | | | 2-BUTANONE | .005 | mg/L | U | N | Y | U | R | | 04A | | | | EELPTW | 18:46 |
| | | | | 2-CHLOROTOLUENE | .001 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 18:46 |
| | | | | 2-HEXANONE | .005 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 18:46 |
| | | | | 4-CHLOROTOLUENE | .001 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 18:46 |
| | | | | 4-METHYL-2-PENTANONE | .005 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 18:46 |
| | | | | ACETONE | .01 | mg/L | U | N | Y | U | R | | 04A | | | | EELPTW | 18:46 |
| | | | | BENZENE | .001 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 18:46 |
| | | | | BROMOBENZENE | .001 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 18:46 |
| | | | | BROMOCHLOROMETHANE | .001 | mg/L | U | N | Y | U | R | | 04A | | | | EELPTW | 18:46 |
| | | | | BROMODICHLOROMETHANE | .001 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 18:46 |
| | | | | BROMOFORM | .001 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 18:46 |
| | | | | BROMOMETHANE | .00053 | mg/L | J B | Y | Y | F | B | | 06A | 06C | 15 | | EELPTW | 18:46 |
| | | | | CARBON DISULFIDE | .001 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 18:46 |
| | | | | CARBON TETRACHLORIDE | .001 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 18:46 |
| | | | | CHLOROBENZENE | .001 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 18:46 |
| | | | | CHLORODIBROMOMETHANE | .001 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 18:46 |
| | | | | CHLOROETHANE | .002 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 18:46 |
| | | | | CHLOROFORM | .001 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 18:46 |
| | | | | CHLOROMETHANE | .0014 | mg/L | J B | Y | Y | P | J | | 15 | | | | EELPTW | 18:46 |
| | | | | CIS-1,2-DICHLOROETHENE | .001 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 18:46 |
| | | | | CIS-1,3-DICHLOROPROPENE | .001 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 18:46 |
| | | | | DIBROMOMETHANE | .001 | mg/L | U | N | Y | U | R | | 04A | | | | EELPTW | 18:46 |
| | | | | DICHLORODIFLUOROMETHANE | .002 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 18:46 |
| | | | | ETHYLBENZENE | .001 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 18:46 |
| | | | | HEXACHLOROBUTADIENE | .001 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 18:46 |
| | | | | ISOPROPYLBENZENE | .001 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 18:46 |
| | | | | M-XYLENE & P-XYLENE | .001 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 18:46 |
| | | | | METHYLENE CHLORIDE | .001 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 18:46 |
| | | | | N-BUTYLBENZENE | .001 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 18:46 |
| | | | | N-PROPYLBENZENE | .001 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 18:46 |
| | | | | NAPHTHALENE | .001 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 18:46 |
| | | | | O-XYLENE | .001 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 18:46 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10117Q11** | | | | | | | | | | | | | | | | | | |
| JM3003 | SW8260 | SW5030 | N 0 1 | P-ISOPROPYLTOLUENE | .001 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 18:46 |
| | | | | SEC-BUTYLBENZENE | .001 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 18:46 |
| | | | | STYRENE | .001 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 18:46 |
| | | | | TERT-BUTYLBENZENE | .001 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 18:46 |
| | | | | TETRACHLOROETHENE | .001 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 18:46 |
| | | | | TOLUENE | .001 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 18:46 |
| | | | | TRANS-1,2-DICHLOROETHENE | .001 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 18:46 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .001 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 18:46 |
| | | | | TRICHLOROETHENE | .001 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 18:46 |
| | | | | TRICHLOROFLUOROMETHANE | .002 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 18:46 |
| | | | | VINYL CHLORIDE | .002 | mg/L | U | N | Y | U | U | | | | | | EELPTW | 18:46 |

***Quality Assurance Report***
***For Ranges West of Iron Mountain Road***
***Parcel HR-151Q***
***IT Project No 796887***
***Fort McClellan Quality Assurance Report***

## *1.0 Overview*

Twelve soil samples, 2 sediment samples, 1 surface water sample, and 1 groundwater sample were collected in support of the investigation at Fort McClellan (FTMC) Parcel HR-151Q, Ranges West of Iron Mountain Road. All samples were submitted to EMAX Laboratories, Inc. for analysis. Soil, sediment, and surface water samples were analyzed for target analyte list (TAL) metals, nitroaromatic-nitramine explosives, and perchlorate. Groundwater samples were analyzed for (TAL) metals, nitroaromatic-nitramine explosives, perchlorate, and target compound list (TCL) volatiles. QC samples consisted of the following types and quantities: 3 field duplicates, 3 trip blanks, and 5 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 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 data and validation 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 (DQO) were met, laboratory analytical results and data packages were examined for compliance with SW846 SW6010B/SW7000 Series, SW8330, SW8260B, and U.S. Environmental Protection Agency (EPA) 314.0 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 analytical holding times were met.

## *2.2 Rejected Data*

Table 2.2-1 lists all rejected analytical data for soil and aqueous samples. Sample re-collection at this time is not warranted due to all rejected results being reported as non-detect.

**Table 2.2-1 Rejected Analytical Results**

| Sample Delivery Group | Sample Number | Contaminant | Reason |
|---|---|---|---|
| 10151Q-05 | JP3001 | 1,2-Dibromo-3-chloropropane<br>Acetone | Calibration Relative Response Factor (RRF) <0.05. |

## *2.3 Blank Results*

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

- Trip blanks (TBs) consist of a VOC sample vial filled in the laboratory with ASTM Type II reagent grade water, transported to the sampling site, handled like an environmental sample and returned to the laboratory for analysis. Trip blanks are prepared only when VOC samples are collected and analyzed. Trip blanks are used to assess the potential introduction of contaminants from sample containers during the transportation and/or storage procedures. Trip blanks were sent with all aqueous samples shipped to the laboratory requiring volatile analysis.

- Equipment rinsates (ER) are samples of analyte-free deionized water poured into, or 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 an analyte-free matrix which is analyzed to verify the analysis system is free of contamination. ICBs and CCBs are analyzed immediately after the initial and continuing calibration is performed.

Field sample concentrations were evaluated to determine if the sample results could have been biased by the presence of any contamination measured in trip blanks, 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 |
|---|---|---|---|
| 10151Q-01 | JP0001, JP0003, JP0010, JP0011 & JP0012 | Potassium | Potassium results for samples JP0001, JP0003, JP0010, JP0011 & JP0012 were "B" qualified. |
| | JP0001, JP0003 & JP0010 | Arsenic | Arsenic results for samples JP0001, JP0003 and JP0010 were "B" qualified. |
| | JP0004 | Thallium | Thallium result for sample JP0004 was "B" qualified. |
| | JP0002 | Chromium | Chromium result for sample JP0002 was "B" qualified. |
| 10151Q-02 | JP1001 | Potassium | Potassium result for sample JP1001 was "B" qualified. |
| | JP1002 | Cobalt | Cobalt result for sample JP1002 was "B" qualified. |
| 10151Q-04 | JP0005, JP0006, JP0007 & JP0009 | Cobalt<br>Potassium<br>Silver | Cobalt, potassium and silver results for samples JP0005, JP0006, JP0007 and JP0009 were "B" qualified. |
| | JP0008 | Potassium | Potassium result for sample JP0008 was "B" qualified. |
| | JP0007 | Zinc | Zinc result for sample JP0007 was "B" qualified. |
| 10151Q-05 | JP3001 | Aluminum<br>Nickel<br>Magnesium<br>Sodium<br>Barium<br>Calcium<br>Zinc | Aluminum, nickel, magnesium, sodium, barium, calcium and zinc results for sample JP3001 were "B" qualified. |

## *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.

Overall sampling and analysis precision for this task was assessed using field duplicate (FD) samples. Laboratory precision was assessed by laboratory control sample/laboratory control sample duplicate (LCS/LCSD) and matrix spike/matrix spike duplicate (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 list field duplicate, LCS/LCSD and MS/MSD RPD anomalies.

**Table 2.4-1 Precision Acceptance Criteria**

| Field/Laboratory QC Type | Matrix | |
|---|---|---|
| | Aqueous | Soil |
| Field Duplicate (Both Organic & Inorganic) | RPD < 35% | RPD < 50% |
| Perchlorate LCS/LCSD and MS/MSD | RPD < 10% | RPD < 20% |
| TCL Volatiles LCS/LCSD and MS/MSD | Refer to Table 8-1of FTMC "Installation Wide Sample and Analysis Plan" | Refer to Table 8-1of FTMC "Installation Wide Sample and Analysis Plan" |
| Nitroaromatic and Nitramine Explosives LCS/LCSD and MS/MSD | Refer to Table 8-1of FTMC "Installation Wide Sample and Analysis Plan" | Refer to Table 8-1of FTMC "Installation Wide Sample and Analysis Plan" |
| Metals LCS/LCSD and MS/MSD | RPD < 20% | 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 |
|---|---|---|---|
| 10151Q-01 | JP0011 (Parent) / JP0012 (FD) | Cobalt (64%) | Cobalt results for samples JP0011 and JP0012 were "J" qualified due to RPD between parent sample and its corresponding field duplicate exceeding QC criteria. |
| 10151Q-02 | JP1001 (Parent) / JP1002 (FD) | Calcium (86%)<br>Mercury (126%) | Cobalt results for samples JP1001 and JP1002 were "J" qualified due to RPD between parent sample and its corresponding field duplicate 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 SW846 SW6010B/SW7000 Series methodology, nitroaromatic-nitramine explosives by SW8330, perchlorate by EPA 314.0 and TCL volatiles by SW8260B. Reported results indicate that an acceptable level of analytical accuracy was achieved. Surrogate, LCS/LCSD and MS/MSD spike recoveries, which exceed QA criteria are summarized in Table 2.5-1.

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

| Sample Delivery Group | Sample Number | Contaminant | Action |
|---|---|---|---|
| 10151Q-04 | JP0005 MS/MSD | Antimony (LB)<br>Barium (HB)<br>Lead (LB) | Antimony, barium and lead results for samples JP0005, JP0006, JP0007, JP0008 and JP0009 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. Soil sample data are being used to assess potential impacts to terrestrial biota that might use the site for food and/or habitat purposes. Monitoring well locations where chosen to establish groundwater flow direction and site-specific geology, and provide 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-151Q Ranges West of Iron Mountain Road. 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-151Q requirement for completeness is 95% for both aqueous and soil samples. The % Completeness for this task is calculated to be 99.7%

- % Completeness = (672 / 674) x 100 = 99.7%.

## *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-151Q
# Ranges West of Iron Mountain Road
# Analytical Summary
# Project No. 796887

## HR-151Q Soil Sampling

| Sample Location | Sample Name | Sample Number | Date Sampled | Analytical Suite |
|---|---|---|---|---|
| HR-151Q-MW01 | HR-151Q-MW01-SS-JP0001-REG | JP0001 | 14-Dec-00 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-151Q-MW01-DS-JP0002-REG | JP0002 | 14-Dec-00 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-151Q-GP01 | HR-151Q-GP01-SS-JP0003-REG | JP0003 | 13-Dec-00 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-151Q-GP01-DS-JP0004-REG | JP0004 | 13-Dec-00 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-151Q-GP02 | HR-151Q-GP02-SS-JP0005-REG | JP0005 | 10-Apr-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-151Q-GP02-DS-JP0006-REG | JP0006 | 10-Apr-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-151Q-GP02-DS-JP0007-FD | JP0007 | 10-Apr-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-151Q-GP03 | HR-151Q-GP03-SS-JP0008-REG | JP0008 | 10-Apr-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-151Q-GP03-DS-JP0009-REG | JP0009 | 10-Apr-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-151Q-GP04 | HR-151Q-GP04-SS-JP0010-REG | JP0010 | 11-Dec-00 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-151Q-GP04-DS-JP0011-REG | JP0011 | 11-Dec-00 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-151Q-GP04-DS-JP0012-FD | JP0012 | 11-Dec-00 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |

## HR-151Q Groundwater Sampling

| Sample Location | Sample Name | Sample Number | Date Sampled | Analytical Suite |
|---|---|---|---|---|
| HR-151Q-MW01 | HR-151Q-MW01-GW-JP3001-REG | JP3001 | 23-Apr-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |

## HR-151Q Sediment-Surface Water Sampling

| Sample Location | Sample Name | Sample Number | Date Sampled | Analytical Suite |
|---|---|---|---|---|
| HR-151Q-SW/SD01 | HR-151Q-SW/SD01-SD-JP1001-REG | JP1001 | 28-Feb-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330, Perchlorate by EPA 314.0, TOC by SW9060 and Grain size by ASTM 421/422. |
| | HR-151Q-SW/SD01-SD-JP1002-FD | JP1002 | 28-Feb-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330, Perchlorate by EPA 314.0, TOC by SW9060 and Grain size by ASTM 421/422. |
| | HR-151Q-SW/SD01-SW-JP2001-REG | JP2001 | 28-Feb-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |

# ATTACHMENT B

# DATA VALIDATION SUMMARY REPORT

***Data Validation Summary Report***
***for the Site Investigation Performed at the***
***Ranges West of Iron Mountain Road (Parcel HR-151Q)***
***Fort McClellan***

## *1.0 Introduction*

Level III data validation was performed on 100% of the environmental samples collected at Ranges West of Iron Mountain Road (Parcel HR-151Q). The analytical data consisted of five sample delivery groups (SDG) 10151Q-01, 10151Q-02, 10151Q-03, 10151Q-04, and 10151Q-05, 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) |
|---|
| Volatile Organics by GC/MS SW846 8260B |
| TAL Metals by SW846 6010B/7470A/7471A |
| Nitroaromatic and Nitramine Explosives by SW846 8330 |
| Perchlorate by EPA 314.0 |
| Total Organic Carbon (TOC) by SW846 9060 |

## *2.0 Procedures*

The sample data were validated following the logic identified in the *USEPA Contract Laboratory Program (CLP) National Functional Guidelines For Inorganic Data Review (February 1994)* and *USEPA Contract Laboratory Program National Functional Guidelines For Organic Review (October 1999)* for all areas except Blanks. *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's) were applied to all sample results. As the result of the use of Update III SW846 test methods for the analytical data and the application of the 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 Chromatograph (GC) and Gas Chromatograph/Mass Spectra (GC/MS) calibration areas and is due to the fact that the analytical methods are "performance-based", and allows 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, CFR, SOP's, QAP) 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 qualification. The only rejected data ('R' qualified) were due to "poor performing" volatile compounds (ketones, some halogenated hydrocarbons, e.g.), which exhibited poor calibration responses in the associated calibration data.

Individual validation reports have been prepared for each parameter in each SDG 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 Parcel HR-151Q. 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 Volatile Organics by GC/MS SW846 8260B*

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:

<u>Holding Times</u>

Technical holding time criteria were met for all samples.

Initial and Continuing Calibration

The initial calibration and continuing calibrations associated with the project samples met QC criteria, with the exception of the following:

- The following exhibited individual ICAL RRF< 0.1 and/or CCAL %D's > 20%:

| SDG Number | Samples Affected | Compound(s) | Validation Qualifier |
|---|---|---|---|
| 10151Q-05 | JP3001 | 1,2-Dibromo-3-Chloropropane, Acetone, 2-Butanone, 2-Hexanone, 4-Methyl-2-pentanone | R/UJ |

Blanks

The 5X/10X rule for contaminants found in the associated equipment rinses, trip blanks, and method blanks was applied to all sample results. All were found to be acceptable.

Surrogate Recoveries

All surrogate recoveries are within acceptable QC limits.

Matrix Spike / Matrix Spike Duplicate

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

Laboratory Control Sample (LCS)

LCS 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.

Internal Standards

All internal standards met QC criteria

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.

### *4.2 TAL 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 exception of the following:

Note: 'B' Qualifiers were applied to all of the following sample results.

| SDG | Samples Affected | Analyte/Analytes | Associated Blank Contamination |
|---|---|---|---|
| 10151Q-01 | JP0001, JP0003, JP0010, JP0011, JP0012 | Potassium | Method |
| | JP0001, JP0003, JP0010 | Arsenic | Calibration |
| | JP0003, JP0010 | Selenium | Calibration |
| | JP0004 | Thallium | Calibration |
| | JP0002 | Chromium | Calibration |
| 10151Q-02 | JP1001 | Potassium | Calibration |
| | JP1002 | Cobalt | Calibration |
| 10151Q-04 | JP0005, JP0006, JP0007, JP0009 | Cobalt, Potassium, Silver | Method/Calibration |
| | JP0008 | Potassium | Calibration |
| | JP0007 | Zinc | Calibration |
| 10151Q-05 | JP3001 | Aluminum, Nickel, Magnesium, Sodium, Barium, Calcium, Zinc | Method/Calibration/ER |

'B' qualifiers assigned to designate blank contamination, which are identification qualifiers, take precedence over estimating qualifiers, assigned due to quantitation.

Matrix Spike / Matrix Spike Duplicate

Batch QC was performed for the project samples and all QC criteria were met, with the exception of the following:

| SDG | Samples Affected | Element/Elements | Validation Qualifier |
|---|---|---|---|
| 10151Q-04 | ALL | Antimony, Barium, Lead | J/UJ |

Laboratory Control Sample (LCS)

All QC criteria were met for the LCS associated with the project sample analyses.

Interference Check Sample (ICS)

All ICS % recoveries for the project samples were acceptable.

ICP Serial Dilutions

All QC criteria were met, with the exception of the following:

| SDG | Samples Affected | Element/Elements | Validation Qualifier |
|---|---|---|---|
| 10151Q-04 | ALL | Zinc | J |

Field Duplicates

Original and field duplicate results were evaluated and no problems were identified, with the exception of the following:

| SDG | Samples Affected | Element/Elements | Validation Qualifier |
|---|---|---|---|
| 10151Q-01 | JP0011 (original), JP0012 (duplicate) | Cobalt | J |
| 10151Q-02 | JP1001 (original), JP1002 (duplicate) | Calcium, Mercury | J |

Sample Quantitation

Results quantified between the IDL and the RL ("J" flagged by the laboratory) were qualified as estimated (J).

### *4.3 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 are within acceptable QC ranges.

Matrix Spike / Matrix Spike Duplicate

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

Laboratory Control Sample (LCS)

LCS 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.

### *4.4 Perchlorate by EPA 314.0*

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

Laboratory Control Sample (LCS)

All QC criteria were met for the LCS associated with the project sample analyses.

Field Duplicates

Original and field duplicate results were evaluated and no problems were noted.

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.

### *4.5. 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. All was acceptable no qualification was necessary.

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, no qualification was necessary.

Matrix Spike / Matrix Spike Duplicate

MS/MSD were performed for the project samples, and all QC criteria were met. No qualification was necessary.

Laboratory Control Sample

Laboratory Control Sample (LCS) was performed for the project samples and all QC criteria were met. No qualification was necessary.

Field Duplicates

Original and field duplicate results were evaluated and no problems were noted.

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 "nondetect" may be inaccurate or imprecise. The nondetect result should be estimated.

## Validation Reason Code Definitions

| Reason Code | Definition |
|---|---|
| 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

Run Date: October 1, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10151Q-01** | | | | | | | | | | | | | | | | | | |
| JP0001 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 6850 | mg/kg | | Y | Y | P | | | | | | | L184-01 | 23:03 |
| | | | | ANTIMONY | 11.6 | mg/kg | U | N | Y | U | U | | | | | | L184-01 | 23:03 |
| | | | | ARSENIC | .936 | mg/kg | J | Y | Y | F | B | | 06B | 15 | | | L184-01 | 22:11 |
| | | | | BARIUM | 41.1 | mg/kg | | Y | Y | P | | | | | | | L184-01 | 23:03 |
| | | | | BERYLLIUM | .221 | mg/kg | J | Y | Y | P | J | | 15 | | | | L184-01 | 23:03 |
| | | | | CADMIUM | .581 | mg/kg | U | N | Y | U | U | | | | | | L184-01 | 23:03 |
| | | | | CALCIUM | 140 | mg/kg | | Y | Y | P | | | | | | | L184-01 | 23:03 |
| | | | | CHROMIUM | 6.1 | mg/kg | | Y | Y | P | | | | | | | L184-01 | 23:03 |
| | | | | COBALT | .599 | mg/kg | J | Y | Y | P | J | | 15 | | | | L184-01 | 23:03 |
| | | | | COPPER | 2.17 | mg/kg | J | Y | Y | P | J | | 15 | | | | L184-01 | 23:03 |
| | | | | IRON | 2580 | mg/kg | | Y | Y | P | | | | | | | L184-01 | 23:03 |
| | | | | LEAD | 10.5 | mg/kg | | Y | Y | P | | | | | | | L184-01 | 22:11 |
| | | | | MAGNESIUM | 148 | mg/kg | | Y | Y | P | | | | | | | L184-01 | 23:03 |
| | | | | MANGANESE | 237 | mg/kg | | Y | Y | P | | | | | | | L184-01 | 23:03 |
| | | | | NICKEL | 2.9 | mg/kg | | Y | Y | P | | | | | | | L184-01 | 23:03 |
| | | | | POTASSIUM | 154 | mg/kg | J | Y | Y | F | B | | 06A | 15 | | | L184-01 | 23:03 |
| | | | | SELENIUM | 1.16 | mg/kg | U | N | Y | U | U | | | | | | L184-01 | 22:11 |
| | | | | SILVER | 1.16 | mg/kg | U | N | Y | U | U | | | | | | L184-01 | 23:03 |
| | | | | SODIUM | 116 | mg/kg | U | N | Y | U | U | | | | | | L184-01 | 23:03 |
| | | | | THALLIUM | 2.33 | mg/kg | U | N | Y | U | U | | | | | | L184-01 | 22:11 |
| | | | | VANADIUM | 8.98 | mg/kg | | Y | Y | P | | | | | | | L184-01 | 23:03 |
| | | | | ZINC | 15.5 | mg/kg | | Y | Y | P | | | | | | | L184-01 | 23:03 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .052 | mg/kg | J | Y | Y | P | J | | 15 | | | | L184-01 | 16:15 |
| JP0002 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 1280 | mg/kg | | Y | Y | P | | | | | | | L184-02 | 23:08 |
| | | | | ANTIMONY | 10.9 | mg/kg | U | N | Y | U | U | | | | | | L184-02 | 23:08 |
| | | | | ARSENIC | 1.09 | mg/kg | U | N | Y | U | U | | | | | | L184-02 | 22:15 |
| | | | | BARIUM | 17.5 | mg/kg | | Y | Y | P | | | | | | | L184-02 | 23:08 |
| | | | | BERYLLIUM | .0288 | mg/kg | J | Y | Y | P | J | | 15 | | | | L184-02 | 23:08 |
| | | | | CADMIUM | .543 | mg/kg | U | N | Y | U | U | | | | | | L184-02 | 23:08 |
| | | | | CALCIUM | 52.3 | mg/kg | J | Y | Y | P | J | | 15 | | | | L184-02 | 23:08 |
| | | | | CHROMIUM | 2.45 | mg/kg | | Y | Y | F | B | | 06B | | | | L184-02 | 23:08 |
| | | | | COBALT | 2.17 | mg/kg | U | N | Y | U | U | | | | | | L184-02 | 23:08 |
| | | | | COPPER | 2.17 | mg/kg | U | N | Y | U | U | | | | | | L184-02 | 23:08 |
| | | | | IRON | 1020 | mg/kg | | Y | Y | P | | | | | | | L184-02 | 23:08 |
| | | | | LEAD | 1.43 | mg/kg | | Y | Y | P | | | | | | | L184-02 | 22:15 |
| | | | | MAGNESIUM | 16.1 | mg/kg | J | Y | Y | P | J | | 15 | | | | L184-02 | 23:08 |
| | | | | MANGANESE | 3.41 | mg/kg | | Y | Y | P | | | | | | | L184-02 | 23:08 |
| | | | | NICKEL | 2.17 | mg/kg | U | N | Y | U | U | | | | | | L184-02 | 23:08 |
| | | | | POTASSIUM | 543 | mg/kg | U | N | Y | U | U | | | | | | L184-02 | 23:08 |
| | | | | SELENIUM | 1.09 | mg/kg | U | N | Y | U | U | | | | | | L184-02 | 22:15 |

# Validation Qualifier Data Entry Verification

Run Date: October 1, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10151Q-01** | | | | | | | | | | | | | | | | | | |
| JP0002 | SW6010B | SW3050 | N 0 1 | SILVER | 1.09 | mg/kg | U | N | Y | U | U | | | | | | L184-02 | 23:08 |
| | | | | SODIUM | 109 | mg/kg | U | N | Y | U | U | | | | | | L184-02 | 23:08 |
| | | | | THALLIUM | 2.17 | mg/kg | U | N | Y | U | U | | | | | | L184-02 | 22:15 |
| | | | | VANADIUM | 3.09 | mg/kg | | Y | Y | P | | | | | | | L184-02 | 23:08 |
| | | | | ZINC | 2.14 | mg/kg | J | Y | Y | P | J | | 15 | | | | L184-02 | 23:08 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .109 | mg/kg | U | N | Y | U | U | | | | | | L184-02 | 16:18 |
| JP0003 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 4210 | mg/kg | | Y | Y | P | | | | | | | L163-01 | 21:56 |
| | | | | ANTIMONY | 10.9 | mg/kg | U | N | Y | U | U | | | | | | L163-01 | 21:56 |
| | | | | ARSENIC | .293 | mg/kg | J | Y | Y | F | B | | 06B | 15 | | | L163-01 | 21:27 |
| | | | | BARIUM | 20.3 | mg/kg | | Y | Y | P | | | | | | | L163-01 | 21:56 |
| | | | | BERYLLIUM | .0718 | mg/kg | J | Y | Y | P | J | | 15 | | | | L163-01 | 21:56 |
| | | | | CADMIUM | 4.37 | mg/kg | | Y | Y | P | | | | | | | L163-01 | 21:56 |
| | | | | CALCIUM | 153 | mg/kg | | Y | Y | P | | | | | | | L163-01 | 21:56 |
| | | | | CHROMIUM | 6.19 | mg/kg | | Y | Y | P | | | | | | | L163-01 | 21:56 |
| | | | | COBALT | 2.19 | mg/kg | U | N | Y | U | U | | | | | | L163-01 | 21:56 |
| | | | | COPPER | 2.18 | mg/kg | J | Y | Y | P | J | | 15 | | | | L163-01 | 21:56 |
| | | | | IRON | 2260 | mg/kg | | Y | Y | P | | | | | | | L163-01 | 21:56 |
| | | | | LEAD | 9.8 | mg/kg | | Y | Y | P | | | | | | | L163-01 | 21:27 |
| | | | | MAGNESIUM | 110 | mg/kg | | Y | Y | P | | | | | | | L163-01 | 21:56 |
| | | | | MANGANESE | 86.4 | mg/kg | | Y | Y | P | | | | | | | L163-01 | 21:56 |
| | | | | NICKEL | 2.25 | mg/kg | | Y | Y | P | | | | | | | L163-01 | 21:56 |
| | | | | POTASSIUM | 144 | mg/kg | J | Y | Y | F | B | | 06A | 15 | | | L163-01 | 21:56 |
| | | | | SELENIUM | .47 | mg/kg | J | Y | Y | F | B | | 06B | 15 | | | L163-01 | 21:27 |
| | | | | SILVER | 1.09 | mg/kg | U | N | Y | U | U | | | | | | L163-01 | 21:56 |
| | | | | SODIUM | 109 | mg/kg | U | N | Y | U | U | | | | | | L163-01 | 21:56 |
| | | | | THALLIUM | 2.19 | mg/kg | U | N | Y | U | U | | | | | | L163-01 | 21:27 |
| | | | | VANADIUM | 7.1 | mg/kg | | Y | Y | P | | | | | | | L163-01 | 21:56 |
| | | | | ZINC | 13.3 | mg/kg | | Y | Y | P | | | | | | | L163-01 | 21:56 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .029 | mg/kg | J | Y | Y | P | J | | 15 | | | | L163-01 | 16:04 |
| JP0004 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 5520 | mg/kg | | Y | Y | P | | | | | | | L163-02 | 22:01 |
| | | | | ANTIMONY | 11 | mg/kg | U | N | Y | U | U | | | | | | L163-02 | 22:01 |
| | | | | ARSENIC | 2.16 | mg/kg | | Y | Y | P | | | | | | | L163-02 | 21:32 |
| | | | | BARIUM | 5.72 | mg/kg | | Y | Y | P | | | | | | | L163-02 | 22:01 |
| | | | | BERYLLIUM | .285 | mg/kg | J | Y | Y | P | J | | 15 | | | | L163-02 | 22:01 |
| | | | | CADMIUM | .551 | mg/kg | U | N | Y | U | U | | | | | | L163-02 | 22:01 |
| | | | | CALCIUM | 93.3 | mg/kg | J | Y | Y | P | J | | 15 | | | | L163-02 | 22:01 |
| | | | | CHROMIUM | 30.9 | mg/kg | | Y | Y | P | | | | | | | L163-02 | 22:01 |
| | | | | COBALT | 2.38 | mg/kg | | Y | Y | P | | | | | | | L163-02 | 22:01 |
| | | | | COPPER | 9.7 | mg/kg | | Y | Y | P | | | | | | | L163-02 | 22:01 |
| | | | | IRON | 38900 | mg/kg | | Y | Y | P | | | | | | | L163-02 | 22:01 |

# Validation Qualifier Data Entry Verification

Run Date: October 1, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10151Q-01** | | | | | | | | | | | | | | | | | | |
| JP0004 | SW6010B | SW3050 | N 0 1 | LEAD | 4 | mg/kg | | Y | Y | P | | | | | | | L163-02 | 21:32 |
| | | | | MAGNESIUM | 51.6 | mg/kg | J | Y | Y | P | J | | 15 | | | | L163-02 | 22:01 |
| | | | | MANGANESE | 18.3 | mg/kg | | Y | Y | P | | | | | | | L163-02 | 22:01 |
| | | | | NICKEL | 4.83 | mg/kg | | Y | Y | P | | | | | | | L163-02 | 22:01 |
| | | | | POTASSIUM | 551 | mg/kg | U | N | Y | U | U | | | | | | L163-02 | 22:01 |
| | | | | SELENIUM | 1.1 | mg/kg | U | N | Y | U | U | | | | | | L163-02 | 21:32 |
| | | | | SILVER | 1.1 | mg/kg | U | N | Y | U | U | | | | | | L163-02 | 22:01 |
| | | | | SODIUM | 110 | mg/kg | U | N | Y | U | U | | | | | | L163-02 | 22:01 |
| | | | | THALLIUM | 1.51 | mg/kg | J | Y | Y | F | B | | 06B | 15 | | | L163-02 | 21:32 |
| | | | | VANADIUM | 43.5 | mg/kg | | Y | Y | P | | | | | | | L163-02 | 22:01 |
| | | | | ZINC | 13.9 | mg/kg | | Y | Y | P | | | | | | | L163-02 | 22:01 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .11 | mg/kg | U | N | Y | U | U | | | | | | L163-02 | 16:06 |
| JP0010 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 4960 | mg/kg | | Y | Y | P | | | | | | | L145-01 | 22:47 |
| | | | | ANTIMONY | 11.4 | mg/kg | U | N | Y | U | U | | | | | | L145-01 | 22:47 |
| | | | | ARSENIC | 1.2 | mg/kg | | Y | Y | F | B | | 06B | | | | L145-01 | 21:13 |
| | | | | BARIUM | 24.1 | mg/kg | | Y | Y | P | | | | | | | L145-01 | 22:47 |
| | | | | BERYLLIUM | .124 | mg/kg | J | Y | Y | P | J | | 15 | | | | L145-01 | 22:47 |
| | | | | CADMIUM | .571 | mg/kg | U | N | Y | U | U | | | | | | L145-01 | 22:47 |
| | | | | CALCIUM | 129 | mg/kg | | Y | Y | P | | | | | | | L145-01 | 22:47 |
| | | | | CHROMIUM | 4.92 | mg/kg | | Y | Y | P | | | | | | | L145-01 | 22:47 |
| | | | | COBALT | 2.29 | mg/kg | U | N | Y | U | U | | | | | | L145-01 | 22:47 |
| | | | | COPPER | 1.61 | mg/kg | J | Y | Y | P | J | | 15 | | | | L145-01 | 22:47 |
| | | | | IRON | 3940 | mg/kg | | Y | Y | P | | | | | | | L145-01 | 22:47 |
| | | | | LEAD | 10.7 | mg/kg | | Y | Y | P | | | | | | | L145-01 | 21:13 |
| | | | | MAGNESIUM | 165 | mg/kg | | Y | Y | P | | | | | | | L145-01 | 22:47 |
| | | | | MANGANESE | 37.3 | mg/kg | | Y | Y | P | | | | | | | L145-01 | 22:47 |
| | | | | NICKEL | 2.34 | mg/kg | | Y | Y | P | | | | | | | L145-01 | 22:47 |
| | | | | POTASSIUM | 191 | mg/kg | J | Y | Y | F | B | | 06A | 15 | | | L145-01 | 22:47 |
| | | | | SELENIUM | .527 | mg/kg | J | Y | Y | F | B | | 06B | 15 | | | L145-01 | 21:13 |
| | | | | SILVER | 1.14 | mg/kg | U | N | Y | U | U | | | | | | L145-01 | 22:47 |
| | | | | SODIUM | 114 | mg/kg | U | N | Y | U | U | | | | | | L145-01 | 22:47 |
| | | | | THALLIUM | 2.29 | mg/kg | U | N | Y | U | U | | | | | | L145-01 | 21:13 |
| | | | | VANADIUM | 7.81 | mg/kg | | Y | Y | P | | | | | | | L145-01 | 22:47 |
| | | | | ZINC | 13.7 | mg/kg | | Y | Y | P | | | | | | | L145-01 | 22:47 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .057 | mg/kg | J | Y | Y | P | J | | 15 | | | | L145-01 | 15:56 |
| JP0011 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 5760 | mg/kg | | Y | Y | P | | | | | | | L145-02 | 22:52 |
| | | | | ANTIMONY | 10.8 | mg/kg | U | N | Y | U | U | | | | | | L145-02 | 22:52 |
| | | | | ARSENIC | 1.94 | mg/kg | | Y | Y | P | | | | | | | L145-02 | 21:18 |
| | | | | BARIUM | 33.9 | mg/kg | | Y | Y | P | | | | | | | L145-02 | 22:52 |
| | | | | BERYLLIUM | .152 | mg/kg | J | Y | Y | P | J | | 15 | | | | L145-02 | 22:52 |

# Validation Qualifier Data Entry Verification

Run Date: October 1, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10151Q-01** | | | | | | | | | | | | | | | | | | |
| JP0011 | SW6010B | SW3050 | N 0 1 | CADMIUM | .541 | mg/kg | U | N | Y | U | U | | | | | | L145-02 | 22:52 |
| | | | | CALCIUM | 59.4 | mg/kg | J | Y | Y | P | J | | 15 | | | | L145-02 | 22:52 |
| | | | | CHROMIUM | 13 | mg/kg | | Y | Y | P | | | | | | | L145-02 | 22:52 |
| | | | | COBALT | .443 | mg/kg | J | Y | Y | P | J | | 17 | 15 | | | L145-02 | 22:52 |
| | | | | COPPER | 2.21 | mg/kg | | Y | Y | P | | | | | | | L145-02 | 22:52 |
| | | | | IRON | 8530 | mg/kg | | Y | Y | P | | | | | | | L145-02 | 22:52 |
| | | | | LEAD | 4.24 | mg/kg | | Y | Y | P | | | | | | | L145-02 | 21:18 |
| | | | | MAGNESIUM | 208 | mg/kg | | Y | Y | P | | | | | | | L145-02 | 22:52 |
| | | | | MANGANESE | 14.3 | mg/kg | | Y | Y | P | | | | | | | L145-02 | 22:52 |
| | | | | NICKEL | 2.73 | mg/kg | | Y | Y | P | | | | | | | L145-02 | 22:52 |
| | | | | POTASSIUM | 124 | mg/kg | J | Y | Y | F | B | | 06A | 15 | | | L145-02 | 22:52 |
| | | | | SELENIUM | 1.08 | mg/kg | U | N | Y | U | U | | | | | | L145-02 | 21:18 |
| | | | | SILVER | 1.08 | mg/kg | U | N | Y | U | U | | | | | | L145-02 | 22:52 |
| | | | | SODIUM | 108 | mg/kg | U | N | Y | U | U | | | | | | L145-02 | 22:52 |
| | | | | THALLIUM | 2.16 | mg/kg | U | N | Y | U | U | | | | | | L145-02 | 21:18 |
| | | | | VANADIUM | 18.4 | mg/kg | | Y | Y | P | | | | | | | L145-02 | 22:52 |
| | | | | ZINC | 6.32 | mg/kg | | Y | Y | P | | | | | | | L145-02 | 22:52 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .031 | mg/kg | J | Y | Y | P | J | | 15 | | | | L145-02 | 15:59 |
| JP0012 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 7200 | mg/kg | | Y | Y | | | | | | | | L145-03 | 22:58 |
| | | | | ANTIMONY | 10.8 | mg/kg | U | N | Y | | U | | | | | | L145-03 | 22:58 |
| | | | | ARSENIC | 1.83 | mg/kg | | Y | Y | | | | | | | | L145-03 | 21:23 |
| | | | | BARIUM | 40.4 | mg/kg | | Y | Y | | | | | | | | L145-03 | 22:58 |
| | | | | BERYLLIUM | .163 | mg/kg | J | Y | Y | | J | | 15 | | | | L145-03 | 22:58 |
| | | | | CADMIUM | .541 | mg/kg | U | N | Y | | U | | | | | | L145-03 | 22:58 |
| | | | | CALCIUM | 76 | mg/kg | J | Y | Y | | J | | 15 | | | | L145-03 | 22:58 |
| | | | | CHROMIUM | 14.2 | mg/kg | | Y | Y | | | | | | | | L145-03 | 22:58 |
| | | | | COBALT | .859 | mg/kg | J | Y | Y | | J | | 17 | 15 | | | L145-03 | 22:58 |
| | | | | COPPER | 2.36 | mg/kg | | Y | Y | | | | | | | | L145-03 | 22:58 |
| | | | | IRON | 8090 | mg/kg | | Y | Y | | | | | | | | L145-03 | 22:58 |
| | | | | LEAD | 5.01 | mg/kg | | Y | Y | | | | | | | | L145-03 | 21:23 |
| | | | | MAGNESIUM | 271 | mg/kg | | Y | Y | | | | | | | | L145-03 | 22:58 |
| | | | | MANGANESE | 16.4 | mg/kg | | Y | Y | | | | | | | | L145-03 | 22:58 |
| | | | | NICKEL | 4.13 | mg/kg | | Y | Y | | | | | | | | L145-03 | 22:58 |
| | | | | POTASSIUM | 166 | mg/kg | J | Y | Y | | B | | 06A | 15 | | | L145-03 | 22:58 |
| | | | | SELENIUM | 1.08 | mg/kg | U | N | Y | | U | | | | | | L145-03 | 21:23 |
| | | | | SILVER | 1.08 | mg/kg | U | N | Y | | U | | | | | | L145-03 | 22:58 |
| | | | | SODIUM | 108 | mg/kg | U | N | Y | | U | | | | | | L145-03 | 22:58 |
| | | | | THALLIUM | 2.16 | mg/kg | U | N | Y | | U | | | | | | L145-03 | 21:23 |
| | | | | VANADIUM | 18.6 | mg/kg | | Y | Y | | | | | | | | L145-03 | 22:58 |
| | | | | ZINC | 8.31 | mg/kg | | Y | Y | | | | | | | | L145-03 | 22:58 |

# Validation Qualifier Data Entry Verification

Run Date: October 1, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10151Q-01** | | | | | | | | | | | | | | | | | | | | |
| JP0012 | SW7471A | TOTAL | N | 0 | 1 | MERCURY | .031 | mg/kg | J | Y | Y | | J | | 15 | | | | L145-03 | 16:01 |
| JP0001 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | L184-01 | 19:04 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | L184-01 | 19:04 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L184-01 | 19:04 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L184-01 | 19:04 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L184-01 | 19:04 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L184-01 | 19:04 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L184-01 | 19:04 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L184-01 | 19:04 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L184-01 | 19:04 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L184-01 | 19:04 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | L184-01 | 19:04 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L184-01 | 19:04 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | L184-01 | 19:04 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | L184-01 | 19:04 |
| JP0002 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | L184-02 | 19:45 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | L184-02 | 19:45 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L184-02 | 19:45 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L184-02 | 19:45 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L184-02 | 19:45 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L184-02 | 19:45 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L184-02 | 19:45 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L184-02 | 19:45 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L184-02 | 19:45 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L184-02 | 19:45 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | L184-02 | 19:45 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L184-02 | 19:45 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | L184-02 | 19:45 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | L184-02 | 19:45 |
| JP0003 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | L163-01 | 02:29 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | L163-01 | 02:29 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L163-01 | 02:29 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L163-01 | 02:29 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L163-01 | 02:29 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L163-01 | 02:29 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L163-01 | 02:29 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L163-01 | 02:29 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L163-01 | 02:29 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L163-01 | 02:29 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | L163-01 | 02:29 |

# Validation Qualifier Data Entry Verification

Run Date: October 1, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10151Q-01** | | | | | | | | | | | | | | | | | | | | |
| JP0003 | SW8330 | METHOD | N | 0 | 1 | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L163-01 | 02:29 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | L163-01 | 02:29 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | L163-01 | 02:29 |
| JP0004 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | L163-02 | 03:10 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | L163-02 | 03:10 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L163-02 | 03:10 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L163-02 | 03:10 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L163-02 | 03:10 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L163-02 | 03:10 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L163-02 | 03:10 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L163-02 | 03:10 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L163-02 | 03:10 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L163-02 | 03:10 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | L163-02 | 03:10 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L163-02 | 03:10 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | L163-02 | 03:10 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | L163-02 | 03:10 |
| JP0010 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | L145-01 | 20:25 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | L145-01 | 20:25 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L145-01 | 20:25 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L145-01 | 20:25 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L145-01 | 20:25 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L145-01 | 20:25 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L145-01 | 20:25 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L145-01 | 20:25 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L145-01 | 20:25 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L145-01 | 20:25 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | L145-01 | 20:25 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L145-01 | 20:25 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | L145-01 | 20:25 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | L145-01 | 20:25 |
| JP0011 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | L145-02 | 21:06 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | L145-02 | 21:06 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L145-02 | 21:06 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L145-02 | 21:06 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L145-02 | 21:06 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L145-02 | 21:06 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L145-02 | 21:06 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L145-02 | 21:06 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L145-02 | 21:06 |

# Validation Qualifier Data Entry Verification

Run Date: October 1, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10151Q-01** | | | | | | | | | | | | | | | | | | | | |
| JP0011 | SW8330 | METHOD | N | 0 | 1 | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L145-02 | 21:06 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | L145-02 | 21:06 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L145-02 | 21:06 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | L145-02 | 21:06 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | L145-02 | 21:06 |
| JP0012 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | | U | | | | | | L145-03 | 21:46 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | | U | | | | | | L145-03 | 21:46 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | | U | | | | | | L145-03 | 21:46 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | | U | | | | | | L145-03 | 21:46 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | | U | | | | | | L145-03 | 21:46 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | | U | | | | | | L145-03 | 21:46 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | | U | | | | | | L145-03 | 21:46 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | | U | | | | | | L145-03 | 21:46 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | | U | | | | | | L145-03 | 21:46 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | | U | | | | | | L145-03 | 21:46 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | | U | | | | | | L145-03 | 21:46 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | | U | | | | | | L145-03 | 21:46 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | | U | | | | | | L145-03 | 21:46 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | | U | | | | | | L145-03 | 21:46 |
| JP0001 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0581 | mg/kg | U | N | Y | U | U | | | | | | L184-01 | 23:09 |
| JP0002 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0543 | mg/kg | U | N | Y | U | U | | | | | | L184-02 | 23:27 |
| JP0003 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0547 | mg/kg | U | N | Y | U | U | | | | | | L163-01 | 22:01 |
| JP0004 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0551 | mg/kg | U | N | Y | U | U | | | | | | L163-02 | 22:18 |
| JP0010 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0571 | mg/kg | U | N | Y | U | U | | | | | | L145-01 | 20:52 |
| JP0011 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0541 | mg/kg | U | N | Y | U | U | | | | | | L145-02 | 21:26 |
| JP0012 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0541 | mg/kg | U | N | Y | | U | | | | | | L145-03 | 21:44 |
| **10151Q-02** | | | | | | | | | | | | | | | | | | | | |
| JP1001 | SW6010B | SW3050 | N | 0 | 1 | ALUMINUM | 8030 | mg/kg | | Y | Y | P | | | | | | | C010-01 | 19:53 |
| | | | | | | ANTIMONY | 14.7 | mg/kg | U | N | Y | U | U | | | | | | C010-01 | 19:53 |
| | | | | | | ARSENIC | 1.95 | mg/kg | | Y | Y | P | | | | | | | C010-01 | 22:53 |
| | | | | | | BARIUM | 108 | mg/kg | | Y | Y | P | | | | | | | C010-01 | 19:53 |
| | | | | | | BERYLLIUM | .781 | mg/kg | J | Y | Y | P | J | | 15 | | | | C010-01 | 19:53 |
| | | | | | | CADMIUM | .733 | mg/kg | U | N | Y | U | U | | | | | | C010-01 | 19:53 |
| | | | | | | CALCIUM | 645 | mg/kg | | Y | Y | P | J | | 17 | | | | C010-01 | 19:53 |
| | | | | | | CHROMIUM | 8.17 | mg/kg | | Y | Y | P | | | | | | | C010-01 | 19:53 |
| | | | | | | COBALT | 3.53 | mg/kg | | Y | Y | P | | | | | | | C010-01 | 19:53 |
| | | | | | | COPPER | 6.43 | mg/kg | | Y | Y | P | | | | | | | C010-01 | 19:53 |
| | | | | | | IRON | 7740 | mg/kg | | Y | Y | P | | | | | | | C010-01 | 19:53 |

# Validation Qualifier Data Entry Verification

Run Date: October 1, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10151Q-02** | | | | | | | | | | | | | | | | | | | | |
| JP1001 | SW6010B | SW3050 | N | 0 | 1 | LEAD | 15.3 | mg/kg | | Y | Y | P | | | | | | | C010-01 | 22:53 |
| | | | | | | MAGNESIUM | 352 | mg/kg | | Y | Y | P | | | | | | | C010-01 | 19:53 |
| | | | | | | MANGANESE | 495 | mg/kg | | Y | Y | P | | | | | | | C010-01 | 19:53 |
| | | | | | | NICKEL | 4.65 | mg/kg | | Y | Y | P | | | | | | | C010-01 | 19:53 |
| | | | | | | POTASSIUM | 424 | mg/kg | J | Y | Y | F | B | | 06B | 15 | | | C010-01 | 19:53 |
| | | | | | | SELENIUM | 1.47 | mg/kg | U | N | Y | U | U | | | | | | C010-01 | 22:53 |
| | | | | | | SILVER | 1.47 | mg/kg | U | N | Y | U | U | | | | | | C010-01 | 19:53 |
| | | | | | | SODIUM | 30.9 | mg/kg | J | Y | Y | P | J | | 15 | | | | C010-01 | 19:53 |
| | | | | | | THALLIUM | 2.93 | mg/kg | U | N | Y | U | U | | | | | | C010-01 | 22:53 |
| | | | | | | VANADIUM | 12.9 | mg/kg | | Y | Y | P | | | | | | | C010-01 | 19:53 |
| | | | | | | ZINC | 17.1 | mg/kg | | Y | Y | P | | | | | | | C010-01 | 19:53 |
| | SW7471A | TOTAL | N | 0 | 1 | MERCURY | .060 | mg/kg | J | Y | Y | P | J | | 17 | 15 | | | C010-01 | 14:22 |
| JP1002 | SW6010B | SW3050 | N | 0 | 1 | ALUMINUM | 7560 | mg/kg | | Y | Y | | | | | | | | C010-02 | 19:58 |
| | | | | | | ANTIMONY | 14.5 | mg/kg | U | N | Y | | U | | | | | | C010-02 | 19:58 |
| | | | | | | ARSENIC | 1.74 | mg/kg | | Y | Y | | | | | | | | C010-02 | 22:57 |
| | | | | | | BARIUM | 71.6 | mg/kg | | Y | Y | | | | | | | | C010-02 | 19:58 |
| | | | | | | BERYLLIUM | .577 | mg/kg | J | Y | Y | | J | | 15 | | | | C010-02 | 19:58 |
| | | | | | | CADMIUM | .723 | mg/kg | U | N | Y | | U | | | | | | C010-02 | 19:58 |
| | | | | | | CALCIUM | 256 | mg/kg | | Y | Y | | J | | 17 | | | | C010-02 | 19:58 |
| | | | | | | CHROMIUM | 8.55 | mg/kg | | Y | Y | | | | | | | | C010-02 | 19:58 |
| | | | | | | COBALT | 2.99 | mg/kg | | Y | Y | F | B | | 06B | | | | C010-02 | 19:58 |
| | | | | | | COPPER | 4.77 | mg/kg | | Y | Y | | | | | | | | C010-02 | 19:58 |
| | | | | | | IRON | 8000 | mg/kg | | Y | Y | | | | | | | | C010-02 | 19:58 |
| | | | | | | LEAD | 12.9 | mg/kg | | Y | Y | | | | | | | | C010-02 | 22:57 |
| | | | | | | MAGNESIUM | 297 | mg/kg | | Y | Y | | | | | | | | C010-02 | 19:58 |
| | | | | | | MANGANESE | 388 | mg/kg | | Y | Y | | | | | | | | C010-02 | 19:58 |
| | | | | | | NICKEL | 3.89 | mg/kg | | Y | Y | | | | | | | | C010-02 | 19:58 |
| | | | | | | POTASSIUM | 723 | mg/kg | U | N | Y | | U | | | | | | C010-02 | 19:58 |
| | | | | | | SELENIUM | 1.45 | mg/kg | U | N | Y | | U | | | | | | C010-02 | 22:57 |
| | | | | | | SILVER | 1.45 | mg/kg | U | N | Y | | U | | | | | | C010-02 | 19:58 |
| | | | | | | SODIUM | 145 | mg/kg | U | N | Y | | U | | | | | | C010-02 | 19:58 |
| | | | | | | THALLIUM | 2.89 | mg/kg | U | N | Y | | U | | | | | | C010-02 | 22:57 |
| | | | | | | VANADIUM | 12.8 | mg/kg | | Y | Y | | | | | | | | C010-02 | 19:58 |
| | | | | | | ZINC | 12.3 | mg/kg | | Y | Y | | | | | | | | C010-02 | 19:58 |
| | SW7471A | TOTAL | N | 0 | 1 | MERCURY | .264 | mg/kg | | Y | Y | | J | | 17 | | | | C010-02 | 14:24 |
| JP1001 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C010-01 | 17:28 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C010-01 | 17:28 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C010-01 | 17:28 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C010-01 | 17:28 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C010-01 | 17:28 |

# Validation Qualifier Data Entry Verification

Run Date: October 1, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10151Q-02** | | | | | | | | | | | | | | | | | | | | |
| JP1001 | SW8330 | METHOD | N | 0 | 1 | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C010-01 | 17:28 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C010-01 | 17:28 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C010-01 | 17:28 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C010-01 | 17:28 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C010-01 | 17:28 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | C010-01 | 17:28 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C010-01 | 17:28 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | C010-01 | 17:28 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | C010-01 | 17:28 |
| JP1002 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | | U | | | | | | C010-02 | 18:07 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | | U | | | | | | C010-02 | 18:07 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | | U | | | | | | C010-02 | 18:07 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | | U | | | | | | C010-02 | 18:07 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | | U | | | | | | C010-02 | 18:07 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | | U | | | | | | C010-02 | 18:07 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | | U | | | | | | C010-02 | 18:07 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | | U | | | | | | C010-02 | 18:07 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | | U | | | | | | C010-02 | 18:07 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | | U | | | | | | C010-02 | 18:07 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | | U | | | | | | C010-02 | 18:07 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | | U | | | | | | C010-02 | 18:07 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | | U | | | | | | C010-02 | 18:07 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | | U | | | | | | C010-02 | 18:07 |
| JP1001 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0644 | mg/kg | U | N | Y | U | U | | | | | | C010-01 | 02:11 |
| JP1002 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0723 | mg/kg | U | N | Y | | U | | | | | | C010-02 | 03:02 |
| JP1001 | SW9060 | NONE | N | 0 | 1 | TOC | 116 | mg/kg | | Y | Y | P | | | | | | | C010-01 | 16:00 |
| JP1002 | SW9060 | NONE | N | 0 | 1 | TOC | 112 | mg/kg | | Y | Y | | | | | | | | C010-02 | 16:30 |
| **10151Q-03** | | | | | | | | | | | | | | | | | | | | |
| JP2001 | SW6010B | SW3010 | N | 0 | 1 | ALUMINUM | .127 | mg/L | J | Y | Y | P | J | | 15 | | | | C015-01 | 17:09 |
| | | | | | | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | C015-01 | 17:09 |
| | | | | | | ARSENIC | .01 | mg/L | U | N | Y | U | U | | | | | | C015-01 | 17:48 |
| | | | | | | BARIUM | .0207 | mg/L | | Y | Y | P | | | | | | | C015-01 | 17:09 |
| | | | | | | BERYLLIUM | .001 | mg/L | U | N | Y | U | U | | | | | | C015-01 | 17:09 |
| | | | | | | CADMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | C015-01 | 17:09 |
| | | | | | | CALCIUM | .626 | mg/L | J | Y | Y | P | J | | 15 | | | | C015-01 | 17:09 |
| | | | | | | CHROMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | C015-01 | 17:09 |
| | | | | | | COBALT | .02 | mg/L | U | N | Y | U | U | | | | | | C015-01 | 17:09 |
| | | | | | | COPPER | .00318 | mg/L | J | Y | Y | P | J | | 15 | | | | C015-01 | 17:09 |
| | | | | | | IRON | .11 | mg/L | J | Y | Y | P | J | | 15 | | | | C015-01 | 17:09 |

# Validation Qualifier Data Entry Verification

Run Date: October 1, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10151Q-03** | | | | | | | | | | | | | | | | | | |
| JP2001 | SW6010B | SW3010 | N 0 1 | LEAD | .01 | mg/L | U | N | Y | U | U | | | | | | C015-01 | 17:48 |
| | | | | MAGNESIUM | .538 | mg/L | J | Y | Y | P | J | | 15 | | | | C015-01 | 17:09 |
| | | | | MANGANESE | .0198 | mg/L | | Y | Y | P | | | | | | | C015-01 | 17:09 |
| | | | | NICKEL | .02 | mg/L | U | N | Y | U | U | | | | | | C015-01 | 17:09 |
| | | | | POTASSIUM | 5 | mg/L | U | N | Y | U | U | | | | | | C015-01 | 17:09 |
| | | | | SELENIUM | .01 | mg/L | U | N | Y | U | U | | | | | | C015-01 | 17:48 |
| | | | | SILVER | .01 | mg/L | U | N | Y | U | U | | | | | | C015-01 | 17:09 |
| | | | | SODIUM | .674 | mg/L | J | Y | Y | P | J | | 15 | | | | C015-01 | 17:09 |
| | | | | THALLIUM | .01 | mg/L | U | N | Y | U | U | | | | | | C015-01 | 17:48 |
| | | | | VANADIUM | .01 | mg/L | U | N | Y | U | U | | | | | | C015-01 | 17:09 |
| | | | | ZINC | .02 | mg/L | U | N | Y | U | U | | | | | | C015-01 | 17:09 |
| | SW7470A | TOTAL | N 0 1 | MERCURY | .0005 | mg/L | U | N | Y | U | U | | | | | | C015-01 | 11:42 |
| JP2001 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | U | U | | | | | | C015-01 | 05:46 |
| | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | U | U | | | | | | C015-01 | 05:46 |
| | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | U | U | | | | | | C015-01 | 05:46 |
| | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | C015-01 | 05:46 |
| | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | C015-01 | 05:46 |
| | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | C015-01 | 05:46 |
| | | | | 2-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | C015-01 | 05:46 |
| | | | | 3-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | C015-01 | 05:46 |
| | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | C015-01 | 05:46 |
| | | | | 4-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | C015-01 | 05:46 |
| | | | | HMX | .001 | mg/L | U | N | Y | U | U | | | | | | C015-01 | 05:46 |
| | | | | NITROBENZENE | .0004 | mg/L | U | N | Y | U | U | | | | | | C015-01 | 05:46 |
| | | | | RDX | .0004 | mg/L | U | N | Y | U | U | | | | | | C015-01 | 05:46 |
| | | | | TETRYL | .0004 | mg/L | U | N | Y | U | U | | | | | | C015-01 | 05:46 |
| JP2001 | EPA314.0 | NONE | N 0 1 | PERCHLORATE | .005 | mg/L | U | N | Y | U | U | | | | | | C015-01 | 09:19 |
| **10151Q-04** | | | | | | | | | | | | | | | | | | |
| JP0005 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 19100 | mg/kg | | Y | Y | P | | | | | | | D096-01 | 21:49 |
| | | | | ANTIMONY | 5.12 | mg/kg | J | Y | Y | P | J | | 08A | 15 | | | D096-01 | 21:49 |
| | | | | ARSENIC | 2.27 | mg/kg | | Y | Y | P | | | | | | | D096-01 | 22:53 |
| | | | | BARIUM | 66.4 | mg/kg | | Y | Y | P | J | | 08A | | | | D096-01 | 21:49 |
| | | | | BERYLLIUM | .264 | mg/kg | J | Y | Y | P | J | | 15 | | | | D096-01 | 21:49 |
| | | | | CADMIUM | .688 | mg/kg | U | N | Y | U | U | | | | | | D096-01 | 21:49 |
| | | | | CALCIUM | 164 | mg/kg | | Y | Y | P | | | | | | | D096-01 | 21:49 |
| | | | | CHROMIUM | 17.5 | mg/kg | | Y | Y | P | | | | | | | D096-01 | 21:49 |
| | | | | COBALT | 1.45 | mg/kg | J | Y | Y | F | B | | 06B | 15 | | | D096-01 | 21:49 |
| | | | | COPPER | 14.4 | mg/kg | | Y | Y | P | | | | | | | D096-01 | 21:49 |
| | | | | IRON | 6530 | mg/kg | | Y | Y | P | | | | | | | D096-01 | 21:49 |

# Validation Qualifier Data Entry Verification

Run Date: October 1, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10151Q-04** | | | | | | | | | | | | | | | | | | |
| JP0005 | SW6010B | SW3050 | N 0 1 | LEAD | 155 | mg/kg | | Y | Y | P | J | | 08A | | | | D096-01 | 22:53 |
| | | | | MAGNESIUM | 374 | mg/kg | | Y | Y | P | | | | | | | D096-01 | 21:49 |
| | | | | MANGANESE | 54.9 | mg/kg | | Y | Y | P | | | | | | | D096-01 | 21:49 |
| | | | | NICKEL | 4 | mg/kg | | Y | Y | P | | | | | | | D096-01 | 21:49 |
| | | | | POTASSIUM | 466 | mg/kg | J | Y | Y | F | B | | 06B | 15 | | | D096-01 | 21:49 |
| | | | | SELENIUM | 1.38 | mg/kg | U | N | Y | U | U | | | | | | D096-01 | 22:53 |
| | | | | SILVER | .92 | mg/kg | J | Y | Y | F | B | | 06A | 06B | 15 | | D096-01 | 21:49 |
| | | | | SODIUM | 138 | mg/kg | U | N | Y | U | U | | | | | | D096-01 | 21:49 |
| | | | | THALLIUM | 2.75 | mg/kg | U | N | Y | U | U | | | | | | D096-01 | 22:53 |
| | | | | VANADIUM | 25.3 | mg/kg | | Y | Y | P | | | | | | | D096-01 | 21:49 |
| | | | | ZINC | 29.8 | mg/kg | | Y | Y | P | J | | 13 | | | | D096-01 | 21:49 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .0268 | mg/kg | | Y | Y | P | | | | | | | D096-01 | 16:49 |
| JP0006 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 9480 | mg/kg | | Y | Y | P | | | | | | | D096-02 | 21:00 |
| | | | | ANTIMONY | 10.8 | mg/kg | U | N | Y | U | UJ | | 08A | | | | D096-02 | 21:00 |
| | | | | ARSENIC | 1.92 | mg/kg | | Y | Y | P | | | | | | | D096-02 | 22:05 |
| | | | | BARIUM | 37.1 | mg/kg | | Y | Y | P | J | | 08A | | | | D096-02 | 21:00 |
| | | | | BERYLLIUM | .149 | mg/kg | J | Y | Y | P | J | | 15 | | | | D096-02 | 21:00 |
| | | | | CADMIUM | .539 | mg/kg | U | N | Y | U | U | | | | | | D096-02 | 21:00 |
| | | | | CALCIUM | 63.8 | mg/kg | J | Y | Y | P | J | | 15 | | | | D096-02 | 21:00 |
| | | | | CHROMIUM | 21 | mg/kg | | Y | Y | P | | | | | | | D096-02 | 21:00 |
| | | | | COBALT | 1.73 | mg/kg | J | Y | Y | F | B | | 06B | 15 | | | D096-02 | 21:00 |
| | | | | COPPER | 3.92 | mg/kg | | Y | Y | P | | | | | | | D096-02 | 21:00 |
| | | | | IRON | 4810 | mg/kg | | Y | Y | P | | | | | | | D096-02 | 21:00 |
| | | | | LEAD | 30.6 | mg/kg | | Y | Y | P | J | | 08A | | | | D096-02 | 22:05 |
| | | | | MAGNESIUM | 225 | mg/kg | | Y | Y | P | | | | | | | D096-02 | 21:00 |
| | | | | MANGANESE | 20.9 | mg/kg | | Y | Y | P | | | | | | | D096-02 | 21:00 |
| | | | | NICKEL | 6.28 | mg/kg | | Y | Y | P | | | | | | | D096-02 | 21:00 |
| | | | | POTASSIUM | 299 | mg/kg | J | Y | Y | F | B | | 06B | 15 | | | D096-02 | 21:00 |
| | | | | SELENIUM | 1.08 | mg/kg | U | N | Y | U | U | | | | | | D096-02 | 22:05 |
| | | | | SILVER | .505 | mg/kg | J | Y | Y | F | B | | 06A | 06B | 15 | | D096-02 | 21:00 |
| | | | | SODIUM | 108 | mg/kg | U | N | Y | U | U | | | | | | D096-02 | 21:00 |
| | | | | THALLIUM | 2.16 | mg/kg | U | N | Y | U | U | | | | | | D096-02 | 22:05 |
| | | | | VANADIUM | 19.7 | mg/kg | | Y | Y | P | | | | | | | D096-02 | 21:00 |
| | | | | ZINC | 7.92 | mg/kg | | Y | Y | F | B | | 06B | 13 | | | D096-02 | 21:00 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .108 | mg/kg | U | N | Y | U | U | | | | | | D096-02 | 16:59 |
| JP0007 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 8790 | mg/kg | | Y | Y | | | | | | | | D096-03 | 21:05 |
| | | | | ANTIMONY | 10.9 | mg/kg | U | N | Y | | UJ | | 08A | | | | D096-03 | 21:05 |
| | | | | ARSENIC | 1.6 | mg/kg | | Y | Y | | | | | | | | D096-03 | 22:10 |
| | | | | BARIUM | 32 | mg/kg | | Y | Y | | J | | 08A | | | | D096-03 | 21:05 |
| | | | | BERYLLIUM | .124 | mg/kg | J | Y | Y | | J | | 15 | | | | D096-03 | 21:05 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10151Q-04** | | | | | | | | | | | | | | | | | | |
| JP0007 | SW6010B | SW3050 | N 0 1 | CADMIUM | .545 | mg/kg | U | N | Y | | U | | | | | | D096-03 | 21:05 |
| | | | | CALCIUM | 52.8 | mg/kg | J | Y | Y | | J | | 15 | | | | D096-03 | 21:05 |
| | | | | CHROMIUM | 18.9 | mg/kg | | Y | Y | | | | | | | | D096-03 | 21:05 |
| | | | | COBALT | .902 | mg/kg | J | Y | Y | F | B | | 06B | 15 | | | D096-03 | 21:05 |
| | | | | COPPER | 3.56 | mg/kg | | Y | Y | | | | | | | | D096-03 | 21:05 |
| | | | | IRON | 4580 | mg/kg | | Y | Y | | | | | | | | D096-03 | 21:05 |
| | | | | LEAD | 26 | mg/kg | | Y | Y | | J | | 08A | | | | D096-03 | 22:10 |
| | | | | MAGNESIUM | 209 | mg/kg | | Y | Y | | | | | | | | D096-03 | 21:05 |
| | | | | MANGANESE | 16.7 | mg/kg | | Y | Y | | | | | | | | D096-03 | 21:05 |
| | | | | NICKEL | 5.22 | mg/kg | | Y | Y | | | | | | | | D096-03 | 21:05 |
| | | | | POTASSIUM | 294 | mg/kg | J | Y | Y | F | B | | 06B | 15 | | | D096-03 | 21:05 |
| | | | | SELENIUM | 1.09 | mg/kg | U | N | Y | | U | | | | | | D096-03 | 22:10 |
| | | | | SILVER | .581 | mg/kg | J | Y | Y | F | B | | 06A | 06B | 15 | | D096-03 | 21:05 |
| | | | | SODIUM | 109 | mg/kg | U | N | Y | | U | | | | | | D096-03 | 21:05 |
| | | | | THALLIUM | 2.18 | mg/kg | U | N | Y | | U | | | | | | D096-03 | 22:10 |
| | | | | VANADIUM | 17.5 | mg/kg | | Y | Y | | | | | | | | D096-03 | 21:05 |
| | | | | ZINC | 7.14 | mg/kg | | Y | Y | F | B | | 06B | 13 | | | D096-03 | 21:05 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .109 | mg/kg | U | N | Y | | U | | | | | | D096-03 | 17:02 |
| JP0008 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 6380 | mg/kg | | Y | Y | P | | | | | | | D096-04 | 21:10 |
| | | | | ANTIMONY | 11.5 | mg/kg | U | N | Y | U | UJ | | 08A | | | | D096-04 | 21:10 |
| | | | | ARSENIC | 1.54 | mg/kg | | Y | Y | P | | | | | | | D096-04 | 22:15 |
| | | | | BARIUM | 23.7 | mg/kg | | Y | Y | P | J | | 08A | | | | D096-04 | 21:10 |
| | | | | BERYLLIUM | .111 | mg/kg | J | Y | Y | P | J | | 15 | | | | D096-04 | 21:10 |
| | | | | CADMIUM | .576 | mg/kg | U | N | Y | U | U | | | | | | D096-04 | 21:10 |
| | | | | CALCIUM | 146 | mg/kg | | Y | Y | P | | | | | | | D096-04 | 21:10 |
| | | | | CHROMIUM | 4.48 | mg/kg | | Y | Y | P | | | | | | | D096-04 | 21:10 |
| | | | | COBALT | 2.3 | mg/kg | U | N | Y | U | U | | | | | | D096-04 | 21:10 |
| | | | | COPPER | 12.2 | mg/kg | | Y | Y | P | | | | | | | D096-04 | 21:10 |
| | | | | IRON | 3360 | mg/kg | | Y | Y | P | | | | | | | D096-04 | 21:10 |
| | | | | LEAD | 78.1 | mg/kg | | Y | Y | P | J | | 08A | | | | D096-04 | 22:15 |
| | | | | MAGNESIUM | 234 | mg/kg | | Y | Y | P | | | | | | | D096-04 | 21:10 |
| | | | | MANGANESE | 36.6 | mg/kg | | Y | Y | P | | | | | | | D096-04 | 21:10 |
| | | | | NICKEL | 2.8 | mg/kg | | Y | Y | P | | | | | | | D096-04 | 21:10 |
| | | | | POTASSIUM | 217 | mg/kg | J | Y | Y | F | B | | 06B | 15 | | | D096-04 | 21:10 |
| | | | | SELENIUM | 1.15 | mg/kg | U | N | Y | U | U | | | | | | D096-04 | 22:15 |
| | | | | SILVER | 1.15 | mg/kg | U | N | Y | U | U | | | | | | D096-04 | 21:10 |
| | | | | SODIUM | 115 | mg/kg | U | N | Y | U | U | | | | | | D096-04 | 21:10 |
| | | | | THALLIUM | 2.3 | mg/kg | U | N | Y | U | U | | | | | | D096-04 | 22:15 |
| | | | | VANADIUM | 8.17 | mg/kg | | Y | Y | P | | | | | | | D096-04 | 21:10 |
| | | | | ZINC | 21.2 | mg/kg | | Y | Y | P | J | | 13 | | | | D096-04 | 21:10 |

# Validation Qualifier Data Entry Verification

Run Date: October 1, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10151Q-04** | | | | | | | | | | | | | | | | | | |
| JP0008 | SW7471A | TOTAL | N 0 1 | MERCURY | .025 | mg/kg | J | Y | Y | P | J | | 15 | | | | D096-04 | 17:04 |
| JP0009 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 21500 | mg/kg | | Y | Y | P | | | | | | | D096-05 | 21:15 |
| | | | | ANTIMONY | 11.1 | mg/kg | U | N | Y | U | UJ | | 08A | | | | D096-05 | 21:15 |
| | | | | ARSENIC | 3.81 | mg/kg | | Y | Y | P | | | | | | | D096-05 | 22:19 |
| | | | | BARIUM | 43.6 | mg/kg | | Y | Y | P | J | | 08A | | | | D096-05 | 21:15 |
| | | | | BERYLLIUM | .237 | mg/kg | J | Y | Y | P | J | | 15 | | | | D096-05 | 21:15 |
| | | | | CADMIUM | .553 | mg/kg | U | N | Y | U | U | | | | | | D096-05 | 21:15 |
| | | | | CALCIUM | 96.7 | mg/kg | J | Y | Y | P | J | | 15 | | | | D096-05 | 21:15 |
| | | | | CHROMIUM | 19.5 | mg/kg | | Y | Y | P | | | | | | | D096-05 | 21:15 |
| | | | | COBALT | 1.83 | mg/kg | J | Y | Y | F | B | | 06B | 15 | | | D096-05 | 21:15 |
| | | | | COPPER | 4.47 | mg/kg | | Y | Y | P | | | | | | | D096-05 | 21:15 |
| | | | | IRON | 11400 | mg/kg | | Y | Y | P | | | | | | | D096-05 | 21:15 |
| | | | | LEAD | 11.8 | mg/kg | | Y | Y | P | J | | 08A | | | | D096-05 | 22:19 |
| | | | | MAGNESIUM | 738 | mg/kg | | Y | Y | P | | | | | | | D096-05 | 21:15 |
| | | | | MANGANESE | 24.9 | mg/kg | | Y | Y | P | | | | | | | D096-05 | 21:15 |
| | | | | NICKEL | 7.14 | mg/kg | | Y | Y | P | | | | | | | D096-05 | 21:15 |
| | | | | POTASSIUM | 517 | mg/kg | J | Y | Y | F | B | | 06B | 15 | | | D096-05 | 21:15 |
| | | | | SELENIUM | 1.11 | mg/kg | U | N | Y | U | U | | | | | | D096-05 | 22:19 |
| | | | | SILVER | .541 | mg/kg | J | Y | Y | F | B | | 06A | 06B | 15 | | D096-05 | 21:15 |
| | | | | SODIUM | 111 | mg/kg | U | N | Y | U | U | | | | | | D096-05 | 21:15 |
| | | | | THALLIUM | 2.21 | mg/kg | U | N | Y | U | U | | | | | | D096-05 | 22:19 |
| | | | | VANADIUM | 30 | mg/kg | | Y | Y | P | | | | | | | D096-05 | 21:15 |
| | | | | ZINC | 22 | mg/kg | | Y | Y | P | J | | 13 | | | | D096-05 | 21:15 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .111 | mg/kg | U | N | Y | U | U | | | | | | D096-05 | 17:07 |
| JP0005 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D096-01 | 22:19 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D096-01 | 22:19 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D096-01 | 22:19 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D096-01 | 22:19 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D096-01 | 22:19 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D096-01 | 22:19 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D096-01 | 22:19 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D096-01 | 22:19 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D096-01 | 22:19 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D096-01 | 22:19 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | D096-01 | 22:19 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D096-01 | 22:19 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | D096-01 | 22:19 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | D096-01 | 22:19 |
| JP0006 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D096-02 | 22:57 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D096-02 | 22:57 |

# Validation Qualifier Data Entry Verification

Run Date: October 1, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10151Q-04** | | | | | | | | | | | | | | | | | |
| JP0006 | SW8330 | METHOD N 0 1 | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D096-02 | 22:57 |
| | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D096-02 | 22:57 |
| | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D096-02 | 22:57 |
| | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D096-02 | 22:57 |
| | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D096-02 | 22:57 |
| | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D096-02 | 22:57 |
| | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D096-02 | 22:57 |
| | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D096-02 | 22:57 |
| | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | D096-02 | 22:57 |
| | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D096-02 | 22:57 |
| | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | D096-02 | 22:57 |
| | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | D096-02 | 22:57 |
| JP0007 | SW8330 | METHOD N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | | U | | | | | | D096-03 | 23:36 |
| | | | 1,3-DNB | .4 | mg/kg | U | N | Y | | U | | | | | | D096-03 | 23:36 |
| | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | | U | | | | | | D096-03 | 23:36 |
| | | | 2,4-DNT | .4 | mg/kg | U | N | Y | | U | | | | | | D096-03 | 23:36 |
| | | | 2,6-DNT | .4 | mg/kg | U | N | Y | | U | | | | | | D096-03 | 23:36 |
| | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | | U | | | | | | D096-03 | 23:36 |
| | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | | U | | | | | | D096-03 | 23:36 |
| | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | | U | | | | | | D096-03 | 23:36 |
| | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | | U | | | | | | D096-03 | 23:36 |
| | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | | U | | | | | | D096-03 | 23:36 |
| | | | HMX | .4 | mg/kg | U | N | Y | | U | | | | | | D096-03 | 23:36 |
| | | | NITROBENZENE | .4 | mg/kg | U | N | Y | | U | | | | | | D096-03 | 23:36 |
| | | | RDX | .4 | mg/kg | U | N | Y | | U | | | | | | D096-03 | 23:36 |
| | | | TETRYL | .4 | mg/kg | U | N | Y | | U | | | | | | D096-03 | 23:36 |
| JP0008 | SW8330 | METHOD N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D096-04 | 00:14 |
| | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D096-04 | 00:14 |
| | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D096-04 | 00:14 |
| | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D096-04 | 00:14 |
| | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D096-04 | 00:14 |
| | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D096-04 | 00:14 |
| | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D096-04 | 00:14 |
| | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D096-04 | 00:14 |
| | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D096-04 | 00:14 |
| | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D096-04 | 00:14 |
| | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | D096-04 | 00:14 |
| | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D096-04 | 00:14 |
| | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | D096-04 | 00:14 |
| | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | D096-04 | 00:14 |

# Validation Qualifier Data Entry Verification

Run Date: October 1, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10151Q-04** | | | | | | | | | | | | | | | | | | | | |
| JP0009 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D096-05 | 01:31 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D096-05 | 01:31 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D096-05 | 01:31 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D096-05 | 01:31 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D096-05 | 01:31 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D096-05 | 01:31 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D096-05 | 01:31 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D096-05 | 01:31 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D096-05 | 01:31 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D096-05 | 01:31 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | D096-05 | 01:31 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D096-05 | 01:31 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | D096-05 | 01:31 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | D096-05 | 01:31 |
| JP0005 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0688 | mg/kg | U | N | Y | U | U | | | | | | D096-01 | 22:21 |
| JP0006 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0539 | mg/kg | U | N | Y | U | U | | | | | | D096-02 | 23:13 |
| JP0007 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0545 | mg/kg | U | N | Y | | U | | | | | | D096-03 | 23:30 |
| JP0008 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0576 | mg/kg | U | N | Y | U | U | | | | | | D096-04 | 23:47 |
| JP0009 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0553 | mg/kg | U | N | Y | U | U | | | | | | D096-05 | 00:04 |
| **10151Q-05** | | | | | | | | | | | | | | | | | | | | |
| JP3001 | SW6010B | SW3010 | N | 0 | 1 | ALUMINUM | .112 | mg/L | J | Y | Y | F | B | | 06A | 06B | 15 | | D215-02 | 23:19 |
| | | | | | | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | D215-02 | 23:19 |
| | | | | | | ARSENIC | .01 | mg/L | U | N | Y | U | U | | | | | | D215-02 | 21:51 |
| | | | | | | BARIUM | .00713 | mg/L | J | Y | Y | F | B | | 15 | 06C | | | D215-02 | 23:19 |
| | | | | | | BERYLLIUM | .001 | mg/L | U | N | Y | U | U | | | | | | D215-02 | 23:19 |
| | | | | | | CADMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D215-02 | 23:19 |
| | | | | | | CALCIUM | .197 | mg/L | J | Y | Y | F | B | | 15 | 06C | | | D215-02 | 23:19 |
| | | | | | | CHROMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D215-02 | 23:19 |
| | | | | | | COBALT | .02 | mg/L | U | N | Y | U | U | | | | | | D215-02 | 23:19 |
| | | | | | | COPPER | .02 | mg/L | U | N | Y | U | U | | | | | | D215-02 | 23:19 |
| | | | | | | IRON | .0373 | mg/L | J | Y | Y | P | J | | 15 | | | | D215-02 | 23:19 |
| | | | | | | LEAD | .01 | mg/L | U | N | Y | U | U | | | | | | D215-02 | 21:51 |
| | | | | | | MAGNESIUM | .143 | mg/L | J | Y | Y | F | B | | 06B | 15 | | | D215-02 | 23:19 |
| | | | | | | MANGANESE | .00947 | mg/L | J | Y | Y | P | J | | 15 | | | | D215-02 | 23:19 |
| | | | | | | NICKEL | .0101 | mg/L | J | Y | Y | F | B | | 06A | 06B | 15 | | D215-02 | 23:19 |
| | | | | | | POTASSIUM | 5 | mg/L | U | N | Y | U | U | | | | | | D215-02 | 23:19 |
| | | | | | | SELENIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D215-02 | 21:51 |
| | | | | | | SILVER | .01 | mg/L | U | N | Y | U | U | | | | | | D215-02 | 23:19 |
| | | | | | | SODIUM | .751 | mg/L | J | Y | Y | F | B | | 06B | 15 | | | D215-02 | 23:19 |

# Validation Qualifier Data Entry Verification

Run Date: October 1, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10151Q-05** | | | | | | | | | | | | | | | | |
| JP3001 | SW6010B | SW3010 | N 0 1 | THALLIUM | .01 | mg/L | U | N Y U | U | | | | | | D215-02 | 21:51 |
| | | | | VANADIUM | .01 | mg/L | U | N Y U | U | | | | | | D215-02 | 23:19 |
| | | | | ZINC | .0156 | mg/L | J | Y Y F | B | | 15 | 06C | | | D215-02 | 23:19 |
| | SW7470A | TOTAL | N 0 1 | MERCURY | .000136 | mg/L | J | Y Y P | J | | 15 | | | | D215-02 | 17:19 |
| JP3001 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .0004 | mg/L | U | N Y U | U | | | | | | D215-02 | 23:20 |
| | | | | 1,3-DNB | .0004 | mg/L | U | N Y U | U | | | | | | D215-02 | 23:20 |
| | | | | 2,4,6-TNT | .0004 | mg/L | U | N Y U | U | | | | | | D215-02 | 23:20 |
| | | | | 2,4-DNT | .0004 | mg/L | U | N Y U | U | | | | | | D215-02 | 23:20 |
| | | | | 2,6-DNT | .0004 | mg/L | U | N Y U | U | | | | | | D215-02 | 23:20 |
| | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N Y U | U | | | | | | D215-02 | 23:20 |
| | | | | 2-NITROTOLUENE | .0004 | mg/L | U | N Y U | U | | | | | | D215-02 | 23:20 |
| | | | | 3-NITROTOLUENE | .0004 | mg/L | U | N Y U | U | | | | | | D215-02 | 23:20 |
| | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N Y U | U | | | | | | D215-02 | 23:20 |
| | | | | 4-NITROTOLUENE | .0004 | mg/L | U | N Y U | U | | | | | | D215-02 | 23:20 |
| | | | | HMX | .001 | mg/L | U | N Y U | U | | | | | | D215-02 | 23:20 |
| | | | | NITROBENZENE | .0004 | mg/L | U | N Y U | U | | | | | | D215-02 | 23:20 |
| | | | | RDX | .0004 | mg/L | U | N Y U | U | | | | | | D215-02 | 23:20 |
| | | | | TETRYL | .0004 | mg/L | U | N Y U | U | | | | | | D215-02 | 23:20 |
| JP3001 | E314.0 | NONE | N 0 1 | PERCHLORATE | .005 | mg/L | U | N Y U | U | | | | | | D215-02 | 14:46 |
| JP3001 | SW8260B | SW5030 | N 0 1 | 1,1,1,2-TETRACHLOROETHANE | .005 | mg/L | U | N Y U | U | | | | | | D215-02 | 06:32 |
| | | | | 1,1,1-TRICHLOROETHANE | .005 | mg/L | U | N Y U | U | | | | | | D215-02 | 06:32 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .005 | mg/L | U | N Y U | U | | | | | | D215-02 | 06:32 |
| | | | | 1,1,2-TRICHLOROETHANE | .005 | mg/L | U | N Y U | U | | | | | | D215-02 | 06:32 |
| | | | | 1,1-DICHLOROETHANE | .005 | mg/L | U | N Y U | U | | | | | | D215-02 | 06:32 |
| | | | | 1,1-DICHLOROETHENE | .005 | mg/L | U | N Y U | U | | | | | | D215-02 | 06:32 |
| | | | | 1,1-DICHLOROPROPENE | .005 | mg/L | U | N Y U | U | | | | | | D215-02 | 06:32 |
| | | | | 1,2,3-TRICHLOROBENZENE | .005 | mg/L | U | N Y U | U | | | | | | D215-02 | 06:32 |
| | | | | 1,2,3-TRICHLOROPROPANE | .005 | mg/L | U | N Y U | U | | | | | | D215-02 | 06:32 |
| | | | | 1,2,4-TRICHLOROBENZENE | .005 | mg/L | U | N Y U | U | | | | | | D215-02 | 06:32 |
| | | | | 1,2,4-TRIMETHYLBENZENE | .005 | mg/L | U | N Y U | U | | | | | | D215-02 | 06:32 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .01 | mg/L | U | N Y U | R | | 05A | | | | D215-02 | 06:32 |
| | | | | 1,2-DIBROMOETHANE | .005 | mg/L | U | N Y U | U | | | | | | D215-02 | 06:32 |
| | | | | 1,2-DICHLOROBENZENE | .005 | mg/L | U | N Y U | U | | | | | | D215-02 | 06:32 |
| | | | | 1,2-DICHLOROETHANE | .005 | mg/L | U | N Y U | U | | | | | | D215-02 | 06:32 |
| | | | | 1,2-DICHLOROPROPANE | .005 | mg/L | U | N Y U | U | | | | | | D215-02 | 06:32 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .005 | mg/L | U | N Y U | U | | | | | | D215-02 | 06:32 |
| | | | | 1,3-DICHLOROBENZENE | .005 | mg/L | U | N Y U | U | | | | | | D215-02 | 06:32 |
| | | | | 1,3-DICHLOROPROPANE | .005 | mg/L | U | N Y U | U | | | | | | D215-02 | 06:32 |
| | | | | 1,4-DICHLOROBENZENE | .005 | mg/L | U | N Y U | U | | | | | | D215-02 | 06:32 |
| | | | | 2,2-DICHLOROPROPANE | .005 | mg/L | U | N Y U | U | | | | | | D215-02 | 06:32 |

# Validation Qualifier Data Entry Verification

Run Date: October 1, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10151Q-05** | | | | | | | | | | | | | | | | | | |
| JP3001 | SW8260B | SW5030 | N 0 1 | 2-BUTANONE | .02 | mg/L | U | N | Y | U | UJ | | 05B | | | | D215-02 | 06:32 |
| | | | | 2-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D215-02 | 06:32 |
| | | | | 2-HEXANONE | .02 | mg/L | U | N | Y | U | UJ | | 05B | | | | D215-02 | 06:32 |
| | | | | 4-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D215-02 | 06:32 |
| | | | | 4-METHYL-2-PENTANONE | .01 | mg/L | U | N | Y | U | UJ | | 05B | | | | D215-02 | 06:32 |
| | | | | ACETONE | .02 | mg/L | U | N | Y | U | R | | 05A | 05B | | | D215-02 | 06:32 |
| | | | | BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D215-02 | 06:32 |
| | | | | BROMOBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D215-02 | 06:32 |
| | | | | BROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D215-02 | 06:32 |
| | | | | BROMODICHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D215-02 | 06:32 |
| | | | | BROMOFORM | .005 | mg/L | U | N | Y | U | U | | | | | | D215-02 | 06:32 |
| | | | | BROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D215-02 | 06:32 |
| | | | | CARBON DISULFIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D215-02 | 06:32 |
| | | | | CARBON TETRACHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D215-02 | 06:32 |
| | | | | CHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D215-02 | 06:32 |
| | | | | CHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D215-02 | 06:32 |
| | | | | CHLOROFORM | .005 | mg/L | U | N | Y | U | U | | | | | | D215-02 | 06:32 |
| | | | | CHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D215-02 | 06:32 |
| | | | | CIS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D215-02 | 06:32 |
| | | | | CIS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | D215-02 | 06:32 |
| | | | | DIBROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D215-02 | 06:32 |
| | | | | DIBROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D215-02 | 06:32 |
| | | | | DICHLORODIFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D215-02 | 06:32 |
| | | | | ETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D215-02 | 06:32 |
| | | | | HEXACHLOROBUTADIENE | .005 | mg/L | U | N | Y | U | U | | | | | | D215-02 | 06:32 |
| | | | | ISOPROPYL BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D215-02 | 06:32 |
| | | | | M/P-XYLENES | .01 | mg/L | U | N | Y | U | U | | | | | | D215-02 | 06:32 |
| | | | | METHYLENE CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D215-02 | 06:32 |
| | | | | N-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D215-02 | 06:32 |
| | | | | N-PROPYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D215-02 | 06:32 |
| | | | | NAPHTHALENE | .005 | mg/L | U | N | Y | U | U | | | | | | D215-02 | 06:32 |
| | | | | O-XYLENE | .005 | mg/L | U | N | Y | U | U | | | | | | D215-02 | 06:32 |
| | | | | P-ISOPROPYLTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D215-02 | 06:32 |
| | | | | SEC-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D215-02 | 06:32 |
| | | | | STYRENE | .005 | mg/L | U | N | Y | U | U | | | | | | D215-02 | 06:32 |
| | | | | TERT-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D215-02 | 06:32 |
| | | | | TETRACHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D215-02 | 06:32 |
| | | | | TOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D215-02 | 06:32 |
| | | | | TRANS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D215-02 | 06:32 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | D215-02 | 06:32 |

# Validation Qualifier Data Entry Verification

Run Date: October 1, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10151Q-05** | | | | | | | | | | | | | | | | |
| JP3001 | SW8260B | SW5030 | N 0 1 | TRICHLOROETHENE | .005 | mg/L | U | N Y U | U | | | | | | D215-02 | 06:32 |
| | | | | TRICHLOROFLUOROMETHANE | .005 | mg/L | U | N Y U | U | | | | | | D215-02 | 06:32 |
| | | | | VINYL CHLORIDE | .005 | mg/L | U | N Y U | U | | | | | | D215-02 | 06:32 |

***Quality Assurance Report***
***For Ranges West of Iron Mountain Road***
***Parcel HR-181***
***IT Project No 796887***
***Fort McClellan Quality Assurance Report***

## *1.0 Overview*

Seven soil samples and 4 groundwater samples were collected in support of the investigation at Fort McClellan (FTMC) Parcel HR-181, Ranges West of Iron Mountain Road. All samples were submitted to EMAX Laboratories, Inc. for analysis. Soil and groundwater samples were analyzed for target analyte list (TAL) metals, nitroaromatic-nitramine explosives, target compound list (TCL) volatiles, TCL semivolatiles and perchlorate. QC samples consisted of the following types and quantities: 2 field duplicates, 2 matrix spike/matrix spike duplicates (MS/MSD), 3 trip blanks, and 2 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 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 data and validation 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 (DQO) were met, laboratory analytical results and data packages were examined for compliance with SW846 SW6010B/SW7000 Series, SW8330, SW8260B, SW8270C and U.S. Environmental Protection Agency (EPA) 314.0 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 analytical holding times were met.

## *2.2 Rejected Data*

Table 2.2-1 lists all rejected analytical data for both soil and groundwater samples. Sample re-collection at this time is not warranted due to all rejected results being reported as non-detect.

**Table 2.2-1 Rejected Analytical Results**

| Sample Delivery Group | Sample Number | Contaminant | Reason |
|---|---|---|---|
| 10181-01 | RB0002, RB0003 & RB0006 | Acetone | Calibration Relative Response Factor (RRF) <0.05. |
| 10181-02 | RB3001, RB3002, RB3003 & RB0004 | 1,2-Dibromo-3-chloropropane<br>Acetone | Calibration Relative Response Factor (RRF) <0.05. |

## *2.3 Blank Results*

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

- Trip blanks (TBs) consist of a VOC sample vial filled in the laboratory with ASTM Type II reagent grade water, transported to the sampling site, handled like an environmental sample and returned to the laboratory for analysis. Trip blanks are prepared only when VOC samples are collected and analyzed. Trip blanks are used to assess the potential introduction of contaminants from sample containers during the transportation and/or storage procedures. Trip blanks were sent with all aqueous samples shipped to the laboratory requiring volatile analysis.

- Equipment rinsates (ER) are samples of analyte-free deionized water poured into, or 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 an analyte-free matrix, which is analyzed to verify the analysis system is free of contamination. ICBs and CCBs are analyzed immediately after the initial and continuing calibration is performed.

Field sample concentrations were evaluated to determine if the sample results could have been biased by the presence of any contamination measured in trip blanks, 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 |
|---|---|---|---|
| 10181-01 | RB0002 & RB0003 | Lead | Lead result for samples RB0002 & RB0003 were "B" qualified. |
| | RB0003 | Zinc | Zinc result for sample RB0003 was "B" qualified. |
| | RB0007 | Silver | Silver result for sample RB0007 was "B" qualified. |
| | RB0002, RB0005, RB0006, RB0007 & RB0008 | Methylene chloride | Methylene chloride result for samples RB0002, RB0005, RB0006, RB0007 & RB0008 were "B" qualified. |
| 10181-02 | RB3001, RB3002 & RB3004 | Nickel<br>Cadmium<br>Magnesium<br>Selenium<br>Zinc | Nickel, cadmium, magnesium, selenium and zinc results for samples RB3001, RB3002 & RB3004 were "B" qualified. |
| | RB3001 | Copper | Copper result for sample RB3001 was "B" qualified. |
| | RB3003 | Calcium<br>Magnesium<br>Selenium<br>Zinc | Calcium, magnesium, selenium and zinc results were "B" qualified. |

## *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.

Overall sampling and analysis precision for this task was assessed using field duplicate (FD) samples. Laboratory precision was assessed by laboratory control sample/laboratory control sample duplicate (LCS/LCSD) and matrix spike/matrix spike duplicate (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 list field duplicate, LCS/LCSD and MS/MSD RPD anomalies.

**Table 2.4-1**
**Precision Acceptance Criteria**

| Field/Laboratory QC Type | Matrix | |
|---|---|---|
| | Aqueous | Soil |
| Field Duplicate (Both Organic & Inorganic) | RPD < 35% | RPD < 50% |
| Perchlorate LCS/LCSD and MS/MSD | RPD < 10% | RPD < 20% |
| 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" |
| TCL Volatiles 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" |
| TCL Semivolatiles 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% |

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

| Sample Delivery Group | Sample Number | Contaminant | Assigned Validation Qualifier |
|---|---|---|---|
| 10181-02 | RB3003 (Parent) / RB3004 (FD) | Aluminum (47%)<br>Iron (42%)<br>Potassium (38%)<br>Zinc (38%) | Barium, magnesium and manganese results for samples RB3003 and RB3004 were "J" qualified due to RPD between parent sample and its corresponding field duplicate exceeding QC criteria.<br><br>Zinc results for samples RB3003 and RB3004 were "B" qualified due to blank contamination which takes precedence over "J" qualification due to RPD between parent sample and its corresponding field duplicate exceeding QC criteria. |
| | RB3003 (Parent) / RB3004 (FD) | 1,3,5-Trinitrobenzene (70%)<br>Tetryl (98%)<br>4-Nitrotoluene (88%) | 1,3,5-Trinitrobenzene, tetryl and 4-nitrotoluene results for samples RB3003 and RB3004 were "J" qualified due to RPD between parent sample and its corresponding field duplicate 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 SW846 SW6010B/SW7000 Series methodology, nitroaromatic-nitramine explosives by SW8330, TCL volatiles by SW8260B, TCL semivolatiles by SW8270C, and perchlorate by EPA 314.0. Reported results indicate that an acceptable level of analytical accuracy was achieved. Surrogate, LCS/LCSD and MS/MSD spike recoveries, which exceed QA criteria are summarized in Table 2.5-1.

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

| Sample Delivery Group | Sample Number | Contaminant | Action |
|---|---|---|---|
| 10181-01 | RB0008 | Acetone | Acetone result for sample RB0008 was "J" qualified due to surrogate recovery exceeding QC criteria. (Bromofluorobenzene - HB). |
| | RB0001, RB0003, RB0007 & RB0008 | Methylene chloride | Methylene chloride result for samples RB0001, RB0003, RB0007 and RB0008 were "J" qualified due to surrogate recoveries exceeding QC criteria. (Toluene-d8 / Bromofluorobenzene - HB). |
| | RB0001, RB0002, RB0003, RB0005, RB0006, RB0007 & RB0008 | Antimony (LB) | Antimony result for samples RB0001, RB0002, RB0003, RB0005, RB0006, RB0007 & RB0008 were "UJ" qualified due to MS/MSD spike recoveries exceeding QC criteria. |

**Table 2.5-1 (Continued)**
**Summary of LCS/LCSD and MS/MSD Spike Recovery Criteria Exceedances**

| Sample Delivery Group | Sample Number | Contaminant | Action |
|---|---|---|---|
| 10181-02 | RB3003 | 2-Nitrotoluene<br>3-Nitrotoluene<br>1,3,5-Trinitrotoluene<br>Tetryl<br>4-Nitrotoluene | 2-Nitrotoluene, 3-nitrotoluene, 1,3,5-trinitrotoluene, tetryl and 4-nitrotoluene results for sample RB3003 were "J" qualified due to surrogate recovery exceeding QC criteria (3,4-Dinitrotoluene - HB). |
| | RB3001, RB3002, RB3003 & RB3004 | Aluminum (HB) | Aluminum result for samples RB3001, RB3002, RB3003 & RB3004 were "J" qualified due to MS/MSD spike recoveries exceeding QC criteria. |

LB - MS/MSD low bias.
HB - MS/MSD 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. Soil sample data are being used to assess potential impacts to terrestrial biota that might use the site for food and/or habitat purposes. Monitoring well locations where chosen to establish groundwater flow direction and site-specific geology, and provide 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-181 Ranges West of Iron Mountain Road. 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-181 requirement for completeness is 95% for both aqueous and soil samples. The % Completeness for this task is calculated to be 99.4%

- % Completeness = (1815 / 1826) x 100 = 99.4%.

## *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-181
# Ranges West of Iron Mountain Road
# Analytical Summary
# Project No. 796887

## HR-181 Soil Sampling

| Sample Location | Sample Name | Sample Number | Date Sampled | Analytical Suite |
|---|---|---|---|---|
| HR-181-MW01 | HR-181-MW01-SS-RB0001-REG | RB0001 | 07-Feb-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Semivolatiles by SW8270C, Nitroaromatic-Nitramine Explosives by SW8330 & Perchl |
| | HR-181-MW01-SS-RB0001-MS | RB0001-MS | 07-Feb-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Semivolatiles by SW8270C, Nitroaromatic-Nitramine Explosives by SW8330 & Perchl |
| | HR-181-MW01-SS-RB0001-MSD | RB0001-MSD | 07-Feb-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Semivolatiles by SW8270C, Nitroaromatic-Nitramine Explosives by SW8330 & Perchl |
| | HR-181-MW01-DS-RB0002-REG | RB0002 | 07-Feb-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Semivolatiles by SW8270C, Nitroaromatic-Nitramine Explosives by SW8330 & Perchl |
| | HR-181-MW01-DS-RB0003-FD | RB0003 | 07-Feb-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Semivolatiles by SW8270C, Nitroaromatic-Nitramine Explosives by SW8330 & Perchl |
| HR-181-MW02 | HR-181-MW02-SS-RB0005-REG | RB0005 | 06-Feb-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Semivolatiles by SW8270C, Nitroaromatic-Nitramine Explosives by SW8330 & Perchl |
| | HR-181-MW02-DS-RB0006-REG | RB0006 | 06-Feb-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Semivolatiles by SW8270C, Nitroaromatic-Nitramine Explosives by SW8330 & Perchl |
| HR-181-MW03 | HR-181-MW03-SS-RB0007-REG | RB0007 | 06-Feb-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Semivolatiles by SW8270C, Nitroaromatic-Nitramine Explosives by SW8330 & Perchl |
| | HR-181-MW03-DS-RB0008-REG | RB0008 | 06-Feb-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Semivolatiles by SW8270C, Nitroaromatic-Nitramine Explosives by SW8330 & Perchl |

## HR-181 Groundwater Sampling

| Sample Location | Sample Name | Sample Number | Date Sampled | Analytical Suite |
|---|---|---|---|---|
| HR-181-MW01 | HR-181-MW01-GW-RB3001-REG | RB3001 | 25-Apr-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Semivolatiles by SW8270C, Nitroaromatic-Nitramine Explosives by SW8330 & Perchl |
| | HR-181-MW01-GW-RB3001-MS | RB3001-MS | 25-Apr-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Semivolatiles by SW8270C, Nitroaromatic-Nitramine Explosives by SW8330 & Perchl |
| | HR-181-MW01-GW-RB3001-MSD | RB3001-MSD | 25-Apr-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Semivolatiles by SW8270C, Nitroaromatic-Nitramine Explosives by SW8330 & Perchl |
| HR-181-MW02 | HR-181-MW02-GW-RB3002-REG | RB3002 | 27-Apr-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Semivolatiles by SW8270C, Nitroaromatic-Nitramine Explosives by SW8330 & Perchl |
| HR-181-MW03 | HR-181-MW03-GW-RB3003-REG | RB3003 | 26-Apr-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Semivolatiles by SW8270C, Nitroaromatic-Nitramine Explosives by SW8330 & Perchl |
| | HR-181-MW03-GW-RB3004-FD | RB3004 | 26-Apr-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Semivolatiles by SW8270C, Nitroaromatic-Nitramine Explosives by SW8330 & Perchl |

# ATTACHMENT B

# DATA VALIDATION SUMMARY REPORT

***Data Validation Summary Report***
***for the Site Investigation Performed at the***
***Ranges West of Iron Mountain Road (Parcel HR-181)***
***Fort McClellan***

## *1.0 Introduction*

Level III data validation was performed on 100% of the environmental samples collected at Ranges West of Iron Mountain Road (Parcel HR-181). The analytical data consisted of two sample delivery groups (SDG) 10181-01 and 10181-02, 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) |
|---|
| Volatile Organics by GC/MS SW846 8260B |
| Semivolatile Organic Compounds by SW846-8270C |
| TAL Metals by SW846 6010B/7470A/7471A |
| Nitroaromatic and Nitramine Explosives by SW846 8330 |
| Perchlorate by EPA 314.0 |

## *2.0 Procedures*

The sample data were validated following the logic identified in the *USEPA Contract Laboratory Program (CLP) National Functional Guidelines For Inorganic Data Review (February 1994)* and *USEPA Contract Laboratory Program National Functional Guidelines For Organic Review (October 1999)* for all areas except Blanks. *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's) were applied to all sample results. As the result of the use of Update III SW846 test methods for the analytical data and the application of the 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 Chromatograph (GC) and Gas Chromatograph/Mass Spectra (GC/MS) calibration areas and is due to the fact that the analytical methods are "performance-based", and allows 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, CFR, SOP's, QAP) 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 qualification. The only rejected data ('R' qualified) were due to "poor performing" volatile compounds (ketones, some halogenated hydrocarbons, e.g.), which exhibited poor calibration responses in the associated calibration data, and samples that were reanalyzed and have more than one set of results reported. The "R" qualifier was assigned to the samples with more than one set of results to indicate that a given result should not be used to characterize a particular constituent or an analysis for a given sample.

Individual validation reports have been prepared for each parameter in each SDG 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 Parcel HR-181. 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 Volatile Organics by GC/MS SW846 8260B*

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:

<u>Holding Times</u>

Technical holding time criteria were met for all samples.

Initial and Continuing Calibration

The initial calibration and continuing calibrations associated with the project samples met QC criteria, with the exception of the following:

- The following exhibited individual ICAL RRF<.1 and/or CCAL %D's > 20%:

| SDG Number | Samples Affected | Compound(s) | Validation Qualifier |
|---|---|---|---|
| 10181-01 | RB0001, RB0002, RB0005, RB0006, RB0007, RB0008 | n-Propylbenzene | UJ |
| | RB0002, RB0003, RB0005, RB0007 | Naphthalene | UJ |
| | RB0001, RB0003, RB0006, RB0008 | Hexachlorobutadiene, 1,3,5-Trimethylbenzene, p-Cymene | UJ |
| | ALL | Acetone, 1,2-Dibromo-3-Chloropropane, 2-Butanone, 2-Hexanone, 4-Methyl-2-pentanone, Carbon tetrachloride, Cumene, Methylene chloride, sec-Butylbenzene, tert-Butylbenzene | J/UJ/R/B |
| 10181-02 | RB3001, RB3003 | Bromochloromethane | UJ |
| | RB3002, RB3004 | 2-Butanone, 4-Methyl-2pentanone | UJ |
| | RB3001, RB3003 | Bromomethane | UJ |
| | ALL | 1,2-Dibromo-3-Chloropropane, Acetone, 2-Hexanone | R/UJ |

Blanks

The 5X/10X rule for contaminants found in the associated equipment rinses, trip blanks, and method blanks was applied to all sample results. All were acceptable with the exception of the following:

Note: 'B' Qualifier was applied to the following sample results.

| SDG | Samples Affected | Compound | Associated Blank Contamination |
|---|---|---|---|
| 10181-01 | RB0002, RB0005, RB0006, RB0007, RB0008 | Methylene Chloride | Method |

B' qualifiers assigned to designate blank contamination, which are identification qualifiers, take precedence over estimating qualifiers, assigned due to quantitation.

Surrogate Recoveries

All surrogate recoveries were within acceptable QC criteria, with the exception of the following:

| SDG | Samples Affected | Compound | Validation Qualifier |
|---|---|---|---|
| 10181-01 | RB0008 | Acetone | J |
| | RB0001, RB0003, RB0007, RB0008 | Methylene Chloride | B/J |

Matrix Spike / Matrix Spike Duplicate

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

Laboratory Control Sample (LCS)

LCS 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.

Internal Standards

All internal standards met QC criteria

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.

### *4.2 Semivolatile Organic Compounds by SW846 8270C*

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 project samples.

Initial and Continuing Calibration

All initial and continuing calibrations associated with the project samples met QC criteria, with the exception of the following:

The following exhibited individual ICAL %RSD>30 and/or CCAL %D>20: Non-detect results were estimated (qualified 'UJ'); Unless rejected (qualified 'R') due to ICAL/CCAL minimum RRF

criteria not met; Positive results were estimated (qualified 'J'); Unless 'B' qualified due to blank contamination.

| SDG Number | Sample Number | Compound | Validation Qualifier |
|---|---|---|---|
| 10181-01 | ALL | 2,4-Dinitrophenol, 4-Nitrophenol, bis(2-hloroisopropyl)ether | UJ |
| 10181-02 | ALL | Hexachlorocyclopentadiene | UJ |

Surrogate Recoveries

All surrogate recoveries were within acceptable QC ranges.

Matrix Spike / Matrix Spike Duplicate

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

Laboratory Control Sample

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

Internal Standards

All Internal Standard results were within acceptable QC ranges.

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 TAL Metals by SW846 6010B/7470A/7471A*

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 exception of the following:

Note: 'B' Qualifiers were applied to all of the following sample results.

| SDG | Samples Affected | Element/Elements | Associated Blank Contamination |
|---|---|---|---|
| 10181-01 | RB0002, RB0003 | Lead | Method |
| | RB0003 | Zinc | Calibration |
| | RB0007 | Silver | Method/Calibration |
| 10181-02 | RB3001, RB3002, RB3004 | Nickel, Calcium, Magnesium, Selenium, Zinc | Calibration/ER |
| | RB3001 | Copper | Calibration |
| | RB3003 | Calcium, Magnesium, Selenium, Zinc | ER |

'B' qualifiers assigned to designate blank contamination, which are identification qualifiers, take precedence over estimating qualifiers, assigned due to quantitation.

Matrix Spike / Matrix Spike Duplicate

Batch QC was performed for the project samples and all QC criteria were met, with the exception of the following:

| SDG | Samples Affected | Element/Elements | Validation Qualifier |
|---|---|---|---|
| 10181-01 | ALL | Antimony | UJ |
| 10181-02 | ALL | Aluminum | J |

Laboratory Control Sample (LCS)

All QC criteria were met for the LCS associated with the project sample analyses.

Interference Check Sample (ICS)

All ICS % recoveries for the project samples were acceptable.

ICP Serial Dilutions

All QC criteria were met, with the exception of the following:

| SDG | Samples Affected | Element/Elements | Validation Qualifier |
|---|---|---|---|
| 10181-01 | ALL | Chromium, Vanadium | J |
| 10181-02 | ALL | Aluminum, Iron | J |

Field Duplicates

Original and field duplicate results were evaluated and no problems were identified, with the exception of the following:

| SDG | Samples Affected | Element/Elements | Validation Qualifier |
|---|---|---|---|
| 10181-02 | RB3003 (Original), RB3004 (Duplicate) | Zinc, Aluminum, Iron, Potassium | B/J |

Sample Quantitation

Results quantified between the IDL and the RL ("J" flagged by the laboratory) were qualified as estimated (J).

### *4.4 Nitroaromatic and Nitramine Explosives by SW846 8330*

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 Calibration

The initial calibration 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 acceptable QC ranges, with the exception of the following:

| SDG | Samples Affected | Compounds | Validation Qualifier |
|---|---|---|---|
| 10181-02 | RB3003 | 2-Nitrotoluene, 3-Nitrotoluene, 1,3,5-Trinitrotoluene, Tetryl, p-Nitrotoluene | J |

Matrix Spike / Matrix Spike Duplicate

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

Laboratory Control Sample (LCS)

LCS 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, with the exception of the following:

| SDG | Samples Affected | Compounds | Validation Qualifier |
|---|---|---|---|
| 10181-02 | RB3003 (Original) , RB3004 (FD) | 1,3,5-Trinitrobenzene, Tetryl, p-Nitrotoluene | J |

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.

### *4.5 Perchlorate by EPA 314.0*

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

Laboratory Control Sample (LCS)

All QC criteria were met for the LCS associated with the project sample analyses.

Field Duplicates

Original and field duplicate results were evaluated and no problems were noted.

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.

## *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 "nondetect" may be inaccurate or imprecise. The nondetect result should be estimated.

## Validation Reason Code Definitions

| Reason Code | Definition |
|---|---|
| 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

Run Date: October 2, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10181-01** | | | | | | | | | | | | | | | | | | |
| RB0001 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 5300 | mg/kg | | Y | Y | P | | | | | | | B074-01 | 21:06 |
| | | | | ANTIMONY | 11.6 | mg/kg | U | N | Y | U | UJ | | 08A | | | | B074-01 | 21:06 |
| | | | | ARSENIC | 10.8 | mg/kg | | Y | Y | P | | | | | | | B074-01 | 09:57 |
| | | | | BARIUM | 33 | mg/kg | | Y | Y | P | | | | | | | B074-01 | 21:06 |
| | | | | BERYLLIUM | .4 | mg/kg | J | Y | Y | P | J | | 15 | | | | B074-01 | 21:06 |
| | | | | CADMIUM | .582 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 21:06 |
| | | | | CALCIUM | 181 | mg/kg | | Y | Y | P | | | | | | | B074-01 | 21:06 |
| | | | | CHROMIUM | 12.9 | mg/kg | | Y | Y | P | J | | 13 | | | | B074-01 | 21:06 |
| | | | | COBALT | 3.78 | mg/kg | | Y | Y | P | | | | | | | B074-01 | 21:06 |
| | | | | COPPER | 2.81 | mg/kg | | Y | Y | P | | | | | | | B074-01 | 21:06 |
| | | | | IRON | 16500 | mg/kg | | Y | Y | P | | | | | | | B074-01 | 21:06 |
| | | | | LEAD | 11.8 | mg/kg | | Y | Y | P | | | | | | | B074-01 | 09:57 |
| | | | | MAGNESIUM | 173 | mg/kg | | Y | Y | P | | | | | | | B074-01 | 21:06 |
| | | | | MANGANESE | 295 | mg/kg | | Y | Y | P | | | | | | | B074-01 | 21:06 |
| | | | | NICKEL | 4.47 | mg/kg | | Y | Y | P | | | | | | | B074-01 | 21:06 |
| | | | | POTASSIUM | 153 | mg/kg | J | Y | Y | P | J | | 15 | | | | B074-01 | 21:06 |
| | | | | SELENIUM | 1.16 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 09:57 |
| | | | | SILVER | 1.16 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 21:06 |
| | | | | SODIUM | 116 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 21:06 |
| | | | | THALLIUM | 2.33 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 09:57 |
| | | | | VANADIUM | 13.8 | mg/kg | | Y | Y | P | J | | 13 | | | | B074-01 | 21:06 |
| | | | | ZINC | 21.5 | mg/kg | | Y | Y | P | | | | | | | B074-01 | 21:06 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .116 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 10:35 |
| RB0002 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 779 | mg/kg | | Y | Y | P | | | | | | | B074-02 | 21:11 |
| | | | | ANTIMONY | 10.9 | mg/kg | U | N | Y | U | UJ | | 08A | | | | B074-02 | 21:11 |
| | | | | ARSENIC | .73 | mg/kg | J | Y | Y | P | J | | 15 | | | | B074-02 | 10:01 |
| | | | | BARIUM | 1 | mg/kg | J | Y | Y | P | J | | 15 | | | | B074-02 | 21:11 |
| | | | | BERYLLIUM | 1.09 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 21:11 |
| | | | | CADMIUM | .546 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 21:11 |
| | | | | CALCIUM | 44.4 | mg/kg | J | Y | Y | P | J | | 15 | | | | B074-02 | 21:11 |
| | | | | CHROMIUM | 3.75 | mg/kg | | Y | Y | P | J | | 13 | | | | B074-02 | 21:11 |
| | | | | COBALT | .468 | mg/kg | J | Y | Y | P | J | | 15 | | | | B074-02 | 21:11 |
| | | | | COPPER | 2.18 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 21:11 |
| | | | | IRON | 2490 | mg/kg | | Y | Y | P | | | | | | | B074-02 | 21:11 |
| | | | | LEAD | .702 | mg/kg | J | Y | Y | F | B | | 06A | | | | B074-02 | 10:01 |
| | | | | MAGNESIUM | 23.4 | mg/kg | J | Y | Y | P | J | | 15 | | | | B074-02 | 21:11 |
| | | | | MANGANESE | 4.5 | mg/kg | | Y | Y | P | | | | | | | B074-02 | 21:11 |
| | | | | NICKEL | 2.18 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 21:11 |
| | | | | POTASSIUM | 546 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 21:11 |
| | | | | SELENIUM | 1.09 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 10:01 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10181-01** | | | | | | | | | | | | | | | | | | |
| RB0002 | SW6010B | SW3050 | N 0 1 | SILVER | 1.09 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 21:11 |
| | | | | SODIUM | 109 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 21:11 |
| | | | | THALLIUM | 2.18 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 10:01 |
| | | | | VANADIUM | 4.65 | mg/kg | | Y | Y | P | J | | 13 | | | | B074-02 | 21:11 |
| | | | | ZINC | 2.18 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 21:11 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .109 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 10:44 |
| RB0003 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 869 | mg/kg | | Y | Y | | | | | | | | B074-03 | 21:16 |
| | | | | ANTIMONY | 11 | mg/kg | U | N | Y | | UJ | | 08A | | | | B074-03 | 21:16 |
| | | | | ARSENIC | .793 | mg/kg | J | Y | Y | | J | | 15 | | | | B074-03 | 10:05 |
| | | | | BARIUM | 1.39 | mg/kg | | Y | Y | | | | | | | | B074-03 | 21:16 |
| | | | | BERYLLIUM | 1.1 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 21:16 |
| | | | | CADMIUM | .549 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 21:16 |
| | | | | CALCIUM | 56.5 | mg/kg | J | Y | Y | | J | | 15 | | | | B074-03 | 21:16 |
| | | | | CHROMIUM | 4.13 | mg/kg | | Y | Y | | J | | 13 | | | | B074-03 | 21:16 |
| | | | | COBALT | 2.2 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 21:16 |
| | | | | COPPER | 2.2 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 21:16 |
| | | | | IRON | 2550 | mg/kg | | Y | Y | | | | | | | | B074-03 | 21:16 |
| | | | | LEAD | .983 | mg/kg | J | Y | Y | | B | | 06A | | | | B074-03 | 10:05 |
| | | | | MAGNESIUM | 32.6 | mg/kg | J | Y | Y | | J | | 15 | | | | B074-03 | 21:16 |
| | | | | MANGANESE | 5.29 | mg/kg | | Y | Y | | | | | | | | B074-03 | 21:16 |
| | | | | NICKEL | 2.2 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 21:16 |
| | | | | POTASSIUM | 549 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 21:16 |
| | | | | SELENIUM | 1.1 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 10:05 |
| | | | | SILVER | 1.1 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 21:16 |
| | | | | SODIUM | 110 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 21:16 |
| | | | | THALLIUM | 2.2 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 10:05 |
| | | | | VANADIUM | 4.83 | mg/kg | | Y | Y | | J | | 13 | | | | B074-03 | 21:16 |
| | | | | ZINC | 1.14 | mg/kg | J | Y | Y | F | B | | 06B | | | | B074-03 | 21:16 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .11 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 10:47 |
| RB0005 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 2540 | mg/kg | | Y | Y | P | | | | | | | B056-01 | 20:21 |
| | | | | ANTIMONY | 11.2 | mg/kg | U | N | Y | U | UJ | | 08A | | | | B056-01 | 20:21 |
| | | | | ARSENIC | 3.6 | mg/kg | | Y | Y | P | | | | | | | B056-01 | 20:15 |
| | | | | BARIUM | 15.3 | mg/kg | | Y | Y | P | | | | | | | B056-01 | 20:21 |
| | | | | BERYLLIUM | .169 | mg/kg | J | Y | Y | P | J | | 15 | | | | B056-01 | 20:21 |
| | | | | CADMIUM | .562 | mg/kg | U | N | Y | U | U | | | | | | B056-01 | 20:21 |
| | | | | CALCIUM | 78.5 | mg/kg | J | Y | Y | P | J | | 15 | | | | B056-01 | 20:21 |
| | | | | CHROMIUM | 9.36 | mg/kg | | Y | Y | P | J | | 13 | | | | B056-01 | 20:21 |
| | | | | COBALT | 3.54 | mg/kg | | Y | Y | P | | | | | | | B056-01 | 20:21 |
| | | | | COPPER | 2.96 | mg/kg | | Y | Y | P | | | | | | | B056-01 | 20:21 |
| | | | | IRON | 9840 | mg/kg | | Y | Y | P | | | | | | | B056-01 | 20:21 |

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Run Date: October 2, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10181-01** | | | | | | | | | | | | | | | | |
| RB0005 | SW6010B | SW3050 | N 0 1 | LEAD | 10.1 | mg/kg | | Y Y P | | | | | | | B056-01 | 20:15 |
| | | | | MAGNESIUM | 65.4 | mg/kg | J | Y Y P | J | | 15 | | | | B056-01 | 20:21 |
| | | | | MANGANESE | 155 | mg/kg | | Y Y P | | | | | | | B056-01 | 20:21 |
| | | | | NICKEL | 1.93 | mg/kg | J | Y Y P | J | | 15 | | | | B056-01 | 20:21 |
| | | | | POTASSIUM | 562 | mg/kg | U | N Y U | U | | | | | | B056-01 | 20:21 |
| | | | | SELENIUM | 1.12 | mg/kg | U | N Y U | U | | | | | | B056-01 | 20:15 |
| | | | | SILVER | 1.12 | mg/kg | U | N Y U | U | | | | | | B056-01 | 20:21 |
| | | | | SODIUM | 112 | mg/kg | U | N Y U | U | | | | | | B056-01 | 20:21 |
| | | | | THALLIUM | 2.25 | mg/kg | U | N Y U | U | | | | | | B056-01 | 20:15 |
| | | | | VANADIUM | 13.1 | mg/kg | | Y Y P | J | | 13 | | | | B056-01 | 20:21 |
| | | | | ZINC | 10.8 | mg/kg | | Y Y P | | | | | | | B056-01 | 20:21 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .112 | mg/kg | U | N Y U | U | | | | | | B056-01 | 10:57 |
| RB0006 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 8030 | mg/kg | | Y Y P | | | | | | | B056-02 | 20:25 |
| | | | | ANTIMONY | 11.3 | mg/kg | U | N Y U | UJ | | 08A | | | | B056-02 | 20:25 |
| | | | | ARSENIC | 6.33 | mg/kg | | Y Y P | | | | | | | B056-02 | 20:19 |
| | | | | BARIUM | 5.98 | mg/kg | | Y Y P | | | | | | | B056-02 | 20:25 |
| | | | | BERYLLIUM | .113 | mg/kg | J | Y Y P | J | | 15 | | | | B056-02 | 20:25 |
| | | | | CADMIUM | .565 | mg/kg | U | N Y U | U | | | | | | B056-02 | 20:25 |
| | | | | CALCIUM | 25.1 | mg/kg | J | Y Y P | J | | 15 | | | | B056-02 | 20:25 |
| | | | | CHROMIUM | 19.3 | mg/kg | | Y Y P | J | | 13 | | | | B056-02 | 20:25 |
| | | | | COBALT | 2.26 | mg/kg | U | N Y U | U | | | | | | B056-02 | 20:25 |
| | | | | COPPER | 4.73 | mg/kg | | Y Y P | | | | | | | B056-02 | 20:25 |
| | | | | IRON | 26700 | mg/kg | | Y Y P | | | | | | | B056-02 | 20:25 |
| | | | | LEAD | 4.05 | mg/kg | | Y Y P | | | | | | | B056-02 | 20:19 |
| | | | | MAGNESIUM | 93 | mg/kg | J | Y Y P | J | | 15 | | | | B056-02 | 20:25 |
| | | | | MANGANESE | 4.83 | mg/kg | | Y Y P | | | | | | | B056-02 | 20:25 |
| | | | | NICKEL | 2.26 | mg/kg | U | N Y U | U | | | | | | B056-02 | 20:25 |
| | | | | POTASSIUM | 565 | mg/kg | U | N Y U | U | | | | | | B056-02 | 20:25 |
| | | | | SELENIUM | 1.13 | mg/kg | U | N Y U | U | | | | | | B056-02 | 20:19 |
| | | | | SILVER | 1.13 | mg/kg | U | N Y U | U | | | | | | B056-02 | 20:25 |
| | | | | SODIUM | 113 | mg/kg | U | N Y U | U | | | | | | B056-02 | 20:25 |
| | | | | THALLIUM | 1.01 | mg/kg | J | Y Y P | J | | 15 | | | | B056-02 | 20:19 |
| | | | | VANADIUM | 32.5 | mg/kg | | Y Y P | J | | 13 | | | | B056-02 | 20:25 |
| | | | | ZINC | 4.25 | mg/kg | | Y Y P | | | | | | | B056-02 | 20:25 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .113 | mg/kg | U | N Y U | U | | | | | | B056-02 | 10:59 |
| RB0007 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 5680 | mg/kg | | Y Y P | | | | | | | B056-03 | 20:30 |
| | | | | ANTIMONY | 11.7 | mg/kg | U | N Y U | UJ | | 08A | | | | B056-03 | 20:30 |
| | | | | ARSENIC | 5.49 | mg/kg | | Y Y P | | | | | | | B056-03 | 20:24 |
| | | | | BARIUM | 21.4 | mg/kg | | Y Y P | | | | | | | B056-03 | 20:30 |
| | | | | BERYLLIUM | .361 | mg/kg | J | Y Y P | J | | 15 | | | | B056-03 | 20:30 |

# Validation Qualifier Data Entry Verification

Run Date: October 2, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10181-01** | | | | | | | | | | | | | | | | | | | | |
| RB0007 | SW6010B | SW3050 | N | 0 | 1 | CADMIUM | .587 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 20:30 |
| | | | | | | CALCIUM | 55.9 | mg/kg | J | Y | Y | P | J | | 15 | | | | B056-03 | 20:30 |
| | | | | | | CHROMIUM | 9.17 | mg/kg | | Y | Y | P | J | | 13 | | | | B056-03 | 20:30 |
| | | | | | | COBALT | 5.55 | mg/kg | | Y | Y | P | | | | | | | B056-03 | 20:30 |
| | | | | | | COPPER | 7.04 | mg/kg | | Y | Y | P | | | | | | | B056-03 | 20:30 |
| | | | | | | IRON | 10900 | mg/kg | | Y | Y | P | | | | | | | B056-03 | 20:30 |
| | | | | | | LEAD | 17.4 | mg/kg | | Y | Y | P | | | | | | | B056-03 | 20:24 |
| | | | | | | MAGNESIUM | 139 | mg/kg | | Y | Y | P | | | | | | | B056-03 | 20:30 |
| | | | | | | MANGANESE | 192 | mg/kg | | Y | Y | P | | | | | | | B056-03 | 20:30 |
| | | | | | | NICKEL | 4.86 | mg/kg | | Y | Y | P | | | | | | | B056-03 | 20:30 |
| | | | | | | POTASSIUM | 587 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 20:30 |
| | | | | | | SELENIUM | 1.17 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 20:24 |
| | | | | | | SILVER | .737 | mg/kg | J | Y | Y | F | B | | 06A | 06B | | | B056-03 | 20:30 |
| | | | | | | SODIUM | 117 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 20:30 |
| | | | | | | THALLIUM | 2.35 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 20:24 |
| | | | | | | VANADIUM | 17.3 | mg/kg | | Y | Y | P | J | | 13 | | | | B056-03 | 20:30 |
| | | | | | | ZINC | 18.5 | mg/kg | | Y | Y | P | | | | | | | B056-03 | 20:30 |
| | SW7471A | TOTAL | N | 0 | 1 | MERCURY | .030 | mg/kg | J | Y | Y | P | J | | 15 | | | | B056-03 | 11:02 |
| RB0008 | SW6010B | SW3050 | N | 0 | 1 | ALUMINUM | 4960 | mg/kg | | Y | Y | P | | | | | | | B056-04 | 20:34 |
| | | | | | | ANTIMONY | 11.4 | mg/kg | U | N | Y | U | UJ | | 08A | | | | B056-04 | 20:34 |
| | | | | | | ARSENIC | 1.34 | mg/kg | | Y | Y | P | | | | | | | B056-04 | 20:28 |
| | | | | | | BARIUM | 3.64 | mg/kg | | Y | Y | P | | | | | | | B056-04 | 20:34 |
| | | | | | | BERYLLIUM | .0682 | mg/kg | J | Y | Y | P | J | | 15 | | | | B056-04 | 20:34 |
| | | | | | | CADMIUM | .571 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 20:34 |
| | | | | | | CALCIUM | 22.7 | mg/kg | J | Y | Y | P | J | | 15 | | | | B056-04 | 20:34 |
| | | | | | | CHROMIUM | 10.3 | mg/kg | | Y | Y | P | J | | 13 | | | | B056-04 | 20:34 |
| | | | | | | COBALT | 2.29 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 20:34 |
| | | | | | | COPPER | 3.11 | mg/kg | | Y | Y | P | | | | | | | B056-04 | 20:34 |
| | | | | | | IRON | 18900 | mg/kg | | Y | Y | P | | | | | | | B056-04 | 20:34 |
| | | | | | | LEAD | 3.58 | mg/kg | | Y | Y | P | | | | | | | B056-04 | 20:28 |
| | | | | | | MAGNESIUM | 31.2 | mg/kg | J | Y | Y | P | J | | 15 | | | | B056-04 | 20:34 |
| | | | | | | MANGANESE | 2.86 | mg/kg | | Y | Y | P | | | | | | | B056-04 | 20:34 |
| | | | | | | NICKEL | 2.29 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 20:34 |
| | | | | | | POTASSIUM | 571 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 20:34 |
| | | | | | | SELENIUM | 1.14 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 20:28 |
| | | | | | | SILVER | 1.14 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 20:34 |
| | | | | | | SODIUM | 114 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 20:34 |
| | | | | | | THALLIUM | 2.29 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 20:28 |
| | | | | | | VANADIUM | 16.9 | mg/kg | | Y | Y | P | J | | 13 | | | | B056-04 | 20:34 |
| | | | | | | ZINC | 1.97 | mg/kg | J | Y | Y | P | J | | 15 | | | | B056-04 | 20:34 |

# Validation Qualifier Data Entry Verification

Run Date: October 2, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10181-01** | | | | | | | | | | | | | | | | | | | | |
| RB0008 | SW7471A | TOTAL | N | 0 | 1 | MERCURY | .114 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 11:04 |
| RB0001 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 03:21 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 03:21 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 03:21 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 03:21 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 03:21 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 03:21 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 03:21 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 03:21 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 03:21 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 03:21 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 03:21 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 03:21 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 03:21 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 03:21 |
| RB0002 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 05:23 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 05:23 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 05:23 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 05:23 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 05:23 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 05:23 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 05:23 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 05:23 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 05:23 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 05:23 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 05:23 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 05:23 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 05:23 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 05:23 |
| RB0003 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 06:03 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 06:03 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 06:03 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 06:03 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 06:03 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 06:03 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 06:03 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 06:03 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 06:03 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 06:03 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 06:03 |

# Validation Qualifier Data Entry Verification

Run Date: October 2, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10181-01** | | | | | | | | | | | | | | | | | | | | |
| RB0003 | SW8330 | METHOD | N | 0 | 1 | NITROBENZENE | .4 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 06:03 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 06:03 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 06:03 |
| RB0005 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B056-01 | 00:47 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B056-01 | 00:47 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B056-01 | 00:47 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B056-01 | 00:47 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B056-01 | 00:47 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B056-01 | 00:47 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B056-01 | 00:47 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B056-01 | 00:47 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B056-01 | 00:47 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B056-01 | 00:47 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | B056-01 | 00:47 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B056-01 | 00:47 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | B056-01 | 00:47 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | B056-01 | 00:47 |
| RB0006 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 01:27 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 01:27 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 01:27 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 01:27 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 01:27 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 01:27 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 01:27 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 01:27 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 01:27 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 01:27 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 01:27 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 01:27 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 01:27 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 01:27 |
| RB0007 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 02:08 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 02:08 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 02:08 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 02:08 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 02:08 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 02:08 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 02:08 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 02:08 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 02:08 |

# Validation Qualifier Data Entry Verification

Run Date: October 2, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10181-01** | | | | | | | | | | | | | | | | | | | | |
| RB0007 | SW8330 | METHOD | N | 0 | 1 | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 02:08 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 02:08 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 02:08 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 02:08 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 02:08 |
| RB0008 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 02:48 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 02:48 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 02:48 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 02:48 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 02:48 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 02:48 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 02:48 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 02:48 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 02:48 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 02:48 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 02:48 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 02:48 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 02:48 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 02:48 |
| RB0001 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0582 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 01:01 |
| RB0002 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0546 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 01:52 |
| RB0003 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0549 | mg/kg | U | N | Y | U | U | | | | | | B074-03 | 02:10 |
| RB0005 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0562 | mg/kg | U | N | Y | U | U | | | | | | B056-01 | 23:18 |
| RB0006 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0565 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 00:09 |
| RB0007 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0587 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 00:27 |
| RB0008 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0571 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 00:44 |
| RB0001 | SW8270C | SW3550 | N | 0 | 1 | 1,2,4-TRICHLOROBENZENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 21:02 |
| | | | | | | 1,2-DICHLOROBENZENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 21:02 |
| | | | | | | 1,3-DICHLOROBENZENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 21:02 |
| | | | | | | 1,4-DICHLOROBENZENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 21:02 |
| | | | | | | 2,4,5-TRICHLOROPHENOL | .38 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 21:02 |
| | | | | | | 2,4,6-TRICHLOROPHENOL | .97 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 21:02 |
| | | | | | | 2,4-DICHLOROPHENOL | .38 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 21:02 |
| | | | | | | 2,4-DIMETHYLPHENOL | .38 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 21:02 |
| | | | | | | 2,4-DINITROPHENOL | .38 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B074-01 | 21:02 |
| | | | | | | 2,4-DINITROTOLUENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 21:02 |
| | | | | | | 2,6-DINITROTOLUENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 21:02 |
| | | | | | | 2-CHLORONAPHTHALENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 21:02 |
| | | | | | | 2-CHLOROPHENOL | .38 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 21:02 |

# Validation Qualifier Data Entry Verification

Run Date: October 2, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10181-01** | | | | | | | | | | | | | | | | | | |
| RB0001 | SW8270C | SW3550 | N 0 1 | 2-METHYLNAPHTHALENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 21:02 |
| | | | | 2-METHYLPHENOL | .38 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 21:02 |
| | | | | 2-NITROANILINE | .97 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 21:02 |
| | | | | 2-NITROPHENOL | .38 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 21:02 |
| | | | | 3,3'-DICHLOROBENZIDINE | .97 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 21:02 |
| | | | | 3-NITROANILINE | .97 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 21:02 |
| | | | | 4,6-DINITRO-2-METHYLPHENOL | .97 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 21:02 |
| | | | | 4-BROMOPHENYL-PHENYL ETHER | .38 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 21:02 |
| | | | | 4-CHLORO-3-METHYLPHENOL | .38 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 21:02 |
| | | | | 4-CHLOROANILINE | .38 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 21:02 |
| | | | | 4-CHLOROPHENYL-PHENYL ETHER | .38 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 21:02 |
| | | | | 4-METHYLPHENOL | .38 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 21:02 |
| | | | | 4-NITROANILINE | .38 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 21:02 |
| | | | | 4-NITROPHENOL | .97 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B074-01 | 21:02 |
| | | | | ACENAPHTHENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 21:02 |
| | | | | ACENAPHTHYLENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 21:02 |
| | | | | ANTHRACENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 21:02 |
| | | | | BENZO(A)ANTHRACENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 21:02 |
| | | | | BENZO(A)PYRENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 21:02 |
| | | | | BENZO(B)FLUORANTHENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 21:02 |
| | | | | BENZO(G,H,I)PERYLENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 21:02 |
| | | | | BENZO(K)FLUORANTHENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 21:02 |
| | | | | BIS(2-CHLOROETHOXY)METHANE | .38 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 21:02 |
| | | | | BIS(2-CHLOROETHYL)ETHER | .38 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 21:02 |
| | | | | BIS(2-CHLOROISOPROPYL)ETHER | .38 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B074-01 | 21:02 |
| | | | | BIS(2-ETHYLHEXYL)PHTHALATE | .38 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 21:02 |
| | | | | BUTYLBENZYLPHTHALATE | .38 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 21:02 |
| | | | | CARBAZOLE | .38 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 21:02 |
| | | | | CHRYSENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 21:02 |
| | | | | DI-N-BUTYLPHTHALATE | .38 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 21:02 |
| | | | | DI-N-OCTYLPHTHALATE | .38 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 21:02 |
| | | | | DIBENZO(A,H)ANTHRACENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 21:02 |
| | | | | DIBENZOFURAN | .38 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 21:02 |
| | | | | DIETHYLPHTHALATE | .38 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 21:02 |
| | | | | DIMETHYLPHTHALATE | .38 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 21:02 |
| | | | | FLUORANTHENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 21:02 |
| | | | | FLUORENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 21:02 |
| | | | | HEXACHLOROBENZENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 21:02 |
| | | | | HEXACHLOROBUTADIENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 21:02 |
| | | | | HEXACHLOROCYCLOPENTADIENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 21:02 |

# Validation Qualifier Data Entry Verification

Run Date: October 2, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10181-01** | | | | | | | | | | | | | | | | | | |
| RB0001 | SW8270C | SW3550 | N 0 1 | HEXACHLOROETHANE | .38 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 21:02 |
| | | | | INDENO(1,2,3-CD)PYRENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 21:02 |
| | | | | ISOPHORONE | .38 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 21:02 |
| | | | | N-NITROSO-DI-N-PROPYLAMINE | .38 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 21:02 |
| | | | | N-NITROSODIPHENYLAMINE | .38 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 21:02 |
| | | | | NAPHTHALENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 21:02 |
| | | | | NITROBENZENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 21:02 |
| | | | | PENTACHLOROPHENOL | .97 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 21:02 |
| | | | | PHENANTHRENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 21:02 |
| | | | | PHENOL | .38 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 21:02 |
| | | | | PYRENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 21:02 |
| RB0002 | SW8270C | SW3550 | N 0 1 | 1,2,4-TRICHLOROBENZENE | .36 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 21:40 |
| | | | | 1,2-DICHLOROBENZENE | .36 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 21:40 |
| | | | | 1,3-DICHLOROBENZENE | .36 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 21:40 |
| | | | | 1,4-DICHLOROBENZENE | .36 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 21:40 |
| | | | | 2,4,5-TRICHLOROPHENOL | .36 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 21:40 |
| | | | | 2,4,6-TRICHLOROPHENOL | .91 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 21:40 |
| | | | | 2,4-DICHLOROPHENOL | .36 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 21:40 |
| | | | | 2,4-DIMETHYLPHENOL | .36 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 21:40 |
| | | | | 2,4-DINITROPHENOL | .36 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B074-02 | 21:40 |
| | | | | 2,4-DINITROTOLUENE | .36 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 21:40 |
| | | | | 2,6-DINITROTOLUENE | .36 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 21:40 |
| | | | | 2-CHLORONAPHTHALENE | .36 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 21:40 |
| | | | | 2-CHLOROPHENOL | .36 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 21:40 |
| | | | | 2-METHYLNAPHTHALENE | .36 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 21:40 |
| | | | | 2-METHYLPHENOL | .36 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 21:40 |
| | | | | 2-NITROANILINE | .91 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 21:40 |
| | | | | 2-NITROPHENOL | .36 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 21:40 |
| | | | | 3,3'-DICHLOROBENZIDINE | .91 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 21:40 |
| | | | | 3-NITROANILINE | .91 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 21:40 |
| | | | | 4,6-DINITRO-2-METHYLPHENOL | .91 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 21:40 |
| | | | | 4-BROMOPHENYL-PHENYL ETHER | .36 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 21:40 |
| | | | | 4-CHLORO-3-METHYLPHENOL | .36 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 21:40 |
| | | | | 4-CHLOROANILINE | .36 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 21:40 |
| | | | | 4-CHLOROPHENYL-PHENYL ETHER | .36 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 21:40 |
| | | | | 4-METHYLPHENOL | .36 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 21:40 |
| | | | | 4-NITROANILINE | .36 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 21:40 |
| | | | | 4-NITROPHENOL | .91 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B074-02 | 21:40 |
| | | | | ACENAPHTHENE | .36 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 21:40 |
| | | | | ACENAPHTHYLENE | .36 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 21:40 |

# Validation Qualifier Data Entry Verification

Run Date: October 2, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10181-01** | | | | | | | | | | | | | | | | | | |
| RB0002 | SW8270C | SW3550 | N 0 1 | ANTHRACENE | .36 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 21:40 |
| | | | | BENZO(A)ANTHRACENE | .36 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 21:40 |
| | | | | BENZO(A)PYRENE | .36 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 21:40 |
| | | | | BENZO(B)FLUORANTHENE | .36 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 21:40 |
| | | | | BENZO(G,H,I)PERYLENE | .36 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 21:40 |
| | | | | BENZO(K)FLUORANTHENE | .36 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 21:40 |
| | | | | BIS(2-CHLOROETHOXY)METHANE | .36 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 21:40 |
| | | | | BIS(2-CHLOROETHYL)ETHER | .36 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 21:40 |
| | | | | BIS(2-CHLOROISOPROPYL)ETHER | .36 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B074-02 | 21:40 |
| | | | | BIS(2-ETHYLHEXYL)PHTHALATE | .36 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 21:40 |
| | | | | BUTYLBENZYLPHTHALATE | .36 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 21:40 |
| | | | | CARBAZOLE | .36 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 21:40 |
| | | | | CHRYSENE | .36 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 21:40 |
| | | | | DI-N-BUTYLPHTHALATE | .36 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 21:40 |
| | | | | DI-N-OCTYLPHTHALATE | .36 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 21:40 |
| | | | | DIBENZO(A,H)ANTHRACENE | .36 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 21:40 |
| | | | | DIBENZOFURAN | .36 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 21:40 |
| | | | | DIETHYLPHTHALATE | .36 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 21:40 |
| | | | | DIMETHYLPHTHALATE | .36 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 21:40 |
| | | | | FLUORANTHENE | .36 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 21:40 |
| | | | | FLUORENE | .36 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 21:40 |
| | | | | HEXACHLOROBENZENE | .36 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 21:40 |
| | | | | HEXACHLOROBUTADIENE | .36 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 21:40 |
| | | | | HEXACHLOROCYCLOPENTADIENE | .36 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 21:40 |
| | | | | HEXACHLOROETHANE | .36 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 21:40 |
| | | | | INDENO(1,2,3-CD)PYRENE | .36 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 21:40 |
| | | | | ISOPHORONE | .36 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 21:40 |
| | | | | N-NITROSO-DI-N-PROPYLAMINE | .36 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 21:40 |
| | | | | N-NITROSODIPHENYLAMINE | .36 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 21:40 |
| | | | | NAPHTHALENE | .36 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 21:40 |
| | | | | NITROBENZENE | .36 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 21:40 |
| | | | | PENTACHLOROPHENOL | .91 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 21:40 |
| | | | | PHENANTHRENE | .36 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 21:40 |
| | | | | PHENOL | .36 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 21:40 |
| | | | | PYRENE | .36 | mg/kg | U | N | Y | U | U | | | | | | B074-02 | 21:40 |
| RB0003 | SW8270C | SW3550 | N 0 1 | 1,2,4-TRICHLOROBENZENE | .36 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 22:19 |
| | | | | 1,2-DICHLOROBENZENE | .36 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 22:19 |
| | | | | 1,3-DICHLOROBENZENE | .36 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 22:19 |
| | | | | 1,4-DICHLOROBENZENE | .36 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 22:19 |
| | | | | 2,4,5-TRICHLOROPHENOL | .36 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 22:19 |

# Validation Qualifier Data Entry Verification

Run Date: October 2, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10181-01** | | | | | | | | | | | | | | | | |
| RB0003 | SW8270C | SW3550 | N 0 1 | 2,4,6-TRICHLOROPHENOL | .91 | mg/kg | U | N Y | U | | | | | | B074-03 | 22:19 |
| | | | | 2,4-DICHLOROPHENOL | .36 | mg/kg | U | N Y | U | | | | | | B074-03 | 22:19 |
| | | | | 2,4-DIMETHYLPHENOL | .36 | mg/kg | U | N Y | U | | | | | | B074-03 | 22:19 |
| | | | | 2,4-DINITROPHENOL | .36 | mg/kg | U | N Y | UJ | | 05B | | | | B074-03 | 22:19 |
| | | | | 2,4-DINITROTOLUENE | .36 | mg/kg | U | N Y | U | | | | | | B074-03 | 22:19 |
| | | | | 2,6-DINITROTOLUENE | .36 | mg/kg | U | N Y | U | | | | | | B074-03 | 22:19 |
| | | | | 2-CHLORONAPHTHALENE | .36 | mg/kg | U | N Y | U | | | | | | B074-03 | 22:19 |
| | | | | 2-CHLOROPHENOL | .36 | mg/kg | U | N Y | U | | | | | | B074-03 | 22:19 |
| | | | | 2-METHYLNAPHTHALENE | .36 | mg/kg | U | N Y | U | | | | | | B074-03 | 22:19 |
| | | | | 2-METHYLPHENOL | .36 | mg/kg | U | N Y | U | | | | | | B074-03 | 22:19 |
| | | | | 2-NITROANILINE | .91 | mg/kg | U | N Y | U | | | | | | B074-03 | 22:19 |
| | | | | 2-NITROPHENOL | .36 | mg/kg | U | N Y | U | | | | | | B074-03 | 22:19 |
| | | | | 3,3'-DICHLOROBENZIDINE | .91 | mg/kg | U | N Y | U | | | | | | B074-03 | 22:19 |
| | | | | 3-NITROANILINE | .91 | mg/kg | U | N Y | U | | | | | | B074-03 | 22:19 |
| | | | | 4,6-DINITRO-2-METHYLPHENOL | .91 | mg/kg | U | N Y | U | | | | | | B074-03 | 22:19 |
| | | | | 4-BROMOPHENYL-PHENYL ETHER | .36 | mg/kg | U | N Y | U | | | | | | B074-03 | 22:19 |
| | | | | 4-CHLORO-3-METHYLPHENOL | .36 | mg/kg | U | N Y | U | | | | | | B074-03 | 22:19 |
| | | | | 4-CHLOROANILINE | .36 | mg/kg | U | N Y | U | | | | | | B074-03 | 22:19 |
| | | | | 4-CHLOROPHENYL-PHENYL ETHER | .36 | mg/kg | U | N Y | U | | | | | | B074-03 | 22:19 |
| | | | | 4-METHYLPHENOL | .36 | mg/kg | U | N Y | U | | | | | | B074-03 | 22:19 |
| | | | | 4-NITROANILINE | .36 | mg/kg | U | N Y | U | | | | | | B074-03 | 22:19 |
| | | | | 4-NITROPHENOL | .91 | mg/kg | U | N Y | UJ | | 05B | | | | B074-03 | 22:19 |
| | | | | ACENAPHTHENE | .36 | mg/kg | U | N Y | U | | | | | | B074-03 | 22:19 |
| | | | | ACENAPHTHYLENE | .36 | mg/kg | U | N Y | U | | | | | | B074-03 | 22:19 |
| | | | | ANTHRACENE | .36 | mg/kg | U | N Y | U | | | | | | B074-03 | 22:19 |
| | | | | BENZO(A)ANTHRACENE | .36 | mg/kg | U | N Y | U | | | | | | B074-03 | 22:19 |
| | | | | BENZO(A)PYRENE | .36 | mg/kg | U | N Y | U | | | | | | B074-03 | 22:19 |
| | | | | BENZO(B)FLUORANTHENE | .36 | mg/kg | U | N Y | U | | | | | | B074-03 | 22:19 |
| | | | | BENZO(G,H,I)PERYLENE | .36 | mg/kg | U | N Y | U | | | | | | B074-03 | 22:19 |
| | | | | BENZO(K)FLUORANTHENE | .36 | mg/kg | U | N Y | U | | | | | | B074-03 | 22:19 |
| | | | | BIS(2-CHLOROETHOXY)METHANE | .36 | mg/kg | U | N Y | U | | | | | | B074-03 | 22:19 |
| | | | | BIS(2-CHLOROETHYL)ETHER | .36 | mg/kg | U | N Y | U | | | | | | B074-03 | 22:19 |
| | | | | BIS(2-CHLOROISOPROPYL)ETHER | .36 | mg/kg | U | N Y | UJ | | 05B | | | | B074-03 | 22:19 |
| | | | | BIS(2-ETHYLHEXYL)PHTHALATE | .36 | mg/kg | U | N Y | U | | | | | | B074-03 | 22:19 |
| | | | | BUTYLBENZYLPHTHALATE | .36 | mg/kg | U | N Y | U | | | | | | B074-03 | 22:19 |
| | | | | CARBAZOLE | .36 | mg/kg | U | N Y | U | | | | | | B074-03 | 22:19 |
| | | | | CHRYSENE | .36 | mg/kg | U | N Y | U | | | | | | B074-03 | 22:19 |
| | | | | DI-N-BUTYLPHTHALATE | .36 | mg/kg | U | N Y | U | | | | | | B074-03 | 22:19 |
| | | | | DI-N-OCTYLPHTHALATE | .36 | mg/kg | U | N Y | U | | | | | | B074-03 | 22:19 |
| | | | | DIBENZO(A,H)ANTHRACENE | .36 | mg/kg | U | N Y | U | | | | | | B074-03 | 22:19 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10181-01** | | | | | | | | | | | | | | | | |
| RB0003 | SW8270C | SW3550 | N 0 1 | DIBENZOFURAN | .36 | mg/kg | U | N Y | U | | | | | | B074-03 | 22:19 |
| | | | | DIETHYLPHTHALATE | .36 | mg/kg | U | N Y | U | | | | | | B074-03 | 22:19 |
| | | | | DIMETHYLPHTHALATE | .36 | mg/kg | U | N Y | U | | | | | | B074-03 | 22:19 |
| | | | | FLUORANTHENE | .36 | mg/kg | U | N Y | U | | | | | | B074-03 | 22:19 |
| | | | | FLUORENE | .36 | mg/kg | U | N Y | U | | | | | | B074-03 | 22:19 |
| | | | | HEXACHLOROBENZENE | .36 | mg/kg | U | N Y | U | | | | | | B074-03 | 22:19 |
| | | | | HEXACHLOROBUTADIENE | .36 | mg/kg | U | N Y | U | | | | | | B074-03 | 22:19 |
| | | | | HEXACHLOROCYCLOPENTADIENE | .36 | mg/kg | U | N Y | U | | | | | | B074-03 | 22:19 |
| | | | | HEXACHLOROETHANE | .36 | mg/kg | U | N Y | U | | | | | | B074-03 | 22:19 |
| | | | | INDENO(1,2,3-CD)PYRENE | .36 | mg/kg | U | N Y | U | | | | | | B074-03 | 22:19 |
| | | | | ISOPHORONE | .36 | mg/kg | U | N Y | U | | | | | | B074-03 | 22:19 |
| | | | | N-NITROSO-DI-N-PROPYLAMINE | .36 | mg/kg | U | N Y | U | | | | | | B074-03 | 22:19 |
| | | | | N-NITROSODIPHENYLAMINE | .36 | mg/kg | U | N Y | U | | | | | | B074-03 | 22:19 |
| | | | | NAPHTHALENE | .36 | mg/kg | U | N Y | U | | | | | | B074-03 | 22:19 |
| | | | | NITROBENZENE | .36 | mg/kg | U | N Y | U | | | | | | B074-03 | 22:19 |
| | | | | PENTACHLOROPHENOL | .91 | mg/kg | U | N Y | U | | | | | | B074-03 | 22:19 |
| | | | | PHENANTHRENE | .36 | mg/kg | U | N Y | U | | | | | | B074-03 | 22:19 |
| | | | | PHENOL | .36 | mg/kg | U | N Y | U | | | | | | B074-03 | 22:19 |
| | | | | PYRENE | .36 | mg/kg | U | N Y | U | | | | | | B074-03 | 22:19 |
| RB0005 | SW8270C | SW3550 | N 0 1 | 1,2,4-TRICHLOROBENZENE | .37 | mg/kg | U | N Y U | U | | | | | | B056-01 | 22:57 |
| | | | | 1,2-DICHLOROBENZENE | .37 | mg/kg | U | N Y U | U | | | | | | B056-01 | 22:57 |
| | | | | 1,3-DICHLOROBENZENE | .37 | mg/kg | U | N Y U | U | | | | | | B056-01 | 22:57 |
| | | | | 1,4-DICHLOROBENZENE | .37 | mg/kg | U | N Y U | U | | | | | | B056-01 | 22:57 |
| | | | | 2,4,5-TRICHLOROPHENOL | .37 | mg/kg | U | N Y U | U | | | | | | B056-01 | 22:57 |
| | | | | 2,4,6-TRICHLOROPHENOL | .93 | mg/kg | U | N Y U | U | | | | | | B056-01 | 22:57 |
| | | | | 2,4-DICHLOROPHENOL | .37 | mg/kg | U | N Y U | U | | | | | | B056-01 | 22:57 |
| | | | | 2,4-DIMETHYLPHENOL | .37 | mg/kg | U | N Y U | U | | | | | | B056-01 | 22:57 |
| | | | | 2,4-DINITROPHENOL | .37 | mg/kg | U | N Y U | UJ | | 05B | | | | B056-01 | 22:57 |
| | | | | 2,4-DINITROTOLUENE | .37 | mg/kg | U | N Y U | U | | | | | | B056-01 | 22:57 |
| | | | | 2,6-DINITROTOLUENE | .37 | mg/kg | U | N Y U | U | | | | | | B056-01 | 22:57 |
| | | | | 2-CHLORONAPHTHALENE | .37 | mg/kg | U | N Y U | U | | | | | | B056-01 | 22:57 |
| | | | | 2-CHLOROPHENOL | .37 | mg/kg | U | N Y U | U | | | | | | B056-01 | 22:57 |
| | | | | 2-METHYLNAPHTHALENE | .37 | mg/kg | U | N Y U | U | | | | | | B056-01 | 22:57 |
| | | | | 2-METHYLPHENOL | .37 | mg/kg | U | N Y U | U | | | | | | B056-01 | 22:57 |
| | | | | 2-NITROANILINE | .93 | mg/kg | U | N Y U | U | | | | | | B056-01 | 22:57 |
| | | | | 2-NITROPHENOL | .37 | mg/kg | U | N Y U | U | | | | | | B056-01 | 22:57 |
| | | | | 3,3'-DICHLOROBENZIDINE | .93 | mg/kg | U | N Y U | U | | | | | | B056-01 | 22:57 |
| | | | | 3-NITROANILINE | .93 | mg/kg | U | N Y U | U | | | | | | B056-01 | 22:57 |
| | | | | 4,6-DINITRO-2-METHYLPHENOL | .93 | mg/kg | U | N Y U | U | | | | | | B056-01 | 22:57 |
| | | | | 4-BROMOPHENYL-PHENYL ETHER | .37 | mg/kg | U | N Y U | U | | | | | | B056-01 | 22:57 |

# Validation Qualifier Data Entry Verification

Run Date: October 2, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10181-01** | | | | | | | | | | | | | | | | | | |
| RB0005 | SW8270C | SW3550 | N 0 1 | 4-CHLORO-3-METHYLPHENOL | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-01 | 22:57 |
| | | | | 4-CHLOROANILINE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-01 | 22:57 |
| | | | | 4-CHLOROPHENYL-PHENYL ETHER | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-01 | 22:57 |
| | | | | 4-METHYLPHENOL | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-01 | 22:57 |
| | | | | 4-NITROANILINE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-01 | 22:57 |
| | | | | 4-NITROPHENOL | .93 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B056-01 | 22:57 |
| | | | | ACENAPHTHENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-01 | 22:57 |
| | | | | ACENAPHTHYLENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-01 | 22:57 |
| | | | | ANTHRACENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-01 | 22:57 |
| | | | | BENZO(A)ANTHRACENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-01 | 22:57 |
| | | | | BENZO(A)PYRENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-01 | 22:57 |
| | | | | BENZO(B)FLUORANTHENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-01 | 22:57 |
| | | | | BENZO(G,H,I)PERYLENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-01 | 22:57 |
| | | | | BENZO(K)FLUORANTHENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-01 | 22:57 |
| | | | | BIS(2-CHLOROETHOXY)METHANE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-01 | 22:57 |
| | | | | BIS(2-CHLOROETHYL)ETHER | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-01 | 22:57 |
| | | | | BIS(2-CHLOROISOPROPYL)ETHER | .37 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B056-01 | 22:57 |
| | | | | BIS(2-ETHYLHEXYL)PHTHALATE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-01 | 22:57 |
| | | | | BUTYLBENZYLPHTHALATE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-01 | 22:57 |
| | | | | CARBAZOLE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-01 | 22:57 |
| | | | | CHRYSENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-01 | 22:57 |
| | | | | DI-N-BUTYLPHTHALATE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-01 | 22:57 |
| | | | | DI-N-OCTYLPHTHALATE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-01 | 22:57 |
| | | | | DIBENZO(A,H)ANTHRACENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-01 | 22:57 |
| | | | | DIBENZOFURAN | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-01 | 22:57 |
| | | | | DIETHYLPHTHALATE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-01 | 22:57 |
| | | | | DIMETHYLPHTHALATE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-01 | 22:57 |
| | | | | FLUORANTHENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-01 | 22:57 |
| | | | | FLUORENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-01 | 22:57 |
| | | | | HEXACHLOROBENZENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-01 | 22:57 |
| | | | | HEXACHLOROBUTADIENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-01 | 22:57 |
| | | | | HEXACHLOROCYCLOPENTADIENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-01 | 22:57 |
| | | | | HEXACHLOROETHANE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-01 | 22:57 |
| | | | | INDENO(1,2,3-CD)PYRENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-01 | 22:57 |
| | | | | ISOPHORONE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-01 | 22:57 |
| | | | | N-NITROSO-DI-N-PROPYLAMINE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-01 | 22:57 |
| | | | | N-NITROSODIPHENYLAMINE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-01 | 22:57 |
| | | | | NAPHTHALENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-01 | 22:57 |
| | | | | NITROBENZENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-01 | 22:57 |
| | | | | PENTACHLOROPHENOL | .93 | mg/kg | U | N | Y | U | U | | | | | | B056-01 | 22:57 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10181-01** | | | | | | | | | | | | | | | | | | |
| RB0005 | SW8270C | SW3550 | N 0 1 | PHENANTHRENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-01 | 22:57 |
| | | | | PHENOL | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-01 | 22:57 |
| | | | | PYRENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-01 | 22:57 |
| RB0006 | SW8270C | SW3550 | N 0 1 | 1,2,4-TRICHLOROBENZENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 23:35 |
| | | | | 1,2-DICHLOROBENZENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 23:35 |
| | | | | 1,3-DICHLOROBENZENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 23:35 |
| | | | | 1,4-DICHLOROBENZENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 23:35 |
| | | | | 2,4,5-TRICHLOROPHENOL | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 23:35 |
| | | | | 2,4,6-TRICHLOROPHENOL | .94 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 23:35 |
| | | | | 2,4-DICHLOROPHENOL | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 23:35 |
| | | | | 2,4-DIMETHYLPHENOL | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 23:35 |
| | | | | 2,4-DINITROPHENOL | .37 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B056-02 | 23:35 |
| | | | | 2,4-DINITROTOLUENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 23:35 |
| | | | | 2,6-DINITROTOLUENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 23:35 |
| | | | | 2-CHLORONAPHTHALENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 23:35 |
| | | | | 2-CHLOROPHENOL | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 23:35 |
| | | | | 2-METHYLNAPHTHALENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 23:35 |
| | | | | 2-METHYLPHENOL | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 23:35 |
| | | | | 2-NITROANILINE | .94 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 23:35 |
| | | | | 2-NITROPHENOL | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 23:35 |
| | | | | 3,3'-DICHLOROBENZIDINE | .94 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 23:35 |
| | | | | 3-NITROANILINE | .94 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 23:35 |
| | | | | 4,6-DINITRO-2-METHYLPHENOL | .94 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 23:35 |
| | | | | 4-BROMOPHENYL-PHENYL ETHER | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 23:35 |
| | | | | 4-CHLORO-3-METHYLPHENOL | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 23:35 |
| | | | | 4-CHLOROANILINE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 23:35 |
| | | | | 4-CHLOROPHENYL-PHENYL ETHER | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 23:35 |
| | | | | 4-METHYLPHENOL | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 23:35 |
| | | | | 4-NITROANILINE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 23:35 |
| | | | | 4-NITROPHENOL | .94 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B056-02 | 23:35 |
| | | | | ACENAPHTHENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 23:35 |
| | | | | ACENAPHTHYLENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 23:35 |
| | | | | ANTHRACENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 23:35 |
| | | | | BENZO(A)ANTHRACENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 23:35 |
| | | | | BENZO(A)PYRENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 23:35 |
| | | | | BENZO(B)FLUORANTHENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 23:35 |
| | | | | BENZO(G,H,I)PERYLENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 23:35 |
| | | | | BENZO(K)FLUORANTHENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 23:35 |
| | | | | BIS(2-CHLOROETHOXY)METHANE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 23:35 |
| | | | | BIS(2-CHLOROETHYL)ETHER | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 23:35 |

# Validation Qualifier Data Entry Verification

Run Date: October 2, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10181-01** | | | | | | | | | | | | | | | | | | |
| RB0006 | SW8270C | SW3550 | N 0 1 | BIS(2-CHLOROISOPROPYL)ETHER | .37 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B056-02 | 23:35 |
| | | | | BIS(2-ETHYLHEXYL)PHTHALATE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 23:35 |
| | | | | BUTYLBENZYLPHTHALATE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 23:35 |
| | | | | CARBAZOLE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 23:35 |
| | | | | CHRYSENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 23:35 |
| | | | | DI-N-BUTYLPHTHALATE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 23:35 |
| | | | | DI-N-OCTYLPHTHALATE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 23:35 |
| | | | | DIBENZO(A,H)ANTHRACENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 23:35 |
| | | | | DIBENZOFURAN | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 23:35 |
| | | | | DIETHYLPHTHALATE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 23:35 |
| | | | | DIMETHYLPHTHALATE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 23:35 |
| | | | | FLUORANTHENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 23:35 |
| | | | | FLUORENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 23:35 |
| | | | | HEXACHLOROBENZENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 23:35 |
| | | | | HEXACHLOROBUTADIENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 23:35 |
| | | | | HEXACHLOROCYCLOPENTADIENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 23:35 |
| | | | | HEXACHLOROETHANE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 23:35 |
| | | | | INDENO(1,2,3-CD)PYRENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 23:35 |
| | | | | ISOPHORONE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 23:35 |
| | | | | N-NITROSO-DI-N-PROPYLAMINE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 23:35 |
| | | | | N-NITROSODIPHENYLAMINE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 23:35 |
| | | | | NAPHTHALENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 23:35 |
| | | | | NITROBENZENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 23:35 |
| | | | | PENTACHLOROPHENOL | .94 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 23:35 |
| | | | | PHENANTHRENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 23:35 |
| | | | | PHENOL | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 23:35 |
| | | | | PYRENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 23:35 |
| RB0007 | SW8270C | SW3550 | N 0 1 | 1,2,4-TRICHLOROBENZENE | .39 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 00:13 |
| | | | | 1,2-DICHLOROBENZENE | .39 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 00:13 |
| | | | | 1,3-DICHLOROBENZENE | .39 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 00:13 |
| | | | | 1,4-DICHLOROBENZENE | .39 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 00:13 |
| | | | | 2,4,5-TRICHLOROPHENOL | .39 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 00:13 |
| | | | | 2,4,6-TRICHLOROPHENOL | .97 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 00:13 |
| | | | | 2,4-DICHLOROPHENOL | .39 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 00:13 |
| | | | | 2,4-DIMETHYLPHENOL | .39 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 00:13 |
| | | | | 2,4-DINITROPHENOL | .39 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B056-03 | 00:13 |
| | | | | 2,4-DINITROTOLUENE | .39 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 00:13 |
| | | | | 2,6-DINITROTOLUENE | .39 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 00:13 |
| | | | | 2-CHLORONAPHTHALENE | .39 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 00:13 |
| | | | | 2-CHLOROPHENOL | .39 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 00:13 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10181-01** | | | | | | | | | | | | | | | | | | |
| RB0007 | SW8270C | SW3550 | N 0 1 | 2-METHYLNAPHTHALENE | .39 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 00:13 |
| | | | | 2-METHYLPHENOL | .39 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 00:13 |
| | | | | 2-NITROANILINE | .97 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 00:13 |
| | | | | 2-NITROPHENOL | .39 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 00:13 |
| | | | | 3,3'-DICHLOROBENZIDINE | .97 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 00:13 |
| | | | | 3-NITROANILINE | .97 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 00:13 |
| | | | | 4,6-DINITRO-2-METHYLPHENOL | .97 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 00:13 |
| | | | | 4-BROMOPHENYL-PHENYL ETHER | .39 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 00:13 |
| | | | | 4-CHLORO-3-METHYLPHENOL | .39 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 00:13 |
| | | | | 4-CHLOROANILINE | .39 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 00:13 |
| | | | | 4-CHLOROPHENYL-PHENYL ETHER | .39 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 00:13 |
| | | | | 4-METHYLPHENOL | .39 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 00:13 |
| | | | | 4-NITROANILINE | .39 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 00:13 |
| | | | | 4-NITROPHENOL | .97 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B056-03 | 00:13 |
| | | | | ACENAPHTHENE | .39 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 00:13 |
| | | | | ACENAPHTHYLENE | .39 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 00:13 |
| | | | | ANTHRACENE | .39 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 00:13 |
| | | | | BENZO(A)ANTHRACENE | .39 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 00:13 |
| | | | | BENZO(A)PYRENE | .39 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 00:13 |
| | | | | BENZO(B)FLUORANTHENE | .39 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 00:13 |
| | | | | BENZO(G,H,I)PERYLENE | .39 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 00:13 |
| | | | | BENZO(K)FLUORANTHENE | .39 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 00:13 |
| | | | | BIS(2-CHLOROETHOXY)METHANE | .39 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 00:13 |
| | | | | BIS(2-CHLOROETHYL)ETHER | .39 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 00:13 |
| | | | | BIS(2-CHLOROISOPROPYL)ETHER | .39 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B056-03 | 00:13 |
| | | | | BIS(2-ETHYLHEXYL)PHTHALATE | .39 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 00:13 |
| | | | | BUTYLBENZYLPHTHALATE | .39 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 00:13 |
| | | | | CARBAZOLE | .39 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 00:13 |
| | | | | CHRYSENE | .39 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 00:13 |
| | | | | DI-N-BUTYLPHTHALATE | .39 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 00:13 |
| | | | | DI-N-OCTYLPHTHALATE | .39 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 00:13 |
| | | | | DIBENZO(A,H)ANTHRACENE | .39 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 00:13 |
| | | | | DIBENZOFURAN | .39 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 00:13 |
| | | | | DIETHYLPHTHALATE | .39 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 00:13 |
| | | | | DIMETHYLPHTHALATE | .39 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 00:13 |
| | | | | FLUORANTHENE | .39 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 00:13 |
| | | | | FLUORENE | .39 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 00:13 |
| | | | | HEXACHLOROBENZENE | .39 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 00:13 |
| | | | | HEXACHLOROBUTADIENE | .39 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 00:13 |
| | | | | HEXACHLOROCYCLOPENTADIENE | .39 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 00:13 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10181-01** | | | | | | | | | | | | | | | | | | |
| RB0007 | SW8270C | SW3550 | N 0 1 | HEXACHLOROETHANE | .39 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 00:13 |
| | | | | INDENO(1,2,3-CD)PYRENE | .39 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 00:13 |
| | | | | ISOPHORONE | .39 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 00:13 |
| | | | | N-NITROSO-DI-N-PROPYLAMINE | .39 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 00:13 |
| | | | | N-NITROSODIPHENYLAMINE | .39 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 00:13 |
| | | | | NAPHTHALENE | .39 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 00:13 |
| | | | | NITROBENZENE | .39 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 00:13 |
| | | | | PENTACHLOROPHENOL | .97 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 00:13 |
| | | | | PHENANTHRENE | .39 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 00:13 |
| | | | | PHENOL | .39 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 00:13 |
| | | | | PYRENE | .39 | mg/kg | U | N | Y | U | U | | | | | | B056-03 | 00:13 |
| RB0008 | SW8270C | SW3550 | N 0 1 | 1,2,4-TRICHLOROBENZENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 00:52 |
| | | | | 1,2-DICHLOROBENZENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 00:52 |
| | | | | 1,3-DICHLOROBENZENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 00:52 |
| | | | | 1,4-DICHLOROBENZENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 00:52 |
| | | | | 2,4,5-TRICHLOROPHENOL | .38 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 00:52 |
| | | | | 2,4,6-TRICHLOROPHENOL | .95 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 00:52 |
| | | | | 2,4-DICHLOROPHENOL | .38 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 00:52 |
| | | | | 2,4-DIMETHYLPHENOL | .38 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 00:52 |
| | | | | 2,4-DINITROPHENOL | .38 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B056-04 | 00:52 |
| | | | | 2,4-DINITROTOLUENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 00:52 |
| | | | | 2,6-DINITROTOLUENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 00:52 |
| | | | | 2-CHLORONAPHTHALENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 00:52 |
| | | | | 2-CHLOROPHENOL | .38 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 00:52 |
| | | | | 2-METHYLNAPHTHALENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 00:52 |
| | | | | 2-METHYLPHENOL | .38 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 00:52 |
| | | | | 2-NITROANILINE | .95 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 00:52 |
| | | | | 2-NITROPHENOL | .38 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 00:52 |
| | | | | 3,3'-DICHLOROBENZIDINE | .95 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 00:52 |
| | | | | 3-NITROANILINE | .95 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 00:52 |
| | | | | 4,6-DINITRO-2-METHYLPHENOL | .95 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 00:52 |
| | | | | 4-BROMOPHENYL-PHENYL ETHER | .38 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 00:52 |
| | | | | 4-CHLORO-3-METHYLPHENOL | .38 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 00:52 |
| | | | | 4-CHLOROANILINE | .38 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 00:52 |
| | | | | 4-CHLOROPHENYL-PHENYL ETHER | .38 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 00:52 |
| | | | | 4-METHYLPHENOL | .38 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 00:52 |
| | | | | 4-NITROANILINE | .38 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 00:52 |
| | | | | 4-NITROPHENOL | .95 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B056-04 | 00:52 |
| | | | | ACENAPHTHENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 00:52 |
| | | | | ACENAPHTHYLENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 00:52 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10181-01** | | | | | | | | | | | | | | | | | | |
| RB0008 | SW8270C | SW3550 | N 0 1 | ANTHRACENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 00:52 |
| | | | | BENZO(A)ANTHRACENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 00:52 |
| | | | | BENZO(A)PYRENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 00:52 |
| | | | | BENZO(B)FLUORANTHENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 00:52 |
| | | | | BENZO(G,H,I)PERYLENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 00:52 |
| | | | | BENZO(K)FLUORANTHENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 00:52 |
| | | | | BIS(2-CHLOROETHOXY)METHANE | .38 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 00:52 |
| | | | | BIS(2-CHLOROETHYL)ETHER | .38 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 00:52 |
| | | | | BIS(2-CHLOROISOPROPYL)ETHER | .38 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B056-04 | 00:52 |
| | | | | BIS(2-ETHYLHEXYL)PHTHALATE | .38 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 00:52 |
| | | | | BUTYLBENZYLPHTHALATE | .38 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 00:52 |
| | | | | CARBAZOLE | .38 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 00:52 |
| | | | | CHRYSENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 00:52 |
| | | | | DI-N-BUTYLPHTHALATE | .38 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 00:52 |
| | | | | DI-N-OCTYLPHTHALATE | .38 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 00:52 |
| | | | | DIBENZO(A,H)ANTHRACENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 00:52 |
| | | | | DIBENZOFURAN | .38 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 00:52 |
| | | | | DIETHYLPHTHALATE | .38 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 00:52 |
| | | | | DIMETHYLPHTHALATE | .38 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 00:52 |
| | | | | FLUORANTHENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 00:52 |
| | | | | FLUORENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 00:52 |
| | | | | HEXACHLOROBENZENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 00:52 |
| | | | | HEXACHLOROBUTADIENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 00:52 |
| | | | | HEXACHLOROCYCLOPENTADIENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 00:52 |
| | | | | HEXACHLOROETHANE | .38 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 00:52 |
| | | | | INDENO(1,2,3-CD)PYRENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 00:52 |
| | | | | ISOPHORONE | .38 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 00:52 |
| | | | | N-NITROSO-DI-N-PROPYLAMINE | .38 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 00:52 |
| | | | | N-NITROSODIPHENYLAMINE | .38 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 00:52 |
| | | | | NAPHTHALENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 00:52 |
| | | | | NITROBENZENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 00:52 |
| | | | | PENTACHLOROPHENOL | .95 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 00:52 |
| | | | | PHENANTHRENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 00:52 |
| | | | | PHENOL | .38 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 00:52 |
| | | | | PYRENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 00:52 |
| RB0001 | SW8260B | SW5035 | N 0 0.76 | 1,1,1,2-TETRACHLOROETHANE | .0044 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 20:52 |
| | | | | 1,1,1-TRICHLOROETHANE | .0044 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 20:52 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .0044 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 20:52 |
| | | | | 1,1,2-TRICHLOROETHANE | .0044 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 20:52 |
| | | | | 1,1-DICHLOROETHANE | .0044 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 20:52 |

# Validation Qualifier Data Entry Verification

Run Date: October 2, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10181-01** | | | | | | | | | | | | | | | | | | | | |
| RB0001 | SW8260B | SW5035 | N | 0 | 0.76 | 1,1-DICHLOROETHENE | .0044 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 20:52 |
| | | | | | | 1,1-DICHLOROPROPENE | .0044 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 20:52 |
| | | | | | | 1,2,3-TRICHLOROBENZENE | .0044 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 20:52 |
| | | | | | | 1,2,3-TRICHLOROPROPANE | .0044 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 20:52 |
| | | | | | | 1,2,4-TRICHLOROBENZENE | .0044 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 20:52 |
| | | | | | | 1,2,4-TRIMETHYLBENZENE | .0044 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 20:52 |
| | | | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .0088 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B074-01 | 20:52 |
| | | | | | | 1,2-DIBROMOETHANE | .0044 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 20:52 |
| | | | | | | 1,2-DICHLOROBENZENE | .0044 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 20:52 |
| | | | | | | 1,2-DICHLOROETHANE | .0044 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 20:52 |
| | | | | | | 1,2-DICHLOROPROPANE | .0044 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 20:52 |
| | | | | | | 1,3,5-TRIMETHYLBENZENE | .0044 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B074-01 | 20:52 |
| | | | | | | 1,3-DICHLOROBENZENE | .0044 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 20:52 |
| | | | | | | 1,3-DICHLOROPROPANE | .0044 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 20:52 |
| | | | | | | 1,4-DICHLOROBENZENE | .0044 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 20:52 |
| | | | | | | 2,2-DICHLOROPROPANE | .0044 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 20:52 |
| | | | | | | 2-BUTANONE | .018 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B074-01 | 20:52 |
| | | | | | | 2-CHLOROTOLUENE | .0044 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 20:52 |
| | | | | | | 2-HEXANONE | .018 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B074-01 | 20:52 |
| | | | | | | 4-CHLOROTOLUENE | .0044 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 20:52 |
| | | | | | | 4-METHYL-2-PENTANONE | .0088 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B074-01 | 20:52 |
| | | | | | | ACETONE | .055 | mg/kg | | Y | Y | P | J | | 05A | 05B | | | B074-01 | 20:52 |
| | | | | | | BENZENE | .0044 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 20:52 |
| | | | | | | BROMOBENZENE | .0044 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 20:52 |
| | | | | | | BROMOCHLOROMETHANE | .0044 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 20:52 |
| | | | | | | BROMODICHLOROMETHANE | .0044 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 20:52 |
| | | | | | | BROMOFORM | .0044 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 20:52 |
| | | | | | | BROMOMETHANE | .0044 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 20:52 |
| | | | | | | CARBON DISULFIDE | .0044 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 20:52 |
| | | | | | | CARBON TETRACHLORIDE | .0044 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B074-01 | 20:52 |
| | | | | | | CHLOROBENZENE | .0044 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 20:52 |
| | | | | | | CHLOROETHANE | .0044 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 20:52 |
| | | | | | | CHLOROFORM | .0044 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 20:52 |
| | | | | | | CHLOROMETHANE | .0044 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 20:52 |
| | | | | | | CIS-1,2-DICHLOROETHENE | .0044 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 20:52 |
| | | | | | | CIS-1,3-DICHLOROPROPENE | .0044 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 20:52 |
| | | | | | | DIBROMOCHLOROMETHANE | .0044 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 20:52 |
| | | | | | | DIBROMOMETHANE | .0044 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 20:52 |
| | | | | | | DICHLORODIFLUOROMETHANE | .0044 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 20:52 |
| | | | | | | ETHYLBENZENE | .0044 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 20:52 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10181-01** | | | | | | | | | | | | | | | | | | |
| RB0001 | SW8260B | SW5035 | N 0 0.76 | HEXACHLOROBUTADIENE | .0044 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B074-01 | 20:52 |
| | | | | ISOPROPYL BENZENE | .0044 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B074-01 | 20:52 |
| | | | | M/P-XYLENES | .0088 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 20:52 |
| | | | | METHYLENE CHLORIDE | .0012 | mg/kg | J | Y | Y | P | J | | 05B | 15 | 07A | | B074-01 | 20:52 |
| | | | | N-BUTYLBENZENE | .0044 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 20:52 |
| | | | | N-PROPYLBENZENE | .0044 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B074-01 | 20:52 |
| | | | | NAPHTHALENE | .0044 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 20:52 |
| | | | | O-XYLENE | .0044 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 20:52 |
| | | | | P-ISOPROPYLTOLUENE | .0044 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B074-01 | 20:52 |
| | | | | SEC-BUTYLBENZENE | .0044 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B074-01 | 20:52 |
| | | | | STYRENE | .0044 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 20:52 |
| | | | | TERT-BUTYLBENZENE | .0044 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B074-01 | 20:52 |
| | | | | TETRACHLOROETHENE | .0044 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 20:52 |
| | | | | TOLUENE | .0044 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 20:52 |
| | | | | TRANS-1,2-DICHLOROETHENE | .0044 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 20:52 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .0044 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 20:52 |
| | | | | TRICHLOROETHENE | .0044 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 20:52 |
| | | | | TRICHLOROFLUOROMETHANE | .0044 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 20:52 |
| | | | | VINYL CHLORIDE | .0044 | mg/kg | U | N | Y | U | U | | | | | | B074-01 | 20:52 |
| | SW8260B | SW5035 | N 1 0.84 | 1,1,1,2-TETRACHLOROETHANE | .0049 | mg/kg | U | N | N | U | R | | 16 | | | | B074-01R | 23:31 |
| | | | | 1,1,1-TRICHLOROETHANE | .0049 | mg/kg | U | N | N | U | R | | 16 | | | | B074-01R | 23:31 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .0049 | mg/kg | U | N | N | U | R | | 16 | | | | B074-01R | 23:31 |
| | | | | 1,1,2-TRICHLOROETHANE | .0049 | mg/kg | U | N | N | U | R | | 16 | | | | B074-01R | 23:31 |
| | | | | 1,1-DICHLOROETHANE | .0049 | mg/kg | U | N | N | U | R | | 16 | | | | B074-01R | 23:31 |
| | | | | 1,1-DICHLOROETHENE | .0049 | mg/kg | U | N | N | U | R | | 16 | | | | B074-01R | 23:31 |
| | | | | 1,1-DICHLOROPROPENE | .0049 | mg/kg | U | N | N | U | R | | 16 | | | | B074-01R | 23:31 |
| | | | | 1,2,3-TRICHLOROBENZENE | .0049 | mg/kg | U | N | N | U | R | | 16 | | | | B074-01R | 23:31 |
| | | | | 1,2,3-TRICHLOROPROPANE | .0049 | mg/kg | U | N | N | U | R | | 16 | | | | B074-01R | 23:31 |
| | | | | 1,2,4-TRICHLOROBENZENE | .0049 | mg/kg | U | N | N | U | R | | 16 | | | | B074-01R | 23:31 |
| | | | | 1,2,4-TRIMETHYLBENZENE | .0049 | mg/kg | U | N | N | U | R | | 16 | | | | B074-01R | 23:31 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .0098 | mg/kg | U | N | N | U | R | | 16 | | | | B074-01R | 23:31 |
| | | | | 1,2-DIBROMOETHANE | .0049 | mg/kg | U | N | N | U | R | | 16 | | | | B074-01R | 23:31 |
| | | | | 1,2-DICHLOROBENZENE | .0049 | mg/kg | U | N | N | U | R | | 16 | | | | B074-01R | 23:31 |
| | | | | 1,2-DICHLOROETHANE | .0049 | mg/kg | U | N | N | U | R | | 16 | | | | B074-01R | 23:31 |
| | | | | 1,2-DICHLOROPROPANE | .0049 | mg/kg | U | N | N | U | R | | 16 | | | | B074-01R | 23:31 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .0049 | mg/kg | U | N | N | U | R | | 16 | | | | B074-01R | 23:31 |
| | | | | 1,3-DICHLOROBENZENE | .0049 | mg/kg | U | N | N | U | R | | 16 | | | | B074-01R | 23:31 |
| | | | | 1,3-DICHLOROPROPANE | .0049 | mg/kg | U | N | N | U | R | | 16 | | | | B074-01R | 23:31 |
| | | | | 1,4-DICHLOROBENZENE | .0049 | mg/kg | U | N | N | U | R | | 16 | | | | B074-01R | 23:31 |
| | | | | 2,2-DICHLOROPROPANE | .0049 | mg/kg | U | N | N | U | R | | 16 | | | | B074-01R | 23:31 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10181-01** | | | | | | | | | | | | | | | | | | | | |
| RB0001 | SW8260B | SW5035 | N | 1 | 0.84 | 2-BUTANONE | .02 | mg/kg | U | N | N | U | R | | 16 | | | | B074-01R | 23:31 |
| | | | | | | 2-CHLOROTOLUENE | .0049 | mg/kg | U | N | N | U | R | | 16 | | | | B074-01R | 23:31 |
| | | | | | | 2-HEXANONE | .02 | mg/kg | U | N | N | U | R | | 16 | | | | B074-01R | 23:31 |
| | | | | | | 4-CHLOROTOLUENE | .0049 | mg/kg | U | N | N | U | R | | 16 | | | | B074-01R | 23:31 |
| | | | | | | 4-METHYL-2-PENTANONE | .0098 | mg/kg | U | N | N | U | R | | 16 | | | | B074-01R | 23:31 |
| | | | | | | ACETONE | .039 | mg/kg | | Y | N | P | R | | 16 | | | | B074-01R | 23:31 |
| | | | | | | BENZENE | .0049 | mg/kg | U | N | N | U | R | | 16 | | | | B074-01R | 23:31 |
| | | | | | | BROMOBENZENE | .0049 | mg/kg | U | N | N | U | R | | 16 | | | | B074-01R | 23:31 |
| | | | | | | BROMOCHLOROMETHANE | .0049 | mg/kg | U | N | N | U | R | | 16 | | | | B074-01R | 23:31 |
| | | | | | | BROMODICHLOROMETHANE | .0049 | mg/kg | U | N | N | U | R | | 16 | | | | B074-01R | 23:31 |
| | | | | | | BROMOFORM | .0049 | mg/kg | U | N | N | U | R | | 16 | | | | B074-01R | 23:31 |
| | | | | | | BROMOMETHANE | .0049 | mg/kg | U | N | N | U | R | | 16 | | | | B074-01R | 23:31 |
| | | | | | | CARBON DISULFIDE | .0049 | mg/kg | U | N | N | U | R | | 16 | | | | B074-01R | 23:31 |
| | | | | | | CARBON TETRACHLORIDE | .0049 | mg/kg | U | N | N | U | R | | 16 | | | | B074-01R | 23:31 |
| | | | | | | CHLOROBENZENE | .0049 | mg/kg | U | N | N | U | R | | 16 | | | | B074-01R | 23:31 |
| | | | | | | CHLOROETHANE | .0049 | mg/kg | U | N | N | U | R | | 16 | | | | B074-01R | 23:31 |
| | | | | | | CHLOROFORM | .0049 | mg/kg | U | N | N | U | R | | 16 | | | | B074-01R | 23:31 |
| | | | | | | CHLOROMETHANE | .0049 | mg/kg | U | N | N | U | R | | 16 | | | | B074-01R | 23:31 |
| | | | | | | CIS-1,2-DICHLOROETHENE | .0049 | mg/kg | U | N | N | U | R | | 16 | | | | B074-01R | 23:31 |
| | | | | | | CIS-1,3-DICHLOROPROPENE | .0049 | mg/kg | U | N | N | U | R | | 16 | | | | B074-01R | 23:31 |
| | | | | | | DIBROMOCHLOROMETHANE | .0049 | mg/kg | U | N | N | U | R | | 16 | | | | B074-01R | 23:31 |
| | | | | | | DIBROMOMETHANE | .0049 | mg/kg | U | N | N | U | R | | 16 | | | | B074-01R | 23:31 |
| | | | | | | DICHLORODIFLUOROMETHANE | .0049 | mg/kg | U | N | N | U | R | | 16 | | | | B074-01R | 23:31 |
| | | | | | | ETHYLBENZENE | .0049 | mg/kg | U | N | N | U | R | | 16 | | | | B074-01R | 23:31 |
| | | | | | | HEXACHLOROBUTADIENE | .0049 | mg/kg | U | N | N | U | R | | 16 | | | | B074-01R | 23:31 |
| | | | | | | ISOPROPYL BENZENE | .0049 | mg/kg | U | N | N | U | R | | 16 | | | | B074-01R | 23:31 |
| | | | | | | M/P-XYLENES | .0098 | mg/kg | U | N | N | U | R | | 16 | | | | B074-01R | 23:31 |
| | | | | | | METHYLENE CHLORIDE | .0018 | mg/kg | J | Y | N | F | R | | 16 | | | | B074-01R | 23:31 |
| | | | | | | N-BUTYLBENZENE | .0049 | mg/kg | U | N | N | U | R | | 16 | | | | B074-01R | 23:31 |
| | | | | | | N-PROPYLBENZENE | .0049 | mg/kg | U | N | N | U | R | | 16 | | | | B074-01R | 23:31 |
| | | | | | | NAPHTHALENE | .0049 | mg/kg | U | N | N | U | R | | 16 | | | | B074-01R | 23:31 |
| | | | | | | O-XYLENE | .0049 | mg/kg | U | N | N | U | R | | 16 | | | | B074-01R | 23:31 |
| | | | | | | P-ISOPROPYLTOLUENE | .0049 | mg/kg | U | N | N | U | R | | 16 | | | | B074-01R | 23:31 |
| | | | | | | SEC-BUTYLBENZENE | .0049 | mg/kg | U | N | N | U | R | | 16 | | | | B074-01R | 23:31 |
| | | | | | | STYRENE | .0049 | mg/kg | U | N | N | U | R | | 16 | | | | B074-01R | 23:31 |
| | | | | | | TERT-BUTYLBENZENE | .0049 | mg/kg | U | N | N | U | R | | 16 | | | | B074-01R | 23:31 |
| | | | | | | TETRACHLOROETHENE | .0049 | mg/kg | U | N | N | U | R | | 16 | | | | B074-01R | 23:31 |
| | | | | | | TOLUENE | .0049 | mg/kg | U | N | N | U | R | | 16 | | | | B074-01R | 23:31 |
| | | | | | | TRANS-1,2-DICHLOROETHENE | .0049 | mg/kg | U | N | N | U | R | | 16 | | | | B074-01R | 23:31 |
| | | | | | | TRANS-1,3-DICHLOROPROPENE | .0049 | mg/kg | U | N | N | U | R | | 16 | | | | B074-01R | 23:31 |

# Validation Qualifier Data Entry Verification

Run Date: October 2, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10181-01** | | | | | | | | | | | | | | | | | | | | |
| RB0001 | SW8260B | SW5035 | N | 1 | 0.84 | TRICHLOROETHENE | .0049 | mg/kg | U | N | N | U | R | | 16 | | | | B074-01R | 23:31 |
| | | | | | | TRICHLOROFLUOROMETHANE | .0049 | mg/kg | U | N | N | U | R | | 16 | | | | B074-01R | 23:31 |
| | | | | | | VINYL CHLORIDE | .0049 | mg/kg | U | N | N | U | R | | 16 | | | | B074-01R | 23:31 |
| RB0002 | SW8260B | SW5035 | N | 0 | 0.97 | 1,1,1,2-TETRACHLOROETHANE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B074-02R | 00:08 |
| | | | | | | 1,1,1-TRICHLOROETHANE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B074-02R | 00:08 |
| | | | | | | 1,1,2,2-TETRACHLOROETHANE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B074-02R | 00:08 |
| | | | | | | 1,1,2-TRICHLOROETHANE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B074-02R | 00:08 |
| | | | | | | 1,1-DICHLOROETHANE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B074-02R | 00:08 |
| | | | | | | 1,1-DICHLOROETHENE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B074-02R | 00:08 |
| | | | | | | 1,1-DICHLOROPROPENE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B074-02R | 00:08 |
| | | | | | | 1,2,3-TRICHLOROBENZENE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B074-02R | 00:08 |
| | | | | | | 1,2,3-TRICHLOROPROPANE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B074-02R | 00:08 |
| | | | | | | 1,2,4-TRICHLOROBENZENE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B074-02R | 00:08 |
| | | | | | | 1,2,4-TRIMETHYLBENZENE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B074-02R | 00:08 |
| | | | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .011 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B074-02R | 00:08 |
| | | | | | | 1,2-DIBROMOETHANE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B074-02R | 00:08 |
| | | | | | | 1,2-DICHLOROBENZENE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B074-02R | 00:08 |
| | | | | | | 1,2-DICHLOROETHANE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B074-02R | 00:08 |
| | | | | | | 1,2-DICHLOROPROPANE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B074-02R | 00:08 |
| | | | | | | 1,3,5-TRIMETHYLBENZENE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B074-02R | 00:08 |
| | | | | | | 1,3-DICHLOROBENZENE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B074-02R | 00:08 |
| | | | | | | 1,3-DICHLOROPROPANE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B074-02R | 00:08 |
| | | | | | | 1,4-DICHLOROBENZENE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B074-02R | 00:08 |
| | | | | | | 2,2-DICHLOROPROPANE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B074-02R | 00:08 |
| | | | | | | 2-BUTANONE | .021 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B074-02R | 00:08 |
| | | | | | | 2-CHLOROTOLUENE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B074-02R | 00:08 |
| | | | | | | 2-HEXANONE | .021 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B074-02R | 00:08 |
| | | | | | | 4-CHLOROTOLUENE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B074-02R | 00:08 |
| | | | | | | 4-METHYL-2-PENTANONE | .011 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B074-02R | 00:08 |
| | | | | | | ACETONE | .021 | mg/kg | U | N | Y | U | R | | 05A | 05B | | | B074-02R | 00:08 |
| | | | | | | BENZENE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B074-02R | 00:08 |
| | | | | | | BROMOBENZENE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B074-02R | 00:08 |
| | | | | | | BROMOCHLOROMETHANE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B074-02R | 00:08 |
| | | | | | | BROMODICHLOROMETHANE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B074-02R | 00:08 |
| | | | | | | BROMOFORM | .0053 | mg/kg | U | N | Y | U | U | | | | | | B074-02R | 00:08 |
| | | | | | | BROMOMETHANE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B074-02R | 00:08 |
| | | | | | | CARBON DISULFIDE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B074-02R | 00:08 |
| | | | | | | CARBON TETRACHLORIDE | .0053 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B074-02R | 00:08 |
| | | | | | | CHLOROBENZENE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B074-02R | 00:08 |
| | | | | | | CHLOROETHANE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B074-02R | 00:08 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10181-01** | | | | | | | | | | | | | | | | | | |
| RB0002 | SW8260B | SW5035 | N 0 0.97 | CHLOROFORM | .0053 | mg/kg | U | N | Y | U | U | | | | | | B074-02R | 00:08 |
| | | | | CHLOROMETHANE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B074-02R | 00:08 |
| | | | | CIS-1,2-DICHLOROETHENE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B074-02R | 00:08 |
| | | | | CIS-1,3-DICHLOROPROPENE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B074-02R | 00:08 |
| | | | | DIBROMOCHLOROMETHANE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B074-02R | 00:08 |
| | | | | DIBROMOMETHANE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B074-02R | 00:08 |
| | | | | DICHLORODIFLUOROMETHANE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B074-02R | 00:08 |
| | | | | ETHYLBENZENE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B074-02R | 00:08 |
| | | | | HEXACHLOROBUTADIENE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B074-02R | 00:08 |
| | | | | ISOPROPYL BENZENE | .0053 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B074-02R | 00:08 |
| | | | | M/P-XYLENES | .011 | mg/kg | U | N | Y | U | U | | | | | | B074-02R | 00:08 |
| | | | | METHYLENE CHLORIDE | .0021 | mg/kg | JB | Y | Y | F | B | | 06A | 05B | 15 | | B074-02R | 00:08 |
| | | | | N-BUTYLBENZENE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B074-02R | 00:08 |
| | | | | N-PROPYLBENZENE | .0053 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B074-02R | 00:08 |
| | | | | NAPHTHALENE | .0053 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B074-02R | 00:08 |
| | | | | O-XYLENE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B074-02R | 00:08 |
| | | | | P-ISOPROPYLTOLUENE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B074-02R | 00:08 |
| | | | | SEC-BUTYLBENZENE | .0053 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B074-02R | 00:08 |
| | | | | STYRENE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B074-02R | 00:08 |
| | | | | TERT-BUTYLBENZENE | .0053 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B074-02R | 00:08 |
| | | | | TETRACHLOROETHENE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B074-02R | 00:08 |
| | | | | TOLUENE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B074-02R | 00:08 |
| | | | | TRANS-1,2-DICHLOROETHENE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B074-02R | 00:08 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B074-02R | 00:08 |
| | | | | TRICHLOROETHENE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B074-02R | 00:08 |
| | | | | TRICHLOROFLUOROMETHANE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B074-02R | 00:08 |
| | | | | VINYL CHLORIDE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B074-02R | 00:08 |
| RB0003 | SW8260B | SW5035 | N 0 0.95 | 1,1,1,2-TETRACHLOROETHANE | .0052 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 22:07 |
| | | | | 1,1,1-TRICHLOROETHANE | .0052 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 22:07 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .0052 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 22:07 |
| | | | | 1,1,2-TRICHLOROETHANE | .0052 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 22:07 |
| | | | | 1,1-DICHLOROETHANE | .0052 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 22:07 |
| | | | | 1,1-DICHLOROETHENE | .0052 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 22:07 |
| | | | | 1,1-DICHLOROPROPENE | .0052 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 22:07 |
| | | | | 1,2,3-TRICHLOROBENZENE | .0052 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 22:07 |
| | | | | 1,2,3-TRICHLOROPROPANE | .0052 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 22:07 |
| | | | | 1,2,4-TRICHLOROBENZENE | .0052 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 22:07 |
| | | | | 1,2,4-TRIMETHYLBENZENE | .0052 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 22:07 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .01 | mg/kg | U | N | Y | | UJ | | 05B | | | | B074-03 | 22:07 |
| | | | | 1,2-DIBROMOETHANE | .0052 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 22:07 |

# Validation Qualifier Data Entry Verification

Run Date: October 2, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10181-01** | | | | | | | | | | | | | | | | | | |
| RB0003 | SW8260B | SW5035 | N 0 0.95 | 1,2-DICHLOROBENZENE | .0052 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 22:07 |
| | | | | 1,2-DICHLOROETHANE | .0052 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 22:07 |
| | | | | 1,2-DICHLOROPROPANE | .0052 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 22:07 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .0052 | mg/kg | U | N | Y | | UJ | | 05B | | | | B074-03 | 22:07 |
| | | | | 1,3-DICHLOROBENZENE | .0052 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 22:07 |
| | | | | 1,3-DICHLOROPROPANE | .0052 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 22:07 |
| | | | | 1,4-DICHLOROBENZENE | .0052 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 22:07 |
| | | | | 2,2-DICHLOROPROPANE | .0052 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 22:07 |
| | | | | 2-BUTANONE | .021 | mg/kg | U | N | Y | | UJ | | 05B | | | | B074-03 | 22:07 |
| | | | | 2-CHLOROTOLUENE | .0052 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 22:07 |
| | | | | 2-HEXANONE | .021 | mg/kg | U | N | Y | | UJ | | 05B | | | | B074-03 | 22:07 |
| | | | | 4-CHLOROTOLUENE | .0052 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 22:07 |
| | | | | 4-METHYL-2-PENTANONE | .01 | mg/kg | U | N | Y | | UJ | | 05B | | | | B074-03 | 22:07 |
| | | | | ACETONE | .021 | mg/kg | U | N | Y | | R | | 05A | 05B | | | B074-03 | 22:07 |
| | | | | BENZENE | .0052 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 22:07 |
| | | | | BROMOBENZENE | .0052 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 22:07 |
| | | | | BROMOCHLOROMETHANE | .0052 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 22:07 |
| | | | | BROMODICHLOROMETHANE | .0052 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 22:07 |
| | | | | BROMOFORM | .0052 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 22:07 |
| | | | | BROMOMETHANE | .0052 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 22:07 |
| | | | | CARBON DISULFIDE | .0052 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 22:07 |
| | | | | CARBON TETRACHLORIDE | .0052 | mg/kg | U | N | Y | | UJ | | 05B | | | | B074-03 | 22:07 |
| | | | | CHLOROBENZENE | .0052 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 22:07 |
| | | | | CHLOROETHANE | .0052 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 22:07 |
| | | | | CHLOROFORM | .0052 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 22:07 |
| | | | | CHLOROMETHANE | .0052 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 22:07 |
| | | | | CIS-1,2-DICHLOROETHENE | .0052 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 22:07 |
| | | | | CIS-1,3-DICHLOROPROPENE | .0052 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 22:07 |
| | | | | DIBROMOCHLOROMETHANE | .0052 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 22:07 |
| | | | | DIBROMOMETHANE | .0052 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 22:07 |
| | | | | DICHLORODIFLUOROMETHANE | .0052 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 22:07 |
| | | | | ETHYLBENZENE | .0052 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 22:07 |
| | | | | HEXACHLOROBUTADIENE | .0052 | mg/kg | U | N | Y | | UJ | | 05B | | | | B074-03 | 22:07 |
| | | | | ISOPROPYL BENZENE | .0052 | mg/kg | U | N | Y | | UJ | | 05B | | | | B074-03 | 22:07 |
| | | | | M/P-XYLENES | .01 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 22:07 |
| | | | | METHYLENE CHLORIDE | .0013 | mg/kg | J | Y | Y | | J | | 05B | 15 | 07A | | B074-03 | 22:07 |
| | | | | N-BUTYLBENZENE | .0052 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 22:07 |
| | | | | N-PROPYLBENZENE | .0052 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 22:07 |
| | | | | NAPHTHALENE | .0052 | mg/kg | U | N | Y | | UJ | | 05B | | | | B074-03 | 22:07 |
| | | | | O-XYLENE | .0052 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 22:07 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10181-01** | | | | | | | | | | | | | | | | | | | | |
| RB0003 | SW8260B | SW5035 | N | 0 | 0.95 | P-ISOPROPYLTOLUENE | .0052 | mg/kg | U | N | Y | | UJ | | 05B | | | | B074-03 | 22:07 |
| | | | | | | SEC-BUTYLBENZENE | .0052 | mg/kg | U | N | Y | | UJ | | 05B | | | | B074-03 | 22:07 |
| | | | | | | STYRENE | .0052 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 22:07 |
| | | | | | | TERT-BUTYLBENZENE | .0052 | mg/kg | U | N | Y | | UJ | | 05B | | | | B074-03 | 22:07 |
| | | | | | | TETRACHLOROETHENE | .0052 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 22:07 |
| | | | | | | TOLUENE | .0052 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 22:07 |
| | | | | | | TRANS-1,2-DICHLOROETHENE | .0052 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 22:07 |
| | | | | | | TRANS-1,3-DICHLOROPROPENE | .0052 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 22:07 |
| | | | | | | TRICHLOROETHENE | .0052 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 22:07 |
| | | | | | | TRICHLOROFLUOROMETHANE | .0052 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 22:07 |
| | | | | | | VINYL CHLORIDE | .0052 | mg/kg | U | N | Y | | U | | | | | | B074-03 | 22:07 |
| | SW8260B | SW5035 | N | 1 | 0.92 | 1,1,1,2-TETRACHLOROETHANE | .0051 | mg/kg | U | N | N | | R | | 16 | | | | B074-03R | 00:46 |
| | | | | | | 1,1,1-TRICHLOROETHANE | .0051 | mg/kg | U | N | N | | R | | 16 | | | | B074-03R | 00:46 |
| | | | | | | 1,1,2,2-TETRACHLOROETHANE | .0051 | mg/kg | U | N | N | | R | | 16 | | | | B074-03R | 00:46 |
| | | | | | | 1,1,2-TRICHLOROETHANE | .0051 | mg/kg | U | N | N | | R | | 16 | | | | B074-03R | 00:46 |
| | | | | | | 1,1-DICHLOROETHANE | .0051 | mg/kg | U | N | N | | R | | 16 | | | | B074-03R | 00:46 |
| | | | | | | 1,1-DICHLOROETHENE | .0051 | mg/kg | U | N | N | | R | | 16 | | | | B074-03R | 00:46 |
| | | | | | | 1,1-DICHLOROPROPENE | .0051 | mg/kg | U | N | N | | R | | 16 | | | | B074-03R | 00:46 |
| | | | | | | 1,2,3-TRICHLOROBENZENE | .0051 | mg/kg | U | N | N | | R | | 16 | | | | B074-03R | 00:46 |
| | | | | | | 1,2,3-TRICHLOROPROPANE | .0051 | mg/kg | U | N | N | | R | | 16 | | | | B074-03R | 00:46 |
| | | | | | | 1,2,4-TRICHLOROBENZENE | .0051 | mg/kg | U | N | N | | R | | 16 | | | | B074-03R | 00:46 |
| | | | | | | 1,2,4-TRIMETHYLBENZENE | .0051 | mg/kg | U | N | N | | R | | 16 | | | | B074-03R | 00:46 |
| | | | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .01 | mg/kg | U | N | N | | R | | 16 | | | | B074-03R | 00:46 |
| | | | | | | 1,2-DIBROMOETHANE | .0051 | mg/kg | U | N | N | | R | | 16 | | | | B074-03R | 00:46 |
| | | | | | | 1,2-DICHLOROBENZENE | .0051 | mg/kg | U | N | N | | R | | 16 | | | | B074-03R | 00:46 |
| | | | | | | 1,2-DICHLOROETHANE | .0051 | mg/kg | U | N | N | | R | | 16 | | | | B074-03R | 00:46 |
| | | | | | | 1,2-DICHLOROPROPANE | .0051 | mg/kg | U | N | N | | R | | 16 | | | | B074-03R | 00:46 |
| | | | | | | 1,3,5-TRIMETHYLBENZENE | .0051 | mg/kg | U | N | N | | R | | 16 | | | | B074-03R | 00:46 |
| | | | | | | 1,3-DICHLOROBENZENE | .0051 | mg/kg | U | N | N | | R | | 16 | | | | B074-03R | 00:46 |
| | | | | | | 1,3-DICHLOROPROPANE | .0051 | mg/kg | U | N | N | | R | | 16 | | | | B074-03R | 00:46 |
| | | | | | | 1,4-DICHLOROBENZENE | .0051 | mg/kg | U | N | N | | R | | 16 | | | | B074-03R | 00:46 |
| | | | | | | 2,2-DICHLOROPROPANE | .0051 | mg/kg | U | N | N | | R | | 16 | | | | B074-03R | 00:46 |
| | | | | | | 2-BUTANONE | .02 | mg/kg | U | N | N | | R | | 16 | | | | B074-03R | 00:46 |
| | | | | | | 2-CHLOROTOLUENE | .0051 | mg/kg | U | N | N | | R | | 16 | | | | B074-03R | 00:46 |
| | | | | | | 2-HEXANONE | .02 | mg/kg | U | N | N | | R | | 16 | | | | B074-03R | 00:46 |
| | | | | | | 4-CHLOROTOLUENE | .0051 | mg/kg | U | N | N | | R | | 16 | | | | B074-03R | 00:46 |
| | | | | | | 4-METHYL-2-PENTANONE | .01 | mg/kg | U | N | N | | R | | 16 | | | | B074-03R | 00:46 |
| | | | | | | ACETONE | .02 | mg/kg | U | N | N | | R | | 16 | | | | B074-03R | 00:46 |
| | | | | | | BENZENE | .0051 | mg/kg | U | N | N | | R | | 16 | | | | B074-03R | 00:46 |
| | | | | | | BROMOBENZENE | .0051 | mg/kg | U | N | N | | R | | 16 | | | | B074-03R | 00:46 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10181-01** | | | | | | | | | | | | | | | | | | |
| RB0003 | SW8260B | SW5035 | N 1 0.92 | BROMOCHLOROMETHANE | .0051 | mg/kg | U | N | N | | R | | 16 | | | | B074-03R | 00:46 |
| | | | | BROMODICHLOROMETHANE | .0051 | mg/kg | U | N | N | | R | | 16 | | | | B074-03R | 00:46 |
| | | | | BROMOFORM | .0051 | mg/kg | U | N | N | | R | | 16 | | | | B074-03R | 00:46 |
| | | | | BROMOMETHANE | .0051 | mg/kg | U | N | N | | R | | 16 | | | | B074-03R | 00:46 |
| | | | | CARBON DISULFIDE | .0051 | mg/kg | U | N | N | | R | | 16 | | | | B074-03R | 00:46 |
| | | | | CARBON TETRACHLORIDE | .0051 | mg/kg | U | N | N | | R | | 16 | | | | B074-03R | 00:46 |
| | | | | CHLOROBENZENE | .0051 | mg/kg | U | N | N | | R | | 16 | | | | B074-03R | 00:46 |
| | | | | CHLOROETHANE | .0051 | mg/kg | U | N | N | | R | | 16 | | | | B074-03R | 00:46 |
| | | | | CHLOROFORM | .0051 | mg/kg | U | N | N | | R | | 16 | | | | B074-03R | 00:46 |
| | | | | CHLOROMETHANE | .0051 | mg/kg | U | N | N | | R | | 16 | | | | B074-03R | 00:46 |
| | | | | CIS-1,2-DICHLOROETHENE | .0051 | mg/kg | U | N | N | | R | | 16 | | | | B074-03R | 00:46 |
| | | | | CIS-1,3-DICHLOROPROPENE | .0051 | mg/kg | U | N | N | | R | | 16 | | | | B074-03R | 00:46 |
| | | | | DIBROMOCHLOROMETHANE | .0051 | mg/kg | U | N | N | | R | | 16 | | | | B074-03R | 00:46 |
| | | | | DIBROMOMETHANE | .0051 | mg/kg | U | N | N | | R | | 16 | | | | B074-03R | 00:46 |
| | | | | DICHLORODIFLUOROMETHANE | .0051 | mg/kg | U | N | N | | R | | 16 | | | | B074-03R | 00:46 |
| | | | | ETHYLBENZENE | .0051 | mg/kg | U | N | N | | R | | 16 | | | | B074-03R | 00:46 |
| | | | | HEXACHLOROBUTADIENE | .0051 | mg/kg | U | N | N | | R | | 16 | | | | B074-03R | 00:46 |
| | | | | ISOPROPYL BENZENE | .0051 | mg/kg | U | N | N | | R | | 16 | | | | B074-03R | 00:46 |
| | | | | M/P-XYLENES | .01 | mg/kg | U | N | N | | R | | 16 | | | | B074-03R | 00:46 |
| | | | | METHYLENE CHLORIDE | .0018 | mg/kg | J | Y | N | | R | | 16 | | | | B074-03R | 00:46 |
| | | | | N-BUTYLBENZENE | .0051 | mg/kg | U | N | N | | R | | 16 | | | | B074-03R | 00:46 |
| | | | | N-PROPYLBENZENE | .0051 | mg/kg | U | N | N | | R | | 16 | | | | B074-03R | 00:46 |
| | | | | NAPHTHALENE | .0051 | mg/kg | U | N | N | | R | | 16 | | | | B074-03R | 00:46 |
| | | | | O-XYLENE | .0051 | mg/kg | U | N | N | | R | | 16 | | | | B074-03R | 00:46 |
| | | | | P-ISOPROPYLTOLUENE | .0051 | mg/kg | U | N | N | | R | | 16 | | | | B074-03R | 00:46 |
| | | | | SEC-BUTYLBENZENE | .0051 | mg/kg | U | N | N | | R | | 16 | | | | B074-03R | 00:46 |
| | | | | STYRENE | .0051 | mg/kg | U | N | N | | R | | 16 | | | | B074-03R | 00:46 |
| | | | | TERT-BUTYLBENZENE | .0051 | mg/kg | U | N | N | | R | | 16 | | | | B074-03R | 00:46 |
| | | | | TETRACHLOROETHENE | .0051 | mg/kg | U | N | N | | R | | 16 | | | | B074-03R | 00:46 |
| | | | | TOLUENE | .0051 | mg/kg | U | N | N | | R | | 16 | | | | B074-03R | 00:46 |
| | | | | TRANS-1,2-DICHLOROETHENE | .0051 | mg/kg | U | N | N | | R | | 16 | | | | B074-03R | 00:46 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .0051 | mg/kg | U | N | N | | R | | 16 | | | | B074-03R | 00:46 |
| | | | | TRICHLOROETHENE | .0051 | mg/kg | U | N | N | | R | | 16 | | | | B074-03R | 00:46 |
| | | | | TRICHLOROFLUOROMETHANE | .0051 | mg/kg | U | N | N | | R | | 16 | | | | B074-03R | 00:46 |
| | | | | VINYL CHLORIDE | .0051 | mg/kg | U | N | N | | R | | 16 | | | | B074-03R | 00:46 |
| RB0005 | SW8260B | SW5035 | N 0 0.98 | 1,1,1,2-TETRACHLOROETHANE | .0055 | mg/kg | U | N | Y | U | U | | | | | | B056-01R | 21:01 |
| | | | | 1,1,1-TRICHLOROETHANE | .0055 | mg/kg | U | N | Y | U | U | | | | | | B056-01R | 21:01 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .0055 | mg/kg | U | N | Y | U | U | | | | | | B056-01R | 21:01 |
| | | | | 1,1,2-TRICHLOROETHANE | .0055 | mg/kg | U | N | Y | U | U | | | | | | B056-01R | 21:01 |
| | | | | 1,1-DICHLOROETHANE | .0055 | mg/kg | U | N | Y | U | U | | | | | | B056-01R | 21:01 |

# Validation Qualifier Data Entry Verification

Run Date: October 2, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10181-01** | | | | | | | | | | | | | | | | | | |
| RB0005 | SW8260B | SW5035 | N 0 0.98 | 1,1-DICHLOROETHENE | .0055 | mg/kg | U | N | Y | U | U | | | | | | B056-01R | 21:01 |
| | | | | 1,1-DICHLOROPROPENE | .0055 | mg/kg | U | N | Y | U | U | | | | | | B056-01R | 21:01 |
| | | | | 1,2,3-TRICHLOROBENZENE | .0055 | mg/kg | U | N | Y | U | U | | | | | | B056-01R | 21:01 |
| | | | | 1,2,3-TRICHLOROPROPANE | .0055 | mg/kg | U | N | Y | U | U | | | | | | B056-01R | 21:01 |
| | | | | 1,2,4-TRICHLOROBENZENE | .0055 | mg/kg | U | N | Y | U | U | | | | | | B056-01R | 21:01 |
| | | | | 1,2,4-TRIMETHYLBENZENE | .0055 | mg/kg | U | N | Y | U | U | | | | | | B056-01R | 21:01 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .011 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B056-01R | 21:01 |
| | | | | 1,2-DIBROMOETHANE | .0055 | mg/kg | U | N | Y | U | U | | | | | | B056-01R | 21:01 |
| | | | | 1,2-DICHLOROBENZENE | .0055 | mg/kg | U | N | Y | U | U | | | | | | B056-01R | 21:01 |
| | | | | 1,2-DICHLOROETHANE | .0055 | mg/kg | U | N | Y | U | U | | | | | | B056-01R | 21:01 |
| | | | | 1,2-DICHLOROPROPANE | .0055 | mg/kg | U | N | Y | U | U | | | | | | B056-01R | 21:01 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .0055 | mg/kg | U | N | Y | U | U | | | | | | B056-01R | 21:01 |
| | | | | 1,3-DICHLOROBENZENE | .0055 | mg/kg | U | N | Y | U | U | | | | | | B056-01R | 21:01 |
| | | | | 1,3-DICHLOROPROPANE | .0055 | mg/kg | U | N | Y | U | U | | | | | | B056-01R | 21:01 |
| | | | | 1,4-DICHLOROBENZENE | .0055 | mg/kg | U | N | Y | U | U | | | | | | B056-01R | 21:01 |
| | | | | 2,2-DICHLOROPROPANE | .0055 | mg/kg | U | N | Y | U | U | | | | | | B056-01R | 21:01 |
| | | | | 2-BUTANONE | .012 | mg/kg | J | Y | Y | P | J | | 05B | 15 | | | B056-01R | 21:01 |
| | | | | 2-CHLOROTOLUENE | .0055 | mg/kg | U | N | Y | U | U | | | | | | B056-01R | 21:01 |
| | | | | 2-HEXANONE | .022 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B056-01R | 21:01 |
| | | | | 4-CHLOROTOLUENE | .0055 | mg/kg | U | N | Y | U | U | | | | | | B056-01R | 21:01 |
| | | | | 4-METHYL-2-PENTANONE | .011 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B056-01R | 21:01 |
| | | | | ACETONE | .39 | mg/kg | | Y | Y | P | J | | 05A | 05B | | | B056-01R | 21:01 |
| | | | | BENZENE | .0055 | mg/kg | U | N | Y | U | U | | | | | | B056-01R | 21:01 |
| | | | | BROMOBENZENE | .0055 | mg/kg | U | N | Y | U | U | | | | | | B056-01R | 21:01 |
| | | | | BROMOCHLOROMETHANE | .0055 | mg/kg | U | N | Y | U | U | | | | | | B056-01R | 21:01 |
| | | | | BROMODICHLOROMETHANE | .0055 | mg/kg | U | N | Y | U | U | | | | | | B056-01R | 21:01 |
| | | | | BROMOFORM | .0055 | mg/kg | U | N | Y | U | U | | | | | | B056-01R | 21:01 |
| | | | | BROMOMETHANE | .0055 | mg/kg | U | N | Y | U | U | | | | | | B056-01R | 21:01 |
| | | | | CARBON DISULFIDE | .0055 | mg/kg | U | N | Y | U | U | | | | | | B056-01R | 21:01 |
| | | | | CARBON TETRACHLORIDE | .0055 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B056-01R | 21:01 |
| | | | | CHLOROBENZENE | .0055 | mg/kg | U | N | Y | U | U | | | | | | B056-01R | 21:01 |
| | | | | CHLOROETHANE | .0055 | mg/kg | U | N | Y | U | U | | | | | | B056-01R | 21:01 |
| | | | | CHLOROFORM | .0055 | mg/kg | U | N | Y | U | U | | | | | | B056-01R | 21:01 |
| | | | | CHLOROMETHANE | .0055 | mg/kg | U | N | Y | U | U | | | | | | B056-01R | 21:01 |
| | | | | CIS-1,2-DICHLOROETHENE | .0055 | mg/kg | U | N | Y | U | U | | | | | | B056-01R | 21:01 |
| | | | | CIS-1,3-DICHLOROPROPENE | .0055 | mg/kg | U | N | Y | U | U | | | | | | B056-01R | 21:01 |
| | | | | DIBROMOCHLOROMETHANE | .0055 | mg/kg | U | N | Y | U | U | | | | | | B056-01R | 21:01 |
| | | | | DIBROMOMETHANE | .0055 | mg/kg | U | N | Y | U | U | | | | | | B056-01R | 21:01 |
| | | | | DICHLORODIFLUOROMETHANE | .0055 | mg/kg | U | N | Y | U | U | | | | | | B056-01R | 21:01 |
| | | | | ETHYLBENZENE | .0055 | mg/kg | U | N | Y | U | U | | | | | | B056-01R | 21:01 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10181-01** | | | | | | | | | | | | | | | | | | |
| RB0005 | SW8260B | SW5035 | N 0 0.98 | HEXACHLOROBUTADIENE | .0055 | mg/kg | U | N | Y | U | U | | | | | | B056-01R | 21:01 |
| | | | | ISOPROPYL BENZENE | .0055 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B056-01R | 21:01 |
| | | | | M/P-XYLENES | .011 | mg/kg | U | N | Y | U | U | | | | | | B056-01R | 21:01 |
| | | | | METHYLENE CHLORIDE | .0021 | mg/kg | JB | Y | Y | F | B | | 06A | 05B | 15 | | B056-01R | 21:01 |
| | | | | N-BUTYLBENZENE | .0055 | mg/kg | U | N | Y | U | U | | | | | | B056-01R | 21:01 |
| | | | | N-PROPYLBENZENE | .0055 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B056-01R | 21:01 |
| | | | | NAPHTHALENE | .0055 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B056-01R | 21:01 |
| | | | | O-XYLENE | .0055 | mg/kg | U | N | Y | U | U | | | | | | B056-01R | 21:01 |
| | | | | P-ISOPROPYLTOLUENE | .0055 | mg/kg | U | N | Y | U | U | | | | | | B056-01R | 21:01 |
| | | | | SEC-BUTYLBENZENE | .0055 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B056-01R | 21:01 |
| | | | | STYRENE | .0055 | mg/kg | U | N | Y | U | U | | | | | | B056-01R | 21:01 |
| | | | | TERT-BUTYLBENZENE | .0055 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B056-01R | 21:01 |
| | | | | TETRACHLOROETHENE | .0055 | mg/kg | U | N | Y | U | U | | | | | | B056-01R | 21:01 |
| | | | | TOLUENE | .0055 | mg/kg | U | N | Y | U | U | | | | | | B056-01R | 21:01 |
| | | | | TRANS-1,2-DICHLOROETHENE | .0055 | mg/kg | U | N | Y | U | U | | | | | | B056-01R | 21:01 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .0055 | mg/kg | U | N | Y | U | U | | | | | | B056-01R | 21:01 |
| | | | | TRICHLOROETHENE | .0055 | mg/kg | U | N | Y | U | U | | | | | | B056-01R | 21:01 |
| | | | | TRICHLOROFLUOROMETHANE | .0055 | mg/kg | U | N | Y | U | U | | | | | | B056-01R | 21:01 |
| | | | | VINYL CHLORIDE | .0055 | mg/kg | U | N | Y | U | U | | | | | | B056-01R | 21:01 |
| RB0006 | SW8260B | SW5035 | N 0 0.91 | 1,1,1,2-TETRACHLOROETHANE | .0051 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 19:00 |
| | | | | 1,1,1-TRICHLOROETHANE | .0051 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 19:00 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .0051 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 19:00 |
| | | | | 1,1,2-TRICHLOROETHANE | .0051 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 19:00 |
| | | | | 1,1-DICHLOROETHANE | .0051 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 19:00 |
| | | | | 1,1-DICHLOROETHENE | .0051 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 19:00 |
| | | | | 1,1-DICHLOROPROPENE | .0051 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 19:00 |
| | | | | 1,2,3-TRICHLOROBENZENE | .0051 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 19:00 |
| | | | | 1,2,3-TRICHLOROPROPANE | .0051 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 19:00 |
| | | | | 1,2,4-TRICHLOROBENZENE | .0051 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 19:00 |
| | | | | 1,2,4-TRIMETHYLBENZENE | .0051 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 19:00 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .01 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B056-02 | 19:00 |
| | | | | 1,2-DIBROMOETHANE | .0051 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 19:00 |
| | | | | 1,2-DICHLOROBENZENE | .0051 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 19:00 |
| | | | | 1,2-DICHLOROETHANE | .0051 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 19:00 |
| | | | | 1,2-DICHLOROPROPANE | .0051 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 19:00 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .0051 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B056-02 | 19:00 |
| | | | | 1,3-DICHLOROBENZENE | .0051 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 19:00 |
| | | | | 1,3-DICHLOROPROPANE | .0051 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 19:00 |
| | | | | 1,4-DICHLOROBENZENE | .0051 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 19:00 |
| | | | | 2,2-DICHLOROPROPANE | .0051 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 19:00 |

# Validation Qualifier Data Entry Verification

Run Date: October 2, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10181-01** | | | | | | | | | | | | | | | | | | |
| RB0006 | SW8260B | SW5035 | N 0 0.91 | 2-BUTANONE | .021 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B056-02 | 19:00 |
| | | | | 2-CHLOROTOLUENE | .0051 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 19:00 |
| | | | | 2-HEXANONE | .021 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B056-02 | 19:00 |
| | | | | 4-CHLOROTOLUENE | .0051 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 19:00 |
| | | | | 4-METHYL-2-PENTANONE | .01 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B056-02 | 19:00 |
| | | | | ACETONE | .021 | mg/kg | U | N | Y | U | R | | 05A | 05B | | | B056-02 | 19:00 |
| | | | | BENZENE | .0051 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 19:00 |
| | | | | BROMOBENZENE | .0051 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 19:00 |
| | | | | BROMOCHLOROMETHANE | .0051 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 19:00 |
| | | | | BROMODICHLOROMETHANE | .0051 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 19:00 |
| | | | | BROMOFORM | .0051 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 19:00 |
| | | | | BROMOMETHANE | .0051 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 19:00 |
| | | | | CARBON DISULFIDE | .0051 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 19:00 |
| | | | | CARBON TETRACHLORIDE | .0051 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B056-02 | 19:00 |
| | | | | CHLOROBENZENE | .0051 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 19:00 |
| | | | | CHLOROETHANE | .0051 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 19:00 |
| | | | | CHLOROFORM | .0051 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 19:00 |
| | | | | CHLOROMETHANE | .0051 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 19:00 |
| | | | | CIS-1,2-DICHLOROETHENE | .0051 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 19:00 |
| | | | | CIS-1,3-DICHLOROPROPENE | .0051 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 19:00 |
| | | | | DIBROMOCHLOROMETHANE | .0051 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 19:00 |
| | | | | DIBROMOMETHANE | .0051 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 19:00 |
| | | | | DICHLORODIFLUOROMETHANE | .0051 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 19:00 |
| | | | | ETHYLBENZENE | .0051 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 19:00 |
| | | | | HEXACHLOROBUTADIENE | .0051 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B056-02 | 19:00 |
| | | | | ISOPROPYL BENZENE | .0051 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B056-02 | 19:00 |
| | | | | M/P-XYLENES | .01 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 19:00 |
| | | | | METHYLENE CHLORIDE | .0017 | mg/kg | J | Y | Y | F | B | | 05B | 15 | 06A | | B056-02 | 19:00 |
| | | | | N-BUTYLBENZENE | .0051 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 19:00 |
| | | | | N-PROPYLBENZENE | .0051 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B056-02 | 19:00 |
| | | | | NAPHTHALENE | .0051 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 19:00 |
| | | | | O-XYLENE | .0051 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 19:00 |
| | | | | P-ISOPROPYLTOLUENE | .0051 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B056-02 | 19:00 |
| | | | | SEC-BUTYLBENZENE | .0051 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B056-02 | 19:00 |
| | | | | STYRENE | .0051 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 19:00 |
| | | | | TERT-BUTYLBENZENE | .0051 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B056-02 | 19:00 |
| | | | | TETRACHLOROETHENE | .0051 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 19:00 |
| | | | | TOLUENE | .0051 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 19:00 |
| | | | | TRANS-1,2-DICHLOROETHENE | .0051 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 19:00 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .0051 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 19:00 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10181-01** | | | | | | | | | | | | | | | | | | |
| RB0006 | SW8260B | SW5035 | N 0 0.91 | TRICHLOROETHENE | .0051 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 19:00 |
| | | | | TRICHLOROFLUOROMETHANE | .0051 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 19:00 |
| | | | | VINYL CHLORIDE | .0051 | mg/kg | U | N | Y | U | U | | | | | | B056-02 | 19:00 |
| RB0007 | SW8260B | SW5035 | N 1 0.83 | 1,1,1,2-TETRACHLOROETHANE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-03R | 22:16 |
| | | | | 1,1,1-TRICHLOROETHANE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-03R | 22:16 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-03R | 22:16 |
| | | | | 1,1,2-TRICHLOROETHANE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-03R | 22:16 |
| | | | | 1,1-DICHLOROETHANE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-03R | 22:16 |
| | | | | 1,1-DICHLOROETHENE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-03R | 22:16 |
| | | | | 1,1-DICHLOROPROPENE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-03R | 22:16 |
| | | | | 1,2,3-TRICHLOROBENZENE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-03R | 22:16 |
| | | | | 1,2,3-TRICHLOROPROPANE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-03R | 22:16 |
| | | | | 1,2,4-TRICHLOROBENZENE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-03R | 22:16 |
| | | | | 1,2,4-TRIMETHYLBENZENE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-03R | 22:16 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .0097 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B056-03R | 22:16 |
| | | | | 1,2-DIBROMOETHANE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-03R | 22:16 |
| | | | | 1,2-DICHLOROBENZENE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-03R | 22:16 |
| | | | | 1,2-DICHLOROETHANE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-03R | 22:16 |
| | | | | 1,2-DICHLOROPROPANE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-03R | 22:16 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-03R | 22:16 |
| | | | | 1,3-DICHLOROBENZENE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-03R | 22:16 |
| | | | | 1,3-DICHLOROPROPANE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-03R | 22:16 |
| | | | | 1,4-DICHLOROBENZENE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-03R | 22:16 |
| | | | | 2,2-DICHLOROPROPANE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-03R | 22:16 |
| | | | | 2-BUTANONE | .019 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B056-03R | 22:16 |
| | | | | 2-CHLOROTOLUENE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-03R | 22:16 |
| | | | | 2-HEXANONE | .019 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B056-03R | 22:16 |
| | | | | 4-CHLOROTOLUENE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-03R | 22:16 |
| | | | | 4-METHYL-2-PENTANONE | .0097 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B056-03R | 22:16 |
| | | | | ACETONE | .064 | mg/kg | | Y | Y | P | J | | 05A | 05B | | | B056-03R | 22:16 |
| | | | | BENZENE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-03R | 22:16 |
| | | | | BROMOBENZENE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-03R | 22:16 |
| | | | | BROMOCHLOROMETHANE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-03R | 22:16 |
| | | | | BROMODICHLOROMETHANE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-03R | 22:16 |
| | | | | BROMOFORM | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-03R | 22:16 |
| | | | | BROMOMETHANE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-03R | 22:16 |
| | | | | CARBON DISULFIDE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-03R | 22:16 |
| | | | | CARBON TETRACHLORIDE | .0049 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B056-03R | 22:16 |
| | | | | CHLOROBENZENE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-03R | 22:16 |
| | | | | CHLOROETHANE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-03R | 22:16 |

# Validation Qualifier Data Entry Verification

Run Date: October 2, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10181-01** | | | | | | | | | | | | | | | | | | |
| RB0007 | SW8260B | SW5035 | N 1 0.83 | CHLOROFORM | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-03R | 22:16 |
| | | | | CHLOROMETHANE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-03R | 22:16 |
| | | | | CIS-1,2-DICHLOROETHENE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-03R | 22:16 |
| | | | | CIS-1,3-DICHLOROPROPENE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-03R | 22:16 |
| | | | | DIBROMOCHLOROMETHANE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-03R | 22:16 |
| | | | | DIBROMOMETHANE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-03R | 22:16 |
| | | | | DICHLORODIFLUOROMETHANE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-03R | 22:16 |
| | | | | ETHYLBENZENE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-03R | 22:16 |
| | | | | HEXACHLOROBUTADIENE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-03R | 22:16 |
| | | | | ISOPROPYL BENZENE | .0049 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B056-03R | 22:16 |
| | | | | M/P-XYLENES | .0097 | mg/kg | U | N | Y | U | U | | | | | | B056-03R | 22:16 |
| | | | | METHYLENE CHLORIDE | .0015 | mg/kg | J | Y | Y | F | B | | 06A | 05B | 15 | 07A | B056-03R | 22:16 |
| | | | | N-BUTYLBENZENE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-03R | 22:16 |
| | | | | N-PROPYLBENZENE | .0049 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B056-03R | 22:16 |
| | | | | NAPHTHALENE | .0049 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B056-03R | 22:16 |
| | | | | O-XYLENE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-03R | 22:16 |
| | | | | P-ISOPROPYLTOLUENE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-03R | 22:16 |
| | | | | SEC-BUTYLBENZENE | .0049 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B056-03R | 22:16 |
| | | | | STYRENE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-03R | 22:16 |
| | | | | TERT-BUTYLBENZENE | .0049 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B056-03R | 22:16 |
| | | | | TETRACHLOROETHENE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-03R | 22:16 |
| | | | | TOLUENE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-03R | 22:16 |
| | | | | TRANS-1,2-DICHLOROETHENE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-03R | 22:16 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-03R | 22:16 |
| | | | | TRICHLOROETHENE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-03R | 22:16 |
| | | | | TRICHLOROFLUOROMETHANE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-03R | 22:16 |
| | | | | VINYL CHLORIDE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-03R | 22:16 |
| RB0008 | SW8260B | SW5035 | N 0 0.86 | 1,1,1,2-TETRACHLOROETHANE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 20:15 |
| | | | | 1,1,1-TRICHLOROETHANE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 20:15 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 20:15 |
| | | | | 1,1,2-TRICHLOROETHANE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 20:15 |
| | | | | 1,1-DICHLOROETHANE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 20:15 |
| | | | | 1,1-DICHLOROETHENE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 20:15 |
| | | | | 1,1-DICHLOROPROPENE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 20:15 |
| | | | | 1,2,3-TRICHLOROBENZENE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 20:15 |
| | | | | 1,2,3-TRICHLOROPROPANE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 20:15 |
| | | | | 1,2,4-TRICHLOROBENZENE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 20:15 |
| | | | | 1,2,4-TRIMETHYLBENZENE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 20:15 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .0098 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B056-04 | 20:15 |
| | | | | 1,2-DIBROMOETHANE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 20:15 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10181-01** | | | | | | | | | | | | | | | | | | |
| RB0008 | SW8260B | SW5035 | N 0 0.86 | 1,2-DICHLOROBENZENE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 20:15 |
| | | | | 1,2-DICHLOROETHANE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 20:15 |
| | | | | 1,2-DICHLOROPROPANE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 20:15 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .0049 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B056-04 | 20:15 |
| | | | | 1,3-DICHLOROBENZENE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 20:15 |
| | | | | 1,3-DICHLOROPROPANE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 20:15 |
| | | | | 1,4-DICHLOROBENZENE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 20:15 |
| | | | | 2,2-DICHLOROPROPANE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 20:15 |
| | | | | 2-BUTANONE | .02 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B056-04 | 20:15 |
| | | | | 2-CHLOROTOLUENE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 20:15 |
| | | | | 2-HEXANONE | .02 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B056-04 | 20:15 |
| | | | | 4-CHLOROTOLUENE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 20:15 |
| | | | | 4-METHYL-2-PENTANONE | .0098 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B056-04 | 20:15 |
| | | | | ACETONE | .0064 | mg/kg | J | Y | Y | P | J | | 05A | 05B | 15 | 07A | B056-04 | 20:15 |
| | | | | BENZENE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 20:15 |
| | | | | BROMOBENZENE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 20:15 |
| | | | | BROMOCHLOROMETHANE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 20:15 |
| | | | | BROMODICHLOROMETHANE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 20:15 |
| | | | | BROMOFORM | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 20:15 |
| | | | | BROMOMETHANE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 20:15 |
| | | | | CARBON DISULFIDE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 20:15 |
| | | | | CARBON TETRACHLORIDE | .0049 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B056-04 | 20:15 |
| | | | | CHLOROBENZENE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 20:15 |
| | | | | CHLOROETHANE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 20:15 |
| | | | | CHLOROFORM | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 20:15 |
| | | | | CHLOROMETHANE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 20:15 |
| | | | | CIS-1,2-DICHLOROETHENE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 20:15 |
| | | | | CIS-1,3-DICHLOROPROPENE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 20:15 |
| | | | | DIBROMOCHLOROMETHANE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 20:15 |
| | | | | DIBROMOMETHANE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 20:15 |
| | | | | DICHLORODIFLUOROMETHANE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 20:15 |
| | | | | ETHYLBENZENE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 20:15 |
| | | | | HEXACHLOROBUTADIENE | .0049 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B056-04 | 20:15 |
| | | | | ISOPROPYL BENZENE | .0049 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B056-04 | 20:15 |
| | | | | M/P-XYLENES | .0098 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 20:15 |
| | | | | METHYLENE CHLORIDE | .0013 | mg/kg | J | Y | Y | F | B | | 05B | 15 | 07A | 06A | B056-04 | 20:15 |
| | | | | N-BUTYLBENZENE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 20:15 |
| | | | | N-PROPYLBENZENE | .0049 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B056-04 | 20:15 |
| | | | | NAPHTHALENE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 20:15 |
| | | | | O-XYLENE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 20:15 |

# Validation Qualifier Data Entry Verification

Run Date: October 2, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10181-01** | | | | | | | | | | | | | | | | | | | | |
| RB0008 | SW8260B | SW5035 | N | 0 | 0.86 | P-ISOPROPYLTOLUENE | .0049 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B056-04 | 20:15 |
| | | | | | | SEC-BUTYLBENZENE | .0049 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B056-04 | 20:15 |
| | | | | | | STYRENE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 20:15 |
| | | | | | | TERT-BUTYLBENZENE | .0049 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B056-04 | 20:15 |
| | | | | | | TETRACHLOROETHENE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 20:15 |
| | | | | | | TOLUENE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 20:15 |
| | | | | | | TRANS-1,2-DICHLOROETHENE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 20:15 |
| | | | | | | TRANS-1,3-DICHLOROPROPENE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 20:15 |
| | | | | | | TRICHLOROETHENE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 20:15 |
| | | | | | | TRICHLOROFLUOROMETHANE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 20:15 |
| | | | | | | VINYL CHLORIDE | .0049 | mg/kg | U | N | Y | U | U | | | | | | B056-04 | 20:15 |
| | SW8260B | SW5035 | N | 1 | 0.92 | 1,1,1,2-TETRACHLOROETHANE | .0053 | mg/kg | U | N | Y | U | R | | 16 | | | | B056-04R | 22:53 |
| | | | | | | 1,1,1-TRICHLOROETHANE | .0053 | mg/kg | U | N | Y | U | R | | 16 | | | | B056-04R | 22:53 |
| | | | | | | 1,1,2,2-TETRACHLOROETHANE | .0053 | mg/kg | U | N | Y | U | R | | 16 | | | | B056-04R | 22:53 |
| | | | | | | 1,1,2-TRICHLOROETHANE | .0053 | mg/kg | U | N | Y | U | R | | 16 | | | | B056-04R | 22:53 |
| | | | | | | 1,1-DICHLOROETHANE | .0053 | mg/kg | U | N | Y | U | R | | 16 | | | | B056-04R | 22:53 |
| | | | | | | 1,1-DICHLOROETHENE | .0053 | mg/kg | U | N | Y | U | R | | 16 | | | | B056-04R | 22:53 |
| | | | | | | 1,1-DICHLOROPROPENE | .0053 | mg/kg | U | N | Y | U | R | | 16 | | | | B056-04R | 22:53 |
| | | | | | | 1,2,3-TRICHLOROBENZENE | .0053 | mg/kg | U | N | Y | U | R | | 16 | | | | B056-04R | 22:53 |
| | | | | | | 1,2,3-TRICHLOROPROPANE | .0053 | mg/kg | U | N | Y | U | R | | 16 | | | | B056-04R | 22:53 |
| | | | | | | 1,2,4-TRICHLOROBENZENE | .0053 | mg/kg | U | N | N | U | R | | 16 | | | | B056-04R | 22:53 |
| | | | | | | 1,2,4-TRIMETHYLBENZENE | .0053 | mg/kg | U | N | N | U | R | | 16 | | | | B056-04R | 22:53 |
| | | | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .011 | mg/kg | U | N | N | U | R | | 16 | | | | B056-04R | 22:53 |
| | | | | | | 1,2-DIBROMOETHANE | .0053 | mg/kg | U | N | N | U | R | | 16 | | | | B056-04R | 22:53 |
| | | | | | | 1,2-DICHLOROBENZENE | .0053 | mg/kg | U | N | N | U | R | | 16 | | | | B056-04R | 22:53 |
| | | | | | | 1,2-DICHLOROETHANE | .0053 | mg/kg | U | N | N | U | R | | 16 | | | | B056-04R | 22:53 |
| | | | | | | 1,2-DICHLOROPROPANE | .0053 | mg/kg | U | N | N | U | R | | 16 | | | | B056-04R | 22:53 |
| | | | | | | 1,3,5-TRIMETHYLBENZENE | .0053 | mg/kg | U | N | N | U | R | | 16 | | | | B056-04R | 22:53 |
| | | | | | | 1,3-DICHLOROBENZENE | .0053 | mg/kg | U | N | N | U | R | | 16 | | | | B056-04R | 22:53 |
| | | | | | | 1,3-DICHLOROPROPANE | .0053 | mg/kg | U | N | N | U | R | | 16 | | | | B056-04R | 22:53 |
| | | | | | | 1,4-DICHLOROBENZENE | .0053 | mg/kg | U | N | N | U | R | | 16 | | | | B056-04R | 22:53 |
| | | | | | | 2,2-DICHLOROPROPANE | .0053 | mg/kg | U | N | N | U | R | | 16 | | | | B056-04R | 22:53 |
| | | | | | | 2-BUTANONE | .021 | mg/kg | U | N | N | U | R | | 16 | | | | B056-04R | 22:53 |
| | | | | | | 2-CHLOROTOLUENE | .0053 | mg/kg | U | N | N | U | R | | 16 | | | | B056-04R | 22:53 |
| | | | | | | 2-HEXANONE | .021 | mg/kg | U | N | N | U | R | | 16 | | | | B056-04R | 22:53 |
| | | | | | | 4-CHLOROTOLUENE | .0053 | mg/kg | U | N | N | U | R | | 16 | | | | B056-04R | 22:53 |
| | | | | | | 4-METHYL-2-PENTANONE | .011 | mg/kg | U | N | N | U | R | | 16 | | | | B056-04R | 22:53 |
| | | | | | | ACETONE | .0055 | mg/kg | J | Y | N | P | R | | 16 | | | | B056-04R | 22:53 |
| | | | | | | BENZENE | .0053 | mg/kg | U | N | N | U | R | | 16 | | | | B056-04R | 22:53 |
| | | | | | | BROMOBENZENE | .0053 | mg/kg | U | N | N | U | R | | 16 | | | | B056-04R | 22:53 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10181-01** | | | | | | | | | | | | | | | | | | |
| RB0008 | SW8260B | SW5035 | N 1 0.92 | BROMOCHLOROMETHANE | .0053 | mg/kg | U | N | N | U | R | | 16 | | | | B056-04R | 22:53 |
| | | | | BROMODICHLOROMETHANE | .0053 | mg/kg | U | N | N | U | R | | 16 | | | | B056-04R | 22:53 |
| | | | | BROMOFORM | .0053 | mg/kg | U | N | N | U | R | | 16 | | | | B056-04R | 22:53 |
| | | | | BROMOMETHANE | .0053 | mg/kg | U | N | N | U | R | | 16 | | | | B056-04R | 22:53 |
| | | | | CARBON DISULFIDE | .0053 | mg/kg | U | N | N | U | R | | 16 | | | | B056-04R | 22:53 |
| | | | | CARBON TETRACHLORIDE | .0053 | mg/kg | U | N | N | U | R | | 16 | | | | B056-04R | 22:53 |
| | | | | CHLOROBENZENE | .0053 | mg/kg | U | N | N | U | R | | 16 | | | | B056-04R | 22:53 |
| | | | | CHLOROETHANE | .0053 | mg/kg | U | N | N | U | R | | 16 | | | | B056-04R | 22:53 |
| | | | | CHLOROFORM | .0053 | mg/kg | U | N | N | U | R | | 16 | | | | B056-04R | 22:53 |
| | | | | CHLOROMETHANE | .0053 | mg/kg | U | N | N | U | R | | 16 | | | | B056-04R | 22:53 |
| | | | | CIS-1,2-DICHLOROETHENE | .0053 | mg/kg | U | N | N | U | R | | 16 | | | | B056-04R | 22:53 |
| | | | | CIS-1,3-DICHLOROPROPENE | .0053 | mg/kg | U | N | N | U | R | | 16 | | | | B056-04R | 22:53 |
| | | | | DIBROMOCHLOROMETHANE | .0053 | mg/kg | U | N | N | U | R | | 16 | | | | B056-04R | 22:53 |
| | | | | DIBROMOMETHANE | .0053 | mg/kg | U | N | N | U | R | | 16 | | | | B056-04R | 22:53 |
| | | | | DICHLORODIFLUOROMETHANE | .0053 | mg/kg | U | N | N | U | R | | 16 | | | | B056-04R | 22:53 |
| | | | | ETHYLBENZENE | .0053 | mg/kg | U | N | N | U | R | | 16 | | | | B056-04R | 22:53 |
| | | | | HEXACHLOROBUTADIENE | .0053 | mg/kg | U | N | N | U | R | | 16 | | | | B056-04R | 22:53 |
| | | | | ISOPROPYL BENZENE | .0053 | mg/kg | U | N | N | U | R | | 16 | | | | B056-04R | 22:53 |
| | | | | M/P-XYLENES | .011 | mg/kg | U | N | N | U | R | | 16 | | | | B056-04R | 22:53 |
| | | | | METHYLENE CHLORIDE | .0016 | mg/kg | J | Y | N | F | R | | 16 | | | | B056-04R | 22:53 |
| | | | | N-BUTYLBENZENE | .0053 | mg/kg | U | N | N | U | R | | 16 | | | | B056-04R | 22:53 |
| | | | | N-PROPYLBENZENE | .0053 | mg/kg | U | N | N | U | R | | 16 | | | | B056-04R | 22:53 |
| | | | | NAPHTHALENE | .0053 | mg/kg | U | N | N | U | R | | 16 | | | | B056-04R | 22:53 |
| | | | | O-XYLENE | .0053 | mg/kg | U | N | N | U | R | | 16 | | | | B056-04R | 22:53 |
| | | | | P-ISOPROPYLTOLUENE | .0053 | mg/kg | U | N | N | U | R | | 16 | | | | B056-04R | 22:53 |
| | | | | SEC-BUTYLBENZENE | .0053 | mg/kg | U | N | N | U | R | | 16 | | | | B056-04R | 22:53 |
| | | | | STYRENE | .0053 | mg/kg | U | N | N | U | R | | 16 | | | | B056-04R | 22:53 |
| | | | | TERT-BUTYLBENZENE | .0053 | mg/kg | U | N | N | U | R | | 16 | | | | B056-04R | 22:53 |
| | | | | TETRACHLOROETHENE | .0053 | mg/kg | U | N | N | U | R | | 16 | | | | B056-04R | 22:53 |
| | | | | TOLUENE | .0053 | mg/kg | U | N | N | U | R | | 16 | | | | B056-04R | 22:53 |
| | | | | TRANS-1,2-DICHLOROETHENE | .0053 | mg/kg | U | N | N | U | R | | 16 | | | | B056-04R | 22:53 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .0053 | mg/kg | U | N | N | U | R | | 16 | | | | B056-04R | 22:53 |
| | | | | TRICHLOROETHENE | .0053 | mg/kg | U | N | N | U | R | | 16 | | | | B056-04R | 22:53 |
| | | | | TRICHLOROFLUOROMETHANE | .0053 | mg/kg | U | N | N | U | R | | 16 | | | | B056-04R | 22:53 |
| | | | | VINYL CHLORIDE | .0053 | mg/kg | U | N | N | U | R | | 16 | | | | B056-04R | 22:53 |
| **10181-02** | | | | | | | | | | | | | | | | | | |
| RB3001 | SW6010B | SW3010 | N 0 1 | ALUMINUM | 2.87 | mg/L | | Y | Y | P | J | | 08A | 13 | | | D264-02 | 19:51 |
| | | | | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 19:51 |
| | | | | ARSENIC | .0036 | mg/L | J | Y | Y | P | J | | 15 | | | | D264-02 | 18:45 |
| | | | | BARIUM | .0118 | mg/L | | Y | Y | P | | | | | | | D264-02 | 19:51 |

# Validation Qualifier Data Entry Verification

Run Date: October 2, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10181-02** | | | | | | | | | | | | | | | | | | |
| RB3001 | SW6010B | SW3010 | N 0 1 | BERYLLIUM | .001 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 19:51 |
| | | | | CADMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 19:51 |
| | | | | CALCIUM | 1.63 | mg/L | | Y | Y | F | B | | 06C | | | | D264-02 | 19:51 |
| | | | | CHROMIUM | .0149 | mg/L | | Y | Y | P | | | | | | | D264-02 | 19:51 |
| | | | | COBALT | .02 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 19:51 |
| | | | | COPPER | .00615 | mg/L | J | Y | Y | F | B | | 06B | 15 | | | D264-02 | 19:51 |
| | | | | IRON | 4.48 | mg/L | | Y | Y | P | J | | 13 | | | | D264-02 | 19:51 |
| | | | | LEAD | .00772 | mg/L | J | Y | Y | P | J | | 15 | | | | D264-02 | 18:45 |
| | | | | MAGNESIUM | .664 | mg/L | J | Y | Y | F | B | | 06C | 15 | | | D264-02 | 19:51 |
| | | | | MANGANESE | .0536 | mg/L | | Y | Y | P | | | | | | | D264-02 | 19:51 |
| | | | | NICKEL | .0183 | mg/L | J | Y | Y | F | B | | 06B | 15 | | | D264-02 | 19:51 |
| | | | | POTASSIUM | 2.26 | mg/L | J | Y | Y | P | J | | 15 | | | | D264-02 | 19:51 |
| | | | | SELENIUM | .00285 | mg/L | J | Y | Y | F | B | | 06C | 15 | | | D264-02 | 18:45 |
| | | | | SILVER | .01 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 19:51 |
| | | | | SODIUM | .927 | mg/L | J | Y | Y | P | J | | 15 | | | | D264-02 | 19:51 |
| | | | | THALLIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 18:45 |
| | | | | VANADIUM | .0258 | mg/L | | Y | Y | P | | | | | | | D264-02 | 19:51 |
| | | | | ZINC | .0175 | mg/L | J | Y | Y | F | B | | 06C | 15 | | | D264-02 | 19:51 |
| | SW7470A | TOTAL | N 0 1 | MERCURY | .0005 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 10:40 |
| RB3002 | SW6010B | SW3010 | N 0 1 | ALUMINUM | .18 | mg/L | J | Y | Y | P | J | | 08A | 13 | 15 | | D277-02 | 19:56 |
| | | | | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 19:56 |
| | | | | ARSENIC | .01 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 18:32 |
| | | | | BARIUM | .0669 | mg/L | | Y | Y | P | | | | | | | D277-02 | 19:56 |
| | | | | BERYLLIUM | .001 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 19:56 |
| | | | | CADMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 19:56 |
| | | | | CALCIUM | .482 | mg/L | J | Y | Y | F | B | | 06C | 15 | | | D277-02 | 19:56 |
| | | | | CHROMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 19:56 |
| | | | | COBALT | .02 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 19:56 |
| | | | | COPPER | .02 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 19:56 |
| | | | | IRON | .177 | mg/L | J | Y | Y | P | J | | 13 | 15 | | | D277-02 | 19:56 |
| | | | | LEAD | .01 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 18:32 |
| | | | | MAGNESIUM | .279 | mg/L | J | Y | Y | F | B | | 06C | 15 | | | D277-02 | 19:56 |
| | | | | MANGANESE | .665 | mg/L | | Y | Y | P | | | | | | | D277-02 | 19:56 |
| | | | | NICKEL | .0106 | mg/L | J | Y | Y | F | B | | 06B | 15 | | | D277-02 | 19:56 |
| | | | | POTASSIUM | 5 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 19:56 |
| | | | | SELENIUM | .00364 | mg/L | J | Y | Y | F | B | | 06C | 15 | | | D277-02 | 18:32 |
| | | | | SILVER | .00764 | mg/L | J | Y | Y | P | J | | 15 | | | | D277-02 | 19:56 |
| | | | | SODIUM | .708 | mg/L | J | Y | Y | P | J | | 15 | | | | D277-02 | 19:56 |
| | | | | THALLIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 18:32 |
| | | | | VANADIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 19:56 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10181-02** | | | | | | | | | | | | | | | | | | |
| RB3002 | SW6010B | SW3010 | N 0 1 | ZINC | .0215 | mg/L | | Y | Y | F | B | | 06C | | | | D277-02 | 19:56 |
| | SW7470A | TOTAL | N 0 1 | MERCURY | .0005 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 10:54 |
| RB3003 | SW6010B | SW3010 | N 0 1 | ALUMINUM | 2.35 | mg/L | | Y | Y | P | J | | 08A | 13 | 17 | | D277-03 | 20:00 |
| | | | | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 20:00 |
| | | | | ARSENIC | .01 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 18:36 |
| | | | | BARIUM | .0126 | mg/L | | Y | Y | P | | | | | | | D277-03 | 20:00 |
| | | | | BERYLLIUM | .001 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 20:00 |
| | | | | CADMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 20:00 |
| | | | | CALCIUM | 1.62 | mg/L | | Y | Y | F | B | | 06C | | | | D277-03 | 20:00 |
| | | | | CHROMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 20:00 |
| | | | | COBALT | .02 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 20:00 |
| | | | | COPPER | .02 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 20:00 |
| | | | | IRON | 1.31 | mg/L | | Y | Y | P | J | | 13 | 17 | | | D277-03 | 20:00 |
| | | | | LEAD | .01 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 18:36 |
| | | | | MAGNESIUM | .675 | mg/L | J | Y | Y | F | B | | 06C | 15 | | | D277-03 | 20:00 |
| | | | | MANGANESE | .0633 | mg/L | | Y | Y | P | | | | | | | D277-03 | 20:00 |
| | | | | NICKEL | .02 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 20:00 |
| | | | | POTASSIUM | 2.4 | mg/L | J | Y | Y | P | J | | 15 | 17 | | | D277-03 | 20:00 |
| | | | | SELENIUM | .00196 | mg/L | J | Y | Y | F | B | | 06C | 15 | | | D277-03 | 18:36 |
| | | | | SILVER | .01 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 20:00 |
| | | | | SODIUM | 9.9 | mg/L | | Y | Y | P | | | | | | | D277-03 | 20:00 |
| | | | | THALLIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 18:36 |
| | | | | VANADIUM | .00386 | mg/L | J | Y | Y | P | J | | 15 | | | | D277-03 | 20:00 |
| | | | | ZINC | .0158 | mg/L | J | Y | Y | F | B | | 06C | 15 | 17 | | D277-03 | 20:00 |
| | SW7470A | TOTAL | N 0 1 | MERCURY | .0005 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 10:57 |
| RB3004 | SW6010B | SW3010 | N 0 1 | ALUMINUM | 1.45 | mg/L | | Y | Y | | J | | 08A | 13 | 17 | | D277-04 | 20:05 |
| | | | | ANTIMONY | .1 | mg/L | U | N | Y | | U | | | | | | D277-04 | 20:05 |
| | | | | ARSENIC | .01 | mg/L | U | N | Y | | U | | | | | | D277-04 | 18:40 |
| | | | | BARIUM | .012 | mg/L | | Y | Y | | | | | | | | D277-04 | 20:05 |
| | | | | BERYLLIUM | .001 | mg/L | U | N | Y | | U | | | | | | D277-04 | 20:05 |
| | | | | CADMIUM | .01 | mg/L | U | N | Y | | U | | | | | | D277-04 | 20:05 |
| | | | | CALCIUM | 1.63 | mg/L | | Y | Y | | B | | 06C | | | | D277-04 | 20:05 |
| | | | | CHROMIUM | .01 | mg/L | U | N | Y | | U | | | | | | D277-04 | 20:05 |
| | | | | COBALT | .02 | mg/L | U | N | Y | | U | | | | | | D277-04 | 20:05 |
| | | | | COPPER | .02 | mg/L | U | N | Y | | U | | | | | | D277-04 | 20:05 |
| | | | | IRON | .855 | mg/L | | Y | Y | | J | | 13 | 17 | | | D277-04 | 20:05 |
| | | | | LEAD | .01 | mg/L | U | N | Y | | U | | | | | | D277-04 | 18:40 |
| | | | | MAGNESIUM | .629 | mg/L | J | Y | Y | | B | | 06C | 15 | | | D277-04 | 20:05 |
| | | | | MANGANESE | .0645 | mg/L | | Y | Y | | | | | | | | D277-04 | 20:05 |
| | | | | NICKEL | .0184 | mg/L | J | Y | Y | F | B | | 06B | 15 | | | D277-04 | 20:05 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10181-02** | | | | | | | | | | | | | | | | | | |
| RB3004 | SW6010B | SW3010 | N 0 1 | POTASSIUM | 3.51 | mg/L | J | Y | Y | | J | | 15 | 17 | | | D277-04 | 20:05 |
| | | | | SELENIUM | .00191 | mg/L | J | Y | Y | | B | | 06C | 15 | | | D277-04 | 18:40 |
| | | | | SILVER | .01 | mg/L | U | N | Y | | U | | | | | | D277-04 | 20:05 |
| | | | | SODIUM | 9.47 | mg/L | | Y | Y | | | | | | | | D277-04 | 20:05 |
| | | | | THALLIUM | .01 | mg/L | U | N | Y | | U | | | | | | D277-04 | 18:40 |
| | | | | VANADIUM | .01 | mg/L | U | N | Y | | U | | | | | | D277-04 | 20:05 |
| | | | | ZINC | .0231 | mg/L | | Y | Y | | B | | 06C | 17 | | | D277-04 | 20:05 |
| | SW7470A | TOTAL | N 0 1 | MERCURY | .0005 | mg/L | U | N | Y | | U | | | | | | D277-04 | 11:04 |
| RB3001 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .00051 | mg/L | | Y | Y | P | | | | | | | D264-02 | 06:59 |
| | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 06:59 |
| | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 06:59 |
| | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 06:59 |
| | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 06:59 |
| | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 06:59 |
| | | | | 2-NITROTOLUENE | .0018 | mg/L | | Y | Y | P | | | | | | | D264-02 | 06:59 |
| | | | | 3-NITROTOLUENE | .00028 | mg/L | J | Y | Y | P | J | | 15 | | | | D264-02 | 06:59 |
| | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 06:59 |
| | | | | 4-NITROTOLUENE | .00047 | mg/L | | Y | Y | P | | | | | | | D264-02 | 06:59 |
| | | | | HMX | .001 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 06:59 |
| | | | | NITROBENZENE | .0004 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 06:59 |
| | | | | RDX | .0004 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 06:59 |
| | | | | TETRYL | .0004 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 06:59 |
| RB3002 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 14:11 |
| | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 14:11 |
| | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 14:11 |
| | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 14:11 |
| | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 14:11 |
| | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 14:11 |
| | | | | 2-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 14:11 |
| | | | | 3-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 14:11 |
| | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 14:11 |
| | | | | 4-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 14:11 |
| | | | | HMX | .001 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 14:11 |
| | | | | NITROBENZENE | .0004 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 14:11 |
| | | | | RDX | .0004 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 14:11 |
| | | | | TETRYL | .0004 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 14:11 |
| RB3003 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .00024 | mg/L | J | Y | Y | P | J | | 07A | 15 | 17 | | D277-03 | 14:50 |
| | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 14:50 |
| | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 14:50 |
| | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 14:50 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10181-02** | | | | | | | | | | | | | | | | | | | | |
| RB3003 | SW8330 | METHOD | N | 0 | 1 | 2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 14:50 |
| | | | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 14:50 |
| | | | | | | 2-NITROTOLUENE | .0012 | mg/L | | Y | Y | P | J | | 07A | | | | D277-03 | 14:50 |
| | | | | | | 3-NITROTOLUENE | .0015 | mg/L | | Y | Y | P | J | | 07A | | | | D277-03 | 14:50 |
| | | | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 14:50 |
| | | | | | | 4-NITROTOLUENE | .00027 | mg/L | J | Y | Y | P | J | | 07A | 15 | 17 | | D277-03 | 14:50 |
| | | | | | | HMX | .001 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 14:50 |
| | | | | | | NITROBENZENE | .0004 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 14:50 |
| | | | | | | RDX | .0004 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 14:50 |
| | | | | | | TETRYL | .00021 | mg/L | J | Y | Y | P | J | | 07A | 15 | 17 | | D277-03 | 14:50 |
| RB3004 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .0005 | mg/L | | Y | Y | | J | | 17 | | | | D277-04 | 15:28 |
| | | | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | | U | | | | | | D277-04 | 15:28 |
| | | | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | | U | | | | | | D277-04 | 15:28 |
| | | | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | | U | | | | | | D277-04 | 15:28 |
| | | | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | | U | | | | | | D277-04 | 15:28 |
| | | | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | | U | | | | | | D277-04 | 15:28 |
| | | | | | | 2-NITROTOLUENE | .0015 | mg/L | | Y | Y | | | | | | | | D277-04 | 15:28 |
| | | | | | | 3-NITROTOLUENE | .002 | mg/L | | Y | Y | | | | | | | | D277-04 | 15:28 |
| | | | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N | Y | | U | | | | | | D277-04 | 15:28 |
| | | | | | | 4-NITROTOLUENE | .00069 | mg/L | | Y | Y | | J | | 17 | | | | D277-04 | 15:28 |
| | | | | | | HMX | .001 | mg/L | U | N | Y | | U | | | | | | D277-04 | 15:28 |
| | | | | | | NITROBENZENE | .0004 | mg/L | U | N | Y | | U | | | | | | D277-04 | 15:28 |
| | | | | | | RDX | .0004 | mg/L | U | N | Y | | U | | | | | | D277-04 | 15:28 |
| | | | | | | TETRYL | .00061 | mg/L | | Y | Y | | J | | 17 | | | | D277-04 | 15:28 |
| RB3001 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .005 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 21:53 |
| RB3002 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 22:44 |
| RB3003 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .00202 | mg/L | J | Y | Y | P | J | | 15 | | | | D277-03 | 23:01 |
| RB3004 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .00246 | mg/L | J | Y | Y | | J | | 15 | | | | D277-04 | 23:18 |
| RB3001 | SW8270C | SW3520 | N | 0 | .95 | 1,2,4-TRICHLOROBENZENE | .0095 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 16:25 |
| | | | | | | 1,2-DICHLOROBENZENE | .0095 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 16:25 |
| | | | | | | 1,3-DICHLOROBENZENE | .0095 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 16:25 |
| | | | | | | 1,4-DICHLOROBENZENE | .0095 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 16:25 |
| | | | | | | 2,4,5-TRICHLOROPHENOL | .0095 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 16:25 |
| | | | | | | 2,4,6-TRICHLOROPHENOL | .024 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 16:25 |
| | | | | | | 2,4-DICHLOROPHENOL | .0095 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 16:25 |
| | | | | | | 2,4-DIMETHYLPHENOL | .0095 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 16:25 |
| | | | | | | 2,4-DINITROPHENOL | .024 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 16:25 |
| | | | | | | 2,4-DINITROTOLUENE | .0095 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 16:25 |
| | | | | | | 2,6-DINITROTOLUENE | .0095 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 16:25 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10181-02** | | | | | | | | | | | | | | | | | | |
| RB3001 | SW8270C | SW3520 | N 0 .95 | 2-CHLORONAPHTHALENE | .0095 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 16:25 |
| | | | | 2-CHLOROPHENOL | .0095 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 16:25 |
| | | | | 2-METHYLNAPHTHALENE | .0095 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 16:25 |
| | | | | 2-METHYLPHENOL | .0095 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 16:25 |
| | | | | 2-NITROANILINE | .024 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 16:25 |
| | | | | 2-NITROPHENOL | .0095 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 16:25 |
| | | | | 3,3'-DICHLOROBENZIDINE | .024 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 16:25 |
| | | | | 3-NITROANILINE | .024 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 16:25 |
| | | | | 4,6-DINITRO-2-METHYLPHENOL | .024 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 16:25 |
| | | | | 4-BROMOPHENYL-PHENYL ETHER | .0095 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 16:25 |
| | | | | 4-CHLORO-3-METHYLPHENOL | .0095 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 16:25 |
| | | | | 4-CHLOROANILINE | .0095 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 16:25 |
| | | | | 4-CHLOROPHENYL-PHENYL ETHER | .0095 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 16:25 |
| | | | | 4-METHYLPHENOL | .0095 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 16:25 |
| | | | | 4-NITROANILINE | .0095 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 16:25 |
| | | | | 4-NITROPHENOL | .024 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 16:25 |
| | | | | ACENAPHTHENE | .0095 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 16:25 |
| | | | | ACENAPHTHYLENE | .0095 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 16:25 |
| | | | | ANTHRACENE | .0095 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 16:25 |
| | | | | BENZO(A)ANTHRACENE | .0095 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 16:25 |
| | | | | BENZO(A)PYRENE | .0095 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 16:25 |
| | | | | BENZO(B)FLUORANTHENE | .0095 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 16:25 |
| | | | | BENZO(G,H,I)PERYLENE | .0095 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 16:25 |
| | | | | BENZO(K)FLUORANTHENE | .0095 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 16:25 |
| | | | | BIS(2-CHLOROETHOXY)METHANE | .0095 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 16:25 |
| | | | | BIS(2-CHLOROETHYL)ETHER | .0095 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 16:25 |
| | | | | BIS(2-CHLOROISOPROPYL)ETHER | .0095 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 16:25 |
| | | | | BIS(2-ETHYLHEXYL)PHTHALATE | .0095 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 16:25 |
| | | | | BUTYLBENZYLPHTHALATE | .0095 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 16:25 |
| | | | | CARBAZOLE | .0095 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 16:25 |
| | | | | CHRYSENE | .0095 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 16:25 |
| | | | | DI-N-BUTYLPHTHALATE | .0095 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 16:25 |
| | | | | DI-N-OCTYLPHTHALATE | .0095 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 16:25 |
| | | | | DIBENZO(A,H)ANTHRACENE | .0095 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 16:25 |
| | | | | DIBENZOFURAN | .0095 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 16:25 |
| | | | | DIETHYLPHTHALATE | .0095 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 16:25 |
| | | | | DIMETHYLPHTHALATE | .0095 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 16:25 |
| | | | | FLUORANTHENE | .0095 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 16:25 |
| | | | | FLUORENE | .0095 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 16:25 |
| | | | | HEXACHLOROBENZENE | .0095 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 16:25 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10181-02** | | | | | | | | | | | | | | | | | | |
| RB3001 | SW8270C | SW3520 | N 0 .95 | HEXACHLOROBUTADIENE | .0095 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 16:25 |
| | | | | HEXACHLOROCYCLOPENTADIENE | .0095 | mg/L | U | N | Y | U | UJ | | 05B | | | | D264-02 | 16:25 |
| | | | | HEXACHLOROETHANE | .0095 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 16:25 |
| | | | | INDENO(1,2,3-CD)PYRENE | .0095 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 16:25 |
| | | | | ISOPHORONE | .0095 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 16:25 |
| | | | | N-NITROSO-DI-N-PROPYLAMINE | .0095 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 16:25 |
| | | | | N-NITROSODIPHENYLAMINE | .0095 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 16:25 |
| | | | | NAPHTHALENE | .0095 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 16:25 |
| | | | | NITROBENZENE | .0095 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 16:25 |
| | | | | PENTACHLOROPHENOL | .024 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 16:25 |
| | | | | PHENANTHRENE | .0095 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 16:25 |
| | | | | PHENOL | .0095 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 16:25 |
| | | | | PYRENE | .0095 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 16:25 |
| RB3002 | SW8270C | SW3520 | N 0 .96 | 1,2,4-TRICHLOROBENZENE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 21:34 |
| | | | | 1,2-DICHLOROBENZENE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 21:34 |
| | | | | 1,3-DICHLOROBENZENE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 21:34 |
| | | | | 1,4-DICHLOROBENZENE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 21:34 |
| | | | | 2,4,5-TRICHLOROPHENOL | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 21:34 |
| | | | | 2,4,6-TRICHLOROPHENOL | .024 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 21:34 |
| | | | | 2,4-DICHLOROPHENOL | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 21:34 |
| | | | | 2,4-DIMETHYLPHENOL | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 21:34 |
| | | | | 2,4-DINITROPHENOL | .024 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 21:34 |
| | | | | 2,4-DINITROTOLUENE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 21:34 |
| | | | | 2,6-DINITROTOLUENE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 21:34 |
| | | | | 2-CHLORONAPHTHALENE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 21:34 |
| | | | | 2-CHLOROPHENOL | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 21:34 |
| | | | | 2-METHYLNAPHTHALENE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 21:34 |
| | | | | 2-METHYLPHENOL | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 21:34 |
| | | | | 2-NITROANILINE | .024 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 21:34 |
| | | | | 2-NITROPHENOL | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 21:34 |
| | | | | 3,3'-DICHLOROBENZIDINE | .024 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 21:34 |
| | | | | 3-NITROANILINE | .024 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 21:34 |
| | | | | 4,6-DINITRO-2-METHYLPHENOL | .024 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 21:34 |
| | | | | 4-BROMOPHENYL-PHENYL ETHER | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 21:34 |
| | | | | 4-CHLORO-3-METHYLPHENOL | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 21:34 |
| | | | | 4-CHLOROANILINE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 21:34 |
| | | | | 4-CHLOROPHENYL-PHENYL ETHER | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 21:34 |
| | | | | 4-METHYLPHENOL | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 21:34 |
| | | | | 4-NITROANILINE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 21:34 |
| | | | | 4-NITROPHENOL | .024 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 21:34 |

# Validation Qualifier Data Entry Verification

Run Date: October 2, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10181-02** | | | | | | | | | | | | | | | | | | |
| RB3002 | SW8270C | SW3520 | N 0 .96 | ACENAPHTHENE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 21:34 |
| | | | | ACENAPHTHYLENE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 21:34 |
| | | | | ANTHRACENE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 21:34 |
| | | | | BENZO(A)ANTHRACENE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 21:34 |
| | | | | BENZO(A)PYRENE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 21:34 |
| | | | | BENZO(B)FLUORANTHENE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 21:34 |
| | | | | BENZO(G,H,I)PERYLENE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 21:34 |
| | | | | BENZO(K)FLUORANTHENE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 21:34 |
| | | | | BIS(2-CHLOROETHOXY)METHANE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 21:34 |
| | | | | BIS(2-CHLOROETHYL)ETHER | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 21:34 |
| | | | | BIS(2-CHLOROISOPROPYL)ETHER | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 21:34 |
| | | | | BIS(2-ETHYLHEXYL)PHTHALATE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 21:34 |
| | | | | BUTYLBENZYLPHTHALATE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 21:34 |
| | | | | CARBAZOLE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 21:34 |
| | | | | CHRYSENE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 21:34 |
| | | | | DI-N-BUTYLPHTHALATE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 21:34 |
| | | | | DI-N-OCTYLPHTHALATE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 21:34 |
| | | | | DIBENZO(A,H)ANTHRACENE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 21:34 |
| | | | | DIBENZOFURAN | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 21:34 |
| | | | | DIETHYLPHTHALATE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 21:34 |
| | | | | DIMETHYLPHTHALATE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 21:34 |
| | | | | FLUORANTHENE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 21:34 |
| | | | | FLUORENE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 21:34 |
| | | | | HEXACHLOROBENZENE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 21:34 |
| | | | | HEXACHLOROBUTADIENE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 21:34 |
| | | | | HEXACHLOROCYCLOPENTADIENE | .0096 | mg/L | U | N | Y | U | UJ | | 05B | | | | D277-02 | 21:34 |
| | | | | HEXACHLOROETHANE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 21:34 |
| | | | | INDENO(1,2,3-CD)PYRENE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 21:34 |
| | | | | ISOPHORONE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 21:34 |
| | | | | N-NITROSO-DI-N-PROPYLAMINE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 21:34 |
| | | | | N-NITROSODIPHENYLAMINE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 21:34 |
| | | | | NAPHTHALENE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 21:34 |
| | | | | NITROBENZENE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 21:34 |
| | | | | PENTACHLOROPHENOL | .024 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 21:34 |
| | | | | PHENANTHRENE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 21:34 |
| | | | | PHENOL | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 21:34 |
| | | | | PYRENE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 21:34 |
| RB3003 | SW8270C | SW3520 | N 0 .96 | 1,2,4-TRICHLOROBENZENE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 22:12 |
| | | | | 1,2-DICHLOROBENZENE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 22:12 |
| | | | | 1,3-DICHLOROBENZENE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 22:12 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10181-02** | | | | | | | | | | | | | | | | | | |
| RB3003 | SW8270C | SW3520 | N 0 .96 | 1,4-DICHLOROBENZENE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 22:12 |
| | | | | 2,4,5-TRICHLOROPHENOL | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 22:12 |
| | | | | 2,4,6-TRICHLOROPHENOL | .024 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 22:12 |
| | | | | 2,4-DICHLOROPHENOL | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 22:12 |
| | | | | 2,4-DIMETHYLPHENOL | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 22:12 |
| | | | | 2,4-DINITROPHENOL | .024 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 22:12 |
| | | | | 2,4-DINITROTOLUENE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 22:12 |
| | | | | 2,6-DINITROTOLUENE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 22:12 |
| | | | | 2-CHLORONAPHTHALENE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 22:12 |
| | | | | 2-CHLOROPHENOL | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 22:12 |
| | | | | 2-METHYLNAPHTHALENE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 22:12 |
| | | | | 2-METHYLPHENOL | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 22:12 |
| | | | | 2-NITROANILINE | .024 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 22:12 |
| | | | | 2-NITROPHENOL | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 22:12 |
| | | | | 3,3'-DICHLOROBENZIDINE | .024 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 22:12 |
| | | | | 3-NITROANILINE | .024 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 22:12 |
| | | | | 4,6-DINITRO-2-METHYLPHENOL | .024 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 22:12 |
| | | | | 4-BROMOPHENYL-PHENYL ETHER | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 22:12 |
| | | | | 4-CHLORO-3-METHYLPHENOL | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 22:12 |
| | | | | 4-CHLOROANILINE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 22:12 |
| | | | | 4-CHLOROPHENYL-PHENYL ETHER | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 22:12 |
| | | | | 4-METHYLPHENOL | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 22:12 |
| | | | | 4-NITROANILINE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 22:12 |
| | | | | 4-NITROPHENOL | .024 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 22:12 |
| | | | | ACENAPHTHENE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 22:12 |
| | | | | ACENAPHTHYLENE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 22:12 |
| | | | | ANTHRACENE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 22:12 |
| | | | | BENZO(A)ANTHRACENE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 22:12 |
| | | | | BENZO(A)PYRENE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 22:12 |
| | | | | BENZO(B)FLUORANTHENE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 22:12 |
| | | | | BENZO(G,H,I)PERYLENE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 22:12 |
| | | | | BENZO(K)FLUORANTHENE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 22:12 |
| | | | | BIS(2-CHLOROETHOXY)METHANE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 22:12 |
| | | | | BIS(2-CHLOROETHYL)ETHER | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 22:12 |
| | | | | BIS(2-CHLOROISOPROPYL)ETHER | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 22:12 |
| | | | | BIS(2-ETHYLHEXYL)PHTHALATE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 22:12 |
| | | | | BUTYLBENZYLPHTHALATE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 22:12 |
| | | | | CARBAZOLE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 22:12 |
| | | | | CHRYSENE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 22:12 |
| | | | | DI-N-BUTYLPHTHALATE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 22:12 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10181-02** | | | | | | | | | | | | | | | | | | |
| RB3003 | SW8270C | SW3520 | N 0 .96 | DI-N-OCTYLPHTHALATE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 22:12 |
| | | | | DIBENZO(A,H)ANTHRACENE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 22:12 |
| | | | | DIBENZOFURAN | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 22:12 |
| | | | | DIETHYLPHTHALATE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 22:12 |
| | | | | DIMETHYLPHTHALATE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 22:12 |
| | | | | FLUORANTHENE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 22:12 |
| | | | | FLUORENE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 22:12 |
| | | | | HEXACHLOROBENZENE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 22:12 |
| | | | | HEXACHLOROBUTADIENE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 22:12 |
| | | | | HEXACHLOROCYCLOPENTADIENE | .0096 | mg/L | U | N | Y | U | UJ | | 05B | | | | D277-03 | 22:12 |
| | | | | HEXACHLOROETHANE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 22:12 |
| | | | | INDENO(1,2,3-CD)PYRENE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 22:12 |
| | | | | ISOPHORONE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 22:12 |
| | | | | N-NITROSO-DI-N-PROPYLAMINE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 22:12 |
| | | | | N-NITROSODIPHENYLAMINE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 22:12 |
| | | | | NAPHTHALENE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 22:12 |
| | | | | NITROBENZENE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 22:12 |
| | | | | PENTACHLOROPHENOL | .024 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 22:12 |
| | | | | PHENANTHRENE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 22:12 |
| | | | | PHENOL | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 22:12 |
| | | | | PYRENE | .0096 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 22:12 |
| RB3004 | SW8270C | SW3520 | N 0 .98 | 1,2,4-TRICHLOROBENZENE | .0098 | mg/L | U | N | Y | | U | | | | | | D277-04 | 22:51 |
| | | | | 1,2-DICHLOROBENZENE | .0098 | mg/L | U | N | Y | | U | | | | | | D277-04 | 22:51 |
| | | | | 1,3-DICHLOROBENZENE | .0098 | mg/L | U | N | Y | | U | | | | | | D277-04 | 22:51 |
| | | | | 1,4-DICHLOROBENZENE | .0098 | mg/L | U | N | Y | | U | | | | | | D277-04 | 22:51 |
| | | | | 2,4,5-TRICHLOROPHENOL | .0098 | mg/L | U | N | Y | | U | | | | | | D277-04 | 22:51 |
| | | | | 2,4,6-TRICHLOROPHENOL | .025 | mg/L | U | N | Y | | U | | | | | | D277-04 | 22:51 |
| | | | | 2,4-DICHLOROPHENOL | .0098 | mg/L | U | N | Y | | U | | | | | | D277-04 | 22:51 |
| | | | | 2,4-DIMETHYLPHENOL | .0098 | mg/L | U | N | Y | | U | | | | | | D277-04 | 22:51 |
| | | | | 2,4-DINITROPHENOL | .025 | mg/L | U | N | Y | | U | | | | | | D277-04 | 22:51 |
| | | | | 2,4-DINITROTOLUENE | .0098 | mg/L | U | N | Y | | U | | | | | | D277-04 | 22:51 |
| | | | | 2,6-DINITROTOLUENE | .0098 | mg/L | U | N | Y | | U | | | | | | D277-04 | 22:51 |
| | | | | 2-CHLORONAPHTHALENE | .0098 | mg/L | U | N | Y | | U | | | | | | D277-04 | 22:51 |
| | | | | 2-CHLOROPHENOL | .0098 | mg/L | U | N | Y | | U | | | | | | D277-04 | 22:51 |
| | | | | 2-METHYLNAPHTHALENE | .0098 | mg/L | U | N | Y | | U | | | | | | D277-04 | 22:51 |
| | | | | 2-METHYLPHENOL | .0098 | mg/L | U | N | Y | | U | | | | | | D277-04 | 22:51 |
| | | | | 2-NITROANILINE | .025 | mg/L | U | N | Y | | U | | | | | | D277-04 | 22:51 |
| | | | | 2-NITROPHENOL | .0098 | mg/L | U | N | Y | | U | | | | | | D277-04 | 22:51 |
| | | | | 3,3'-DICHLOROBENZIDINE | .025 | mg/L | U | N | Y | | U | | | | | | D277-04 | 22:51 |
| | | | | 3-NITROANILINE | .025 | mg/L | U | N | Y | | U | | | | | | D277-04 | 22:51 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10181-02** | | | | | | | | | | | | | | | | |
| RB3004 | SW8270C | SW3520 | N 0 .98 | 4,6-DINITRO-2-METHYLPHENOL | .025 | mg/L | U | N Y | U | | | | | | D277-04 | 22:51 |
| | | | | 4-BROMOPHENYL-PHENYL ETHER | .0098 | mg/L | U | N Y | U | | | | | | D277-04 | 22:51 |
| | | | | 4-CHLORO-3-METHYLPHENOL | .0098 | mg/L | U | N Y | U | | | | | | D277-04 | 22:51 |
| | | | | 4-CHLOROANILINE | .0098 | mg/L | U | N Y | U | | | | | | D277-04 | 22:51 |
| | | | | 4-CHLOROPHENYL-PHENYL ETHER | .0098 | mg/L | U | N Y | U | | | | | | D277-04 | 22:51 |
| | | | | 4-METHYLPHENOL | .0098 | mg/L | U | N Y | U | | | | | | D277-04 | 22:51 |
| | | | | 4-NITROANILINE | .0098 | mg/L | U | N Y | U | | | | | | D277-04 | 22:51 |
| | | | | 4-NITROPHENOL | .025 | mg/L | U | N Y | U | | | | | | D277-04 | 22:51 |
| | | | | ACENAPHTHENE | .0098 | mg/L | U | N Y | U | | | | | | D277-04 | 22:51 |
| | | | | ACENAPHTHYLENE | .0098 | mg/L | U | N Y | U | | | | | | D277-04 | 22:51 |
| | | | | ANTHRACENE | .0098 | mg/L | U | N Y | U | | | | | | D277-04 | 22:51 |
| | | | | BENZO(A)ANTHRACENE | .0098 | mg/L | U | N Y | U | | | | | | D277-04 | 22:51 |
| | | | | BENZO(A)PYRENE | .0098 | mg/L | U | N Y | U | | | | | | D277-04 | 22:51 |
| | | | | BENZO(B)FLUORANTHENE | .0098 | mg/L | U | N Y | U | | | | | | D277-04 | 22:51 |
| | | | | BENZO(G,H,I)PERYLENE | .0098 | mg/L | U | N Y | U | | | | | | D277-04 | 22:51 |
| | | | | BENZO(K)FLUORANTHENE | .0098 | mg/L | U | N Y | U | | | | | | D277-04 | 22:51 |
| | | | | BIS(2-CHLOROETHOXY)METHANE | .0098 | mg/L | U | N Y | U | | | | | | D277-04 | 22:51 |
| | | | | BIS(2-CHLOROETHYL)ETHER | .0098 | mg/L | U | N Y | U | | | | | | D277-04 | 22:51 |
| | | | | BIS(2-CHLOROISOPROPYL)ETHER | .0098 | mg/L | U | N Y | U | | | | | | D277-04 | 22:51 |
| | | | | BIS(2-ETHYLHEXYL)PHTHALATE | .0098 | mg/L | U | N Y | U | | | | | | D277-04 | 22:51 |
| | | | | BUTYLBENZYLPHTHALATE | .0098 | mg/L | U | N Y | U | | | | | | D277-04 | 22:51 |
| | | | | CARBAZOLE | .0098 | mg/L | U | N Y | U | | | | | | D277-04 | 22:51 |
| | | | | CHRYSENE | .0098 | mg/L | U | N Y | U | | | | | | D277-04 | 22:51 |
| | | | | DI-N-BUTYLPHTHALATE | .0098 | mg/L | U | N Y | U | | | | | | D277-04 | 22:51 |
| | | | | DI-N-OCTYLPHTHALATE | .0098 | mg/L | U | N Y | U | | | | | | D277-04 | 22:51 |
| | | | | DIBENZO(A,H)ANTHRACENE | .0098 | mg/L | U | N Y | U | | | | | | D277-04 | 22:51 |
| | | | | DIBENZOFURAN | .0098 | mg/L | U | N Y | U | | | | | | D277-04 | 22:51 |
| | | | | DIETHYLPHTHALATE | .0098 | mg/L | U | N Y | U | | | | | | D277-04 | 22:51 |
| | | | | DIMETHYLPHTHALATE | .0098 | mg/L | U | N Y | U | | | | | | D277-04 | 22:51 |
| | | | | FLUORANTHENE | .0098 | mg/L | U | N Y | U | | | | | | D277-04 | 22:51 |
| | | | | FLUORENE | .0098 | mg/L | U | N Y | U | | | | | | D277-04 | 22:51 |
| | | | | HEXACHLOROBENZENE | .0098 | mg/L | U | N Y | U | | | | | | D277-04 | 22:51 |
| | | | | HEXACHLOROBUTADIENE | .0098 | mg/L | U | N Y | U | | | | | | D277-04 | 22:51 |
| | | | | HEXACHLOROCYCLOPENTADIENE | .0098 | mg/L | U | N Y | UJ | | 05B | | | | D277-04 | 22:51 |
| | | | | HEXACHLOROETHANE | .0098 | mg/L | U | N Y | U | | | | | | D277-04 | 22:51 |
| | | | | INDENO(1,2,3-CD)PYRENE | .0098 | mg/L | U | N Y | U | | | | | | D277-04 | 22:51 |
| | | | | ISOPHORONE | .0098 | mg/L | U | N Y | U | | | | | | D277-04 | 22:51 |
| | | | | N-NITROSO-DI-N-PROPYLAMINE | .0098 | mg/L | U | N Y | U | | | | | | D277-04 | 22:51 |
| | | | | N-NITROSODIPHENYLAMINE | .0098 | mg/L | U | N Y | U | | | | | | D277-04 | 22:51 |
| | | | | NAPHTHALENE | .0098 | mg/L | U | N Y | U | | | | | | D277-04 | 22:51 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10181-02** | | | | | | | | | | | | | | | | | | |
| RB3004 | SW8270C | SW3520 | N 0 .98 | NITROBENZENE | .0098 | mg/L | U | N | Y | | U | | | | | | D277-04 | 22:51 |
| | | | | PENTACHLOROPHENOL | .025 | mg/L | U | N | Y | | U | | | | | | D277-04 | 22:51 |
| | | | | PHENANTHRENE | .0098 | mg/L | U | N | Y | | U | | | | | | D277-04 | 22:51 |
| | | | | PHENOL | .0098 | mg/L | U | N | Y | | U | | | | | | D277-04 | 22:51 |
| | | | | PYRENE | .0098 | mg/L | U | N | Y | | U | | | | | | D277-04 | 22:51 |
| RB3001 | SW8260B | SW5030 | N 0 1 | 1,1,1,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 08:41 |
| | | | | 1,1,1-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 08:41 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 08:41 |
| | | | | 1,1,2-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 08:41 |
| | | | | 1,1-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 08:41 |
| | | | | 1,1-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 08:41 |
| | | | | 1,1-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 08:41 |
| | | | | 1,2,3-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 08:41 |
| | | | | 1,2,3-TRICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 08:41 |
| | | | | 1,2,4-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 08:41 |
| | | | | 1,2,4-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 08:41 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .01 | mg/L | U | N | Y | U | R | 05A | | | | | D264-02 | 08:41 |
| | | | | 1,2-DIBROMOETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 08:41 |
| | | | | 1,2-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 08:41 |
| | | | | 1,2-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 08:41 |
| | | | | 1,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 08:41 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 08:41 |
| | | | | 1,3-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 08:41 |
| | | | | 1,3-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 08:41 |
| | | | | 1,4-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 08:41 |
| | | | | 2,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 08:41 |
| | | | | 2-BUTANONE | .02 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 08:41 |
| | | | | 2-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 08:41 |
| | | | | 2-HEXANONE | .02 | mg/L | U | N | Y | U | UJ | 05B | | | | | D264-02 | 08:41 |
| | | | | 4-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 08:41 |
| | | | | 4-METHYL-2-PENTANONE | .01 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 08:41 |
| | | | | ACETONE | .02 | mg/L | U | N | Y | U | R | 05A | | | | | D264-02 | 08:41 |
| | | | | BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 08:41 |
| | | | | BROMOBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 08:41 |
| | | | | BROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | UJ | 05B | | | | | D264-02 | 08:41 |
| | | | | BROMODICHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 08:41 |
| | | | | BROMOFORM | .005 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 08:41 |
| | | | | BROMOMETHANE | .005 | mg/L | U | N | Y | U | UJ | 05B | | | | | D264-02 | 08:41 |
| | | | | CARBON DISULFIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 08:41 |
| | | | | CARBON TETRACHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 08:41 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10181-02** | | | | | | | | | | | | | | | | | | |
| RB3001 | SW8260B | SW5030 | N 0 1 | CHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 08:41 |
| | | | | CHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 08:41 |
| | | | | CHLOROFORM | .005 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 08:41 |
| | | | | CHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 08:41 |
| | | | | CIS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 08:41 |
| | | | | CIS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 08:41 |
| | | | | DIBROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 08:41 |
| | | | | DIBROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 08:41 |
| | | | | DICHLORODIFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 08:41 |
| | | | | ETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 08:41 |
| | | | | HEXACHLOROBUTADIENE | .005 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 08:41 |
| | | | | ISOPROPYL BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 08:41 |
| | | | | M/P-XYLENES | .01 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 08:41 |
| | | | | METHYLENE CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 08:41 |
| | | | | N-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 08:41 |
| | | | | N-PROPYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 08:41 |
| | | | | NAPHTHALENE | .005 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 08:41 |
| | | | | O-XYLENE | .005 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 08:41 |
| | | | | P-ISOPROPYLTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 08:41 |
| | | | | SEC-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 08:41 |
| | | | | STYRENE | .005 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 08:41 |
| | | | | TERT-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 08:41 |
| | | | | TETRACHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 08:41 |
| | | | | TOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 08:41 |
| | | | | TRANS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 08:41 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 08:41 |
| | | | | TRICHLOROETHENE | .0012 | mg/L | J | Y | Y | P | J | | 15 | | | | D264-02 | 08:41 |
| | | | | TRICHLOROFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 08:41 |
| | | | | VINYL CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D264-02 | 08:41 |
| RB3002 | SW8260B | SW5030 | N 0 1 | 1,1,1,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 08:51 |
| | | | | 1,1,1-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 08:51 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 08:51 |
| | | | | 1,1,2-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 08:51 |
| | | | | 1,1-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 08:51 |
| | | | | 1,1-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 08:51 |
| | | | | 1,1-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 08:51 |
| | | | | 1,2,3-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 08:51 |
| | | | | 1,2,3-TRICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 08:51 |
| | | | | 1,2,4-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 08:51 |
| | | | | 1,2,4-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 08:51 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10181-02** | | | | | | | | | | | | | | | | | | |
| RB3002 | SW8260B | SW5030 | N 0 1 | 1,2-DIBROMO-3-CHLOROPROPANE | .01 | mg/L | U | N | Y | U | R | | 05A | | | | D277-02 | 08:51 |
| | | | | 1,2-DIBROMOETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 08:51 |
| | | | | 1,2-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 08:51 |
| | | | | 1,2-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 08:51 |
| | | | | 1,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 08:51 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 08:51 |
| | | | | 1,3-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 08:51 |
| | | | | 1,3-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 08:51 |
| | | | | 1,4-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 08:51 |
| | | | | 2,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 08:51 |
| | | | | 2-BUTANONE | .02 | mg/L | U | N | Y | U | UJ | | 05B | | | | D277-02 | 08:51 |
| | | | | 2-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 08:51 |
| | | | | 2-HEXANONE | .02 | mg/L | U | N | Y | U | UJ | | 05B | | | | D277-02 | 08:51 |
| | | | | 4-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 08:51 |
| | | | | 4-METHYL-2-PENTANONE | .01 | mg/L | U | N | Y | U | UJ | | 05B | | | | D277-02 | 08:51 |
| | | | | ACETONE | .02 | mg/L | U | N | Y | U | R | | 05A | 05B | | | D277-02 | 08:51 |
| | | | | BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 08:51 |
| | | | | BROMOBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 08:51 |
| | | | | BROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 08:51 |
| | | | | BROMODICHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 08:51 |
| | | | | BROMOFORM | .005 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 08:51 |
| | | | | BROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 08:51 |
| | | | | CARBON DISULFIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 08:51 |
| | | | | CARBON TETRACHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 08:51 |
| | | | | CHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 08:51 |
| | | | | CHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 08:51 |
| | | | | CHLOROFORM | .005 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 08:51 |
| | | | | CHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 08:51 |
| | | | | CIS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 08:51 |
| | | | | CIS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 08:51 |
| | | | | DIBROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 08:51 |
| | | | | DIBROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 08:51 |
| | | | | DICHLORODIFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 08:51 |
| | | | | ETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 08:51 |
| | | | | HEXACHLOROBUTADIENE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 08:51 |
| | | | | ISOPROPYL BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 08:51 |
| | | | | M/P-XYLENES | .01 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 08:51 |
| | | | | METHYLENE CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 08:51 |
| | | | | N-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 08:51 |
| | | | | N-PROPYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 08:51 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10181-02** | | | | | | | | | | | | | | | | | | |
| RB3002 | SW8260B | SW5030 | N 0 1 | NAPHTHALENE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 08:51 |
| | | | | O-XYLENE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 08:51 |
| | | | | P-ISOPROPYLTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 08:51 |
| | | | | SEC-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 08:51 |
| | | | | STYRENE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 08:51 |
| | | | | TERT-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 08:51 |
| | | | | TETRACHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 08:51 |
| | | | | TOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 08:51 |
| | | | | TRANS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 08:51 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 08:51 |
| | | | | TRICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 08:51 |
| | | | | TRICHLOROFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 08:51 |
| | | | | VINYL CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-02 | 08:51 |
| RB3003 | SW8260B | SW5030 | N 0 1 | 1,1,1,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 08:07 |
| | | | | 1,1,1-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 08:07 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 08:07 |
| | | | | 1,1,2-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 08:07 |
| | | | | 1,1-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 08:07 |
| | | | | 1,1-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 08:07 |
| | | | | 1,1-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 08:07 |
| | | | | 1,2,3-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 08:07 |
| | | | | 1,2,3-TRICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 08:07 |
| | | | | 1,2,4-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 08:07 |
| | | | | 1,2,4-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 08:07 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .01 | mg/L | U | N | Y | U | R | | 05A | | | | D277-03 | 08:07 |
| | | | | 1,2-DIBROMOETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 08:07 |
| | | | | 1,2-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 08:07 |
| | | | | 1,2-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 08:07 |
| | | | | 1,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 08:07 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 08:07 |
| | | | | 1,3-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 08:07 |
| | | | | 1,3-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 08:07 |
| | | | | 1,4-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 08:07 |
| | | | | 2,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 08:07 |
| | | | | 2-BUTANONE | .02 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 08:07 |
| | | | | 2-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 08:07 |
| | | | | 2-HEXANONE | .02 | mg/L | U | N | Y | U | UJ | | 05B | | | | D277-03 | 08:07 |
| | | | | 4-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 08:07 |
| | | | | 4-METHYL-2-PENTANONE | .01 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 08:07 |
| | | | | ACETONE | .02 | mg/L | U | N | Y | U | R | | 05A | | | | D277-03 | 08:07 |

# Validation Qualifier Data Entry Verification

Run Date: October 2, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10181-02** | | | | | | | | | | | | | | | | | | |
| RB3003 | SW8260B | SW5030 | N 0 1 | BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 08:07 |
| | | | | BROMOBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 08:07 |
| | | | | BROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | D277-03 | 08:07 |
| | | | | BROMODICHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 08:07 |
| | | | | BROMOFORM | .005 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 08:07 |
| | | | | BROMOMETHANE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | D277-03 | 08:07 |
| | | | | CARBON DISULFIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 08:07 |
| | | | | CARBON TETRACHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 08:07 |
| | | | | CHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 08:07 |
| | | | | CHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 08:07 |
| | | | | CHLOROFORM | .005 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 08:07 |
| | | | | CHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 08:07 |
| | | | | CIS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 08:07 |
| | | | | CIS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 08:07 |
| | | | | DIBROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 08:07 |
| | | | | DIBROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 08:07 |
| | | | | DICHLORODIFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 08:07 |
| | | | | ETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 08:07 |
| | | | | HEXACHLOROBUTADIENE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 08:07 |
| | | | | ISOPROPYL BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 08:07 |
| | | | | M/P-XYLENES | .01 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 08:07 |
| | | | | METHYLENE CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 08:07 |
| | | | | N-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 08:07 |
| | | | | N-PROPYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 08:07 |
| | | | | NAPHTHALENE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 08:07 |
| | | | | O-XYLENE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 08:07 |
| | | | | P-ISOPROPYLTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 08:07 |
| | | | | SEC-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 08:07 |
| | | | | STYRENE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 08:07 |
| | | | | TERT-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 08:07 |
| | | | | TETRACHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 08:07 |
| | | | | TOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 08:07 |
| | | | | TRANS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 08:07 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 08:07 |
| | | | | TRICHLOROETHENE | .0012 | mg/L | J | Y | Y | P | J | | 15 | | | | D277-03 | 08:07 |
| | | | | TRICHLOROFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 08:07 |
| | | | | VINYL CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D277-03 | 08:07 |
| RB3004 | SW8260B | SW5030 | N 0 1 | 1,1,1,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | | U | | | | | | D277-04 | 07:42 |
| | | | | 1,1,1-TRICHLOROETHANE | .005 | mg/L | U | N | Y | | U | | | | | | D277-04 | 07:42 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | | U | | | | | | D277-04 | 07:42 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10181-02** | | | | | | | | | | | | | | | | |
| RB3004 | SW8260B | SW5030 | N 0 1 | 1,1,2-TRICHLOROETHANE | .005 | mg/L | U | N Y | U | | | | | | D277-04 | 07:42 |
| | | | | 1,1-DICHLOROETHANE | .005 | mg/L | U | N Y | U | | | | | | D277-04 | 07:42 |
| | | | | 1,1-DICHLOROETHENE | .005 | mg/L | U | N Y | U | | | | | | D277-04 | 07:42 |
| | | | | 1,1-DICHLOROPROPENE | .005 | mg/L | U | N Y | U | | | | | | D277-04 | 07:42 |
| | | | | 1,2,3-TRICHLOROBENZENE | .005 | mg/L | U | N Y | U | | | | | | D277-04 | 07:42 |
| | | | | 1,2,3-TRICHLOROPROPANE | .005 | mg/L | U | N Y | U | | | | | | D277-04 | 07:42 |
| | | | | 1,2,4-TRICHLOROBENZENE | .005 | mg/L | U | N Y | U | | | | | | D277-04 | 07:42 |
| | | | | 1,2,4-TRIMETHYLBENZENE | .005 | mg/L | U | N Y | U | | | | | | D277-04 | 07:42 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .01 | mg/L | U | N Y | R | | 05A | | | | D277-04 | 07:42 |
| | | | | 1,2-DIBROMOETHANE | .005 | mg/L | U | N Y | U | | | | | | D277-04 | 07:42 |
| | | | | 1,2-DICHLOROBENZENE | .005 | mg/L | U | N Y | U | | | | | | D277-04 | 07:42 |
| | | | | 1,2-DICHLOROETHANE | .005 | mg/L | U | N Y | U | | | | | | D277-04 | 07:42 |
| | | | | 1,2-DICHLOROPROPANE | .005 | mg/L | U | N Y | U | | | | | | D277-04 | 07:42 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .005 | mg/L | U | N Y | U | | | | | | D277-04 | 07:42 |
| | | | | 1,3-DICHLOROBENZENE | .005 | mg/L | U | N Y | U | | | | | | D277-04 | 07:42 |
| | | | | 1,3-DICHLOROPROPANE | .005 | mg/L | U | N Y | U | | | | | | D277-04 | 07:42 |
| | | | | 1,4-DICHLOROBENZENE | .005 | mg/L | U | N Y | U | | | | | | D277-04 | 07:42 |
| | | | | 2,2-DICHLOROPROPANE | .005 | mg/L | U | N Y | U | | | | | | D277-04 | 07:42 |
| | | | | 2-BUTANONE | .02 | mg/L | U | N Y | UJ | | 05B | | | | D277-04 | 07:42 |
| | | | | 2-CHLOROTOLUENE | .005 | mg/L | U | N Y | U | | | | | | D277-04 | 07:42 |
| | | | | 2-HEXANONE | .02 | mg/L | U | N Y | UJ | | 05B | | | | D277-04 | 07:42 |
| | | | | 4-CHLOROTOLUENE | .005 | mg/L | U | N Y | U | | | | | | D277-04 | 07:42 |
| | | | | 4-METHYL-2-PENTANONE | .01 | mg/L | U | N Y | UJ | | 05B | | | | D277-04 | 07:42 |
| | | | | ACETONE | .02 | mg/L | U | N Y | R | | 05A | 05B | | | D277-04 | 07:42 |
| | | | | BENZENE | .005 | mg/L | U | N Y | U | | | | | | D277-04 | 07:42 |
| | | | | BROMOBENZENE | .005 | mg/L | U | N Y | U | | | | | | D277-04 | 07:42 |
| | | | | BROMOCHLOROMETHANE | .005 | mg/L | U | N Y | U | | | | | | D277-04 | 07:42 |
| | | | | BROMODICHLOROMETHANE | .005 | mg/L | U | N Y | U | | | | | | D277-04 | 07:42 |
| | | | | BROMOFORM | .005 | mg/L | U | N Y | U | | | | | | D277-04 | 07:42 |
| | | | | BROMOMETHANE | .005 | mg/L | U | N Y | U | | | | | | D277-04 | 07:42 |
| | | | | CARBON DISULFIDE | .005 | mg/L | U | N Y | U | | | | | | D277-04 | 07:42 |
| | | | | CARBON TETRACHLORIDE | .005 | mg/L | U | N Y | U | | | | | | D277-04 | 07:42 |
| | | | | CHLOROBENZENE | .005 | mg/L | U | N Y | U | | | | | | D277-04 | 07:42 |
| | | | | CHLOROETHANE | .005 | mg/L | U | N Y | U | | | | | | D277-04 | 07:42 |
| | | | | CHLOROFORM | .005 | mg/L | U | N Y | U | | | | | | D277-04 | 07:42 |
| | | | | CHLOROMETHANE | .005 | mg/L | U | N Y | U | | | | | | D277-04 | 07:42 |
| | | | | CIS-1,2-DICHLOROETHENE | .005 | mg/L | U | N Y | U | | | | | | D277-04 | 07:42 |
| | | | | CIS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N Y | U | | | | | | D277-04 | 07:42 |
| | | | | DIBROMOCHLOROMETHANE | .005 | mg/L | U | N Y | U | | | | | | D277-04 | 07:42 |
| | | | | DIBROMOMETHANE | .005 | mg/L | U | N Y | U | | | | | | D277-04 | 07:42 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10181-02** | | | | | | | | | | | | | | | | |
| RB3004 | SW8260B | SW5030 | N 0 1 | DICHLORODIFLUOROMETHANE | .005 | mg/L | U | N Y | U | | | | | | D277-04 | 07:42 |
| | | | | ETHYLBENZENE | .005 | mg/L | U | N Y | U | | | | | | D277-04 | 07:42 |
| | | | | HEXACHLOROBUTADIENE | .005 | mg/L | U | N Y | U | | | | | | D277-04 | 07:42 |
| | | | | ISOPROPYL BENZENE | .005 | mg/L | U | N Y | U | | | | | | D277-04 | 07:42 |
| | | | | M/P-XYLENES | .01 | mg/L | U | N Y | U | | | | | | D277-04 | 07:42 |
| | | | | METHYLENE CHLORIDE | .005 | mg/L | U | N Y | U | | | | | | D277-04 | 07:42 |
| | | | | N-BUTYLBENZENE | .005 | mg/L | U | N Y | U | | | | | | D277-04 | 07:42 |
| | | | | N-PROPYLBENZENE | .005 | mg/L | U | N Y | U | | | | | | D277-04 | 07:42 |
| | | | | NAPHTHALENE | .005 | mg/L | U | N Y | U | | | | | | D277-04 | 07:42 |
| | | | | O-XYLENE | .005 | mg/L | U | N Y | U | | | | | | D277-04 | 07:42 |
| | | | | P-ISOPROPYLTOLUENE | .005 | mg/L | U | N Y | U | | | | | | D277-04 | 07:42 |
| | | | | SEC-BUTYLBENZENE | .005 | mg/L | U | N Y | U | | | | | | D277-04 | 07:42 |
| | | | | STYRENE | .005 | mg/L | U | N Y | U | | | | | | D277-04 | 07:42 |
| | | | | TERT-BUTYLBENZENE | .005 | mg/L | U | N Y | U | | | | | | D277-04 | 07:42 |
| | | | | TETRACHLOROETHENE | .005 | mg/L | U | N Y | U | | | | | | D277-04 | 07:42 |
| | | | | TOLUENE | .005 | mg/L | U | N Y | U | | | | | | D277-04 | 07:42 |
| | | | | TRANS-1,2-DICHLOROETHENE | .005 | mg/L | U | N Y | U | | | | | | D277-04 | 07:42 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N Y | U | | | | | | D277-04 | 07:42 |
| | | | | TRICHLOROETHENE | .005 | mg/L | U | N Y | U | | | | | | D277-04 | 07:42 |
| | | | | TRICHLOROFLUOROMETHANE | .005 | mg/L | U | N Y | U | | | | | | D277-04 | 07:42 |
| | | | | VINYL CHLORIDE | .005 | mg/L | U | N Y | U | | | | | | D277-04 | 07:42 |

***Quality Assurance Report***
***For Ranges West of Iron Mountain Road***
***Parcel HR-194***
***IT Project No 796887***
***Fort McClellan Quality Assurance Report***

## *1.0 Overview*

Seven soil samples were collected in support of the investigation at Fort McClellan (FTMC) Parcel HR-194, Ranges West of Iron Mountain Road. All samples were submitted to EMAX Laboratories, Inc. for analysis. Soil samples were analyzed for target analyte list (TAL) metals, target compound list (TCL) volatiles, TCL semivolatiles, nitroaromatic-nitramine explosives, and perchlorate. QC samples consisted of the following types and quantities: 1 field duplicate, 1 matrix spike/matrix spike duplicate (MS/MSD), and 1 equipment rinsate. 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 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 data and validation 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 (DQO) were met, laboratory analytical results and data packages were examined for compliance with SW846 SW6010B/SW7000 Series, SW8330, SW8260B, SW8270C and U.S. Environmental Protection Agency (EPA) 314.0 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 analytical holding times were met.

## *2.2 Rejected Data*

Table 2.2-1 lists all rejected analytical data for soil samples. Sample re-collection at this time is not warranted due to all rejected results being reported as non-detect.

**Table 2.2-1 Rejected Analytical Results**

| Sample Delivery Group | Sample Number | Contaminant | Reason |
|---|---|---|---|
| 10194-01 | RC0002 | Acetone | Calibration Relative Response Factor (RRF) <0.05. |

## *2.3 Blank Results*

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

- Equipment rinsates (ER) are samples of analyte-free deionized water poured into, or 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 an analyte-free matrix, which is analyzed to verify the analysis system is free of contamination. ICBs and CCBs are analyzed immediately after the initial and continuing calibration is 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 |
|---|---|---|---|
| 10194-01 | RC0006 | Potassium | Potassium result for sample RC0006 was "B" qualified. |
| | RC0001, RC0003 & RC0004 | Cobalt | Cobalt result for samples RC0001, RC0003 & RC0004 were "B" qualified. |
| | RC0001, RC0002, RC0003, RC0004, RC0005, RC0006 & RC0007 | Methylene chloride | Methylene chloride result for samples RC0001, RC0002, RC0003, RC0004, RC0005, RC0006 & RC0007 were "B" qualified. |
| | RC0002 | Trichlorofluoromethane | Trichlorofluoromethane result for sample RC0002 was "B" qualified. |

## *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 matrix spike/matrix spike duplicate (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 list field duplicate, LCS/LCSD and MS/MSD RPD anomalies.

**Table 2.4-1 Precision Acceptance Criteria**

| Field/Laboratory QC Type | Matrix | |
|---|---|---|
| | Aqueous | Soil |
| Field Duplicate (Both Organic & Inorganic) | RPD < 35% | RPD < 50% |
| Perchlorate LCS/LCSD and MS/MSD | RPD < 10% | RPD < 20% |
| TCL VOC 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" |
| TCL SVOC 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" |
| 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% |

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

| Sample Delivery Group | Sample Number | Contaminant | Assigned Validation Qualifier |
|---|---|---|---|
| 10194-01 | RC0006 (Parent) / RC0007 (FD) | Chromium (108%) | Chromium results for samples RC0006 and RC0007 were "J" qualified due to RPD between parent sample and its corresponding field duplicate exceeding QC requirements. |

## 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 SW846 SW6010B/SW7000 Series methodology, nitroaromatic-nitramine explosives by SW8330, TCL volatiles by SW8260B, TCL semivolatiles by SW8270C, and perchlorate by EPA 314.0. Reported results indicate that an acceptable level of analytical accuracy was achieved. Surrogate recoveries, LCS/LCSD, and MS/MSD spike recoveries which exceed QC criteria are listed in Table 2.5-1.

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

| Sample Delivery Group | Sample Number | Contaminant | Action |
|---|---|---|---|
| 10194-01 | RC0001 MS/MSD | Antimony (LB)<br>Lead (LB) | Antimony and lead results for samples RC0001, RC0002, RC0003, RC0004, RC0005, RC0006 & RC0007 were "J" / "UJ" qualified due to MS/MSD spike recoveries exceeding QC requirements. |

LB - MS/MSD low 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. Soil sample data are being used to assess potential impacts to terrestrial biota that might use the site for food and/or habitat purposes

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-194 Ranges West of Iron Mountain Road. 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-194 requirement for completeness is 95% for both aqueous and soil samples. The % Completeness for this task is calculated to be 99.9%

- % Completeness = (1162 / 1163) x 100 = 99.9%.

## *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-194
# Ranges West of Iron Mountain Road
# Analytical Summary
# Project No. 796887

## HR-194 Soil Sampling

| Sample Location | Sample Name | Sample Number | Date Sampled | Analytical Suite |
|---|---|---|---|---|
| HR-194-MW01 | HR-194-MW01-SS-RC0001-REG | RC0001 | 06-Feb-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Semivolatiles by SW8270C, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-194-MW01-SS-RC0001-MS | RC0001-MS | 06-Feb-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Semivolatiles by SW8270C, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-194-MW01-SS-RC0001-MSD | RC0001-MSD | 06-Feb-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Semivolatiles by SW8270C, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-194-MW01-DS-RC0002-REG | RC0002 | 06-Feb-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Semivolatiles by SW8270C, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-194-MW02 | HR-194-MW02-SS-RC0003-REG | RC0003 | 06-Feb-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Semivolatiles by SW8270C, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-194-MW02-DS-RC0004-REG | RC0004 | 06-Feb-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Semivolatiles by SW8270C, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-194-MW03 | HR-194-MW03-SS-RC0005-REG | RC0005 | 06-Feb-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Semivolatiles by SW8270C, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-194-MW03-DS-RC0006-REG | RC0006 | 06-Feb-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Semivolatiles by SW8270C, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-194-MW03-DS-RC0007-FD | RC0007 | 06-Feb-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Semivolatiles by SW8270C, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |

## HR-194 Groundwater Sampling

| Sample Location | Sample Name | Sample Number | Date Sampled | Analytical Suite |
|---|---|---|---|---|
| HR-194-MW01 | HR-194-MW01-GW-RC3001-REG | RC3001 | Not Sampled | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Semivolatiles by SW8270C, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-194-MW02 | HR-194-MW02-GW-RC3002-REG | RC3002 | Not Sampled | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Semivolatiles by SW8270C, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-194-MW03 | HR-194-MW03-GW-RC3003-REG | RC3003 | Not Sampled | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Semivolatiles by SW8270C, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |

# ATTACHMENT B

# DATA VALIDATION SUMMARY REPORT

***Data Validation Summary Report***
***for the Site Investigation Performed at the***
***Ranges West of Iron Mountain Road (Parcel HR-194)***
***Fort McClellan***

## *1.0 Introduction*

Level III data validation was performed on 100% of the environmental samples collected at Ranges West of Iron Mountain Road (Parcel HR-194). The analytical data consisted of one sample delivery group (SDG) 10194-01, which was analyzed by EMAX Laboratories. The chemical parameters for which the samples were analyzed, are identified below:

| **Parameter** (Method) |
|---|
| Volatile Organics by GC/MS SW846 8260B |
| Semivolatile Organic Compounds by SW846 8270C |
| TAL Metals by SW846 6010B/7470A |
| Nitroaromatic and Nitramine Explosives by SW846 8330 |
| Perchlorate by EPA 314.0 |

## *2.0 Procedures*

The sample data were validated following the logic identified in the *USEPA Contract Laboratory Program (CLP) National Functional Guidelines For Inorganic Data Review (February 1994)* and *USEPA Contract Laboratory Program National Functional Guidelines For Organic Review (October 1999)* for all areas except Blanks. *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's) were applied to all sample results. As the result of the use of Update III SW846 test methods for the analytical data and the application of the 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 Chromatograph (GC) and Gas Chromatograph/Mass Spectra (GC/MS) calibration areas and is due to the fact that the analytical methods are "performance-based", and allows 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, CFR, SOP's, QAP) 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 qualification. The only rejected data ('R' qualified) were due to "poor performing" volatile compounds (ketones, some halogenated hydrocarbons, e.g.), which exhibited poor calibration responses in the associated calibration data.

Individual validation reports have been prepared for each parameter in each SDG 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 Parcel HR-194. 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 Volatile Organics by GC/MS SW846 8260B*

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 Calibration

The initial calibration and continuing calibrations associated with the project samples met QC criteria, with the exception of the following:

- The following exhibited individual ICAL RRF<.1 and/or CCAL %D's > 20%:

| SDG Number | Samples Affected | Compound(s) | Validation Qualifier |
|---|---|---|---|
| 10194-01 | ALL | Acetone, Carbon disulfide, Dichlorodifluoromethane | R/UJ/J |

Blanks

The 5X/10X rule for contaminants found in the associated equipment rinses, trip blanks, and method blanks was applied to all sample results. All were acceptable with the exception of the following:

Note: 'B' Qualifier was applied to the following sample results.

| SDG | Samples Affected | Compound | Associated Blank Contamination |
|---|---|---|---|
| 10194-01 | ALL | Methylene Chloride | Method |
| | RC0002 | Trichlorofluoromethane | Method |

B' qualifiers assigned to designate blank contamination, which are identification qualifiers, take precedence over estimating qualifiers, assigned due to quantitation.

Surrogate Recoveries

All surrogate recoveries were within acceptable QC criteria.

Matrix Spike / Matrix Spike Duplicate

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

Laboratory Control Sample (LCS)

LCS 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.

Internal Standards

All internal standards met QC criteria

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.

### *4.2 Semivolatile Organic Compounds by SW846 8270C*

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 project samples.

Initial and Continuing Calibration

All initial and continuing calibrations associated with the project samples met QC criteria, with the exception of the following:

The following exhibited individual ICAL %RSD>30 and/or CCAL %D>20: Non-detect results were estimated (qualified 'UJ'); Unless rejected (qualified 'R') due to ICAL/CCAL minimum RRF criteria not met; Positive results were estimated (qualified 'J'); Unless 'B' qualified due to blank contamination.

| SDG Number | Sample Number | Compound | Validation Qualifier |
|---|---|---|---|
| 10194-01 | ALL | 4-Nitrophenol, bis(2-Chloroethyl)ether, bis(2-Chloroisopropyl)ether, n-Nitroso-di-n-propylamine | UJ |

Blanks

The 5X/10X rule for contaminants found in the associated equipment rinses, trip blanks, and method blanks was applied to all sample results. All were acceptable.

Surrogate Recoveries

All surrogate recoveries were within acceptable QC ranges.

Matrix Spike / Matrix Spike Duplicate

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

Laboratory Control Sample

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

Internal Standards

All Internal Standard results were within acceptable QC ranges.

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 TAL Metals by SW846 6010B/7471A*

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 exception of the following:

Note: 'B' Qualifiers were applied to all of the following sample results.

| SDG | Samples Affected | Analyte/Analytes | Associated Blank Contamination |
|---|---|---|---|
| 10194-01 | RC0006 | Potassium | Calibration |
| | RC0001, RC0003, RC0004 | Cobalt | Calibration |

'B' qualifiers assigned to designate blank contamination, which are identification qualifiers, take precedence over estimating qualifiers, assigned due to quantitation.

Matrix Spike / Matrix Spike Duplicate

Batch QC was performed for the project samples and all QC criteria were met, with the exception of the following:

| SDG | Samples Affected | Element/Elements | Validation Qualifier |
|---|---|---|---|
| 10194-01 | ALL | Antimony, Lead | J/UJ |

Laboratory Control Sample (LCS)

All QC criteria were met for the LCS associated with the project sample analyses.

Interference Check Sample (ICS)

All ICS % recoveries for the project samples were acceptable.

ICP Serial Dilutions

All QC criteria were met, with the exception of the following:

| SDG | Samples Affected | Element/Elements | Validation Qualifier |
|---|---|---|---|
| 10194-01 | ALL | Vanadium | J |

Field Duplicates

Original and field duplicate results were evaluated and no problems were identified, with the exception of the following:

| SDG | Samples Affected | Element/Elements | Validation Qualifier |
|---|---|---|---|
| 10194-01 | RC0006 (original), RC0007 (duplicate) | Chromium | J |

Sample Quantitation

Results quantified between the IDL and the RL ("J" flagged by the laboratory) were qualified as estimated (J).

### *4.4 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

The initial calibration 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 acceptable QC ranges.

Matrix Spike / Matrix Spike Duplicate

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

Laboratory Control Sample (LCS)

LCS 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.

### *4.5 Perchlorate by EPA 314.0*

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

Laboratory Control Sample (LCS)

All QC criteria were met for the LCS associated with the project sample analyses.

Field Duplicates

Original and field duplicate results were evaluated and no problems were noted.

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.

## *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 "nondetect" may be inaccurate or imprecise. The nondetect result should be estimated.

## Validation Reason Code Definitions

| Reason Code | Definition |
|---|---|
| 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

Run Date: October 4, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10194-01** | | | | | | | | | | | | | | | | | | |
| RC0001 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 4720 | mg/kg | | Y | Y | P | | | | | | | B059-01 | 22:53 |
| | | | | ANTIMONY | 11.3 | mg/kg | U | N | Y | U | UJ | | 08A | | | | B059-01 | 22:53 |
| | | | | ARSENIC | 2.96 | mg/kg | | Y | Y | P | | | | | | | B059-01 | 23:10 |
| | | | | BARIUM | 16.8 | mg/kg | | Y | Y | P | | | | | | | B059-01 | 22:53 |
| | | | | BERYLLIUM | .167 | mg/kg | J | Y | Y | P | J | | 15 | | | | B059-01 | 22:53 |
| | | | | CADMIUM | .563 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 22:53 |
| | | | | CALCIUM | 78.3 | mg/kg | J | Y | Y | P | J | | 15 | | | | B059-01 | 22:53 |
| | | | | CHROMIUM | 10.5 | mg/kg | | Y | Y | P | | | | | | | B059-01 | 22:53 |
| | | | | COBALT | 1.59 | mg/kg | J | Y | Y | F | B | | 06B | 15 | | | B059-01 | 22:53 |
| | | | | COPPER | 6.29 | mg/kg | | Y | Y | P | | | | | | | B059-01 | 22:53 |
| | | | | IRON | 10800 | mg/kg | | Y | Y | P | | | | | | | B059-01 | 22:53 |
| | | | | LEAD | 44.6 | mg/kg | | Y | Y | P | J | | 08A | | | | B059-01 | 23:10 |
| | | | | MAGNESIUM | 100 | mg/kg | J | Y | Y | P | J | | 15 | | | | B059-01 | 22:53 |
| | | | | MANGANESE | 54.5 | mg/kg | | Y | Y | P | | | | | | | B059-01 | 22:53 |
| | | | | NICKEL | 1.39 | mg/kg | J | Y | Y | P | J | | 15 | | | | B059-01 | 22:53 |
| | | | | POTASSIUM | 563 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 22:53 |
| | | | | SELENIUM | 1.13 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 23:10 |
| | | | | SILVER | 1.13 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 22:53 |
| | | | | SODIUM | 113 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 22:53 |
| | | | | THALLIUM | 2.25 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 23:10 |
| | | | | VANADIUM | 16.7 | mg/kg | | Y | Y | P | J | | 13 | | | | B059-01 | 22:53 |
| | | | | ZINC | 12.5 | mg/kg | | Y | Y | P | | | | | | | B059-01 | 22:53 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .113 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 11:21 |
| | SW7471A | TOTAL | N 1 5 | MERCURY | .563 | mg/kg | U | N | Y | U | U | | | | | | B059-01T | 11:28 |
| RC0002 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 6050 | mg/kg | | Y | Y | P | | | | | | | B059-02 | 22:58 |
| | | | | ANTIMONY | 12.4 | mg/kg | U | N | Y | U | UJ | | 08A | | | | B059-02 | 22:58 |
| | | | | ARSENIC | 5.78 | mg/kg | | Y | Y | P | | | | | | | B059-02 | 22:27 |
| | | | | BARIUM | 5.55 | mg/kg | | Y | Y | P | | | | | | | B059-02 | 22:58 |
| | | | | BERYLLIUM | .294 | mg/kg | J | Y | Y | P | J | | 15 | | | | B059-02 | 22:58 |
| | | | | CADMIUM | .619 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 22:58 |
| | | | | CALCIUM | 28.5 | mg/kg | J | Y | Y | P | J | | 15 | | | | B059-02 | 22:58 |
| | | | | CHROMIUM | 18.8 | mg/kg | | Y | Y | P | | | | | | | B059-02 | 22:58 |
| | | | | COBALT | 3.37 | mg/kg | | Y | Y | P | | | | | | | B059-02 | 22:58 |
| | | | | COPPER | 26.9 | mg/kg | | Y | Y | P | | | | | | | B059-02 | 22:58 |
| | | | | IRON | 33100 | mg/kg | | Y | Y | P | | | | | | | B059-02 | 22:58 |
| | | | | LEAD | 9.64 | mg/kg | | Y | Y | P | J | | 08A | | | | B059-02 | 22:27 |
| | | | | MAGNESIUM | 57.8 | mg/kg | J | Y | Y | P | J | | 15 | | | | B059-02 | 22:58 |
| | | | | MANGANESE | 58.5 | mg/kg | | Y | Y | P | | | | | | | B059-02 | 22:58 |
| | | | | NICKEL | 5.68 | mg/kg | | Y | Y | P | | | | | | | B059-02 | 22:58 |
| | | | | POTASSIUM | 619 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 22:58 |

# Validation Qualifier Data Entry Verification

Run Date: October 4, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10194-01** | | | | | | | | | | | | | | | | | | |
| RC0002 | SW6010B | SW3050 | N 0 1 | SELENIUM | 1.24 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 22:27 |
| | | | | SILVER | 1.24 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 22:58 |
| | | | | SODIUM | 124 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 22:58 |
| | | | | THALLIUM | 1.15 | mg/kg | J | Y | Y | P | J | | 15 | | | | B059-02 | 22:27 |
| | | | | VANADIUM | 43.1 | mg/kg | | Y | Y | P | J | | 13 | | | | B059-02 | 22:58 |
| | | | | ZINC | 27.6 | mg/kg | | Y | Y | P | | | | | | | B059-02 | 22:58 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .066 | mg/kg | J | Y | Y | P | J | | 15 | | | | B059-02 | 11:30 |
| RC0003 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 6960 | mg/kg | | Y | Y | P | | | | | | | B059-03 | 23:02 |
| | | | | ANTIMONY | 11.2 | mg/kg | U | N | Y | U | UJ | | 08A | | | | B059-03 | 23:02 |
| | | | | ARSENIC | 2.89 | mg/kg | | Y | Y | P | | | | | | | B059-03 | 22:32 |
| | | | | BARIUM | 24.7 | mg/kg | | Y | Y | P | | | | | | | B059-03 | 23:02 |
| | | | | BERYLLIUM | .165 | mg/kg | J | Y | Y | P | J | | 15 | | | | B059-03 | 23:02 |
| | | | | CADMIUM | .562 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 23:02 |
| | | | | CALCIUM | 199 | mg/kg | | Y | Y | P | | | | | | | B059-03 | 23:02 |
| | | | | CHROMIUM | 18.2 | mg/kg | | Y | Y | P | | | | | | | B059-03 | 23:02 |
| | | | | COBALT | 1.18 | mg/kg | J | Y | Y | F | B | | 06B | 15 | | | B059-03 | 23:02 |
| | | | | COPPER | 3.14 | mg/kg | | Y | Y | P | | | | | | | B059-03 | 23:02 |
| | | | | IRON | 13200 | mg/kg | | Y | Y | P | | | | | | | B059-03 | 23:02 |
| | | | | LEAD | 5.98 | mg/kg | | Y | Y | P | J | | 08A | | | | B059-03 | 22:32 |
| | | | | MAGNESIUM | 188 | mg/kg | | Y | Y | P | | | | | | | B059-03 | 23:02 |
| | | | | MANGANESE | 34.6 | mg/kg | | Y | Y | P | | | | | | | B059-03 | 23:02 |
| | | | | NICKEL | 1.68 | mg/kg | J | Y | Y | P | J | | 15 | | | | B059-03 | 23:02 |
| | | | | POTASSIUM | 562 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 23:02 |
| | | | | SELENIUM | 1.12 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 22:32 |
| | | | | SILVER | 1.12 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 23:02 |
| | | | | SODIUM | 112 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 23:02 |
| | | | | THALLIUM | 2.25 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 22:32 |
| | | | | VANADIUM | 21.8 | mg/kg | | Y | Y | P | J | | 13 | | | | B059-03 | 23:02 |
| | | | | ZINC | 9.88 | mg/kg | | Y | Y | P | | | | | | | B059-03 | 23:02 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .026 | mg/kg | J | Y | Y | P | J | | 15 | | | | B059-03 | 11:33 |
| RC0004 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 10100 | mg/kg | | Y | Y | P | | | | | | | B059-04 | 23:07 |
| | | | | ANTIMONY | 11.7 | mg/kg | U | N | Y | U | UJ | | 08A | | | | B059-04 | 23:07 |
| | | | | ARSENIC | 4.91 | mg/kg | | Y | Y | P | | | | | | | B059-04 | 22:36 |
| | | | | BARIUM | 7.91 | mg/kg | | Y | Y | P | | | | | | | B059-04 | 23:07 |
| | | | | BERYLLIUM | .161 | mg/kg | J | Y | Y | P | J | | 15 | | | | B059-04 | 23:07 |
| | | | | CADMIUM | .587 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 23:07 |
| | | | | CALCIUM | 18.5 | mg/kg | J | Y | Y | P | J | | 15 | | | | B059-04 | 23:07 |
| | | | | CHROMIUM | 80.2 | mg/kg | | Y | Y | P | | | | | | | B059-04 | 23:07 |
| | | | | COBALT | .526 | mg/kg | J | Y | Y | F | B | | 06B | 15 | | | B059-04 | 23:07 |
| | | | | COPPER | 8.13 | mg/kg | | Y | Y | P | | | | | | | B059-04 | 23:07 |

# Validation Qualifier Data Entry Verification

Run Date: October 4, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10194-01** | | | | | | | | | | | | | | | | | | |
| RC0004 | SW6010B | SW3050 | N 0 1 | IRON | 36000 | mg/kg | | Y | Y | P | | | | | | | B059-04 | 23:07 |
| | | | | LEAD | 7.33 | mg/kg | | Y | Y | P | J | | 08A | | | | B059-04 | 22:36 |
| | | | | MAGNESIUM | 106 | mg/kg | J | Y | Y | P | J | | 15 | | | | B059-04 | 23:07 |
| | | | | MANGANESE | 35.5 | mg/kg | | Y | Y | P | | | | | | | B059-04 | 23:07 |
| | | | | NICKEL | 1.24 | mg/kg | J | Y | Y | P | J | | 15 | | | | B059-04 | 23:07 |
| | | | | POTASSIUM | 587 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 23:07 |
| | | | | SELENIUM | 1.17 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 22:36 |
| | | | | SILVER | 1.17 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 23:07 |
| | | | | SODIUM | 117 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 23:07 |
| | | | | THALLIUM | .676 | mg/kg | J | Y | Y | P | J | | 15 | | | | B059-04 | 22:36 |
| | | | | VANADIUM | 41.7 | mg/kg | | Y | Y | P | J | | 13 | | | | B059-04 | 23:07 |
| | | | | ZINC | 14.2 | mg/kg | | Y | Y | P | | | | | | | B059-04 | 23:07 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .054 | mg/kg | J | Y | Y | P | J | | 15 | | | | B059-04 | 11:43 |
| RC0005 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 4760 | mg/kg | | Y | Y | P | | | | | | | B059-05 | 23:25 |
| | | | | ANTIMONY | 11.2 | mg/kg | U | N | Y | U | UJ | | 08A | | | | B059-05 | 23:25 |
| | | | | ARSENIC | 2.03 | mg/kg | | Y | Y | P | | | | | | | B059-05 | 22:40 |
| | | | | BARIUM | 23.7 | mg/kg | | Y | Y | P | | | | | | | B059-05 | 23:25 |
| | | | | BERYLLIUM | .198 | mg/kg | J | Y | Y | P | J | | 15 | | | | B059-05 | 23:25 |
| | | | | CADMIUM | .558 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 23:25 |
| | | | | CALCIUM | 166 | mg/kg | | Y | Y | P | | | | | | | B059-05 | 23:25 |
| | | | | CHROMIUM | 8.91 | mg/kg | | Y | Y | P | | | | | | | B059-05 | 23:25 |
| | | | | COBALT | 1.46 | mg/kg | J | Y | Y | P | J | | 15 | | | | B059-05 | 23:25 |
| | | | | COPPER | 3.53 | mg/kg | | Y | Y | P | | | | | | | B059-05 | 23:25 |
| | | | | IRON | 11800 | mg/kg | | Y | Y | P | | | | | | | B059-05 | 23:25 |
| | | | | LEAD | 27.6 | mg/kg | | Y | Y | P | J | | 08A | | | | B059-05 | 22:40 |
| | | | | MAGNESIUM | 117 | mg/kg | | Y | Y | P | | | | | | | B059-05 | 23:25 |
| | | | | MANGANESE | 158 | mg/kg | | Y | Y | P | | | | | | | B059-05 | 23:25 |
| | | | | NICKEL | 2.23 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 23:25 |
| | | | | POTASSIUM | 558 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 23:25 |
| | | | | SELENIUM | 1.12 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 22:40 |
| | | | | SILVER | 1.12 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 23:25 |
| | | | | SODIUM | 112 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 23:25 |
| | | | | THALLIUM | 2.23 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 22:40 |
| | | | | VANADIUM | 10.7 | mg/kg | | Y | Y | P | J | | 13 | | | | B059-05 | 23:25 |
| | | | | ZINC | 14 | mg/kg | | Y | Y | P | | | | | | | B059-05 | 23:25 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .112 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 11:46 |
| RC0006 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 15100 | mg/kg | | Y | Y | P | | | | | | | B059-06 | 23:30 |
| | | | | ANTIMONY | 11.4 | mg/kg | U | N | Y | U | UJ | | 08A | | | | B059-06 | 23:30 |
| | | | | ARSENIC | 4.61 | mg/kg | | Y | Y | P | | | | | | | B059-06 | 23:14 |
| | | | | BARIUM | 17.4 | mg/kg | | Y | Y | P | | | | | | | B059-06 | 23:30 |

# Validation Qualifier Data Entry Verification

Run Date: October 4, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10194-01** | | | | | | | | | | | | | | | | | | |
| RC0006 | SW6010B | SW3050 | N 0 1 | BERYLLIUM | .183 | mg/kg | J | Y | Y | P | J | | 15 | | | | B059-06 | 23:30 |
| | | | | CADMIUM | .572 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 23:30 |
| | | | | CALCIUM | 41.2 | mg/kg | J | Y | Y | P | J | | 15 | | | | B059-06 | 23:30 |
| | | | | CHROMIUM | 37.7 | mg/kg | | Y | Y | P | J | | 17 | | | | B059-06 | 23:30 |
| | | | | COBALT | .637 | mg/kg | J | Y | Y | P | J | | 15 | | | | B059-06 | 23:30 |
| | | | | COPPER | 6.1 | mg/kg | | Y | Y | P | | | | | | | B059-06 | 23:30 |
| | | | | IRON | 19400 | mg/kg | | Y | Y | P | | | | | | | B059-06 | 23:30 |
| | | | | LEAD | 7.77 | mg/kg | | Y | Y | P | J | | 08A | | | | B059-06 | 23:14 |
| | | | | MAGNESIUM | 149 | mg/kg | | Y | Y | P | | | | | | | B059-06 | 23:30 |
| | | | | MANGANESE | 58.5 | mg/kg | | Y | Y | P | | | | | | | B059-06 | 23:30 |
| | | | | NICKEL | 2.1 | mg/kg | J | Y | Y | P | J | | 15 | | | | B059-06 | 23:30 |
| | | | | POTASSIUM | 177 | mg/kg | J | Y | Y | F | B | | 06B | 15 | | | B059-06 | 23:30 |
| | | | | SELENIUM | 1.14 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 23:14 |
| | | | | SILVER | 1.14 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 23:30 |
| | | | | SODIUM | 114 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 23:30 |
| | | | | THALLIUM | 2.29 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 23:14 |
| | | | | VANADIUM | 35.7 | mg/kg | | Y | Y | P | J | | 13 | | | | B059-06 | 23:30 |
| | | | | ZINC | 7.08 | mg/kg | | Y | Y | P | | | | | | | B059-06 | 23:30 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .093 | mg/kg | J | Y | Y | P | J | | 15 | | | | B059-06 | 11:49 |
| RC0007 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 15900 | mg/kg | | Y | Y | | | | | | | | B059-07 | 23:34 |
| | | | | ANTIMONY | 11.4 | mg/kg | U | N | Y | | UJ | | 08A | | | | B059-07 | 23:34 |
| | | | | ARSENIC | 2.79 | mg/kg | | Y | Y | | | | | | | | B059-07 | 23:18 |
| | | | | BARIUM | 17.3 | mg/kg | | Y | Y | | | | | | | | B059-07 | 23:34 |
| | | | | BERYLLIUM | .161 | mg/kg | J | Y | Y | | J | | 15 | | | | B059-07 | 23:34 |
| | | | | CADMIUM | .572 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 23:34 |
| | | | | CALCIUM | 42.8 | mg/kg | J | Y | Y | | J | | 15 | | | | B059-07 | 23:34 |
| | | | | CHROMIUM | 11.2 | mg/kg | | Y | Y | | J | | 17 | | | | B059-07 | 23:34 |
| | | | | COBALT | .733 | mg/kg | J | Y | Y | | J | | 15 | | | | B059-07 | 23:34 |
| | | | | COPPER | 5.82 | mg/kg | | Y | Y | | | | | | | | B059-07 | 23:34 |
| | | | | IRON | 17200 | mg/kg | | Y | Y | | | | | | | | B059-07 | 23:34 |
| | | | | LEAD | 7.89 | mg/kg | | Y | Y | | J | | 08A | | | | B059-07 | 23:18 |
| | | | | MAGNESIUM | 146 | mg/kg | | Y | Y | | | | | | | | B059-07 | 23:34 |
| | | | | MANGANESE | 55.4 | mg/kg | | Y | Y | | | | | | | | B059-07 | 23:34 |
| | | | | NICKEL | 2.3 | mg/kg | | Y | Y | | | | | | | | B059-07 | 23:34 |
| | | | | POTASSIUM | 572 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 23:34 |
| | | | | SELENIUM | 1.14 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 23:18 |
| | | | | SILVER | 1.14 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 23:34 |
| | | | | SODIUM | 114 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 23:34 |
| | | | | THALLIUM | 2.29 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 23:18 |
| | | | | VANADIUM | 29.6 | mg/kg | | Y | Y | | J | | 13 | | | | B059-07 | 23:34 |

# Validation Qualifier Data Entry Verification

Run Date: October 4, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10194-01** | | | | | | | | | | | | | | | | | | | | |
| RC0007 | SW6010B | SW3050 | N | 0 | 1 | ZINC | 6.82 | mg/kg | | Y | Y | | | | | | | | B059-07 | 23:34 |
| | SW7471A | TOTAL | N | 0 | 1 | MERCURY | .103 | mg/kg | J | Y | Y | | J | | 15 | | | | B059-07 | 11:51 |
| RC0001 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 19:17 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 19:17 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 19:17 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 19:17 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 19:17 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 19:17 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 19:17 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 19:17 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 19:17 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 19:17 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 19:17 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 19:17 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 19:17 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 19:17 |
| RC0002 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 21:59 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 21:59 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 21:59 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 21:59 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 21:59 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 21:59 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 21:59 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 21:59 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 21:59 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 21:59 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 21:59 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 21:59 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 21:59 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 21:59 |
| RC0003 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 22:39 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 22:39 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 22:39 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 22:39 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 22:39 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 22:39 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 22:39 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 22:39 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 22:39 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 22:39 |

# Validation Qualifier Data Entry Verification

Run Date: October 4, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10194-01** | | | | | | | | | | | | | | | | | | |
| RC0003 | SW8330 | METHOD | N 0 1 | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 22:39 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 22:39 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 22:39 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 22:39 |
| RC0004 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 23:20 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 23:20 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 23:20 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 23:20 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 23:20 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 23:20 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 23:20 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 23:20 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 23:20 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 23:20 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 23:20 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 23:20 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 23:20 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 23:20 |
| RC0005 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 00:00 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 00:00 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 00:00 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 00:00 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 00:00 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 00:00 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 00:00 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 00:00 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 00:00 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 00:00 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 00:00 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 00:00 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 00:00 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 00:00 |
| RC0006 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 00:40 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 00:40 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 00:40 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 00:40 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 00:40 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 00:40 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 00:40 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 00:40 |

# Validation Qualifier Data Entry Verification

Run Date: October 4, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10194-01** | | | | | | | | | | | | | | | | | | | | |
| RC0006 | SW8330 | METHOD | N | 0 | 1 | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 00:40 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 00:40 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 00:40 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 00:40 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 00:40 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 00:40 |
| RC0007 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 01:21 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 01:21 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 01:21 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 01:21 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 01:21 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 01:21 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 01:21 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 01:21 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 01:21 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 01:21 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 01:21 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 01:21 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 01:21 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 01:21 |
| RC0001 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0563 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 21:18 |
| RC0002 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0619 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 21:35 |
| RC0003 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0562 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 21:52 |
| RC0004 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0587 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 22:09 |
| RC0005 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0558 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 22:26 |
| RC0006 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0572 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 22:44 |
| RC0007 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0572 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 23:01 |
| RC0001 | SW8270C | SW3550 | N | 0 | 1 | 1,2,4-TRICHLOROBENZENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 18:40 |
| | | | | | | 1,2-DICHLOROBENZENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 18:40 |
| | | | | | | 1,3-DICHLOROBENZENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 18:40 |
| | | | | | | 1,4-DICHLOROBENZENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 18:40 |
| | | | | | | 2,4,5-TRICHLOROPHENOL | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 18:40 |
| | | | | | | 2,4,6-TRICHLOROPHENOL | .93 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 18:40 |
| | | | | | | 2,4-DICHLOROPHENOL | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 18:40 |
| | | | | | | 2,4-DIMETHYLPHENOL | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 18:40 |
| | | | | | | 2,4-DINITROPHENOL | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 18:40 |
| | | | | | | 2,4-DINITROTOLUENE | .22 | mg/kg | J | Y | Y | P | J | | 15 | | | | B059-01 | 18:40 |
| | | | | | | 2,6-DINITROTOLUENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 18:40 |
| | | | | | | 2-CHLORONAPHTHALENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 18:40 |

# Validation Qualifier Data Entry Verification

Run Date: October 4, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10194-01** | | | | | | | | | | | | | | | | | | |
| RC0001 | SW8270C | SW3550 | N 0 1 | 2-CHLOROPHENOL | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 18:40 |
| | | | | 2-METHYLNAPHTHALENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 18:40 |
| | | | | 2-METHYLPHENOL | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 18:40 |
| | | | | 2-NITROANILINE | .93 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 18:40 |
| | | | | 2-NITROPHENOL | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 18:40 |
| | | | | 3,3'-DICHLOROBENZIDINE | .93 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 18:40 |
| | | | | 3-NITROANILINE | .93 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 18:40 |
| | | | | 4,6-DINITRO-2-METHYLPHENOL | .93 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 18:40 |
| | | | | 4-BROMOPHENYL-PHENYL ETHER | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 18:40 |
| | | | | 4-CHLORO-3-METHYLPHENOL | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 18:40 |
| | | | | 4-CHLOROANILINE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 18:40 |
| | | | | 4-CHLOROPHENYL-PHENYL ETHER | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 18:40 |
| | | | | 4-METHYLPHENOL | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 18:40 |
| | | | | 4-NITROANILINE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 18:40 |
| | | | | 4-NITROPHENOL | .93 | mg/kg | U | N | Y | U | UJ | 05B | | | | | B059-01 | 18:40 |
| | | | | ACENAPHTHENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 18:40 |
| | | | | ACENAPHTHYLENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 18:40 |
| | | | | ANTHRACENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 18:40 |
| | | | | BENZO(A)ANTHRACENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 18:40 |
| | | | | BENZO(A)PYRENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 18:40 |
| | | | | BENZO(B)FLUORANTHENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 18:40 |
| | | | | BENZO(G,H,I)PERYLENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 18:40 |
| | | | | BENZO(K)FLUORANTHENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 18:40 |
| | | | | BIS(2-CHLOROETHOXY)METHANE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 18:40 |
| | | | | BIS(2-CHLOROETHYL)ETHER | .37 | mg/kg | U | N | Y | U | UJ | 05B | | | | | B059-01 | 18:40 |
| | | | | BIS(2-CHLOROISOPROPYL)ETHER | .37 | mg/kg | U | N | Y | U | UJ | 05B | | | | | B059-01 | 18:40 |
| | | | | BIS(2-ETHYLHEXYL)PHTHALATE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 18:40 |
| | | | | BUTYLBENZYLPHTHALATE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 18:40 |
| | | | | CARBAZOLE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 18:40 |
| | | | | CHRYSENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 18:40 |
| | | | | DI-N-BUTYLPHTHALATE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 18:40 |
| | | | | DI-N-OCTYLPHTHALATE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 18:40 |
| | | | | DIBENZO(A,H)ANTHRACENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 18:40 |
| | | | | DIBENZOFURAN | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 18:40 |
| | | | | DIETHYLPHTHALATE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 18:40 |
| | | | | DIMETHYLPHTHALATE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 18:40 |
| | | | | FLUORANTHENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 18:40 |
| | | | | FLUORENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 18:40 |
| | | | | HEXACHLOROBENZENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 18:40 |
| | | | | HEXACHLOROBUTADIENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 18:40 |

# Validation Qualifier Data Entry Verification

Run Date: October 4, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10194-01** | | | | | | | | | | | | | | | | | | |
| RC0001 | SW8270C | SW3550 | N 0 1 | HEXACHLOROCYCLOPENTADIENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 18:40 |
| | | | | HEXACHLOROETHANE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 18:40 |
| | | | | INDENO(1,2,3-CD)PYRENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 18:40 |
| | | | | ISOPHORONE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 18:40 |
| | | | | N-NITROSO-DI-N-PROPYLAMINE | .37 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B059-01 | 18:40 |
| | | | | N-NITROSODIPHENYLAMINE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 18:40 |
| | | | | NAPHTHALENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 18:40 |
| | | | | NITROBENZENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 18:40 |
| | | | | PENTACHLOROPHENOL | .25 | mg/kg | J | Y | Y | P | J | | 15 | | | | B059-01 | 18:40 |
| | | | | PHENANTHRENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 18:40 |
| | | | | PHENOL | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 18:40 |
| | | | | PYRENE | .37 | mg/kg | J | Y | Y | P | J | | 15 | | | | B059-01 | 18:40 |
| RC0002 | SW8270C | SW3550 | N 0 1 | 1,2,4-TRICHLOROBENZENE | .41 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 19:19 |
| | | | | 1,2-DICHLOROBENZENE | .41 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 19:19 |
| | | | | 1,3-DICHLOROBENZENE | .41 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 19:19 |
| | | | | 1,4-DICHLOROBENZENE | .41 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 19:19 |
| | | | | 2,4,5-TRICHLOROPHENOL | .41 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 19:19 |
| | | | | 2,4,6-TRICHLOROPHENOL | 1 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 19:19 |
| | | | | 2,4-DICHLOROPHENOL | .41 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 19:19 |
| | | | | 2,4-DIMETHYLPHENOL | .41 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 19:19 |
| | | | | 2,4-DINITROPHENOL | .41 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 19:19 |
| | | | | 2,4-DINITROTOLUENE | .41 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 19:19 |
| | | | | 2,6-DINITROTOLUENE | .41 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 19:19 |
| | | | | 2-CHLORONAPHTHALENE | .41 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 19:19 |
| | | | | 2-CHLOROPHENOL | .41 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 19:19 |
| | | | | 2-METHYLNAPHTHALENE | .41 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 19:19 |
| | | | | 2-METHYLPHENOL | .41 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 19:19 |
| | | | | 2-NITROANILINE | 1 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 19:19 |
| | | | | 2-NITROPHENOL | .41 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 19:19 |
| | | | | 3,3'-DICHLOROBENZIDINE | 1 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 19:19 |
| | | | | 3-NITROANILINE | 1 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 19:19 |
| | | | | 4,6-DINITRO-2-METHYLPHENOL | 1 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 19:19 |
| | | | | 4-BROMOPHENYL-PHENYL ETHER | .41 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 19:19 |
| | | | | 4-CHLORO-3-METHYLPHENOL | .41 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 19:19 |
| | | | | 4-CHLOROANILINE | .41 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 19:19 |
| | | | | 4-CHLOROPHENYL-PHENYL ETHER | .41 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 19:19 |
| | | | | 4-METHYLPHENOL | .41 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 19:19 |
| | | | | 4-NITROANILINE | .41 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 19:19 |
| | | | | 4-NITROPHENOL | 1 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B059-02 | 19:19 |
| | | | | ACENAPHTHENE | .41 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 19:19 |

# Validation Qualifier Data Entry Verification

Run Date: October 4, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10194-01** | | | | | | | | | | | | | | | | | | |
| RC0002 | SW8270C | SW3550 | N 0 1 | ACENAPHTHYLENE | .41 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 19:19 |
| | | | | ANTHRACENE | .41 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 19:19 |
| | | | | BENZO(A)ANTHRACENE | .41 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 19:19 |
| | | | | BENZO(A)PYRENE | .41 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 19:19 |
| | | | | BENZO(B)FLUORANTHENE | .41 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 19:19 |
| | | | | BENZO(G,H,I)PERYLENE | .41 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 19:19 |
| | | | | BENZO(K)FLUORANTHENE | .41 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 19:19 |
| | | | | BIS(2-CHLOROETHOXY)METHANE | .41 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 19:19 |
| | | | | BIS(2-CHLOROETHYL)ETHER | .41 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B059-02 | 19:19 |
| | | | | BIS(2-CHLOROISOPROPYL)ETHER | .41 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B059-02 | 19:19 |
| | | | | BIS(2-ETHYLHEXYL)PHTHALATE | .41 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 19:19 |
| | | | | BUTYLBENZYLPHTHALATE | .41 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 19:19 |
| | | | | CARBAZOLE | .41 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 19:19 |
| | | | | CHRYSENE | .41 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 19:19 |
| | | | | DI-N-BUTYLPHTHALATE | .41 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 19:19 |
| | | | | DI-N-OCTYLPHTHALATE | .41 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 19:19 |
| | | | | DIBENZO(A,H)ANTHRACENE | .41 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 19:19 |
| | | | | DIBENZOFURAN | .41 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 19:19 |
| | | | | DIETHYLPHTHALATE | .41 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 19:19 |
| | | | | DIMETHYLPHTHALATE | .41 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 19:19 |
| | | | | FLUORANTHENE | .41 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 19:19 |
| | | | | FLUORENE | .41 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 19:19 |
| | | | | HEXACHLOROBENZENE | .41 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 19:19 |
| | | | | HEXACHLOROBUTADIENE | .41 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 19:19 |
| | | | | HEXACHLOROCYCLOPENTADIENE | .41 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 19:19 |
| | | | | HEXACHLOROETHANE | .41 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 19:19 |
| | | | | INDENO(1,2,3-CD)PYRENE | .41 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 19:19 |
| | | | | ISOPHORONE | .41 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 19:19 |
| | | | | N-NITROSO-DI-N-PROPYLAMINE | .41 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B059-02 | 19:19 |
| | | | | N-NITROSODIPHENYLAMINE | .41 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 19:19 |
| | | | | NAPHTHALENE | .41 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 19:19 |
| | | | | NITROBENZENE | .41 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 19:19 |
| | | | | PENTACHLOROPHENOL | 1 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 19:19 |
| | | | | PHENANTHRENE | .41 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 19:19 |
| | | | | PHENOL | .41 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 19:19 |
| | | | | PYRENE | .41 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 19:19 |
| RC0003 | SW8270C | SW3550 | N 0 1 | 1,2,4-TRICHLOROBENZENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 19:57 |
| | | | | 1,2-DICHLOROBENZENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 19:57 |
| | | | | 1,3-DICHLOROBENZENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 19:57 |
| | | | | 1,4-DICHLOROBENZENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 19:57 |

# Validation Qualifier Data Entry Verification

Run Date: October 4, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10194-01** | | | | | | | | | | | | | | | | | | |
| RC0003 | SW8270C | SW3550 | N 0 1 | 2,4,5-TRICHLOROPHENOL | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 19:57 |
| | | | | 2,4,6-TRICHLOROPHENOL | .93 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 19:57 |
| | | | | 2,4-DICHLOROPHENOL | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 19:57 |
| | | | | 2,4-DIMETHYLPHENOL | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 19:57 |
| | | | | 2,4-DINITROPHENOL | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 19:57 |
| | | | | 2,4-DINITROTOLUENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 19:57 |
| | | | | 2,6-DINITROTOLUENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 19:57 |
| | | | | 2-CHLORONAPHTHALENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 19:57 |
| | | | | 2-CHLOROPHENOL | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 19:57 |
| | | | | 2-METHYLNAPHTHALENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 19:57 |
| | | | | 2-METHYLPHENOL | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 19:57 |
| | | | | 2-NITROANILINE | .93 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 19:57 |
| | | | | 2-NITROPHENOL | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 19:57 |
| | | | | 3,3'-DICHLOROBENZIDINE | .93 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 19:57 |
| | | | | 3-NITROANILINE | .93 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 19:57 |
| | | | | 4,6-DINITRO-2-METHYLPHENOL | .93 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 19:57 |
| | | | | 4-BROMOPHENYL-PHENYL ETHER | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 19:57 |
| | | | | 4-CHLORO-3-METHYLPHENOL | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 19:57 |
| | | | | 4-CHLOROANILINE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 19:57 |
| | | | | 4-CHLOROPHENYL-PHENYL ETHER | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 19:57 |
| | | | | 4-METHYLPHENOL | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 19:57 |
| | | | | 4-NITROANILINE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 19:57 |
| | | | | 4-NITROPHENOL | .93 | mg/kg | U | N | Y | U | UJ | 05B | | | | | B059-03 | 19:57 |
| | | | | ACENAPHTHENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 19:57 |
| | | | | ACENAPHTHYLENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 19:57 |
| | | | | ANTHRACENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 19:57 |
| | | | | BENZO(A)ANTHRACENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 19:57 |
| | | | | BENZO(A)PYRENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 19:57 |
| | | | | BENZO(B)FLUORANTHENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 19:57 |
| | | | | BENZO(G,H,I)PERYLENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 19:57 |
| | | | | BENZO(K)FLUORANTHENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 19:57 |
| | | | | BIS(2-CHLOROETHOXY)METHANE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 19:57 |
| | | | | BIS(2-CHLOROETHYL)ETHER | .37 | mg/kg | U | N | Y | U | UJ | 05B | | | | | B059-03 | 19:57 |
| | | | | BIS(2-CHLOROISOPROPYL)ETHER | .37 | mg/kg | U | N | Y | U | UJ | 05B | | | | | B059-03 | 19:57 |
| | | | | BIS(2-ETHYLHEXYL)PHTHALATE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 19:57 |
| | | | | BUTYLBENZYLPHTHALATE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 19:57 |
| | | | | CARBAZOLE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 19:57 |
| | | | | CHRYSENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 19:57 |
| | | | | DI-N-BUTYLPHTHALATE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 19:57 |
| | | | | DI-N-OCTYLPHTHALATE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 19:57 |

# Validation Qualifier Data Entry Verification

Run Date: October 4, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10194-01** | | | | | | | | | | | | | | | | | | |
| RC0003 | SW8270C | SW3550 | N 0 1 | DIBENZO(A,H)ANTHRACENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 19:57 |
| | | | | DIBENZOFURAN | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 19:57 |
| | | | | DIETHYLPHTHALATE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 19:57 |
| | | | | DIMETHYLPHTHALATE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 19:57 |
| | | | | FLUORANTHENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 19:57 |
| | | | | FLUORENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 19:57 |
| | | | | HEXACHLOROBENZENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 19:57 |
| | | | | HEXACHLOROBUTADIENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 19:57 |
| | | | | HEXACHLOROCYCLOPENTADIENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 19:57 |
| | | | | HEXACHLOROETHANE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 19:57 |
| | | | | INDENO(1,2,3-CD)PYRENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 19:57 |
| | | | | ISOPHORONE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 19:57 |
| | | | | N-NITROSO-DI-N-PROPYLAMINE | .37 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B059-03 | 19:57 |
| | | | | N-NITROSODIPHENYLAMINE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 19:57 |
| | | | | NAPHTHALENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 19:57 |
| | | | | NITROBENZENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 19:57 |
| | | | | PENTACHLOROPHENOL | .93 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 19:57 |
| | | | | PHENANTHRENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 19:57 |
| | | | | PHENOL | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 19:57 |
| | | | | PYRENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-03 | 19:57 |
| RC0004 | SW8270C | SW3550 | N 0 1 | 1,2,4-TRICHLOROBENZENE | .39 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 20:35 |
| | | | | 1,2-DICHLOROBENZENE | .39 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 20:35 |
| | | | | 1,3-DICHLOROBENZENE | .39 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 20:35 |
| | | | | 1,4-DICHLOROBENZENE | .39 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 20:35 |
| | | | | 2,4,5-TRICHLOROPHENOL | .39 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 20:35 |
| | | | | 2,4,6-TRICHLOROPHENOL | .97 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 20:35 |
| | | | | 2,4-DICHLOROPHENOL | .39 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 20:35 |
| | | | | 2,4-DIMETHYLPHENOL | .39 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 20:35 |
| | | | | 2,4-DINITROPHENOL | .39 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 20:35 |
| | | | | 2,4-DINITROTOLUENE | .39 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 20:35 |
| | | | | 2,6-DINITROTOLUENE | .39 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 20:35 |
| | | | | 2-CHLORONAPHTHALENE | .39 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 20:35 |
| | | | | 2-CHLOROPHENOL | .39 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 20:35 |
| | | | | 2-METHYLNAPHTHALENE | .39 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 20:35 |
| | | | | 2-METHYLPHENOL | .39 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 20:35 |
| | | | | 2-NITROANILINE | .97 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 20:35 |
| | | | | 2-NITROPHENOL | .39 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 20:35 |
| | | | | 3,3'-DICHLOROBENZIDINE | .97 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 20:35 |
| | | | | 3-NITROANILINE | .97 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 20:35 |
| | | | | 4,6-DINITRO-2-METHYLPHENOL | .97 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 20:35 |

# Validation Qualifier Data Entry Verification

Run Date: October 4, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10194-01** | | | | | | | | | | | | | | | | | | |
| RC0004 | SW8270C | SW3550 | N 0 1 | 4-BROMOPHENYL-PHENYL ETHER | .39 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 20:35 |
| | | | | 4-CHLORO-3-METHYLPHENOL | .39 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 20:35 |
| | | | | 4-CHLOROANILINE | .39 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 20:35 |
| | | | | 4-CHLOROPHENYL-PHENYL ETHER | .39 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 20:35 |
| | | | | 4-METHYLPHENOL | .39 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 20:35 |
| | | | | 4-NITROANILINE | .39 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 20:35 |
| | | | | 4-NITROPHENOL | .97 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B059-04 | 20:35 |
| | | | | ACENAPHTHENE | .39 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 20:35 |
| | | | | ACENAPHTHYLENE | .39 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 20:35 |
| | | | | ANTHRACENE | .39 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 20:35 |
| | | | | BENZO(A)ANTHRACENE | .39 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 20:35 |
| | | | | BENZO(A)PYRENE | .39 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 20:35 |
| | | | | BENZO(B)FLUORANTHENE | .39 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 20:35 |
| | | | | BENZO(G,H,I)PERYLENE | .39 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 20:35 |
| | | | | BENZO(K)FLUORANTHENE | .39 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 20:35 |
| | | | | BIS(2-CHLOROETHOXY)METHANE | .39 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 20:35 |
| | | | | BIS(2-CHLOROETHYL)ETHER | .39 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B059-04 | 20:35 |
| | | | | BIS(2-CHLOROISOPROPYL)ETHER | .39 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B059-04 | 20:35 |
| | | | | BIS(2-ETHYLHEXYL)PHTHALATE | .39 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 20:35 |
| | | | | BUTYLBENZYLPHTHALATE | .39 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 20:35 |
| | | | | CARBAZOLE | .39 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 20:35 |
| | | | | CHRYSENE | .39 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 20:35 |
| | | | | DI-N-BUTYLPHTHALATE | .39 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 20:35 |
| | | | | DI-N-OCTYLPHTHALATE | .39 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 20:35 |
| | | | | DIBENZO(A,H)ANTHRACENE | .39 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 20:35 |
| | | | | DIBENZOFURAN | .39 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 20:35 |
| | | | | DIETHYLPHTHALATE | .39 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 20:35 |
| | | | | DIMETHYLPHTHALATE | .39 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 20:35 |
| | | | | FLUORANTHENE | .39 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 20:35 |
| | | | | FLUORENE | .39 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 20:35 |
| | | | | HEXACHLOROBENZENE | .39 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 20:35 |
| | | | | HEXACHLOROBUTADIENE | .39 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 20:35 |
| | | | | HEXACHLOROCYCLOPENTADIENE | .39 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 20:35 |
| | | | | HEXACHLOROETHANE | .39 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 20:35 |
| | | | | INDENO(1,2,3-CD)PYRENE | .39 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 20:35 |
| | | | | ISOPHORONE | .39 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 20:35 |
| | | | | N-NITROSO-DI-N-PROPYLAMINE | .39 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B059-04 | 20:35 |
| | | | | N-NITROSODIPHENYLAMINE | .39 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 20:35 |
| | | | | NAPHTHALENE | .39 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 20:35 |
| | | | | NITROBENZENE | .39 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 20:35 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10194-01** | | | | | | | | | | | | | | | | | | |
| RC0004 | SW8270C | SW3550 | N 0 1 | PENTACHLOROPHENOL | .97 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 20:35 |
| | | | | PHENANTHRENE | .39 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 20:35 |
| | | | | PHENOL | .39 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 20:35 |
| | | | | PYRENE | .39 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 20:35 |
| RC0005 | SW8270C | SW3550 | N 0 1 | 1,2,4-TRICHLOROBENZENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 21:14 |
| | | | | 1,2-DICHLOROBENZENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 21:14 |
| | | | | 1,3-DICHLOROBENZENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 21:14 |
| | | | | 1,4-DICHLOROBENZENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 21:14 |
| | | | | 2,4,5-TRICHLOROPHENOL | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 21:14 |
| | | | | 2,4,6-TRICHLOROPHENOL | .93 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 21:14 |
| | | | | 2,4-DICHLOROPHENOL | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 21:14 |
| | | | | 2,4-DIMETHYLPHENOL | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 21:14 |
| | | | | 2,4-DINITROPHENOL | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 21:14 |
| | | | | 2,4-DINITROTOLUENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 21:14 |
| | | | | 2,6-DINITROTOLUENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 21:14 |
| | | | | 2-CHLORONAPHTHALENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 21:14 |
| | | | | 2-CHLOROPHENOL | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 21:14 |
| | | | | 2-METHYLNAPHTHALENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 21:14 |
| | | | | 2-METHYLPHENOL | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 21:14 |
| | | | | 2-NITROANILINE | .93 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 21:14 |
| | | | | 2-NITROPHENOL | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 21:14 |
| | | | | 3,3'-DICHLOROBENZIDINE | .93 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 21:14 |
| | | | | 3-NITROANILINE | .93 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 21:14 |
| | | | | 4,6-DINITRO-2-METHYLPHENOL | .93 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 21:14 |
| | | | | 4-BROMOPHENYL-PHENYL ETHER | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 21:14 |
| | | | | 4-CHLORO-3-METHYLPHENOL | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 21:14 |
| | | | | 4-CHLOROANILINE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 21:14 |
| | | | | 4-CHLOROPHENYL-PHENYL ETHER | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 21:14 |
| | | | | 4-METHYLPHENOL | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 21:14 |
| | | | | 4-NITROANILINE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 21:14 |
| | | | | 4-NITROPHENOL | .93 | mg/kg | U | N | Y | U | UJ | 05B | | | | | B059-05 | 21:14 |
| | | | | ACENAPHTHENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 21:14 |
| | | | | ACENAPHTHYLENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 21:14 |
| | | | | ANTHRACENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 21:14 |
| | | | | BENZO(A)ANTHRACENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 21:14 |
| | | | | BENZO(A)PYRENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 21:14 |
| | | | | BENZO(B)FLUORANTHENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 21:14 |
| | | | | BENZO(G,H,I)PERYLENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 21:14 |
| | | | | BENZO(K)FLUORANTHENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 21:14 |
| | | | | BIS(2-CHLOROETHOXY)METHANE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 21:14 |

# Validation Qualifier Data Entry Verification

Run Date: October 4, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10194-01** | | | | | | | | | | | | | | | | | | |
| RC0005 | SW8270C | SW3550 | N 0 1 | BIS(2-CHLOROETHYL)ETHER | .37 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B059-05 | 21:14 |
| | | | | BIS(2-CHLOROISOPROPYL)ETHER | .37 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B059-05 | 21:14 |
| | | | | BIS(2-ETHYLHEXYL)PHTHALATE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 21:14 |
| | | | | BUTYLBENZYLPHTHALATE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 21:14 |
| | | | | CARBAZOLE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 21:14 |
| | | | | CHRYSENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 21:14 |
| | | | | DI-N-BUTYLPHTHALATE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 21:14 |
| | | | | DI-N-OCTYLPHTHALATE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 21:14 |
| | | | | DIBENZO(A,H)ANTHRACENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 21:14 |
| | | | | DIBENZOFURAN | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 21:14 |
| | | | | DIETHYLPHTHALATE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 21:14 |
| | | | | DIMETHYLPHTHALATE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 21:14 |
| | | | | FLUORANTHENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 21:14 |
| | | | | FLUORENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 21:14 |
| | | | | HEXACHLOROBENZENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 21:14 |
| | | | | HEXACHLOROBUTADIENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 21:14 |
| | | | | HEXACHLOROCYCLOPENTADIENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 21:14 |
| | | | | HEXACHLOROETHANE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 21:14 |
| | | | | INDENO(1,2,3-CD)PYRENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 21:14 |
| | | | | ISOPHORONE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 21:14 |
| | | | | N-NITROSO-DI-N-PROPYLAMINE | .37 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B059-05 | 21:14 |
| | | | | N-NITROSODIPHENYLAMINE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 21:14 |
| | | | | NAPHTHALENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 21:14 |
| | | | | NITROBENZENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 21:14 |
| | | | | PENTACHLOROPHENOL | .93 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 21:14 |
| | | | | PHENANTHRENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 21:14 |
| | | | | PHENOL | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 21:14 |
| | | | | PYRENE | .37 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 21:14 |
| RC0006 | SW8270C | SW3550 | N 0 1 | 1,2,4-TRICHLOROBENZENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 21:52 |
| | | | | 1,2-DICHLOROBENZENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 21:52 |
| | | | | 1,3-DICHLOROBENZENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 21:52 |
| | | | | 1,4-DICHLOROBENZENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 21:52 |
| | | | | 2,4,5-TRICHLOROPHENOL | .38 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 21:52 |
| | | | | 2,4,6-TRICHLOROPHENOL | .95 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 21:52 |
| | | | | 2,4-DICHLOROPHENOL | .38 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 21:52 |
| | | | | 2,4-DIMETHYLPHENOL | .38 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 21:52 |
| | | | | 2,4-DINITROPHENOL | .38 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 21:52 |
| | | | | 2,4-DINITROTOLUENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 21:52 |
| | | | | 2,6-DINITROTOLUENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 21:52 |
| | | | | 2-CHLORONAPHTHALENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 21:52 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10194-01** | | | | | | | | | | | | | | | | | | |
| RC0006 | SW8270C | SW3550 | N 0 1 | 2-CHLOROPHENOL | .38 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 21:52 |
| | | | | 2-METHYLNAPHTHALENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 21:52 |
| | | | | 2-METHYLPHENOL | .38 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 21:52 |
| | | | | 2-NITROANILINE | .95 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 21:52 |
| | | | | 2-NITROPHENOL | .38 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 21:52 |
| | | | | 3,3'-DICHLOROBENZIDINE | .95 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 21:52 |
| | | | | 3-NITROANILINE | .95 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 21:52 |
| | | | | 4,6-DINITRO-2-METHYLPHENOL | .95 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 21:52 |
| | | | | 4-BROMOPHENYL-PHENYL ETHER | .38 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 21:52 |
| | | | | 4-CHLORO-3-METHYLPHENOL | .38 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 21:52 |
| | | | | 4-CHLOROANILINE | .38 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 21:52 |
| | | | | 4-CHLOROPHENYL-PHENYL ETHER | .38 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 21:52 |
| | | | | 4-METHYLPHENOL | .38 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 21:52 |
| | | | | 4-NITROANILINE | .38 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 21:52 |
| | | | | 4-NITROPHENOL | .95 | mg/kg | U | N | Y | U | UJ | 05B | | | | | B059-06 | 21:52 |
| | | | | ACENAPHTHENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 21:52 |
| | | | | ACENAPHTHYLENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 21:52 |
| | | | | ANTHRACENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 21:52 |
| | | | | BENZO(A)ANTHRACENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 21:52 |
| | | | | BENZO(A)PYRENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 21:52 |
| | | | | BENZO(B)FLUORANTHENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 21:52 |
| | | | | BENZO(G,H,I)PERYLENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 21:52 |
| | | | | BENZO(K)FLUORANTHENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 21:52 |
| | | | | BIS(2-CHLOROETHOXY)METHANE | .38 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 21:52 |
| | | | | BIS(2-CHLOROETHYL)ETHER | .38 | mg/kg | U | N | Y | U | UJ | 05B | | | | | B059-06 | 21:52 |
| | | | | BIS(2-CHLOROISOPROPYL)ETHER | .38 | mg/kg | U | N | Y | U | UJ | 05B | | | | | B059-06 | 21:52 |
| | | | | BIS(2-ETHYLHEXYL)PHTHALATE | .38 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 21:52 |
| | | | | BUTYLBENZYLPHTHALATE | .38 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 21:52 |
| | | | | CARBAZOLE | .38 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 21:52 |
| | | | | CHRYSENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 21:52 |
| | | | | DI-N-BUTYLPHTHALATE | .38 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 21:52 |
| | | | | DI-N-OCTYLPHTHALATE | .38 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 21:52 |
| | | | | DIBENZO(A,H)ANTHRACENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 21:52 |
| | | | | DIBENZOFURAN | .38 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 21:52 |
| | | | | DIETHYLPHTHALATE | .38 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 21:52 |
| | | | | DIMETHYLPHTHALATE | .38 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 21:52 |
| | | | | FLUORANTHENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 21:52 |
| | | | | FLUORENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 21:52 |
| | | | | HEXACHLOROBENZENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 21:52 |
| | | | | HEXACHLOROBUTADIENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 21:52 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10194-01** | | | | | | | | | | | | | | | | | | |
| RC0006 | SW8270C | SW3550 | N 0 1 | HEXACHLOROCYCLOPENTADIENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 21:52 |
| | | | | HEXACHLOROETHANE | .38 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 21:52 |
| | | | | INDENO(1,2,3-CD)PYRENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 21:52 |
| | | | | ISOPHORONE | .38 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 21:52 |
| | | | | N-NITROSO-DI-N-PROPYLAMINE | .38 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B059-06 | 21:52 |
| | | | | N-NITROSODIPHENYLAMINE | .38 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 21:52 |
| | | | | NAPHTHALENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 21:52 |
| | | | | NITROBENZENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 21:52 |
| | | | | PENTACHLOROPHENOL | .95 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 21:52 |
| | | | | PHENANTHRENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 21:52 |
| | | | | PHENOL | .38 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 21:52 |
| | | | | PYRENE | .38 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 21:52 |
| RC0007 | SW8270C | SW3550 | N 0 1 | 1,2,4-TRICHLOROBENZENE | .38 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 22:30 |
| | | | | 1,2-DICHLOROBENZENE | .38 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 22:30 |
| | | | | 1,3-DICHLOROBENZENE | .38 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 22:30 |
| | | | | 1,4-DICHLOROBENZENE | .38 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 22:30 |
| | | | | 2,4,5-TRICHLOROPHENOL | .38 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 22:30 |
| | | | | 2,4,6-TRICHLOROPHENOL | .95 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 22:30 |
| | | | | 2,4-DICHLOROPHENOL | .38 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 22:30 |
| | | | | 2,4-DIMETHYLPHENOL | .38 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 22:30 |
| | | | | 2,4-DINITROPHENOL | .38 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 22:30 |
| | | | | 2,4-DINITROTOLUENE | .38 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 22:30 |
| | | | | 2,6-DINITROTOLUENE | .38 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 22:30 |
| | | | | 2-CHLORONAPHTHALENE | .38 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 22:30 |
| | | | | 2-CHLOROPHENOL | .38 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 22:30 |
| | | | | 2-METHYLNAPHTHALENE | .38 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 22:30 |
| | | | | 2-METHYLPHENOL | .38 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 22:30 |
| | | | | 2-NITROANILINE | .95 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 22:30 |
| | | | | 2-NITROPHENOL | .38 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 22:30 |
| | | | | 3,3'-DICHLOROBENZIDINE | .95 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 22:30 |
| | | | | 3-NITROANILINE | .95 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 22:30 |
| | | | | 4,6-DINITRO-2-METHYLPHENOL | .95 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 22:30 |
| | | | | 4-BROMOPHENYL-PHENYL ETHER | .38 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 22:30 |
| | | | | 4-CHLORO-3-METHYLPHENOL | .38 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 22:30 |
| | | | | 4-CHLOROANILINE | .38 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 22:30 |
| | | | | 4-CHLOROPHENYL-PHENYL ETHER | .38 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 22:30 |
| | | | | 4-METHYLPHENOL | .38 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 22:30 |
| | | | | 4-NITROANILINE | .38 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 22:30 |
| | | | | 4-NITROPHENOL | .95 | mg/kg | U | N | Y | | UJ | | 05B | | | | B059-07 | 22:30 |
| | | | | ACENAPHTHENE | .38 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 22:30 |

# Validation Qualifier Data Entry Verification

Run Date: October 4, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10194-01** | | | | | | | | | | | | | | | | |
| RC0007 | SW8270C | SW3550 | N 0 1 | ACENAPHTHYLENE | .38 | mg/kg | U | N Y | U | | | | | | B059-07 | 22:30 |
| | | | | ANTHRACENE | .38 | mg/kg | U | N Y | U | | | | | | B059-07 | 22:30 |
| | | | | BENZO(A)ANTHRACENE | .38 | mg/kg | U | N Y | U | | | | | | B059-07 | 22:30 |
| | | | | BENZO(A)PYRENE | .38 | mg/kg | U | N Y | U | | | | | | B059-07 | 22:30 |
| | | | | BENZO(B)FLUORANTHENE | .38 | mg/kg | U | N Y | U | | | | | | B059-07 | 22:30 |
| | | | | BENZO(G,H,I)PERYLENE | .38 | mg/kg | U | N Y | U | | | | | | B059-07 | 22:30 |
| | | | | BENZO(K)FLUORANTHENE | .38 | mg/kg | U | N Y | U | | | | | | B059-07 | 22:30 |
| | | | | BIS(2-CHLOROETHOXY)METHANE | .38 | mg/kg | U | N Y | U | | | | | | B059-07 | 22:30 |
| | | | | BIS(2-CHLOROETHYL)ETHER | .38 | mg/kg | U | N Y | UJ | | 05B | | | | B059-07 | 22:30 |
| | | | | BIS(2-CHLOROISOPROPYL)ETHER | .38 | mg/kg | U | N Y | UJ | | 05B | | | | B059-07 | 22:30 |
| | | | | BIS(2-ETHYLHEXYL)PHTHALATE | .38 | mg/kg | U | N Y | U | | | | | | B059-07 | 22:30 |
| | | | | BUTYLBENZYLPHTHALATE | .38 | mg/kg | U | N Y | U | | | | | | B059-07 | 22:30 |
| | | | | CARBAZOLE | .38 | mg/kg | U | N Y | U | | | | | | B059-07 | 22:30 |
| | | | | CHRYSENE | .38 | mg/kg | U | N Y | U | | | | | | B059-07 | 22:30 |
| | | | | DI-N-BUTYLPHTHALATE | .38 | mg/kg | U | N Y | U | | | | | | B059-07 | 22:30 |
| | | | | DI-N-OCTYLPHTHALATE | .38 | mg/kg | U | N Y | U | | | | | | B059-07 | 22:30 |
| | | | | DIBENZO(A,H)ANTHRACENE | .38 | mg/kg | U | N Y | U | | | | | | B059-07 | 22:30 |
| | | | | DIBENZOFURAN | .38 | mg/kg | U | N Y | U | | | | | | B059-07 | 22:30 |
| | | | | DIETHYLPHTHALATE | .38 | mg/kg | U | N Y | U | | | | | | B059-07 | 22:30 |
| | | | | DIMETHYLPHTHALATE | .38 | mg/kg | U | N Y | U | | | | | | B059-07 | 22:30 |
| | | | | FLUORANTHENE | .38 | mg/kg | U | N Y | U | | | | | | B059-07 | 22:30 |
| | | | | FLUORENE | .38 | mg/kg | U | N Y | U | | | | | | B059-07 | 22:30 |
| | | | | HEXACHLOROBENZENE | .38 | mg/kg | U | N Y | U | | | | | | B059-07 | 22:30 |
| | | | | HEXACHLOROBUTADIENE | .38 | mg/kg | U | N Y | U | | | | | | B059-07 | 22:30 |
| | | | | HEXACHLOROCYCLOPENTADIENE | .38 | mg/kg | U | N Y | U | | | | | | B059-07 | 22:30 |
| | | | | HEXACHLOROETHANE | .38 | mg/kg | U | N Y | U | | | | | | B059-07 | 22:30 |
| | | | | INDENO(1,2,3-CD)PYRENE | .38 | mg/kg | U | N Y | U | | | | | | B059-07 | 22:30 |
| | | | | ISOPHORONE | .38 | mg/kg | U | N Y | U | | | | | | B059-07 | 22:30 |
| | | | | N-NITROSO-DI-N-PROPYLAMINE | .38 | mg/kg | U | N Y | UJ | | 05B | | | | B059-07 | 22:30 |
| | | | | N-NITROSODIPHENYLAMINE | .38 | mg/kg | U | N Y | U | | | | | | B059-07 | 22:30 |
| | | | | NAPHTHALENE | .38 | mg/kg | U | N Y | U | | | | | | B059-07 | 22:30 |
| | | | | NITROBENZENE | .38 | mg/kg | U | N Y | U | | | | | | B059-07 | 22:30 |
| | | | | PENTACHLOROPHENOL | .95 | mg/kg | U | N Y | U | | | | | | B059-07 | 22:30 |
| | | | | PHENANTHRENE | .38 | mg/kg | U | N Y | U | | | | | | B059-07 | 22:30 |
| | | | | PHENOL | .38 | mg/kg | U | N Y | U | | | | | | B059-07 | 22:30 |
| | | | | PYRENE | .38 | mg/kg | U | N Y | U | | | | | | B059-07 | 22:30 |
| RC0001 | SW8260B | SW5035 | N 0 .86 | 1,1,1,2-TETRACHLOROETHANE | .0048 | mg/kg | U | N Y U | U | | | | | | B059-01 | 03:39 |
| | | | | 1,1,1-TRICHLOROETHANE | .0048 | mg/kg | U | N Y U | U | | | | | | B059-01 | 03:39 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .0048 | mg/kg | U | N Y U | U | | | | | | B059-01 | 03:39 |
| | | | | 1,1,2-TRICHLOROETHANE | .0048 | mg/kg | U | N Y U | U | | | | | | B059-01 | 03:39 |

# Validation Qualifier Data Entry Verification

Run Date: October 4, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10194-01** | | | | | | | | | | | | | | | | | | |
| RC0001 | SW8260B | SW5035 | N 0 .86 | 1,1-DICHLOROETHANE | .0048 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 03:39 |
| | | | | 1,1-DICHLOROETHENE | .0048 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 03:39 |
| | | | | 1,1-DICHLOROPROPENE | .0048 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 03:39 |
| | | | | 1,2,3-TRICHLOROBENZENE | .0048 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 03:39 |
| | | | | 1,2,3-TRICHLOROPROPANE | .0048 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 03:39 |
| | | | | 1,2,4-TRICHLOROBENZENE | .0048 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 03:39 |
| | | | | 1,2,4-TRIMETHYLBENZENE | .0048 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 03:39 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .0097 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 03:39 |
| | | | | 1,2-DIBROMOETHANE | .0048 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 03:39 |
| | | | | 1,2-DICHLOROBENZENE | .0048 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 03:39 |
| | | | | 1,2-DICHLOROETHANE | .0048 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 03:39 |
| | | | | 1,2-DICHLOROPROPANE | .0048 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 03:39 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .0048 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 03:39 |
| | | | | 1,3-DICHLOROBENZENE | .0048 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 03:39 |
| | | | | 1,3-DICHLOROPROPANE | .0048 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 03:39 |
| | | | | 1,4-DICHLOROBENZENE | .0048 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 03:39 |
| | | | | 2,2-DICHLOROPROPANE | .0048 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 03:39 |
| | | | | 2-BUTANONE | .019 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 03:39 |
| | | | | 2-CHLOROTOLUENE | .0048 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 03:39 |
| | | | | 2-HEXANONE | .019 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 03:39 |
| | | | | 4-CHLOROTOLUENE | .0048 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 03:39 |
| | | | | 4-METHYL-2-PENTANONE | .0097 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 03:39 |
| | | | | ACETONE | .061 | mg/kg | | Y | Y | P | J | | 04A | 05A | | | B059-01 | 03:39 |
| | | | | BENZENE | .0048 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 03:39 |
| | | | | BROMOBENZENE | .0048 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 03:39 |
| | | | | BROMOCHLOROMETHANE | .0048 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 03:39 |
| | | | | BROMODICHLOROMETHANE | .0048 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 03:39 |
| | | | | BROMOFORM | .0048 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 03:39 |
| | | | | BROMOMETHANE | .0048 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 03:39 |
| | | | | CARBON DISULFIDE | .0048 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B059-01 | 03:39 |
| | | | | CARBON TETRACHLORIDE | .0048 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 03:39 |
| | | | | CHLOROBENZENE | .0048 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 03:39 |
| | | | | CHLOROETHANE | .0048 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 03:39 |
| | | | | CHLOROFORM | .0048 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 03:39 |
| | | | | CHLOROMETHANE | .0048 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 03:39 |
| | | | | CIS-1,2-DICHLOROETHENE | .0048 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 03:39 |
| | | | | CIS-1,3-DICHLOROPROPENE | .0048 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 03:39 |
| | | | | DIBROMOCHLOROMETHANE | .0048 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 03:39 |
| | | | | DIBROMOMETHANE | .0048 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 03:39 |
| | | | | DICHLORODIFLUOROMETHANE | .0048 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B059-01 | 03:39 |

# Validation Qualifier Data Entry Verification

Run Date: October 4, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10194-01** | | | | | | | | | | | | | | | | | | |
| RC0001 | SW8260B | SW5035 | N 0 .86 | ETHYLBENZENE | .0048 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 03:39 |
| | | | | HEXACHLOROBUTADIENE | .0048 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 03:39 |
| | | | | ISOPROPYL BENZENE | .0048 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 03:39 |
| | | | | M/P-XYLENES | .0097 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 03:39 |
| | | | | METHYLENE CHLORIDE | .0022 | mg/kg | J | Y | Y | F | B | | 06A | 15 | | | B059-01 | 03:39 |
| | | | | N-BUTYLBENZENE | .0048 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 03:39 |
| | | | | N-PROPYLBENZENE | .0048 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 03:39 |
| | | | | NAPHTHALENE | .0048 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 03:39 |
| | | | | O-XYLENE | .0048 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 03:39 |
| | | | | P-ISOPROPYLTOLUENE | .0048 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 03:39 |
| | | | | SEC-BUTYLBENZENE | .0048 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 03:39 |
| | | | | STYRENE | .0048 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 03:39 |
| | | | | TERT-BUTYLBENZENE | .0048 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 03:39 |
| | | | | TETRACHLOROETHENE | .0048 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 03:39 |
| | | | | TOLUENE | .0048 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 03:39 |
| | | | | TRANS-1,2-DICHLOROETHENE | .0048 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 03:39 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .0048 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 03:39 |
| | | | | TRICHLOROETHENE | .0048 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 03:39 |
| | | | | TRICHLOROFLUOROMETHANE | .0048 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 03:39 |
| | | | | VINYL CHLORIDE | .0048 | mg/kg | U | N | Y | U | U | | | | | | B059-01 | 03:39 |
| RC0002 | SW8260B | SW5035 | N 0 .88 | 1,1,1,2-TETRACHLOROETHANE | .0054 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 04:14 |
| | | | | 1,1,1-TRICHLOROETHANE | .0054 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 04:14 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .0054 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 04:14 |
| | | | | 1,1,2-TRICHLOROETHANE | .0054 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 04:14 |
| | | | | 1,1-DICHLOROETHANE | .0054 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 04:14 |
| | | | | 1,1-DICHLOROETHENE | .0054 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 04:14 |
| | | | | 1,1-DICHLOROPROPENE | .0054 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 04:14 |
| | | | | 1,2,3-TRICHLOROBENZENE | .0054 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 04:14 |
| | | | | 1,2,3-TRICHLOROPROPANE | .0054 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 04:14 |
| | | | | 1,2,4-TRICHLOROBENZENE | .0054 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 04:14 |
| | | | | 1,2,4-TRIMETHYLBENZENE | .0054 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 04:14 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .011 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 04:14 |
| | | | | 1,2-DIBROMOETHANE | .0054 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 04:14 |
| | | | | 1,2-DICHLOROBENZENE | .0054 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 04:14 |
| | | | | 1,2-DICHLOROETHANE | .0054 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 04:14 |
| | | | | 1,2-DICHLOROPROPANE | .0054 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 04:14 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .0054 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 04:14 |
| | | | | 1,3-DICHLOROBENZENE | .0054 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 04:14 |
| | | | | 1,3-DICHLOROPROPANE | .0054 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 04:14 |
| | | | | 1,4-DICHLOROBENZENE | .0054 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 04:14 |

# Validation Qualifier Data Entry Verification

Run Date: October 4, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10194-01** | | | | | | | | | | | | | | | | | | |
| RC0002 | SW8260B | SW5035 | N 0 .88 | 2,2-DICHLOROPROPANE | .0054 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 04:14 |
| | | | | 2-BUTANONE | .022 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 04:14 |
| | | | | 2-CHLOROTOLUENE | .0054 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 04:14 |
| | | | | 2-HEXANONE | .022 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 04:14 |
| | | | | 4-CHLOROTOLUENE | .0054 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 04:14 |
| | | | | 4-METHYL-2-PENTANONE | .011 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 04:14 |
| | | | | ACETONE | .022 | mg/kg | U | N | Y | U | R | | 04A | 05A | | | B059-02 | 04:14 |
| | | | | BENZENE | .0054 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 04:14 |
| | | | | BROMOBENZENE | .0054 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 04:14 |
| | | | | BROMOCHLOROMETHANE | .0054 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 04:14 |
| | | | | BROMODICHLOROMETHANE | .0054 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 04:14 |
| | | | | BROMOFORM | .0054 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 04:14 |
| | | | | BROMOMETHANE | .0054 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 04:14 |
| | | | | CARBON DISULFIDE | .0054 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B059-02 | 04:14 |
| | | | | CARBON TETRACHLORIDE | .0054 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 04:14 |
| | | | | CHLOROBENZENE | .0054 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 04:14 |
| | | | | CHLOROETHANE | .0054 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 04:14 |
| | | | | CHLOROFORM | .0054 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 04:14 |
| | | | | CHLOROMETHANE | .0054 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 04:14 |
| | | | | CIS-1,2-DICHLOROETHENE | .0054 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 04:14 |
| | | | | CIS-1,3-DICHLOROPROPENE | .0054 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 04:14 |
| | | | | DIBROMOCHLOROMETHANE | .0054 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 04:14 |
| | | | | DIBROMOMETHANE | .0054 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 04:14 |
| | | | | DICHLORODIFLUOROMETHANE | .0054 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B059-02 | 04:14 |
| | | | | ETHYLBENZENE | .0054 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 04:14 |
| | | | | HEXACHLOROBUTADIENE | .0054 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 04:14 |
| | | | | ISOPROPYL BENZENE | .0054 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 04:14 |
| | | | | M/P-XYLENES | .011 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 04:14 |
| | | | | METHYLENE CHLORIDE | .0031 | mg/kg | J | Y | Y | F | B | | 06A | 15 | | | B059-02 | 04:14 |
| | | | | N-BUTYLBENZENE | .0054 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 04:14 |
| | | | | N-PROPYLBENZENE | .0054 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 04:14 |
| | | | | NAPHTHALENE | .0054 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 04:14 |
| | | | | O-XYLENE | .0054 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 04:14 |
| | | | | P-ISOPROPYLTOLUENE | .0054 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 04:14 |
| | | | | SEC-BUTYLBENZENE | .0054 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 04:14 |
| | | | | STYRENE | .0054 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 04:14 |
| | | | | TERT-BUTYLBENZENE | .0054 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 04:14 |
| | | | | TETRACHLOROETHENE | .0054 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 04:14 |
| | | | | TOLUENE | .0015 | mg/kg | J | Y | Y | F | J | | 15 | | | | B059-02 | 04:14 |
| | | | | TRANS-1,2-DICHLOROETHENE | .0054 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 04:14 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10194-01** | | | | | | | | | | | | | | | | | | |
| RC0002 | SW8260B | SW5035 | N 0 .88 | TRANS-1,3-DICHLOROPROPENE | .0054 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 04:14 |
| | | | | TRICHLOROETHENE | .0054 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 04:14 |
| | | | | TRICHLOROFLUOROMETHANE | .0055 | mg/kg | | Y | Y | F | B | | 06A | | | | B059-02 | 04:14 |
| | | | | VINYL CHLORIDE | .0054 | mg/kg | U | N | Y | U | U | | | | | | B059-02 | 04:14 |
| RC0003 | SW8260B | SW5035 | N 0 1 | 1,1,1,2-TETRACHLOROETHANE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-03R | 17:03 |
| | | | | 1,1,1-TRICHLOROETHANE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-03R | 17:03 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-03R | 17:03 |
| | | | | 1,1,2-TRICHLOROETHANE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-03R | 17:03 |
| | | | | 1,1-DICHLOROETHANE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-03R | 17:03 |
| | | | | 1,1-DICHLOROETHENE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-03R | 17:03 |
| | | | | 1,1-DICHLOROPROPENE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-03R | 17:03 |
| | | | | 1,2,3-TRICHLOROBENZENE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-03R | 17:03 |
| | | | | 1,2,3-TRICHLOROPROPANE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-03R | 17:03 |
| | | | | 1,2,4-TRICHLOROBENZENE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-03R | 17:03 |
| | | | | 1,2,4-TRIMETHYLBENZENE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-03R | 17:03 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .011 | mg/kg | U | N | Y | U | U | | | | | | B059-03R | 17:03 |
| | | | | 1,2-DIBROMOETHANE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-03R | 17:03 |
| | | | | 1,2-DICHLOROBENZENE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-03R | 17:03 |
| | | | | 1,2-DICHLOROETHANE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-03R | 17:03 |
| | | | | 1,2-DICHLOROPROPANE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-03R | 17:03 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-03R | 17:03 |
| | | | | 1,3-DICHLOROBENZENE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-03R | 17:03 |
| | | | | 1,3-DICHLOROPROPANE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-03R | 17:03 |
| | | | | 1,4-DICHLOROBENZENE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-03R | 17:03 |
| | | | | 2,2-DICHLOROPROPANE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-03R | 17:03 |
| | | | | 2-BUTANONE | .022 | mg/kg | U | N | Y | U | U | | | | | | B059-03R | 17:03 |
| | | | | 2-CHLOROTOLUENE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-03R | 17:03 |
| | | | | 2-HEXANONE | .022 | mg/kg | U | N | Y | U | U | | | | | | B059-03R | 17:03 |
| | | | | 4-CHLOROTOLUENE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-03R | 17:03 |
| | | | | 4-METHYL-2-PENTANONE | .011 | mg/kg | U | N | Y | U | U | | | | | | B059-03R | 17:03 |
| | | | | ACETONE | .39 | mg/kg | | Y | Y | P | J | | 04A | 05A | | | B059-03R | 17:03 |
| | | | | BENZENE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-03R | 17:03 |
| | | | | BROMOBENZENE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-03R | 17:03 |
| | | | | BROMOCHLOROMETHANE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-03R | 17:03 |
| | | | | BROMODICHLOROMETHANE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-03R | 17:03 |
| | | | | BROMOFORM | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-03R | 17:03 |
| | | | | BROMOMETHANE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-03R | 17:03 |
| | | | | CARBON DISULFIDE | .0056 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B059-03R | 17:03 |
| | | | | CARBON TETRACHLORIDE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-03R | 17:03 |
| | | | | CHLOROBENZENE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-03R | 17:03 |

# Validation Qualifier Data Entry Verification

Run Date: October 4, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10194-01** | | | | | | | | | | | | | | | | | | |
| RC0003 | SW8260B | SW5035 | N 0 1 | CHLOROETHANE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-03R | 17:03 |
| | | | | CHLOROFORM | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-03R | 17:03 |
| | | | | CHLOROMETHANE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-03R | 17:03 |
| | | | | CIS-1,2-DICHLOROETHENE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-03R | 17:03 |
| | | | | CIS-1,3-DICHLOROPROPENE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-03R | 17:03 |
| | | | | DIBROMOCHLOROMETHANE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-03R | 17:03 |
| | | | | DIBROMOMETHANE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-03R | 17:03 |
| | | | | DICHLORODIFLUOROMETHANE | .0056 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B059-03R | 17:03 |
| | | | | ETHYLBENZENE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-03R | 17:03 |
| | | | | HEXACHLOROBUTADIENE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-03R | 17:03 |
| | | | | ISOPROPYL BENZENE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-03R | 17:03 |
| | | | | M/P-XYLENES | .011 | mg/kg | U | N | Y | U | U | | | | | | B059-03R | 17:03 |
| | | | | METHYLENE CHLORIDE | .0024 | mg/kg | J | Y | Y | F | B | | 06A | 15 | | | B059-03R | 17:03 |
| | | | | N-BUTYLBENZENE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-03R | 17:03 |
| | | | | N-PROPYLBENZENE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-03R | 17:03 |
| | | | | NAPHTHALENE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-03R | 17:03 |
| | | | | O-XYLENE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-03R | 17:03 |
| | | | | P-ISOPROPYLTOLUENE | .0022 | mg/kg | J | Y | Y | P | J | | 15 | | | | B059-03R | 17:03 |
| | | | | SEC-BUTYLBENZENE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-03R | 17:03 |
| | | | | STYRENE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-03R | 17:03 |
| | | | | TERT-BUTYLBENZENE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-03R | 17:03 |
| | | | | TETRACHLOROETHENE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-03R | 17:03 |
| | | | | TOLUENE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-03R | 17:03 |
| | | | | TRANS-1,2-DICHLOROETHENE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-03R | 17:03 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-03R | 17:03 |
| | | | | TRICHLOROETHENE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-03R | 17:03 |
| | | | | TRICHLOROFLUOROMETHANE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-03R | 17:03 |
| | | | | VINYL CHLORIDE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-03R | 17:03 |
| RC0004 | SW8260B | SW5035 | N 0 .90 | 1,1,1,2-TETRACHLOROETHANE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 05:24 |
| | | | | 1,1,1-TRICHLOROETHANE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 05:24 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 05:24 |
| | | | | 1,1,2-TRICHLOROETHANE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 05:24 |
| | | | | 1,1-DICHLOROETHANE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 05:24 |
| | | | | 1,1-DICHLOROETHENE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 05:24 |
| | | | | 1,1-DICHLOROPROPENE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 05:24 |
| | | | | 1,2,3-TRICHLOROBENZENE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 05:24 |
| | | | | 1,2,3-TRICHLOROPROPANE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 05:24 |
| | | | | 1,2,4-TRICHLOROBENZENE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 05:24 |
| | | | | 1,2,4-TRIMETHYLBENZENE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 05:24 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .011 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 05:24 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10194-01** | | | | | | | | | | | | | | | | | | |
| RC0004 | SW8260B | SW5035 | N 0 .90 | 1,2-DIBROMOETHANE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 05:24 |
| | | | | 1,2-DICHLOROBENZENE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 05:24 |
| | | | | 1,2-DICHLOROETHANE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 05:24 |
| | | | | 1,2-DICHLOROPROPANE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 05:24 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 05:24 |
| | | | | 1,3-DICHLOROBENZENE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 05:24 |
| | | | | 1,3-DICHLOROPROPANE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 05:24 |
| | | | | 1,4-DICHLOROBENZENE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 05:24 |
| | | | | 2,2-DICHLOROPROPANE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 05:24 |
| | | | | 2-BUTANONE | .021 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 05:24 |
| | | | | 2-CHLOROTOLUENE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 05:24 |
| | | | | 2-HEXANONE | .021 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 05:24 |
| | | | | 4-CHLOROTOLUENE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 05:24 |
| | | | | 4-METHYL-2-PENTANONE | .011 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 05:24 |
| | | | | ACETONE | .031 | mg/kg | | Y | Y | P | J | | 04A | 05A | | | B059-04 | 05:24 |
| | | | | BENZENE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 05:24 |
| | | | | BROMOBENZENE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 05:24 |
| | | | | BROMOCHLOROMETHANE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 05:24 |
| | | | | BROMODICHLOROMETHANE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 05:24 |
| | | | | BROMOFORM | .0053 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 05:24 |
| | | | | BROMOMETHANE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 05:24 |
| | | | | CARBON DISULFIDE | .0053 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B059-04 | 05:24 |
| | | | | CARBON TETRACHLORIDE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 05:24 |
| | | | | CHLOROBENZENE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 05:24 |
| | | | | CHLOROETHANE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 05:24 |
| | | | | CHLOROFORM | .0053 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 05:24 |
| | | | | CHLOROMETHANE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 05:24 |
| | | | | CIS-1,2-DICHLOROETHENE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 05:24 |
| | | | | CIS-1,3-DICHLOROPROPENE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 05:24 |
| | | | | DIBROMOCHLOROMETHANE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 05:24 |
| | | | | DIBROMOMETHANE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 05:24 |
| | | | | DICHLORODIFLUOROMETHANE | .0053 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B059-04 | 05:24 |
| | | | | ETHYLBENZENE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 05:24 |
| | | | | HEXACHLOROBUTADIENE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 05:24 |
| | | | | ISOPROPYL BENZENE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 05:24 |
| | | | | M/P-XYLENES | .011 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 05:24 |
| | | | | METHYLENE CHLORIDE | .0022 | mg/kg | J | Y | Y | F | B | | 06A | 15 | | | B059-04 | 05:24 |
| | | | | N-BUTYLBENZENE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 05:24 |
| | | | | N-PROPYLBENZENE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 05:24 |
| | | | | NAPHTHALENE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 05:24 |

# Validation Qualifier Data Entry Verification

Run Date: October 4, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10194-01** | | | | | | | | | | | | | | | | | | |
| RC0004 | SW8260B | SW5035 | N 0 .90 | O-XYLENE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 05:24 |
| | | | | P-ISOPROPYLTOLUENE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 05:24 |
| | | | | SEC-BUTYLBENZENE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 05:24 |
| | | | | STYRENE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 05:24 |
| | | | | TERT-BUTYLBENZENE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 05:24 |
| | | | | TETRACHLOROETHENE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 05:24 |
| | | | | TOLUENE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 05:24 |
| | | | | TRANS-1,2-DICHLOROETHENE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 05:24 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 05:24 |
| | | | | TRICHLOROETHENE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 05:24 |
| | | | | TRICHLOROFLUOROMETHANE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 05:24 |
| | | | | VINYL CHLORIDE | .0053 | mg/kg | U | N | Y | U | U | | | | | | B059-04 | 05:24 |
| RC0005 | SW8260B | SW5035 | N 0 1 | 1,1,1,2-TETRACHLOROETHANE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 05:59 |
| | | | | 1,1,1-TRICHLOROETHANE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 05:59 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 05:59 |
| | | | | 1,1,2-TRICHLOROETHANE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 05:59 |
| | | | | 1,1-DICHLOROETHANE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 05:59 |
| | | | | 1,1-DICHLOROETHENE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 05:59 |
| | | | | 1,1-DICHLOROPROPENE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 05:59 |
| | | | | 1,2,3-TRICHLOROBENZENE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 05:59 |
| | | | | 1,2,3-TRICHLOROPROPANE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 05:59 |
| | | | | 1,2,4-TRICHLOROBENZENE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 05:59 |
| | | | | 1,2,4-TRIMETHYLBENZENE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 05:59 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .011 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 05:59 |
| | | | | 1,2-DIBROMOETHANE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 05:59 |
| | | | | 1,2-DICHLOROBENZENE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 05:59 |
| | | | | 1,2-DICHLOROETHANE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 05:59 |
| | | | | 1,2-DICHLOROPROPANE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 05:59 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 05:59 |
| | | | | 1,3-DICHLOROBENZENE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 05:59 |
| | | | | 1,3-DICHLOROPROPANE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 05:59 |
| | | | | 1,4-DICHLOROBENZENE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 05:59 |
| | | | | 2,2-DICHLOROPROPANE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 05:59 |
| | | | | 2-BUTANONE | .022 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 05:59 |
| | | | | 2-CHLOROTOLUENE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 05:59 |
| | | | | 2-HEXANONE | .022 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 05:59 |
| | | | | 4-CHLOROTOLUENE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 05:59 |
| | | | | 4-METHYL-2-PENTANONE | .011 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 05:59 |
| | | | | ACETONE | .19 | mg/kg | | Y | Y | P | J | | 04A | 05A | | | B059-05 | 05:59 |
| | | | | BENZENE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 05:59 |

# Validation Qualifier Data Entry Verification

Run Date: October 4, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10194-01** | | | | | | | | | | | | | | | | | | |
| RC0005 | SW8260B | SW5035 | N 0 1 | BROMOBENZENE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 05:59 |
| | | | | BROMOCHLOROMETHANE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 05:59 |
| | | | | BROMODICHLOROMETHANE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 05:59 |
| | | | | BROMOFORM | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 05:59 |
| | | | | BROMOMETHANE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 05:59 |
| | | | | CARBON DISULFIDE | .0056 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B059-05 | 05:59 |
| | | | | CARBON TETRACHLORIDE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 05:59 |
| | | | | CHLOROBENZENE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 05:59 |
| | | | | CHLOROETHANE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 05:59 |
| | | | | CHLOROFORM | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 05:59 |
| | | | | CHLOROMETHANE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 05:59 |
| | | | | CIS-1,2-DICHLOROETHENE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 05:59 |
| | | | | CIS-1,3-DICHLOROPROPENE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 05:59 |
| | | | | DIBROMOCHLOROMETHANE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 05:59 |
| | | | | DIBROMOMETHANE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 05:59 |
| | | | | DICHLORODIFLUOROMETHANE | .0056 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B059-05 | 05:59 |
| | | | | ETHYLBENZENE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 05:59 |
| | | | | HEXACHLOROBUTADIENE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 05:59 |
| | | | | ISOPROPYL BENZENE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 05:59 |
| | | | | M/P-XYLENES | .011 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 05:59 |
| | | | | METHYLENE CHLORIDE | .003 | mg/kg | J | Y | Y | F | B | | 06A | 15 | | | B059-05 | 05:59 |
| | | | | N-BUTYLBENZENE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 05:59 |
| | | | | N-PROPYLBENZENE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 05:59 |
| | | | | NAPHTHALENE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 05:59 |
| | | | | O-XYLENE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 05:59 |
| | | | | P-ISOPROPYLTOLUENE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 05:59 |
| | | | | SEC-BUTYLBENZENE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 05:59 |
| | | | | STYRENE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 05:59 |
| | | | | TERT-BUTYLBENZENE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 05:59 |
| | | | | TETRACHLOROETHENE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 05:59 |
| | | | | TOLUENE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 05:59 |
| | | | | TRANS-1,2-DICHLOROETHENE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 05:59 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 05:59 |
| | | | | TRICHLOROETHENE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 05:59 |
| | | | | TRICHLOROFLUOROMETHANE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 05:59 |
| | | | | VINYL CHLORIDE | .0056 | mg/kg | U | N | Y | U | U | | | | | | B059-05 | 05:59 |
| RC0006 | SW8260B | SW5035 | N 0 .88 | 1,1,1,2-TETRACHLOROETHANE | .005 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 06:33 |
| | | | | 1,1,1-TRICHLOROETHANE | .005 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 06:33 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .005 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 06:33 |
| | | | | 1,1,2-TRICHLOROETHANE | .005 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 06:33 |

# Validation Qualifier Data Entry Verification

Run Date: October 4, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10194-01** | | | | | | | | | | | | | | | | | | |
| RC0006 | SW8260B | SW5035 | N 0 .88 | 1,1-DICHLOROETHANE | .005 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 06:33 |
| | | | | 1,1-DICHLOROETHENE | .005 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 06:33 |
| | | | | 1,1-DICHLOROPROPENE | .005 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 06:33 |
| | | | | 1,2,3-TRICHLOROBENZENE | .005 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 06:33 |
| | | | | 1,2,3-TRICHLOROPROPANE | .005 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 06:33 |
| | | | | 1,2,4-TRICHLOROBENZENE | .005 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 06:33 |
| | | | | 1,2,4-TRIMETHYLBENZENE | .005 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 06:33 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .01 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 06:33 |
| | | | | 1,2-DIBROMOETHANE | .005 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 06:33 |
| | | | | 1,2-DICHLOROBENZENE | .005 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 06:33 |
| | | | | 1,2-DICHLOROETHANE | .005 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 06:33 |
| | | | | 1,2-DICHLOROPROPANE | .005 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 06:33 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .005 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 06:33 |
| | | | | 1,3-DICHLOROBENZENE | .005 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 06:33 |
| | | | | 1,3-DICHLOROPROPANE | .005 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 06:33 |
| | | | | 1,4-DICHLOROBENZENE | .005 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 06:33 |
| | | | | 2,2-DICHLOROPROPANE | .005 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 06:33 |
| | | | | 2-BUTANONE | .02 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 06:33 |
| | | | | 2-CHLOROTOLUENE | .005 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 06:33 |
| | | | | 2-HEXANONE | .02 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 06:33 |
| | | | | 4-CHLOROTOLUENE | .005 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 06:33 |
| | | | | 4-METHYL-2-PENTANONE | .01 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 06:33 |
| | | | | ACETONE | .025 | mg/kg | | Y | Y | P | J | | 04A | 05A | | | B059-06 | 06:33 |
| | | | | BENZENE | .005 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 06:33 |
| | | | | BROMOBENZENE | .005 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 06:33 |
| | | | | BROMOCHLOROMETHANE | .005 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 06:33 |
| | | | | BROMODICHLOROMETHANE | .005 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 06:33 |
| | | | | BROMOFORM | .005 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 06:33 |
| | | | | BROMOMETHANE | .005 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 06:33 |
| | | | | CARBON DISULFIDE | .005 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B059-06 | 06:33 |
| | | | | CARBON TETRACHLORIDE | .005 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 06:33 |
| | | | | CHLOROBENZENE | .005 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 06:33 |
| | | | | CHLOROETHANE | .005 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 06:33 |
| | | | | CHLOROFORM | .005 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 06:33 |
| | | | | CHLOROMETHANE | .005 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 06:33 |
| | | | | CIS-1,2-DICHLOROETHENE | .005 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 06:33 |
| | | | | CIS-1,3-DICHLOROPROPENE | .005 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 06:33 |
| | | | | DIBROMOCHLOROMETHANE | .005 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 06:33 |
| | | | | DIBROMOMETHANE | .005 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 06:33 |
| | | | | DICHLORODIFLUOROMETHANE | .005 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B059-06 | 06:33 |

# Validation Qualifier Data Entry Verification

Run Date: October 4, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10194-01** | | | | | | | | | | | | | | | | | | |
| RC0006 | SW8260B | SW5035 | N 0 .88 | ETHYLBENZENE | .005 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 06:33 |
| | | | | HEXACHLOROBUTADIENE | .005 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 06:33 |
| | | | | ISOPROPYL BENZENE | .005 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 06:33 |
| | | | | M/P-XYLENES | .01 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 06:33 |
| | | | | METHYLENE CHLORIDE | .0022 | mg/kg | J | Y | Y | F | B | | 06A | 15 | | | B059-06 | 06:33 |
| | | | | N-BUTYLBENZENE | .005 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 06:33 |
| | | | | N-PROPYLBENZENE | .005 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 06:33 |
| | | | | NAPHTHALENE | .005 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 06:33 |
| | | | | O-XYLENE | .005 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 06:33 |
| | | | | P-ISOPROPYLTOLUENE | .005 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 06:33 |
| | | | | SEC-BUTYLBENZENE | .005 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 06:33 |
| | | | | STYRENE | .005 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 06:33 |
| | | | | TERT-BUTYLBENZENE | .005 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 06:33 |
| | | | | TETRACHLOROETHENE | .005 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 06:33 |
| | | | | TOLUENE | .005 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 06:33 |
| | | | | TRANS-1,2-DICHLOROETHENE | .005 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 06:33 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .005 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 06:33 |
| | | | | TRICHLOROETHENE | .005 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 06:33 |
| | | | | TRICHLOROFLUOROMETHANE | .005 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 06:33 |
| | | | | VINYL CHLORIDE | .005 | mg/kg | U | N | Y | U | U | | | | | | B059-06 | 06:33 |
| RC0007 | SW8260B | SW5035 | N 0 .98 | 1,1,1,2-TETRACHLOROETHANE | .0056 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 07:08 |
| | | | | 1,1,1-TRICHLOROETHANE | .0056 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 07:08 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .0056 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 07:08 |
| | | | | 1,1,2-TRICHLOROETHANE | .0056 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 07:08 |
| | | | | 1,1-DICHLOROETHANE | .0056 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 07:08 |
| | | | | 1,1-DICHLOROETHENE | .0056 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 07:08 |
| | | | | 1,1-DICHLOROPROPENE | .0056 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 07:08 |
| | | | | 1,2,3-TRICHLOROBENZENE | .0056 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 07:08 |
| | | | | 1,2,3-TRICHLOROPROPANE | .0056 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 07:08 |
| | | | | 1,2,4-TRICHLOROBENZENE | .0056 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 07:08 |
| | | | | 1,2,4-TRIMETHYLBENZENE | .0056 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 07:08 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .011 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 07:08 |
| | | | | 1,2-DIBROMOETHANE | .0056 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 07:08 |
| | | | | 1,2-DICHLOROBENZENE | .0056 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 07:08 |
| | | | | 1,2-DICHLOROETHANE | .0056 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 07:08 |
| | | | | 1,2-DICHLOROPROPANE | .0056 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 07:08 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .0056 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 07:08 |
| | | | | 1,3-DICHLOROBENZENE | .0056 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 07:08 |
| | | | | 1,3-DICHLOROPROPANE | .0056 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 07:08 |
| | | | | 1,4-DICHLOROBENZENE | .0056 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 07:08 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10194-01** | | | | | | | | | | | | | | | | | | |
| RC0007 | SW8260B | SW5035 | N 0 .98 | 2,2-DICHLOROPROPANE | .0056 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 07:08 |
| | | | | 2-BUTANONE | .022 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 07:08 |
| | | | | 2-CHLOROTOLUENE | .0056 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 07:08 |
| | | | | 2-HEXANONE | .022 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 07:08 |
| | | | | 4-CHLOROTOLUENE | .0056 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 07:08 |
| | | | | 4-METHYL-2-PENTANONE | .011 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 07:08 |
| | | | | ACETONE | .025 | mg/kg | | Y | Y | | J | | 04A | 05A | | | B059-07 | 07:08 |
| | | | | BENZENE | .0056 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 07:08 |
| | | | | BROMOBENZENE | .0056 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 07:08 |
| | | | | BROMOCHLOROMETHANE | .0056 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 07:08 |
| | | | | BROMODICHLOROMETHANE | .0056 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 07:08 |
| | | | | BROMOFORM | .0056 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 07:08 |
| | | | | BROMOMETHANE | .0056 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 07:08 |
| | | | | CARBON DISULFIDE | .0056 | mg/kg | U | N | Y | | UJ | | 05B | | | | B059-07 | 07:08 |
| | | | | CARBON TETRACHLORIDE | .0056 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 07:08 |
| | | | | CHLOROBENZENE | .0056 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 07:08 |
| | | | | CHLOROETHANE | .0056 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 07:08 |
| | | | | CHLOROFORM | .0056 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 07:08 |
| | | | | CHLOROMETHANE | .0056 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 07:08 |
| | | | | CIS-1,2-DICHLOROETHENE | .0056 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 07:08 |
| | | | | CIS-1,3-DICHLOROPROPENE | .0056 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 07:08 |
| | | | | DIBROMOCHLOROMETHANE | .0056 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 07:08 |
| | | | | DIBROMOMETHANE | .0056 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 07:08 |
| | | | | DICHLORODIFLUOROMETHANE | .0056 | mg/kg | U | N | Y | | UJ | | 05B | | | | B059-07 | 07:08 |
| | | | | ETHYLBENZENE | .0056 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 07:08 |
| | | | | HEXACHLOROBUTADIENE | .0056 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 07:08 |
| | | | | ISOPROPYL BENZENE | .0056 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 07:08 |
| | | | | M/P-XYLENES | .011 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 07:08 |
| | | | | METHYLENE CHLORIDE | .0027 | mg/kg | J | Y | Y | F | B | | 06A | 15 | | | B059-07 | 07:08 |
| | | | | N-BUTYLBENZENE | .0056 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 07:08 |
| | | | | N-PROPYLBENZENE | .0056 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 07:08 |
| | | | | NAPHTHALENE | .0056 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 07:08 |
| | | | | O-XYLENE | .0056 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 07:08 |
| | | | | P-ISOPROPYLTOLUENE | .0056 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 07:08 |
| | | | | SEC-BUTYLBENZENE | .0056 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 07:08 |
| | | | | STYRENE | .0056 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 07:08 |
| | | | | TERT-BUTYLBENZENE | .0056 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 07:08 |
| | | | | TETRACHLOROETHENE | .0056 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 07:08 |
| | | | | TOLUENE | .0056 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 07:08 |
| | | | | TRANS-1,2-DICHLOROETHENE | .0056 | mg/kg | U | N | Y | | U | | | | | | B059-07 | 07:08 |

# Validation Qualifier Data Entry Verification

Run Date: October 4, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10194-01** | | | | | | | | | | | | | | | | |
| RC0007 | SW8260B | SW5035 | N 0 .98 | TRANS-1,3-DICHLOROPROPENE | .0056 | mg/kg | U | N Y | U | | | | | | B059-07 | 07:08 |
| | | | | TRICHLOROETHENE | .0056 | mg/kg | U | N Y | U | | | | | | B059-07 | 07:08 |
| | | | | TRICHLOROFLUOROMETHANE | .0056 | mg/kg | U | N Y | U | | | | | | B059-07 | 07:08 |
| | | | | VINYL CHLORIDE | .0056 | mg/kg | U | N Y | U | | | | | | B059-07 | 07:08 |

***Quality Assurance Report***
***For Ranges West of Iron Mountain Road***
***Parcel HR-200Q***
***IT Project No 796887***
***Fort McClellan Quality Assurance Report***

## *1.0 Overview*

Five soil samples were collected in support of the investigation at Fort McClellan (FTMC) Parcel HR-200Q, Ranges West of Iron Mountain Road. All samples were submitted to EMAX Laboratories, Inc. for analysis. Soil samples were analyzed for target analyte list (TAL) metals, nitroaromatic-nitramine explosives, and perchlorate. QC samples consisted of the following types and quantities: 1 field duplicate and 1 equipment rinsate. 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 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 data and validation 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 (DQO) were met, laboratory analytical results and data packages were examined for compliance with SW846 SW6010B/SW7000 Series, SW8330, and U.S. Environmental Protection Agency (EPA) 314.0 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 analytical 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*

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

- Equipment rinsates (ER) are samples of analyte-free deionized water poured into, or 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 an analyte-free matrix which is analyzed to verify the analysis system is free of contamination. ICBs and CCBs are analyzed immediately after the initial and continuing calibration is 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 |
|---|---|---|---|
| 10200Q-01 | JQ0001, JQ0002, JQ0004 & JQ0005 | Cobalt<br>Nickel<br>Silver | Cobalt, nickel and silver results for samples JQ0001, JQ0002, JQ0004 & JR0005 were "B" qualified. |
| | JQ0001, JQ0003 & JQ0004 | Mercury | Mercury results for samples JQ0001, JQ0003 & JQ0004 were "B" qualified. |
| | JQ0002, JQ0004 & JQ0005 | Calcium | Calcium results for samples JQ0002, JQ0004 & JQ0005 were "B" qualified. |

## *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.

Overall sampling and analysis precision for this task was assessed using field duplicate (FD) samples. Laboratory precision was assessed by laboratory control sample/laboratory control sample duplicate (LCS/LCSD) and matrix spike/matrix spike duplicate (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 list field duplicate, LCS/LCSD and MS/MSD RPD anomalies.

**Table 2.4-1 Precision Acceptance Criteria**

| Field/Laboratory QC Type | Matrix | |
|---|---|---|
| | Aqueous | Soil |
| Field Duplicate (Both Organic & Inorganic) | RPD < 35% | RPD < 50% |
| Perchlorate LCS/LCSD and MS/MSD | RPD < 10% | RPD < 20% |
| Nitroaromatic and Nitramine Explosives LCS/LCSD and MS/MSD | Refer to Table 8-1of FTMC "Installation Wide Sample and Analysis Plan" | Refer to Table 8-1of FTMC "Installation Wide Sample and Analysis Plan" |
| Metals LCS/LCSD and MS/MSD | RPD < 20% | 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 |
|---|---|---|---|
| 10200Q-01 | JQ0002 (Parent) / JQ0005 (FD) | Manganese (58%)<br>Zinc (64%) | Manganese and zinc results for samples JQ0002 and JQ0005 were "J" qualified due to RPD between parent sample and its corresponding field duplicate 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 SW846 SW6010B/SW7000 Series methodology, nitroaromatic-nitramine

explosives by SW8330, and perchlorate by EPA 314.0. Reported results indicate that an acceptable level of analytical accuracy was achieved.

### *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. Soil sample data are being used to assess potential impacts to terrestrial biota that might use the site for food and/or habitat purposes

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-200Q Ranges West of Iron Mountain Road. 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-200Q requirement for completeness is 95% for both aqueous and soil samples. The % Completeness for this task is calculated to be 100%

- % Completeness = (190 / 190) 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-200Q
# Ranges West of Iron Mountain Road
# Analytical Summary
# Project No. 796887

| HR-200Q Soil Sampling | | | | |
|---|---|---|---|---|
| **Sample Location** | **Sample Name** | **Sample Number** | **Date Sampled** | **Analytical Suite** |
| HR-200Q-GP01 | HR-200Q-GP01-SS-JQ0001-REG | JQ0001 | 28-Mar-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-200Q-GP01-DS-JQ0002-REG | JQ0002 | 28-Mar-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-200Q-GP01-DS-JQ0005-FD | JQ0005 | 28-Mar-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-200Q-GP02 | HR-200Q-GP02-SS-JQ0003-REG | JQ0003 | 28-Mar-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-200Q-GP02-DS-JQ0004-REG | JQ0004 | 28-Mar-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |

# ATTACHMENT B

# DATA VALIDATION SUMMARY REPORT

***Data Validation Summary Report***
***for the Site Investigation Performed at the***
***Ranges West of Iron Mountain Road (Parcel HR-200Q)***
***Fort McCellan***

## *1.0 Introduction*

Level III data validation was performed on 100% of the environmental samples collected at Parcel HR-200Q. The analytical data consisted of one sample delivery group (SDG) 10200Q-01, which was analyzed by EMAX Laboratories. Soil matrix were validated. The chemical parameters for which the samples were analyzed, are identified below:

| Parameter (Method) |
|---|
| Metals by SW846 6010B and 7471A |
| Nitroaromatic and Nitramine Explosives by SW846 8330 |
| Perchlorate by EPA 314.0 |

## *2.0 Procedures*

The sample data were validated following the logic identified in the *USEPA Contract Laboratory Program (CLP) National Functional Guidelines For Inorganic Data Review (February 1994)* and *USEPA Contract Laboratory Program National Functional Guidelines For Organic Review (October 1999)* for all areas except Blanks. *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's) were applied to all sample results. As the result of the use of Update III SW846 test methods for the analytical data and the application of the 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 Chromatograph (GC) and Gas Chromatograph/Mass Spectra (GC/MS) calibration areas and is due to the fact that the analytical methods are "performance-based", and allows 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, CFR, SOP's, QAP) 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 qualification. No data were rejected.

Individual validation reports have been prepared for each parameter in each SDG 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 Parcel HR-200Q. 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*

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 exception of the following:

Note: 'B' Qualifiers were applied to all of the following sample results.

| SDG | Samples Affected | Analyte/Analytes | Associated Blank Contamination |
|---|---|---|---|
| 10200Q-01 | JQ0001, JQ0002, JQ0004, JQ0005 | Cobalt, Nickel, Silver | Method/Calib |
| | JQ0001, JQ0003, JQ0004 | Mercury | Calib |
| | JQ0002, JQ0004, JQ0005 | Calcium | Calib |

'B' qualifiers assigned to designate blank contamination, which are identification qualifiers, take precedence over estimating qualifiers, assigned due to quantitation.

Matrix Spike / Matrix Spike Duplicate

All MS/MSD QC criteria were met for the project samples.

Laboratory Control Sample (LCS)

All QC criteria were met for the LCS associated with the project sample analyses.

Interference Check Sample (ICS)

All ICS % recoveries for the project samples were acceptable.

ICP Serial Dilutions

No associated serial dilution samples were performed for the project samples.

Field Duplicates

Original and field duplicate results were reviewed to evaluate the precision and accuracy of field activities. All QC criteria were met, with the exception of the following, which exceeded QC criteria (RPD < 50%):

| SDG | Samples Affected | Analyte/Analytes | Validation Qualifier |
|---|---|---|---|
| 10200Q-01 | JQ0002(Original) JQ0005(FD) | Manganese, Zinc | J |

Sample Quantitation

Results quantified between the IDL and the RL ("J" flagged by the laboratory) were qualified as estimated (J).

### *4.2 Nitroaromatic and Nitramine Explosives by SW846 8330*

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 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 are within acceptable QC ranges.

Matrix Spike / Matrix Spike Duplicate

All MS/MSD QC criteria were met for the project samples.

Laboratory Control Sample (LCS)

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

Field Duplicates

Original and field duplicate results were reviewed to evaluate the precision and accuracy of field activities. All QC criteria were met.

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.

### *4.3 Perchlorate by EPA 314.0*

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

All MS/MSD QC criteria were met for the project samples.

Laboratory Control Sample (LCS)

All QC criteria were met for the LCS associated with the project sample analyses.

Field Duplicates

Original and field duplicate results were reviewed to evaluate the precision and accuracy of field activities. All QC criteria were met.

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.

## *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 "nondetect" may be inaccurate or imprecise. The nondetect result should be estimated.

## Validation Reason Code Definitions

| Reason Code | Definition |
|---|---|
| 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

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10200Q-01** | | | | | | | | | | | | | | | | | | |
| JQ0001 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 7880 | mg/kg | | Y | Y | P | | | | | | | C256-01 | 22:14 |
| | | | | ANTIMONY | 11.8 | mg/kg | U | N | Y | U | U | | | | | | C256-01 | 22:14 |
| | | | | ARSENIC | 2.6 | mg/kg | | Y | Y | P | | | | | | | C256-01 | 21:33 |
| | | | | BARIUM | 65.2 | mg/kg | | Y | Y | P | | | | | | | C256-01 | 22:14 |
| | | | | BERYLLIUM | .416 | mg/kg | J | Y | Y | P | J | | 15 | | | | C256-01 | 22:14 |
| | | | | CADMIUM | .59 | mg/kg | U | N | Y | U | U | | | | | | C256-01 | 22:14 |
| | | | | CALCIUM | 273 | mg/kg | | Y | Y | P | | | | | | | C256-01 | 22:14 |
| | | | | CHROMIUM | 6.56 | mg/kg | | Y | Y | P | | | | | | | C256-01 | 22:14 |
| | | | | COBALT | 3.15 | mg/kg | | Y | Y | F | B | | 06B | | | | C256-01 | 22:14 |
| | | | | COPPER | 3.26 | mg/kg | | Y | Y | P | | | | | | | C256-01 | 22:14 |
| | | | | IRON | 7050 | mg/kg | | Y | Y | P | | | | | | | C256-01 | 22:14 |
| | | | | LEAD | 9.88 | mg/kg | | Y | Y | P | | | | | | | C256-01 | 21:33 |
| | | | | MAGNESIUM | 236 | mg/kg | | Y | Y | P | | | | | | | C256-01 | 22:14 |
| | | | | MANGANESE | 583 | mg/kg | | Y | Y | P | | | | | | | C256-01 | 22:14 |
| | | | | NICKEL | 3.53 | mg/kg | | Y | Y | F | B | | 06A | | | | C256-01 | 22:14 |
| | | | | POTASSIUM | 134 | mg/kg | J | Y | Y | P | J | | 15 | | | | C256-01 | 22:14 |
| | | | | SELENIUM | 1.18 | mg/kg | U | N | Y | U | U | | | | | | C256-01 | 21:33 |
| | | | | SILVER | .639 | mg/kg | J | Y | Y | F | B | | 06A | 06B | 15 | | C256-01 | 22:14 |
| | | | | SODIUM | 42.5 | mg/kg | J | Y | Y | P | J | | 15 | | | | C256-01 | 22:14 |
| | | | | THALLIUM | 2.36 | mg/kg | U | N | Y | U | U | | | | | | C256-01 | 21:33 |
| | | | | VANADIUM | 10.8 | mg/kg | | Y | Y | P | | | | | | | C256-01 | 22:14 |
| | | | | ZINC | 11 | mg/kg | | Y | Y | P | | | | | | | C256-01 | 22:14 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .036 | mg/kg | J | Y | Y | F | B | | 06B | 15 | | | C256-01 | 10:43 |
| JQ0002 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 5680 | mg/kg | | Y | Y | P | | | | | | | C256-02 | 22:18 |
| | | | | ANTIMONY | 11.4 | mg/kg | U | N | Y | U | U | | | | | | C256-02 | 22:18 |
| | | | | ARSENIC | 6.62 | mg/kg | | Y | Y | P | | | | | | | C256-02 | 21:38 |
| | | | | BARIUM | 22.7 | mg/kg | | Y | Y | P | | | | | | | C256-02 | 22:18 |
| | | | | BERYLLIUM | .163 | mg/kg | J | Y | Y | P | J | | 15 | | | | C256-02 | 22:18 |
| | | | | CADMIUM | .572 | mg/kg | U | N | Y | U | U | | | | | | C256-02 | 22:18 |
| | | | | CALCIUM | 75 | mg/kg | J | Y | Y | F | B | | 06B | 15 | | | C256-02 | 22:18 |
| | | | | CHROMIUM | 10.3 | mg/kg | | Y | Y | P | | | | | | | C256-02 | 22:18 |
| | | | | COBALT | 1.8 | mg/kg | J | Y | Y | F | B | | 06B | 15 | | | C256-02 | 22:18 |
| | | | | COPPER | 4.12 | mg/kg | | Y | Y | P | | | | | | | C256-02 | 22:18 |
| | | | | IRON | 12600 | mg/kg | | Y | Y | P | | | | | | | C256-02 | 22:18 |
| | | | | LEAD | 4.07 | mg/kg | | Y | Y | P | | | | | | | C256-02 | 21:38 |
| | | | | MAGNESIUM | 148 | mg/kg | | Y | Y | P | | | | | | | C256-02 | 22:18 |
| | | | | MANGANESE | 43.7 | mg/kg | | Y | Y | P | J | | 17 | | | | C256-02 | 22:18 |
| | | | | NICKEL | 2.26 | mg/kg | J | Y | Y | F | B | | 06A | 15 | | | C256-02 | 22:18 |
| | | | | POTASSIUM | 172 | mg/kg | J | Y | Y | P | J | | 15 | | | | C256-02 | 22:18 |
| | | | | SELENIUM | 1.14 | mg/kg | U | N | Y | U | U | | | | | | C256-02 | 21:38 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10200Q-01** | | | | | | | | | | | | | | | | | | | | |
| JQ0002 | SW6010B | SW3050 | N | 0 | 1 | SILVER | .541 | mg/kg | J | Y | Y | F | B | | 06A | 06B | 15 | | C256-02 | 22:18 |
| | | | | | | SODIUM | 41.3 | mg/kg | J | Y | Y | P | J | | 15 | | | | C256-02 | 22:18 |
| | | | | | | THALLIUM | 2.29 | mg/kg | U | N | Y | U | U | | | | | | C256-02 | 21:38 |
| | | | | | | VANADIUM | 17.2 | mg/kg | | Y | Y | P | | | | | | | C256-02 | 22:18 |
| | | | | | | ZINC | 6.25 | mg/kg | | Y | Y | P | J | | 17 | | | | C256-02 | 22:18 |
| | SW7471A | TOTAL | N | 0 | 1 | MERCURY | .114 | mg/kg | U | N | Y | U | U | | | | | | C256-02 | 10:46 |
| JQ0003 | SW6010B | SW3050 | N | 0 | 1 | ALUMINUM | 11300 | mg/kg | | Y | Y | P | | | | | | | C256-03 | 22:23 |
| | | | | | | ANTIMONY | 12.3 | mg/kg | U | N | Y | U | U | | | | | | C256-03 | 22:23 |
| | | | | | | ARSENIC | 2.5 | mg/kg | | Y | Y | P | | | | | | | C256-03 | 21:43 |
| | | | | | | BARIUM | 120 | mg/kg | | Y | Y | P | | | | | | | C256-03 | 22:23 |
| | | | | | | BERYLLIUM | .731 | mg/kg | J | Y | Y | P | J | | 15 | | | | C256-03 | 22:23 |
| | | | | | | CADMIUM | .613 | mg/kg | U | N | Y | U | U | | | | | | C256-03 | 22:23 |
| | | | | | | CALCIUM | 337 | mg/kg | | Y | Y | P | | | | | | | C256-03 | 22:23 |
| | | | | | | CHROMIUM | 10.1 | mg/kg | | Y | Y | P | | | | | | | C256-03 | 22:23 |
| | | | | | | COBALT | 5 | mg/kg | | Y | Y | P | | | | | | | C256-03 | 22:23 |
| | | | | | | COPPER | 4.23 | mg/kg | | Y | Y | P | | | | | | | C256-03 | 22:23 |
| | | | | | | IRON | 8560 | mg/kg | | Y | Y | P | | | | | | | C256-03 | 22:23 |
| | | | | | | LEAD | 14.3 | mg/kg | | Y | Y | P | | | | | | | C256-03 | 21:43 |
| | | | | | | MAGNESIUM | 292 | mg/kg | | Y | Y | P | | | | | | | C256-03 | 22:23 |
| | | | | | | MANGANESE | 1330 | mg/kg | | Y | Y | P | | | | | | | C256-03 | 22:23 |
| | | | | | | NICKEL | 5.05 | mg/kg | | Y | Y | P | | | | | | | C256-03 | 22:23 |
| | | | | | | POTASSIUM | 359 | mg/kg | J | Y | Y | P | J | | 15 | | | | C256-03 | 22:23 |
| | | | | | | SELENIUM | 1.23 | mg/kg | U | N | Y | U | U | | | | | | C256-03 | 21:43 |
| | | | | | | SILVER | 1.23 | mg/kg | U | N | Y | U | U | | | | | | C256-03 | 22:23 |
| | | | | | | SODIUM | 27.2 | mg/kg | J | Y | Y | P | J | | 15 | | | | C256-03 | 22:23 |
| | | | | | | THALLIUM | 2.45 | mg/kg | U | N | Y | U | U | | | | | | C256-03 | 21:43 |
| | | | | | | VANADIUM | 12.4 | mg/kg | | Y | Y | P | | | | | | | C256-03 | 22:23 |
| | | | | | | ZINC | 13.2 | mg/kg | | Y | Y | P | | | | | | | C256-03 | 22:23 |
| | SW7471A | TOTAL | N | 0 | 1 | MERCURY | .041 | mg/kg | J | Y | Y | F | B | | 06B | 15 | | | C256-03 | 10:48 |
| JQ0004 | SW6010B | SW3050 | N | 0 | 1 | ALUMINUM | 10800 | mg/kg | | Y | Y | P | | | | | | | C256-04 | 22:28 |
| | | | | | | ANTIMONY | 12 | mg/kg | U | N | Y | U | U | | | | | | C256-04 | 22:28 |
| | | | | | | ARSENIC | 3.19 | mg/kg | | Y | Y | P | | | | | | | C256-04 | 21:47 |
| | | | | | | BARIUM | 22.1 | mg/kg | | Y | Y | P | | | | | | | C256-04 | 22:28 |
| | | | | | | BERYLLIUM | .23 | mg/kg | J | Y | Y | P | J | | 15 | | | | C256-04 | 22:28 |
| | | | | | | CADMIUM | .599 | mg/kg | U | N | Y | U | U | | | | | | C256-04 | 22:28 |
| | | | | | | CALCIUM | 123 | mg/kg | | Y | Y | F | B | | 06B | | | | C256-04 | 22:28 |
| | | | | | | CHROMIUM | 27.2 | mg/kg | | Y | Y | P | | | | | | | C256-04 | 22:28 |
| | | | | | | COBALT | 1.4 | mg/kg | J | Y | Y | F | J | | 06A | 06B | 15 | | C256-04 | 22:28 |
| | | | | | | COPPER | 5.44 | mg/kg | | Y | Y | P | | | | | | | C256-04 | 22:28 |
| | | | | | | IRON | 21600 | mg/kg | | Y | Y | P | | | | | | | C256-04 | 22:28 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10200Q-01** | | | | | | | | | | | | | | | | | | | | |
| JQ0004 | SW6010B | SW3050 | N | 0 | 1 | LEAD | 5.11 | mg/kg | | Y | Y | P | | | | | | | C256-04 | 21:47 |
| | | | | | | MAGNESIUM | 182 | mg/kg | | Y | Y | P | | | | | | | C256-04 | 22:28 |
| | | | | | | MANGANESE | 93.9 | mg/kg | | Y | Y | P | | | | | | | C256-04 | 22:28 |
| | | | | | | NICKEL | 3.25 | mg/kg | | Y | Y | F | B | | 06A | | | | C256-04 | 22:28 |
| | | | | | | POTASSIUM | 159 | mg/kg | J | Y | Y | P | J | | 15 | | | | C256-04 | 22:28 |
| | | | | | | SELENIUM | 1.2 | mg/kg | U | N | Y | U | U | | | | | | C256-04 | 21:47 |
| | | | | | | SILVER | .654 | mg/kg | J | Y | Y | F | B | | 06A | 06B | 15 | | C256-04 | 22:28 |
| | | | | | | SODIUM | 43.2 | mg/kg | J | Y | Y | P | J | | 15 | | | | C256-04 | 22:28 |
| | | | | | | THALLIUM | 2.4 | mg/kg | U | N | Y | U | U | | | | | | C256-04 | 21:47 |
| | | | | | | VANADIUM | 28.6 | mg/kg | | Y | Y | P | | | | | | | C256-04 | 22:28 |
| | | | | | | ZINC | 6.27 | mg/kg | | Y | Y | P | | | | | | | C256-04 | 22:28 |
| | SW7471A | TOTAL | N | 0 | 1 | MERCURY | .027 | mg/kg | J | Y | Y | F | B | | 06B | 15 | | | C256-04 | 10:51 |
| JQ0005 | SW6010B | SW3050 | N | 0 | 1 | ALUMINUM | 5140 | mg/kg | | Y | Y | | | | | | | | C256-05 | 22:33 |
| | | | | | | ANTIMONY | 11.4 | mg/kg | U | N | Y | | U | | | | | | C256-05 | 22:33 |
| | | | | | | ARSENIC | 6.85 | mg/kg | | Y | Y | | | | | | | | C256-05 | 21:52 |
| | | | | | | BARIUM | 17.8 | mg/kg | | Y | Y | | | | | | | | C256-05 | 22:33 |
| | | | | | | BERYLLIUM | .168 | mg/kg | J | Y | Y | | J | | 15 | | | | C256-05 | 22:33 |
| | | | | | | CADMIUM | .569 | mg/kg | U | N | Y | | U | | | | | | C256-05 | 22:33 |
| | | | | | | CALCIUM | 50.5 | mg/kg | J | Y | Y | F | B | | 06B | 15 | | | C256-05 | 22:33 |
| | | | | | | CHROMIUM | 9.77 | mg/kg | | Y | Y | | | | | | | | C256-05 | 22:33 |
| | | | | | | COBALT | 1.2 | mg/kg | J | Y | Y | | B | | 06A | 15 | 06B | | C256-05 | 22:33 |
| | | | | | | COPPER | 4.06 | mg/kg | | Y | Y | | | | | | | | C256-05 | 22:33 |
| | | | | | | IRON | 12900 | mg/kg | | Y | Y | | | | | | | | C256-05 | 22:33 |
| | | | | | | LEAD | 3.56 | mg/kg | | Y | Y | | | | | | | | C256-05 | 21:52 |
| | | | | | | MAGNESIUM | 137 | mg/kg | | Y | Y | | | | | | | | C256-05 | 22:33 |
| | | | | | | MANGANESE | 24.1 | mg/kg | | Y | Y | | J | | 17 | | | | C256-05 | 22:33 |
| | | | | | | NICKEL | 2.28 | mg/kg | | Y | Y | | B | | 06A | | | | C256-05 | 22:33 |
| | | | | | | POTASSIUM | 196 | mg/kg | J | Y | Y | | J | | 15 | | | | C256-05 | 22:33 |
| | | | | | | SELENIUM | 1.14 | mg/kg | U | N | Y | | U | | | | | | C256-05 | 21:52 |
| | | | | | | SILVER | .707 | mg/kg | J | Y | Y | F | B | | 06A | 06B | 15 | | C256-05 | 22:33 |
| | | | | | | SODIUM | 31.6 | mg/kg | J | Y | Y | | J | | | | | | C256-05 | 22:33 |
| | | | | | | THALLIUM | 2.28 | mg/kg | U | N | Y | | U | | | | | | C256-05 | 21:52 |
| | | | | | | VANADIUM | 16.8 | mg/kg | | Y | Y | | | | | | | | C256-05 | 22:33 |
| | | | | | | ZINC | 3.22 | mg/kg | | Y | Y | | J | | 17 | | | | C256-05 | 22:33 |
| | SW7471A | TOTAL | N | 0 | 1 | MERCURY | .114 | mg/kg | U | N | Y | | U | | | | | | C256-05 | 10:53 |
| JQ0001 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C256-01 | 16:54 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C256-01 | 16:54 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C256-01 | 16:54 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C256-01 | 16:54 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C256-01 | 16:54 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10200Q-01** | | | | | | | | | | | | | | | | | | |
| JQ0001 | SW8330 | METHOD | N 0 1 | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C256-01 | 16:54 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C256-01 | 16:54 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C256-01 | 16:54 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C256-01 | 16:54 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C256-01 | 16:54 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | C256-01 | 16:54 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C256-01 | 16:54 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | C256-01 | 16:54 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | C256-01 | 16:54 |
| JQ0002 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C256-02 | 17:32 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C256-02 | 17:32 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C256-02 | 17:32 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C256-02 | 17:32 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C256-02 | 17:32 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C256-02 | 17:32 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C256-02 | 17:32 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C256-02 | 17:32 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C256-02 | 17:32 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C256-02 | 17:32 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | C256-02 | 17:32 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C256-02 | 17:32 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | C256-02 | 17:32 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | C256-02 | 17:32 |
| JQ0003 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C256-03 | 18:11 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C256-03 | 18:11 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C256-03 | 18:11 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C256-03 | 18:11 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C256-03 | 18:11 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C256-03 | 18:11 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C256-03 | 18:11 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C256-03 | 18:11 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C256-03 | 18:11 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C256-03 | 18:11 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | C256-03 | 18:11 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C256-03 | 18:11 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | C256-03 | 18:11 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | C256-03 | 18:11 |
| JQ0004 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C256-04 | 20:09 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C256-04 | 20:09 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C256-04 | 20:09 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10200Q-01** | | | | | | | | | | | | | | | | | | | | |
| JQ0004 | SW8330 | METHOD | N | 0 | 1 | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C256-04 | 20:09 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C256-04 | 20:09 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C256-04 | 20:09 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C256-04 | 20:09 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C256-04 | 20:09 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C256-04 | 20:09 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C256-04 | 20:09 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | C256-04 | 20:09 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C256-04 | 20:09 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | C256-04 | 20:09 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | C256-04 | 20:09 |
| JQ0005 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | | U | | | | | | C256-05 | 20:47 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | | U | | | | | | C256-05 | 20:47 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | | U | | | | | | C256-05 | 20:47 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | | U | | | | | | C256-05 | 20:47 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | | U | | | | | | C256-05 | 20:47 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | | U | | | | | | C256-05 | 20:47 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | | U | | | | | | C256-05 | 20:47 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | | U | | | | | | C256-05 | 20:47 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | | U | | | | | | C256-05 | 20:47 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | | U | | | | | | C256-05 | 20:47 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | | U | | | | | | C256-05 | 20:47 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | | U | | | | | | C256-05 | 20:47 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | | U | | | | | | C256-05 | 20:47 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | | U | | | | | | C256-05 | 20:47 |
| JQ0001 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .059 | mg/kg | U | N | Y | U | U | | | | | | C256-01 | 03:56 |
| JQ0002 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0572 | mg/kg | U | N | Y | U | U | | | | | | C256-02 | 04:14 |
| JQ0003 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0613 | mg/kg | U | N | Y | U | U | | | | | | C256-03 | 04:31 |
| JQ0004 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0599 | mg/kg | U | N | Y | U | U | | | | | | C256-04 | 04:48 |
| JQ0005 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0569 | mg/kg | U | N | Y | | U | | | | | | C256-05 | 05:05 |

***Quality Assurance Report***
***For Ranges West of Iron Mountain Road***
***Parcel HR-201Q***
***IT Project No 796887***
***Fort McClellan Quality Assurance Report***

## *1.0 Overview*

Seven soil, and 2 groundwater samples were collected in support of the investigation at Fort McClellan (FTMC) Parcel HR-201Q, Ranges West of Iron Mountain Road. All samples were submitted to EMAX Laboratories, Inc. for analysis. Soil samples were analyzed for target analyte list (TAL) metals, nitroaromatic-nitramine explosives, and perchlorate. Groundwater samples were analyzed for (TAL) metals, nitroaromatic-nitramine explosives, perchlorate, and target compound list (TCL) volatiles. QC samples consisted of the following types and quantities: 2 field duplicates, 2 trip blanks, and 3 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 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 data and validation 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 (DQO) were met, laboratory analytical results and data packages were examined for compliance with SW846 SW6010B/SW7000 Series, SW8330, SW8260B, and U.S. Environmental Protection Agency (EPA) 314.0 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 analytical 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

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

- Trip blanks (TBs) consist of a VOC sample vial filled in the laboratory with ASTM Type II reagent grade water, transported to the sampling site, handled like an environmental sample and returned to the laboratory for analysis. Trip blanks are prepared only when VOC samples are collected and analyzed. Trip blanks are used to assess the potential introduction of contaminants from sample containers during the transportation and/or storage procedures. Trip blanks were sent with all aqueous samples shipped to the laboratory requiring volatile analysis.

- Equipment rinsates (ER) are samples of analyte-free deionized water poured into, or 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 an analyte-free matrix which is analyzed to verify the analysis system is free of contamination. ICBs and CCBs are analyzed immediately after the initial and continuing calibration is performed.

Field sample concentrations were evaluated to determine if the sample results could have been biased by the presence of any contamination measured in trip blanks, 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 |
|---|---|---|---|
| 10201Q-01 | JR0002, JR0003 & JR0004 | Cobalt | Cobalt results for samples JR0002, JR0003, & JR0004 were "B" qualified. |
| 10201Q-02 | JR0006 | Potassium | Potassium result for sample was "B" qualified. |
| 10201Q-03 | JR3002 | Aluminum<br>Copper<br>Nickel<br>Silver<br>Vanadium<br>Cobalt<br>Potassium<br>Barium<br>Calcium<br>Magnesium | Aluminum, copper, nickel, silver, vanadium, cobalt, potassium, barium, calcium and magnesium results for JR3002 were "B" qualified. |
| 10201Q-04 | JR3001 | Barium<br>Calcium<br>Magnesium<br>Zinc | Barium, calcium, magnesium and zinc were "B" qualified. |

## *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.

Overall sampling and analysis precision for this task was assessed using field duplicate (FD) samples. Laboratory precision was assessed by laboratory control sample/laboratory control sample duplicate (LCS/LCSD) and matrix spike/matrix spike duplicate (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 list field duplicate, LCS/LCSD and MS/MSD RPD anomalies.

**Table 2.4-1 Precision Acceptance Criteria**

| Field/Laboratory QC Type | Matrix | |
|---|---|---|
| | Aqueous | Soil |
| Field Duplicate (Both Organic & Inorganic) | RPD < 35% | RPD < 50% |
| Perchlorate LCS/LCSD and MS/MSD | RPD < 10% | RPD < 20% |
| Nitroaromatic and Nitramine Explosives LCS/LCSD and MS/MSD | Refer to Table 8-1of FTMC "Installation Wide Sample and Analysis Plan" | Refer to Table 8-1of FTMC "Installation Wide Sample and Analysis Plan" |
| TCL Volatiles LCS/LCSD and MS/MSD | Refer to Table 8-1of FTMC "Installation Wide Sample and Analysis Plan" | Refer to Table 8-1of FTMC "Installation Wide Sample and Analysis Plan" |
| Metals LCS/LCSD and MS/MSD | RPD < 20% | 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 |
|---|---|---|---|
| 10201Q-01 | JR0004 (Parent) / JR0005 (FD) | Cobalt (60%)<br>Manganese (109%) | Manganese results for samples JR3004 and JR3005 were "J" qualified due to RPD between parent sample and its corresponding field duplicate exceeding QC criteria.<br><br>Cobalt result for sample JR3004 was "B" qualified due to blank contamination, which takes precedence over "J" qualification attributed to RPD between parent sample and its corresponding field duplicate exceeding QC criteria. |

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

| Sample Delivery Group | Sample Number | Contaminant | Assigned Validation Qualifier |
|---|---|---|---|
| 10201Q-02 | JR0006 (Parent) / JR0007 (FD) | Nickel (55%) | Nickel results for samples JR0006 and JR0007 were "J" qualified due to RPD between parent sample and its corresponding field duplicate exceeding QC criteria. |
| 10201Q-03 | JR3002 MS/MSD | 2-Nitrotoluene (36)<br>4-Nitrotoluene (63)<br>RDX (61) | 2-Nitrotoluene, 4-Nitrotoluene and RDX results for sample JR3002 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 SW846 SW6010B/SW7000 Series methodology, nitroaromatic-nitramine explosives by SW8330, perchlorate by EPA 314.0 and TCL volatiles by SW8260B. Reported results indicate that an acceptable level of analytical accuracy was achieved. Table 2.5-1 lists surrogate, LCS/LCSD, and MS/MSD spike recoveries, which exceed QC criteria.

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

| Sample Delivery Group | Sample Number | Contaminant | Assigned Validation Qualifier |
|---|---|---|---|
| 10201Q-03 | JR3002 MS/MSD | 4-Nitrotoluene (LB) | 4-Nitrotoluene result for sample JR3002 was "UJ" qualified due to MS/MSD spike recoveries exceeding QC criteria. |

LB - Low 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. Soil sample data are being used to assess potential impacts to terrestrial biota that might use the site for food and/or habitat purposes. Monitoring well locations where chosen to establish groundwater flow direction and site-specific geology, and provide 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-201Q Ranges West of Iron Mountain Road. 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-201Q requirement for completeness is 95% for both aqueous and soil samples. The % Completeness for this task is calculated to be 100%

- % Completeness = (470 / 470) 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-201Q
## Ranges West of Iron Mountain Road
## Analytical Summary
## Project No. 796887

### HR-201Q Soil Sampling

| Sample Location | Sample Name | Sample Number | Date Sampled | Analytical Suite |
|---|---|---|---|---|
| HR-201Q-MW01 | HR-201Q-MW01-SS-JR0001-REG | JR0001 | 12-Dec-00 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-201Q-MW01-DS-JR0002-REG | JR0002 | 12-Dec-00 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-201Q-MW02 | HR-201Q-MW02-SS-JR0003-REG | JR0003 | 12-Dec-00 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-201Q-MW02-DS-JR0004-REG | JR0004 | 12-Dec-00 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-201Q-MW02-DS-JR0005-FD | JR0005 | 12-Dec-00 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-201Q-DEP01 | HR-201Q-DEP01-SS-JR0006-REG | JR0006 | 28-Feb-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-201Q-DEP01-SS-JR0007-FD | JR0007 | 28-Feb-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |

### HR-201Q Groundwater Sampling

| Sample Location | Sample Name | Sample Number | Date Sampled | Analytical Suite |
|---|---|---|---|---|
| HR-201Q-MW01 | HR-201Q-MW01-GW-JR3001-REG | JR3001 | 25-Apr-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-201Q-MW02 | HR-201Q-MW02-GW-JR3002-REG | JR3002 | 24-Apr-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-201Q-MW02-GW-JR3002-MS | JR3002-MS | 24-Apr-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-201Q-MW02-GW-JR3002-MSD | JR3002-MSD | 24-Apr-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |

# ATTACHMENT B

# DATA VALIDATION SUMMARY 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 |

# Validation Reason Code Definitions



| Reason Code | Description |
|---|---|
| 10B | Retention Time |
| 11 | Laboratory control sample recoveries outside specified control 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 |

***Data Validation Summary Report***
***for the Site Investigation Performed at the***
***Ranges West of Iron Mountain Road (Parcel HR-201Q)***
***Fort McCellan***

## *1.0 Introduction*

Level III data validation was performed on 100% of the environmental samples collected at Ranges West of Iron Mountain Road (Parcel HR-201Q). The analytical data consisted of four sample delivery groups (SDG) 10201Q-01 through -04, which were analyzed by EMAX Laboratories. Soil and water matrix were validated. The chemical parameters for which the samples were analyzed, are identified below:

| Parameter (Method) |
|---|
| Volatile Organics by GC/MS SW846 8260B |
| Metals by SW846 6010B and 7471A/7470A |
| Nitroaromatic and Nitramine Explosives by SW846 8330 |
| Perchlorate by EPA 314.0 |

## *2.0 Procedures*

The sample data were validated following the logic identified in the *USEPA Contract Laboratory Program (CLP) National Functional Guidelines For Inorganic Data Review (February 1994)* and *USEPA Contract Laboratory Program National Functional Guidelines For Organic Review (October 1999)* for all areas except Blanks. *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's) were applied to all sample results. As the result of the use of Update III SW846 test methods for the analytical data and the application of the 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 Chromatograph (GC) and Gas Chromatograph/Mass Spectra (GC/MS) calibration areas and is due to the fact that the analytical methods are "performance-based", and allows 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, CFR, SOP's, QAP) 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 qualification. No data were rejected.

Individual validation reports have been prepared for each parameter in each SDG 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 Parcel HR-201Q. 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 Volatile Organics by GC/MS SW846 8260B*

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:

<u>Holding Times</u>

Technical holding time criteria were met for all samples.

Initial and Continuing Calibration

The initial calibration and continuing calibrations associated with the project samples met QC criteria, with the exception of the following:

- The following exhibited individual CCAL %D's > 20%:

| SDG Number | Samples Affected | Compound(s) | Validation Qualifier |
|---|---|---|---|
| 10201Q-03 | JR3002 | Dichlorodifluoromethane, Bromomethane, Carbon disulfide, Naphthalene | UJ |
| 10201Q-04 | JR3001 | 2-Hexanone, 4-Methyl-2-pentanone, Bromomethane, Carbon disulfide, Dichlorodifluoromethane | UJ |

Blanks

The 5X/10X rule for contaminants found in the associated equipment rinses, trip blanks, and method blanks was applied to all sample results. All were found to be acceptable.

Surrogate Recoveries

All surrogate recoveries are within acceptable QC limits.

Matrix Spike / Matrix Spike Duplicate

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

Laboratory Control Sample (LCS)

LCS 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.

Internal Standards

All internal standards met QC criteria

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.

### *4.2 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 exception of the following:

Note: 'B' Qualifiers were applied to all of the following sample results.

| SDG | Samples Affected | Analyte/Analytes | Associated Blank Contamination |
|---|---|---|---|
| 10201Q-01 | JR0002, JR0003, JR0004 | Cobalt | Method |
| 10201Q-02 | JR0006 | Potassium | Calibration |
| 10201Q-03 | JR3002 | Aluminum, Copper, Nickel, Silver, Vanadium, Cobalt, Potassium, Barium, Calcium, Magnesium | Method/Calib/ER |
| 10201Q-04 | JR3001 | Barium, Calcium, Magnesium, Zinc | ER |

'B' qualifiers assigned to designate blank contamination, which are identification qualifiers, take precedence over estimating qualifiers, assigned due to quantitation.

Matrix Spike / Matrix Spike Duplicate

Batch QC was performed for the project samples and all QC criteria were met.

Laboratory Control Sample (LCS)

All QC criteria were met for the LCS associated with the project sample analyses.

Interference Check Sample (ICS)

All ICS % recoveries for the project samples were acceptable.

ICP Serial Dilutions

All QC criteria were met.

Field Duplicates

Original and field duplicate results were evaluated and no problems were identified, with the exception of the following:

| SDG | Samples Affected | Element/Elements | Validation Qualifier |
|---|---|---|---|
| 10201Q-01 | JR0004 (original), JR0005 (duplicate) | Cobalt, Manganese | B/J |
| 10201Q-02 | JR0006 (original), JR0007 (duplicate) | Nickel | J |

Sample Quantitation

Results quantified between the IDL and the RL ("J" flagged by the laboratory) were qualified as estimated (J).

### *4.3 Nitroaromatic and Nitramine Explosives by SW846 8330*

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 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 are within acceptable QC ranges for the surrogates applied.

Matrix Spike / Matrix Spike Duplicate

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

| SDG | Samples Affected | Element/Elements | Validation Qualifier |
|---|---|---|---|
| 10201Q-03 | JR3002 | 2-Nitrotoluene, 4-Nitrotoluene, RDX | J/UJ |

Laboratory Control Sample (LCS)

LCS 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.

### *4.4 Perchlorate by EPA 314.0*

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

Laboratory Control Sample (LCS)

All QC criteria were met for the LCS associated with the project sample analyses.

Field Duplicates

Original and field duplicate results were evaluated and no problems were noted.

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.

## *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 "nondetect" may be inaccurate or imprecise. The nondetect result should be estimated.

## Validation Reason Code Definitions

| Reason Code | Definition |
|---|---|
| 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

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10201Q-01** | | | | | | | | | | | | | | | | | | |
| JR0001 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 3960 | mg/kg | | Y | Y | P | | | | | | | L166-01 | 00:02 |
| | | | | ANTIMONY | 10 | mg/kg | U | N | Y | U | U | | | | | | L166-01 | 00:02 |
| | | | | ARSENIC | 1.03 | mg/kg | | Y | Y | P | | | | | | | L166-01 | 20:57 |
| | | | | BARIUM | 12.5 | mg/kg | | Y | Y | P | | | | | | | L166-01 | 00:02 |
| | | | | BERYLLIUM | .0677 | mg/kg | J | Y | Y | P | J | | 15 | | | | L166-01 | 00:02 |
| | | | | CADMIUM | .5 | mg/kg | U | N | Y | U | U | | | | | | L166-01 | 00:02 |
| | | | | CALCIUM | 92.9 | mg/kg | J | Y | Y | P | J | | 15 | | | | L166-01 | 00:02 |
| | | | | CHROMIUM | 2.73 | mg/kg | | Y | Y | P | | | | | | | L166-01 | 00:02 |
| | | | | COBALT | 2 | mg/kg | U | N | Y | U | U | | | | | | L166-01 | 00:02 |
| | | | | COPPER | 1.81 | mg/kg | J | Y | Y | P | J | | 15 | | | | L166-01 | 00:02 |
| | | | | IRON | 2670 | mg/kg | | Y | Y | P | | | | | | | L166-01 | 00:02 |
| | | | | LEAD | 7.01 | mg/kg | | Y | Y | P | | | | | | | L166-01 | 20:57 |
| | | | | MAGNESIUM | 128 | mg/kg | | Y | Y | P | | | | | | | L166-01 | 00:02 |
| | | | | MANGANESE | 14.6 | mg/kg | | Y | Y | P | | | | | | | L166-01 | 00:02 |
| | | | | NICKEL | 1.17 | mg/kg | J | Y | Y | P | J | | 15 | | | | L166-01 | 00:02 |
| | | | | POTASSIUM | 500 | mg/kg | U | N | Y | U | U | | | | | | L166-01 | 00:02 |
| | | | | SELENIUM | 1 | mg/kg | U | N | Y | U | U | | | | | | L166-01 | 20:57 |
| | | | | SILVER | 1 | mg/kg | U | N | Y | U | U | | | | | | L166-01 | 00:02 |
| | | | | SODIUM | 100 | mg/kg | U | N | Y | U | U | | | | | | L166-01 | 00:02 |
| | | | | THALLIUM | 2 | mg/kg | U | N | Y | U | U | | | | | | L166-01 | 20:57 |
| | | | | VANADIUM | 5.23 | mg/kg | | Y | Y | P | | | | | | | L166-01 | 00:02 |
| | | | | ZINC | 8.3 | mg/kg | | Y | Y | P | | | | | | | L166-01 | 00:02 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .034 | mg/kg | J | Y | Y | P | J | | 15 | | | | L166-01 | 16:20 |
| JR0002 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 18700 | mg/kg | | Y | Y | P | | | | | | | L166-02 | 00:07 |
| | | | | ANTIMONY | 10 | mg/kg | U | N | Y | U | U | | | | | | L166-02 | 00:07 |
| | | | | ARSENIC | 4.21 | mg/kg | | Y | Y | P | | | | | | | L166-02 | 21:02 |
| | | | | BARIUM | 12.7 | mg/kg | | Y | Y | P | | | | | | | L166-02 | 00:07 |
| | | | | BERYLLIUM | .127 | mg/kg | J | Y | Y | P | J | | 15 | | | | L166-02 | 00:07 |
| | | | | CADMIUM | .5 | mg/kg | U | N | Y | U | U | | | | | | L166-02 | 00:07 |
| | | | | CALCIUM | 41.8 | mg/kg | J | Y | Y | P | J | | 15 | | | | L166-02 | 00:07 |
| | | | | CHROMIUM | 26 | mg/kg | | Y | Y | P | | | | | | | L166-02 | 00:07 |
| | | | | COBALT | .7 | mg/kg | J | Y | Y | F | B | | 06A | 15 | | | L166-02 | 00:07 |
| | | | | COPPER | 6.24 | mg/kg | | Y | Y | P | | | | | | | L166-02 | 00:07 |
| | | | | IRON | 26100 | mg/kg | | Y | Y | P | | | | | | | L166-02 | 00:07 |
| | | | | LEAD | 6.76 | mg/kg | | Y | Y | P | | | | | | | L166-02 | 21:02 |
| | | | | MAGNESIUM | 201 | mg/kg | | Y | Y | P | | | | | | | L166-02 | 00:07 |
| | | | | MANGANESE | 7.84 | mg/kg | | Y | Y | P | | | | | | | L166-02 | 00:07 |
| | | | | NICKEL | 2.28 | mg/kg | | Y | Y | P | | | | | | | L166-02 | 00:07 |
| | | | | POTASSIUM | 500 | mg/kg | U | N | Y | U | U | | | | | | L166-02 | 00:07 |
| | | | | SELENIUM | 1.07 | mg/kg | | Y | Y | P | | | | | | | L166-02 | 21:02 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10201Q-01** | | | | | | | | | | | | | | | | | | |
| JR0002 | SW6010B | SW3050 | N 0 1 | SILVER | 1 | mg/kg | U | N | Y | U | U | | | | | | L166-02 | 00:07 |
| | | | | SODIUM | 100 | mg/kg | U | N | Y | U | U | | | | | | L166-02 | 00:07 |
| | | | | THALLIUM | 1.35 | mg/kg | J | Y | Y | P | J | | 15 | | | | L166-02 | 21:02 |
| | | | | VANADIUM | 44.4 | mg/kg | | Y | Y | P | | | | | | | L166-02 | 00:07 |
| | | | | ZINC | 9.27 | mg/kg | | Y | Y | P | | | | | | | L166-02 | 00:07 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .070 | mg/kg | J | Y | Y | P | J | | 15 | | | | L166-02 | 16:22 |
| JR0003 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 4870 | mg/kg | | Y | Y | P | | | | | | | L166-03 | 00:12 |
| | | | | ANTIMONY | 10 | mg/kg | U | N | Y | U | U | | | | | | L166-03 | 00:12 |
| | | | | ARSENIC | 1.33 | mg/kg | | Y | Y | P | | | | | | | L166-03 | 21:07 |
| | | | | BARIUM | 15.3 | mg/kg | | Y | Y | P | | | | | | | L166-03 | 00:12 |
| | | | | BERYLLIUM | .095 | mg/kg | J | Y | Y | P | J | | 15 | | | | L166-03 | 00:12 |
| | | | | CADMIUM | .5 | mg/kg | U | N | Y | U | U | | | | | | L166-03 | 00:12 |
| | | | | CALCIUM | 100 | mg/kg | | Y | Y | P | | | | | | | L166-03 | 00:12 |
| | | | | CHROMIUM | 6.51 | mg/kg | | Y | Y | P | | | | | | | L166-03 | 00:12 |
| | | | | COBALT | .848 | mg/kg | J | Y | Y | F | B | | 06A | 15 | | | L166-03 | 00:12 |
| | | | | COPPER | 2.39 | mg/kg | | Y | Y | P | | | | | | | L166-03 | 00:12 |
| | | | | IRON | 5380 | mg/kg | | Y | Y | P | | | | | | | L166-03 | 00:12 |
| | | | | LEAD | 6.42 | mg/kg | | Y | Y | P | | | | | | | L166-03 | 21:07 |
| | | | | MAGNESIUM | 133 | mg/kg | | Y | Y | P | | | | | | | L166-03 | 00:12 |
| | | | | MANGANESE | 13.6 | mg/kg | | Y | Y | P | | | | | | | L166-03 | 00:12 |
| | | | | NICKEL | 1.47 | mg/kg | J | Y | Y | P | J | | 15 | | | | L166-03 | 00:12 |
| | | | | POTASSIUM | 500 | mg/kg | U | N | Y | U | U | | | | | | L166-03 | 00:12 |
| | | | | SELENIUM | 1 | mg/kg | U | N | Y | U | U | | | | | | L166-03 | 21:07 |
| | | | | SILVER | 1 | mg/kg | U | N | Y | U | U | | | | | | L166-03 | 00:12 |
| | | | | SODIUM | 100 | mg/kg | U | N | Y | U | U | | | | | | L166-03 | 00:12 |
| | | | | THALLIUM | 2 | mg/kg | U | N | Y | U | U | | | | | | L166-03 | 21:07 |
| | | | | VANADIUM | 11.1 | mg/kg | | Y | Y | P | | | | | | | L166-03 | 00:12 |
| | | | | ZINC | 7.58 | mg/kg | | Y | Y | P | | | | | | | L166-03 | 00:12 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .039 | mg/kg | J | Y | Y | P | J | | 15 | | | | L166-03 | 16:25 |
| JR0004 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 9190 | mg/kg | | Y | Y | P | | | | | | | L166-04 | 00:17 |
| | | | | ANTIMONY | 4.75 | mg/kg | J | Y | Y | P | J | | 15 | | | | L166-04 | 00:17 |
| | | | | ARSENIC | 4.2 | mg/kg | | Y | Y | P | | | | | | | L166-04 | 21:12 |
| | | | | BARIUM | 7.25 | mg/kg | | Y | Y | P | | | | | | | L166-04 | 00:17 |
| | | | | BERYLLIUM | .3 | mg/kg | J | Y | Y | P | J | | 15 | | | | L166-04 | 00:17 |
| | | | | CADMIUM | .5 | mg/kg | U | N | Y | U | U | | | | | | L166-04 | 00:17 |
| | | | | CALCIUM | 28.3 | mg/kg | J | Y | Y | P | J | | 15 | | | | L166-04 | 00:17 |
| | | | | CHROMIUM | 71.4 | mg/kg | | Y | Y | P | | | | | | | L166-04 | 00:17 |
| | | | | COBALT | 1.29 | mg/kg | J | Y | Y | F | B | | 06A | 17 | 15 | | L166-04 | 00:17 |
| | | | | COPPER | 7.69 | mg/kg | | Y | Y | P | | | | | | | L166-04 | 00:17 |
| | | | | IRON | 67000 | mg/kg | | Y | Y | P | | | | | | | L166-04 | 00:17 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10201Q-01** | | | | | | | | | | | | | | | | | | |
| JR0004 | SW6010B | SW3050 | N 0 1 | LEAD | 9.29 | mg/kg | | Y | Y | P | | | | | | | L166-04 | 21:12 |
| | | | | MAGNESIUM | 72.3 | mg/kg | J | Y | Y | P | J | | 15 | | | | L166-04 | 00:17 |
| | | | | MANGANESE | 12.5 | mg/kg | | Y | Y | P | J | | 17 | | | | L166-04 | 00:17 |
| | | | | NICKEL | 2.21 | mg/kg | | Y | Y | P | | | | | | | L166-04 | 00:17 |
| | | | | POTASSIUM | 153 | mg/kg | J | Y | Y | P | J | | 15 | | | | L166-04 | 00:17 |
| | | | | SELENIUM | 1.35 | mg/kg | | Y | Y | P | | | | | | | L166-04 | 21:12 |
| | | | | SILVER | 1 | mg/kg | U | N | Y | U | U | | | | | | L166-04 | 00:17 |
| | | | | SODIUM | 100 | mg/kg | U | N | Y | U | U | | | | | | L166-04 | 00:17 |
| | | | | THALLIUM | 3.81 | mg/kg | | Y | Y | P | | | | | | | L166-04 | 21:12 |
| | | | | VANADIUM | 95.7 | mg/kg | | Y | Y | P | | | | | | | L166-04 | 00:17 |
| | | | | ZINC | 9.61 | mg/kg | | Y | Y | P | | | | | | | L166-04 | 00:17 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .039 | mg/kg | J | Y | Y | P | J | | 15 | | | | L166-04 | 16:28 |
| JR0005 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 8410 | mg/kg | | Y | Y | | | | | | | | L166-05 | 00:22 |
| | | | | ANTIMONY | 6.28 | mg/kg | J | Y | Y | | J | | 15 | | | | L166-05 | 00:22 |
| | | | | ARSENIC | 2.58 | mg/kg | | Y | Y | | | | | | | | L166-05 | 21:17 |
| | | | | BARIUM | 6 | mg/kg | | Y | Y | | | | | | | | L166-05 | 00:22 |
| | | | | BERYLLIUM | .352 | mg/kg | J | Y | Y | | J | | 15 | | | | L166-05 | 00:22 |
| | | | | CADMIUM | .605 | mg/kg | U | N | Y | | U | | | | | | L166-05 | 00:22 |
| | | | | CALCIUM | 29.3 | mg/kg | J | Y | Y | | J | | 15 | | | | L166-05 | 00:22 |
| | | | | CHROMIUM | 62.1 | mg/kg | | Y | Y | | | | | | | | L166-05 | 00:22 |
| | | | | COBALT | 2.4 | mg/kg | J | Y | Y | | J | | 17 | 15 | | | L166-05 | 00:22 |
| | | | | COPPER | 10.1 | mg/kg | | Y | Y | | | | | | | | L166-05 | 00:22 |
| | | | | IRON | 67100 | mg/kg | | Y | Y | | | | | | | | L166-05 | 00:22 |
| | | | | LEAD | 8.11 | mg/kg | | Y | Y | | | | | | | | L166-05 | 21:17 |
| | | | | MAGNESIUM | 58 | mg/kg | J | Y | Y | | J | | 15 | | | | L166-05 | 00:22 |
| | | | | MANGANESE | 42.6 | mg/kg | | Y | Y | | J | | 17 | | | | L166-05 | 00:22 |
| | | | | NICKEL | 3.09 | mg/kg | | Y | Y | | | | | | | | L166-05 | 00:22 |
| | | | | POTASSIUM | 131 | mg/kg | J | Y | Y | | J | | 15 | | | | L166-05 | 00:22 |
| | | | | SELENIUM | .897 | mg/kg | J | Y | Y | | J | | 15 | | | | L166-05 | 21:17 |
| | | | | SILVER | 1.21 | mg/kg | U | N | Y | | U | | | | | | L166-05 | 00:22 |
| | | | | SODIUM | 121 | mg/kg | U | N | Y | | U | | | | | | L166-05 | 00:22 |
| | | | | THALLIUM | 3.48 | mg/kg | | Y | Y | | | | | | | | L166-05 | 21:17 |
| | | | | VANADIUM | 86.6 | mg/kg | | Y | Y | | | | | | | | L166-05 | 00:22 |
| | | | | ZINC | 13.9 | mg/kg | | Y | Y | | | | | | | | L166-05 | 00:22 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .041 | mg/kg | J | Y | Y | | J | | 15 | | | | L166-05 | 16:30 |
| JR0001 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | L166-01 | 22:26 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | L166-01 | 22:26 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L166-01 | 22:26 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L166-01 | 22:26 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L166-01 | 22:26 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10201Q-01** | | | | | | | | | | | | | | | | | | |
| JR0001 | SW8330 | METHOD | N 0 1 | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L166-01 | 22:26 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L166-01 | 22:26 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L166-01 | 22:26 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L166-01 | 22:26 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L166-01 | 22:26 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | L166-01 | 22:26 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L166-01 | 22:26 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | L166-01 | 22:26 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | L166-01 | 22:26 |
| JR0002 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | L166-02 | 23:07 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | L166-02 | 23:07 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L166-02 | 23:07 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L166-02 | 23:07 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L166-02 | 23:07 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L166-02 | 23:07 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L166-02 | 23:07 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L166-02 | 23:07 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L166-02 | 23:07 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L166-02 | 23:07 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | L166-02 | 23:07 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L166-02 | 23:07 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | L166-02 | 23:07 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | L166-02 | 23:07 |
| JR0003 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | L166-03 | 23:47 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | L166-03 | 23:47 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L166-03 | 23:47 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L166-03 | 23:47 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L166-03 | 23:47 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L166-03 | 23:47 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L166-03 | 23:47 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L166-03 | 23:47 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L166-03 | 23:47 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L166-03 | 23:47 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | L166-03 | 23:47 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L166-03 | 23:47 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | L166-03 | 23:47 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | L166-03 | 23:47 |
| JR0004 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | L166-04 | 00:28 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | L166-04 | 00:28 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L166-04 | 00:28 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10201Q-01** | | | | | | | | | | | | | | | | | | |
| JR0004 | SW8330 | METHOD | N 0 1 | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L166-04 | 00:28 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L166-04 | 00:28 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L166-04 | 00:28 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L166-04 | 00:28 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L166-04 | 00:28 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | L166-04 | 00:28 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L166-04 | 00:28 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | L166-04 | 00:28 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | L166-04 | 00:28 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | L166-04 | 00:28 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | L166-04 | 00:28 |
| JR0005 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | | U | | | | | | L166-05 | 01:08 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | | U | | | | | | L166-05 | 01:08 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | | U | | | | | | L166-05 | 01:08 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | | U | | | | | | L166-05 | 01:08 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | | U | | | | | | L166-05 | 01:08 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | | U | | | | | | L166-05 | 01:08 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | | U | | | | | | L166-05 | 01:08 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | | U | | | | | | L166-05 | 01:08 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | | U | | | | | | L166-05 | 01:08 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | | U | | | | | | L166-05 | 01:08 |
| | | | | HMX | .4 | mg/kg | U | N | Y | | U | | | | | | L166-05 | 01:08 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | | U | | | | | | L166-05 | 01:08 |
| | | | | RDX | .4 | mg/kg | U | N | Y | | U | | | | | | L166-05 | 01:08 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | | U | | | | | | L166-05 | 01:08 |
| JR0001 | EPA314.0 | NONE | N 0 1 | PERCHLORATE | .0552 | mg/kg | U | N | Y | U | U | | | | | | L166-01 | 23:51 |
| JR0002 | EPA314.0 | NONE | N 0 1 | PERCHLORATE | .0579 | mg/kg | U | N | Y | U | U | | | | | | L166-02 | 01:34 |
| JR0003 | EPA314.0 | NONE | N 0 1 | PERCHLORATE | .0554 | mg/kg | U | N | Y | U | U | | | | | | L166-03 | 01:52 |
| JR0004 | EPA314.0 | NONE | N 0 1 | PERCHLORATE | .0602 | mg/kg | U | N | Y | U | U | | | | | | L166-04 | 02:09 |
| JR0005 | EPA314.0 | NONE | N 0 1 | PERCHLORATE | .0605 | mg/kg | U | N | Y | | U | | | | | | L166-05 | 02:26 |
| **10201Q-02** | | | | | | | | | | | | | | | | | | |
| JR0006 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 11300 | mg/kg | | Y | Y | P | | | | | | | C030-01 | 00:08 |
| | | | | ANTIMONY | 18.3 | mg/kg | U | N | Y | U | U | | | | | | C030-01 | 00:08 |
| | | | | ARSENIC | 2.94 | mg/kg | | Y | Y | P | | | | | | | C030-01 | 22:41 |
| | | | | BARIUM | 57.2 | mg/kg | | Y | Y | P | | | | | | | C030-01 | 00:08 |
| | | | | BERYLLIUM | .339 | mg/kg | J | Y | Y | P | J | | 15 | | | | C030-01 | 00:08 |
| | | | | CADMIUM | .914 | mg/kg | U | N | Y | U | U | | | | | | C030-01 | 00:08 |
| | | | | CALCIUM | 283 | mg/kg | | Y | Y | P | | | | | | | C030-01 | 00:08 |
| | | | | CHROMIUM | 15.9 | mg/kg | | Y | Y | P | | | | | | | C030-01 | 00:08 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10201Q-02** | | | | | | | | | | | | | | | | | | |
| JR0006 | SW6010B | SW3050 | N 0 1 | COBALT | 4.62 | mg/kg | | Y | Y | P | | | | | | | C030-01 | 00:08 |
| | | | | COPPER | 8.46 | mg/kg | | Y | Y | P | | | | | | | C030-01 | 00:08 |
| | | | | IRON | 14100 | mg/kg | | Y | Y | P | | | | | | | C030-01 | 00:08 |
| | | | | LEAD | 18.9 | mg/kg | | Y | Y | P | | | | | | | C030-01 | 22:41 |
| | | | | MAGNESIUM | 317 | mg/kg | | Y | Y | P | | | | | | | C030-01 | 00:08 |
| | | | | MANGANESE | 837 | mg/kg | | Y | Y | P | | | | | | | C030-01 | 00:08 |
| | | | | NICKEL | 3.37 | mg/kg | J | Y | Y | P | J | | 17 | 15 | | | C030-01 | 00:08 |
| | | | | POTASSIUM | 537 | mg/kg | J | Y | Y | F | B | | 06B | 15 | | | C030-01 | 00:08 |
| | | | | SELENIUM | 1.83 | mg/kg | U | N | Y | U | U | | | | | | C030-01 | 22:41 |
| | | | | SILVER | 1.83 | mg/kg | U | N | Y | U | U | | | | | | C030-01 | 00:08 |
| | | | | SODIUM | 52.1 | mg/kg | J | Y | Y | P | J | | 15 | | | | C030-01 | 00:08 |
| | | | | THALLIUM | 3.66 | mg/kg | U | N | Y | U | U | | | | | | C030-01 | 22:41 |
| | | | | VANADIUM | 28.9 | mg/kg | | Y | Y | P | | | | | | | C030-01 | 00:08 |
| | | | | ZINC | 24.6 | mg/kg | | Y | Y | P | | | | | | | C030-01 | 00:08 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .066 | mg/kg | J | Y | Y | P | J | | 15 | | | | C030-01 | 14:34 |
| JR0007 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 8080 | mg/kg | | Y | Y | | | | | | | | C030-02 | 00:12 |
| | | | | ANTIMONY | 16 | mg/kg | U | N | Y | | U | | | | | | C030-02 | 00:12 |
| | | | | ARSENIC | 2.03 | mg/kg | | Y | Y | | | | | | | | C030-02 | 22:46 |
| | | | | BARIUM | 38.9 | mg/kg | | Y | Y | | | | | | | | C030-02 | 00:12 |
| | | | | BERYLLIUM | .242 | mg/kg | J | Y | Y | | J | | 15 | | | | C030-02 | 00:12 |
| | | | | CADMIUM | .799 | mg/kg | U | N | Y | | U | | | | | | C030-02 | 00:12 |
| | | | | CALCIUM | 183 | mg/kg | | Y | Y | | | | | | | | C030-02 | 00:12 |
| | | | | CHROMIUM | 12.8 | mg/kg | | Y | Y | | | | | | | | C030-02 | 00:12 |
| | | | | COBALT | 2.84 | mg/kg | J | Y | Y | | J | | 15 | | | | C030-02 | 00:12 |
| | | | | COPPER | 5.67 | mg/kg | | Y | Y | | | | | | | | C030-02 | 00:12 |
| | | | | IRON | 10400 | mg/kg | | Y | Y | | | | | | | | C030-02 | 00:12 |
| | | | | LEAD | 12.9 | mg/kg | | Y | Y | | | | | | | | C030-02 | 22:46 |
| | | | | MAGNESIUM | 222 | mg/kg | | Y | Y | | | | | | | | C030-02 | 00:12 |
| | | | | MANGANESE | 502 | mg/kg | | Y | Y | | | | | | | | C030-02 | 00:12 |
| | | | | NICKEL | 1.92 | mg/kg | J | Y | Y | | J | | 17 | 15 | | | C030-02 | 00:12 |
| | | | | POTASSIUM | 799 | mg/kg | U | N | Y | | U | | | | | | C030-02 | 00:12 |
| | | | | SELENIUM | 1.6 | mg/kg | U | N | Y | | U | | | | | | C030-02 | 22:46 |
| | | | | SILVER | 1.6 | mg/kg | U | N | Y | | U | | | | | | C030-02 | 00:12 |
| | | | | SODIUM | 43.6 | mg/kg | J | Y | Y | | J | | 15 | | | | C030-02 | 00:12 |
| | | | | THALLIUM | 3.19 | mg/kg | U | N | Y | | U | | | | | | C030-02 | 22:46 |
| | | | | VANADIUM | 21.5 | mg/kg | | Y | Y | | | | | | | | C030-02 | 00:12 |
| | | | | ZINC | 16.7 | mg/kg | | Y | Y | | | | | | | | C030-02 | 00:12 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .060 | mg/kg | J | Y | Y | | J | | 15 | | | | C030-02 | 14:37 |
| JR0006 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C030-01 | 00:27 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C030-01 | 00:27 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10201Q-02** | | | | | | | | | | | | | | | | | | |
| JR0006 | SW8330 | METHOD | N 0 1 | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C030-01 | 00:27 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C030-01 | 00:27 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C030-01 | 00:27 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C030-01 | 00:27 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C030-01 | 00:27 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C030-01 | 00:27 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C030-01 | 00:27 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C030-01 | 00:27 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | C030-01 | 00:27 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C030-01 | 00:27 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | C030-01 | 00:27 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | C030-01 | 00:27 |
| JR0007 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | | U | | | | | | C030-02 | 01:06 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | | U | | | | | | C030-02 | 01:06 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | | U | | | | | | C030-02 | 01:06 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | | U | | | | | | C030-02 | 01:06 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | | U | | | | | | C030-02 | 01:06 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | | U | | | | | | C030-02 | 01:06 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | | U | | | | | | C030-02 | 01:06 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | | U | | | | | | C030-02 | 01:06 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | | U | | | | | | C030-02 | 01:06 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | | U | | | | | | C030-02 | 01:06 |
| | | | | HMX | .4 | mg/kg | U | N | Y | | U | | | | | | C030-02 | 01:06 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | | U | | | | | | C030-02 | 01:06 |
| | | | | RDX | .4 | mg/kg | U | N | Y | | U | | | | | | C030-02 | 01:06 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | | U | | | | | | C030-02 | 01:06 |
| JR0006 | E314.0 | NONE | N 0 1 | PERCHLORATE | .0914 | mg/kg | U | N | Y | U | U | | | | | | C030-01 | 04:45 |
| JR0007 | E314.0 | NONE | N 0 1 | PERCHLORATE | .0799 | mg/kg | U | N | Y | | U | | | | | | C030-02 | 05:02 |
| **10201Q-03** | | | | | | | | | | | | | | | | | | |
| JR3002 | SW6010B | SW3010 | N 0 1 | ALUMINUM | .0799 | mg/L | J | Y | Y | F | B | | 06A | 06B | 15 | | D216-01 | 22:47 |
| | | | | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 22:47 |
| | | | | ARSENIC | .01 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 22:27 |
| | | | | BARIUM | .00624 | mg/L | J | Y | Y | F | B | | 06C | 15 | | | D216-01 | 22:47 |
| | | | | BERYLLIUM | .001 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 22:47 |
| | | | | CADMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 22:47 |
| | | | | CALCIUM | 1.78 | mg/L | | Y | Y | F | B | | 06C | | | | D216-01 | 22:47 |
| | | | | CHROMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 22:47 |
| | | | | COBALT | .0101 | mg/L | J | Y | Y | F | B | | 06B | 15 | | | D216-01 | 22:47 |
| | | | | COPPER | .00767 | mg/L | J | Y | Y | F | B | | 06A | 06B | 15 | | D216-01 | 22:47 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10201Q-03** | | | | | | | | | | | | | | | | | | |
| JR3002 | SW6010B | SW3010 | N 0 1 | IRON | 2.27 | mg/L | | Y | Y | P | | | | | | | D216-01 | 22:47 |
| | | | | LEAD | .01 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 22:27 |
| | | | | MAGNESIUM | .847 | mg/L | J | Y | Y | F | B | | 06C | 15 | | | D216-01 | 22:47 |
| | | | | MANGANESE | .0554 | mg/L | | Y | Y | P | | | | | | | D216-01 | 22:47 |
| | | | | NICKEL | .0135 | mg/L | J | Y | Y | F | B | | 06A | 06B | 15 | | D216-01 | 22:47 |
| | | | | POTASSIUM | 2.37 | mg/L | J | Y | Y | F | B | | 06B | 15 | | | D216-01 | 22:47 |
| | | | | SELENIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 22:27 |
| | | | | SILVER | .0066 | mg/L | J | Y | Y | F | B | | 06A | 06B | 15 | | D216-01 | 22:47 |
| | | | | SODIUM | .751 | mg/L | J | Y | Y | P | J | | 15 | | | | D216-01 | 22:47 |
| | | | | THALLIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 22:27 |
| | | | | VANADIUM | .00684 | mg/L | J | Y | Y | F | B | | 06A | 06B | 15 | | D216-01 | 22:47 |
| | | | | ZINC | .02 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 22:47 |
| | SW7470A | TOTAL | N 0 1 | MERCURY | .0005 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 16:47 |
| JR3002 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | | U | | | | | | D216-01W | 13:39 |
| | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | | U | | | | | | D216-01W | 13:39 |
| | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | | U | | | | | | D216-01W | 13:39 |
| | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | | U | | | | | | D216-01W | 13:39 |
| | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | | U | | | | | | D216-01W | 13:39 |
| | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | | U | | | | | | D216-01W | 13:39 |
| | | | | 2-NITROTOLUENE | .0057 | mg/L | | Y | Y | P | J | | 08B | | | | D216-01W | 13:39 |
| | | | | 3-NITROTOLUENE | .001 | mg/L | | Y | Y | P | | | | | | | D216-01W | 13:39 |
| | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N | Y | | U | | | | | | D216-01W | 13:39 |
| | | | | 4-NITROTOLUENE | .0014 | mg/L | | Y | Y | P | J | | 08A | 08B | | | D216-01W | 13:39 |
| | | | | HMX | .001 | mg/L | U | N | Y | | U | | | | | | D216-01W | 13:39 |
| | | | | NITROBENZENE | .0004 | mg/L | U | N | Y | | U | | | | | | D216-01W | 13:39 |
| | | | | RDX | .0004 | mg/L | U | N | Y | | UJ | | 08B | | | | D216-01W | 13:39 |
| | | | | TETRYL | .0004 | mg/L | U | N | Y | | U | | | | | | D216-01W | 13:39 |
| JR3002 | E314.0 | NONE | N 0 1 | PERCHLORATE | .005 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 15:03 |
| JR3002 | SW8260B | SW5030 | N 0 1 | 1,1,1,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 00:31 |
| | | | | 1,1,1-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 00:31 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 00:31 |
| | | | | 1,1,2-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 00:31 |
| | | | | 1,1-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 00:31 |
| | | | | 1,1-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 00:31 |
| | | | | 1,1-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 00:31 |
| | | | | 1,2,3-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 00:31 |
| | | | | 1,2,3-TRICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 00:31 |
| | | | | 1,2,4-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 00:31 |
| | | | | 1,2,4-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 00:31 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .01 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 00:31 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10201Q-03** | | | | | | | | | | | | | | | | | | |
| JR3002 | SW8260B | SW5030 | N 0 1 | 1,2-DIBROMOETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 00:31 |
| | | | | 1,2-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 00:31 |
| | | | | 1,2-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 00:31 |
| | | | | 1,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 00:31 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 00:31 |
| | | | | 1,3-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 00:31 |
| | | | | 1,3-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 00:31 |
| | | | | 1,4-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 00:31 |
| | | | | 2,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 00:31 |
| | | | | 2-BUTANONE | .02 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 00:31 |
| | | | | 2-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 00:31 |
| | | | | 2-HEXANONE | .02 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 00:31 |
| | | | | 4-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 00:31 |
| | | | | 4-METHYL-2-PENTANONE | .01 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 00:31 |
| | | | | ACETONE | .02 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 00:31 |
| | | | | BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 00:31 |
| | | | | BROMOBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 00:31 |
| | | | | BROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 00:31 |
| | | | | BROMODICHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 00:31 |
| | | | | BROMOFORM | .005 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 00:31 |
| | | | | BROMOMETHANE | .005 | mg/L | U | N | Y | U | UJ | 05B | | | | | D216-01 | 00:31 |
| | | | | CARBON DISULFIDE | .005 | mg/L | U | N | Y | U | UJ | 05B | | | | | D216-01 | 00:31 |
| | | | | CARBON TETRACHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 00:31 |
| | | | | CHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 00:31 |
| | | | | CHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 00:31 |
| | | | | CHLOROFORM | .005 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 00:31 |
| | | | | CHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 00:31 |
| | | | | CIS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 00:31 |
| | | | | CIS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 00:31 |
| | | | | DIBROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 00:31 |
| | | | | DIBROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 00:31 |
| | | | | DICHLORODIFLUOROMETHANE | .005 | mg/L | U | N | Y | U | UJ | 05B | | | | | D216-01 | 00:31 |
| | | | | ETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 00:31 |
| | | | | HEXACHLOROBUTADIENE | .005 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 00:31 |
| | | | | ISOPROPYL BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 00:31 |
| | | | | M/P-XYLENES | .01 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 00:31 |
| | | | | METHYLENE CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 00:31 |
| | | | | N-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 00:31 |
| | | | | N-PROPYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 00:31 |
| | | | | NAPHTHALENE | .005 | mg/L | U | N | Y | U | UJ | 05B | | | | | D216-01 | 00:31 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10201Q-03** | | | | | | | | | | | | | | | | | | |
| JR3002 | SW8260B | SW5030 | N 0 1 | O-XYLENE | .005 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 00:31 |
| | | | | P-ISOPROPYLTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 00:31 |
| | | | | SEC-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 00:31 |
| | | | | STYRENE | .005 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 00:31 |
| | | | | TERT-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 00:31 |
| | | | | TETRACHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 00:31 |
| | | | | TOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 00:31 |
| | | | | TRANS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 00:31 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 00:31 |
| | | | | TRICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 00:31 |
| | | | | TRICHLOROFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 00:31 |
| | | | | VINYL CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D216-01 | 00:31 |
| **10201Q-04** | | | | | | | | | | | | | | | | | | |
| JR3001 | SW6010B | SW3010 | N 0 1 | ALUMINUM | .0856 | mg/L | J | Y | Y | P | J | | 15 | | | | D238-02 | 21:18 |
| | | | | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 21:18 |
| | | | | ARSENIC | .00248 | mg/L | J | Y | Y | P | J | | 15 | | | | D238-02 | 20:08 |
| | | | | BARIUM | .00377 | mg/L | J | Y | Y | F | B | | 06C | 15 | | | D238-02 | 21:18 |
| | | | | BERYLLIUM | .001 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 21:18 |
| | | | | CADMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 21:18 |
| | | | | CALCIUM | .387 | mg/L | J | Y | Y | F | B | | 06C | 15 | | | D238-02 | 21:18 |
| | | | | CHROMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 21:18 |
| | | | | COBALT | .02 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 21:18 |
| | | | | COPPER | .02 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 21:18 |
| | | | | IRON | .0404 | mg/L | J | Y | Y | P | J | | 15 | | | | D238-02 | 21:18 |
| | | | | LEAD | .01 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 20:08 |
| | | | | MAGNESIUM | .137 | mg/L | J | Y | Y | F | B | | 06C | 15 | | | D238-02 | 21:18 |
| | | | | MANGANESE | .00521 | mg/L | J | Y | Y | P | J | | 15 | | | | D238-02 | 21:18 |
| | | | | NICKEL | .02 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 21:18 |
| | | | | POTASSIUM | 5 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 21:18 |
| | | | | SELENIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 20:08 |
| | | | | SILVER | .01 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 21:18 |
| | | | | SODIUM | 1.06 | mg/L | | Y | Y | P | | | | | | | D238-02 | 21:18 |
| | | | | THALLIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 20:08 |
| | | | | VANADIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 21:18 |
| | | | | ZINC | .00673 | mg/L | J | Y | Y | F | B | | 06C | 15 | | | D238-02 | 21:18 |
| | SW7470A | TOTAL | N 0 1 | MERCURY | .0005 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 12:10 |
| JR3001 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 01:51 |
| | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 01:51 |
| | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 01:51 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10201Q-04** | | | | | | | | | | | | | | | | | | |
| JR3001 | SW8330 | METHOD | N 0 1 | 2,4-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 01:51 |
| | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 01:51 |
| | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 01:51 |
| | | | | 2-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 01:51 |
| | | | | 3-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 01:51 |
| | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 01:51 |
| | | | | 4-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 01:51 |
| | | | | HMX | .001 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 01:51 |
| | | | | NITROBENZENE | .0004 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 01:51 |
| | | | | RDX | .0004 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 01:51 |
| | | | | TETRYL | .0004 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 01:51 |
| JR3001 | E314.0 | NONE | N 0 1 | PERCHLORATE | .00127 | mg/L | J | Y | Y | P | J | | 15 | | | | D238-02 | 15:54 |
| JR3001 | SW8260B | SW5030 | N 0 1 | 1,1,1,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 21:02 |
| | | | | 1,1,1-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 21:02 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 21:02 |
| | | | | 1,1,2-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 21:02 |
| | | | | 1,1-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 21:02 |
| | | | | 1,1-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 21:02 |
| | | | | 1,1-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 21:02 |
| | | | | 1,2,3-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 21:02 |
| | | | | 1,2,3-TRICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 21:02 |
| | | | | 1,2,4-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 21:02 |
| | | | | 1,2,4-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 21:02 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .01 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 21:02 |
| | | | | 1,2-DIBROMOETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 21:02 |
| | | | | 1,2-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 21:02 |
| | | | | 1,2-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 21:02 |
| | | | | 1,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 21:02 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 21:02 |
| | | | | 1,3-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 21:02 |
| | | | | 1,3-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 21:02 |
| | | | | 1,4-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 21:02 |
| | | | | 2,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 21:02 |
| | | | | 2-BUTANONE | .02 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 21:02 |
| | | | | 2-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 21:02 |
| | | | | 2-HEXANONE | .02 | mg/L | U | N | Y | U | UJ | | 05B | | | | D238-02 | 21:02 |
| | | | | 4-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 21:02 |
| | | | | 4-METHYL-2-PENTANONE | .01 | mg/L | U | N | Y | U | UJ | | 05B | | | | D238-02 | 21:02 |
| | | | | ACETONE | .02 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 21:02 |
| | | | | BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 21:02 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10201Q-04** | | | | | | | | | | | | | | | | | | |
| JR3001 | SW8260B | SW5030 | N 0 1 | BROMOBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 21:02 |
| | | | | BROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 21:02 |
| | | | | BROMODICHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 21:02 |
| | | | | BROMOFORM | .005 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 21:02 |
| | | | | BROMOMETHANE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | D238-02 | 21:02 |
| | | | | CARBON DISULFIDE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | D238-02 | 21:02 |
| | | | | CARBON TETRACHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 21:02 |
| | | | | CHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 21:02 |
| | | | | CHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 21:02 |
| | | | | CHLOROFORM | .005 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 21:02 |
| | | | | CHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 21:02 |
| | | | | CIS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 21:02 |
| | | | | CIS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 21:02 |
| | | | | DIBROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 21:02 |
| | | | | DIBROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 21:02 |
| | | | | DICHLORODIFLUOROMETHANE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | D238-02 | 21:02 |
| | | | | ETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 21:02 |
| | | | | HEXACHLOROBUTADIENE | .005 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 21:02 |
| | | | | ISOPROPYL BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 21:02 |
| | | | | M/P-XYLENES | .01 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 21:02 |
| | | | | METHYLENE CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 21:02 |
| | | | | N-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 21:02 |
| | | | | N-PROPYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 21:02 |
| | | | | NAPHTHALENE | .005 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 21:02 |
| | | | | O-XYLENE | .005 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 21:02 |
| | | | | P-ISOPROPYLTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 21:02 |
| | | | | SEC-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 21:02 |
| | | | | STYRENE | .005 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 21:02 |
| | | | | TERT-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 21:02 |
| | | | | TETRACHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 21:02 |
| | | | | TOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 21:02 |
| | | | | TRANS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 21:02 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 21:02 |
| | | | | TRICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 21:02 |
| | | | | TRICHLOROFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 21:02 |
| | | | | VINYL CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D238-02 | 21:02 |

***Quality Assurance Report***
***For Ranges West of Iron Mountain Road***
***Parcel HR-228Q***
***IT Project No 796887***
***Fort McClellan Quality Assurance Report***

## *1.0 Overview*

Five soil samples and 1 groundwater sample were collected in support of the investigation at Fort McClellan (FTMC) Parcel HR-228Q, Ranges West of Iron Mountain Road. All samples were submitted to EMAX Laboratories, Inc. for analysis. Soil samples were analyzed for target analyte list (TAL) metals, nitroaromatic-nitramine explosives, and perchlorate. The groundwater sample was analyzed for (TAL) metals, nitroaromatic-nitramine explosives, perchlorate, and target compound list (TCL) volatiles. QC samples consisted of the following types and quantities: 1 field duplicate, 1 trip blank, and 2 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 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 data and validation 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 (DQO) were met, laboratory analytical results and data packages were examined for compliance with SW846 SW6010B/SW7000 Series, SW8330, SW8260B and U.S. Environmental Protection Agency (EPA) 314.0 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 analytical 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*

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

- Trip blanks (TBs) consist of a VOC sample vial filled in the laboratory with ASTM Type II reagent grade water, transported to the sampling site, handled like an environmental sample and returned to the laboratory for analysis. Trip blanks are prepared only when VOC samples are collected and analyzed. Trip blanks are used to assess the potential introduction of contaminants from sample containers during the transportation and/or storage procedures. Trip blanks were sent with all aqueous samples shipped to the laboratory requiring volatile analysis.

- Equipment rinsates (ER) are samples of analyte-free deionized water poured into, or 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 an analyte-free matrix, which is analyzed to verify the analysis system is free of contamination. ICBs and CCBs are analyzed immediately after the initial and continuing calibration is performed.

Field sample concentrations were evaluated to determine if the sample results could have been biased by the presence of any contamination measured in trip blanks, 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 |
|---|---|---|---|
| 10228Q-01 | JS0001, JS0003 & JS0005 | Potassium | Potassium results for samples JS0001, JS0003 & JS0005 were "B" qualified. |
| 10228Q-02 | JS3002 | Zinc | Zinc result for sample JS3002 was "B" qualified. |

## *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.

Overall sampling and analysis precision for this task was assessed using field duplicate (FD) samples. Laboratory precision was assessed by laboratory control sample/laboratory control sample duplicate (LCS/LCSD) and matrix spike/matrix spike duplicate (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 2.4-1**
**Precision Acceptance Criteria**

| Field/Laboratory QC Type | Matrix | |
|---|---|---|
| | Aqueous | Soil |
| Field Duplicate (Both Organic & Inorganic) | RPD < 35% | RPD < 50% |
| Perchlorate LCS/LCSD and MS/MSD | RPD < 10% | RPD < 20% |
| 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" |
| TCL Volatiles 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% |

## *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 SW846 SW6010B/SW7000 Series methodology, nitroaromatic-nitramine explosives by SW8330, perchlorate by EPA 314.0, and TCL volatiles by SW8260B. Reported results indicate that an acceptable level of analytical accuracy was achieved. Surrogate, LCS/LCSD and MS/MSD spike recoveries, which exceed QA criteria are summarized in Table 2.5-1.

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

| Sample Delivery Group | Sample Number | Contaminant | Action |
|---|---|---|---|
| 10228Q-01 | JL0001MS/MSD | Antimony (LB)<br>Chromium (LB)<br>Manganese (LB) | Antimony, chromium and manganese results for samples JS0001, JS0002, JS0003, JS0004 & JS0005 were "J" / "UJ" qualified due to MS/MSD spike recoveries exceeding QC criteria. |

LB - low 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. Soil sample data are being used to assess potential impacts to terrestrial biota that might use the site for food and/or habitat purposes. Monitoring well locations where chosen to establish groundwater flow direction and site-specific geology, and provide 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-228Q Ranges West of Iron Mountain Road. 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-228Q requirement for completeness is 95% for both aqueous and soil samples. The % Completeness for this task is calculated to be 100%

- % Completeness = (292 / 292) 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-228Q
# Ranges West of Iron Mountain Road
# Analytical Summary
# Project No. 796887

## HR-228Q Soil Sampling

| Sample Location | Sample Name | Sample Number | Date Sampled | Analytical Suite |
|---|---|---|---|---|
| HR-228Q-MW01 | HR-228Q-MW01-SS-JS0001-REG | JS0001 | 05-Apr-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-228Q-MW01-DS-JS0002-REG | JS0002 | 05-Apr-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-228Q-MW02 | HR-228Q-MW02-SS-JS0003-REG | JS0003 | 05-Apr-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-228Q-MW02-DS-JS0004-REG | JS0004 | 05-Apr-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-228Q-MW02-DS-JS0005-FD | JS0005 | 05-Apr-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |

## HR-228Q Groundwater Sampling

| Sample Location | Sample Name | Sample Number | Date Sampled | Analytical Suite |
|---|---|---|---|---|
| HR-228Q-MW01 | HR-228Q-MW01-GW-JS3001-REG | JS3001 | Not Sampled | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-228Q-MW02 | HR-228Q-MW02-GW-JS3002-REG | JS3002 | 14-May-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |

# ATTACHMENT B

# DATA VALIDATION SUMMARY REPORT

***Data Validation Summary Report***
***for the Site Investigation Performed at the***
***Ranges West of Iron Mountain Road (Parcel HR-228Q)***
***Fort McClellan***

## *1.0 Introduction*

Level III data validation was performed on 100% of the environmental samples collected at Ranges West of Iron Mountain Road (Parcel HR-228Q). The analytical data consisted of two sample delivery groups (SDG) 10228Q-01 and 10228Q-02, 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) |
|---|
| Volatile Organics by GC/MS SW846 8260B |
| TAL Metals by SW846 6010B/7470A/7471A |
| Nitroaromatic and Nitramine Explosives by SW846 8330 |
| Perchlorate by EPA 314.0 |

## *2.0 Procedures*

The sample data were validated following the logic identified in the *USEPA Contract Laboratory Program (CLP) National Functional Guidelines For Inorganic Data Review (February 1994)* and *USEPA Contract Laboratory Program National Functional Guidelines For Organic Review (October 1999)* for all areas except Blanks. *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's) were applied to all sample results. As the result of the use of Update III SW846 test methods for the analytical data and the application of the 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 Chromatograph (GC) and Gas Chromatograph/Mass Spectra (GC/MS) calibration areas and is due to the fact that the analytical methods are "performance-based", and allows 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, CFR, SOP's, QAP) 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 qualification. No data were rejected.

Individual validation reports have been prepared for each parameter in each SDG 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 Parcel HR-228Q. 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 Volatile Organics by GC/MS SW846 8260B*

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

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

Blanks

The 5X/10X rule for contaminants found in the associated equipment rinses, trip blanks, and method blanks was applied to all sample results. All were found to be acceptable.

Surrogate Recoveries

All surrogate recoveries are within acceptable QC limits.

Matrix Spike / Matrix Spike Duplicate

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

Laboratory Control Sample (LCS)

LCS 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.

Internal Standards

All internal standards met QC criteria

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.

### *4.2 TAL 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 exception of the following:

Note: 'B' Qualifiers were applied to all of the following sample results.

| SDG | Samples Affected | Analyte/Analytes | Associated Blank Contamination |
|---|---|---|---|
| 10228Q-01 | JS0001, JS0003, JS0005 | Potassium | Calibration |
| 10228Q-02 | JS3002 | Zinc | Calibration |

'B' qualifiers assigned to designate blank contamination, which are identification qualifiers, take precedence over estimating qualifiers, assigned due to quantitation.

Matrix Spike / Matrix Spike Duplicate

Batch QC was performed for the project samples and all QC criteria were met, with the exception of the following:

| SDG | Samples Affected | Element/Elements | Validation Qualifier |
|---|---|---|---|
| 10228Q-01 | ALL | Antimony, Chromium, Manganese | J/UJ |

Laboratory Control Sample (LCS)

All QC criteria were met for the LCS associated with the project sample analyses.

Interference Check Sample (ICS)

All ICS % recoveries for the project samples were acceptable.

ICP Serial Dilutions

All QC criteria were met, with the exception of the following:

| SDG | Samples Affected | Element/Elements | Validation Qualifier |
|---|---|---|---|
| 10228Q-01 | ALL | Chromium, Copper, Nickel, Zinc | J |

Field Duplicates

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

Sample Quantitation

Results quantified between the IDL and the RL ("J" flagged by the laboratory) were qualified as estimated (J).

### *4.3 Nitroaromatic and Nitramine Explosives by SW846 8330*

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 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 are within acceptable QC ranges.

Matrix Spike / Matrix Spike Duplicate

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

Laboratory Control Sample (LCS)

LCS 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.

### *4.4 Perchlorate by EPA 314.0*

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

Laboratory Control Sample (LCS)

All QC criteria were met for the LCS associated with the project sample analyses.

Field Duplicates

Original and field duplicate results were evaluated and no problems were noted.

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.

## *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 "nondetect" may be inaccurate or imprecise. The nondetect result should be estimated.

## Validation Reason Code Definitions

| Reason Code | Definition |
|---|---|
| 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

Run Date: October 26, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10228Q-01** | | | | | | | | | | | | | | | | | | |
| JS0001 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 12400 | mg/kg | | Y | Y | P | | | | | | | D058-01 | 18:31 |
| | | | | ANTIMONY | 11.6 | mg/kg | U | N | Y | U | UJ | | 08A | | | | D058-01 | 18:31 |
| | | | | ARSENIC | 4.21 | mg/kg | | Y | Y | P | | | | | | | D058-01 | 19:25 |
| | | | | BARIUM | 81.7 | mg/kg | | Y | Y | P | | | | | | | D058-01 | 18:31 |
| | | | | BERYLLIUM | .426 | mg/kg | J | Y | Y | P | J | | 15 | | | | D058-01 | 18:31 |
| | | | | CADMIUM | .581 | mg/kg | U | N | Y | U | U | | | | | | D058-01 | 18:31 |
| | | | | CALCIUM | 277 | mg/kg | | Y | Y | P | | | | | | | D058-01 | 18:31 |
| | | | | CHROMIUM | 42.1 | mg/kg | | Y | Y | P | J | | 08A | 13 | | | D058-01 | 18:31 |
| | | | | COBALT | 7.29 | mg/kg | | Y | Y | P | | | | | | | D058-01 | 18:31 |
| | | | | COPPER | 7.05 | mg/kg | | Y | Y | P | J | | 13 | | | | D058-01 | 18:31 |
| | | | | IRON | 18000 | mg/kg | | Y | Y | P | | | | | | | D058-01 | 18:31 |
| | | | | LEAD | 11 | mg/kg | | Y | Y | P | | | | | | | D058-01 | 19:25 |
| | | | | MAGNESIUM | 692 | mg/kg | | Y | Y | P | | | | | | | D058-01 | 18:31 |
| | | | | MANGANESE | 403 | mg/kg | | Y | Y | P | J | | 08A | | | | D058-01 | 18:31 |
| | | | | NICKEL | 5.77 | mg/kg | | Y | Y | P | J | | 13 | | | | D058-01 | 18:31 |
| | | | | POTASSIUM | 274 | mg/kg | J | Y | Y | F | B | | 06B | 15 | | | D058-01 | 18:31 |
| | | | | SELENIUM | 1.16 | mg/kg | U | N | Y | U | U | | | | | | D058-01 | 19:25 |
| | | | | SILVER | 1.16 | mg/kg | U | N | Y | U | U | | | | | | D058-01 | 18:31 |
| | | | | SODIUM | 116 | mg/kg | U | N | Y | U | U | | | | | | D058-01 | 18:31 |
| | | | | THALLIUM | 2.32 | mg/kg | U | N | Y | U | U | | | | | | D058-01 | 19:25 |
| | | | | VANADIUM | 20.2 | mg/kg | | Y | Y | P | | | | | | | D058-01 | 18:31 |
| | | | | ZINC | 25.4 | mg/kg | | Y | Y | P | J | | 13 | | | | D058-01 | 18:31 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .116 | mg/kg | U | N | Y | U | U | | | | | | D058-01 | 13:52 |
| JS0002 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 24700 | mg/kg | | Y | Y | P | | | | | | | D058-02 | 18:36 |
| | | | | ANTIMONY | 12.1 | mg/kg | U | N | Y | U | UJ | | 08A | | | | D058-02 | 18:36 |
| | | | | ARSENIC | 8.41 | mg/kg | | Y | Y | P | | | | | | | D058-02 | 19:30 |
| | | | | BARIUM | 32 | mg/kg | | Y | Y | P | | | | | | | D058-02 | 18:36 |
| | | | | BERYLLIUM | .32 | mg/kg | J | Y | Y | P | J | | 15 | | | | D058-02 | 18:36 |
| | | | | CADMIUM | .604 | mg/kg | U | N | Y | U | U | | | | | | D058-02 | 18:36 |
| | | | | CALCIUM | 45 | mg/kg | J | Y | Y | P | J | | 15 | | | | D058-02 | 18:36 |
| | | | | CHROMIUM | 22.8 | mg/kg | | Y | Y | P | J | | 08A | 13 | | | D058-02 | 18:36 |
| | | | | COBALT | 4.19 | mg/kg | | Y | Y | P | | | | | | | D058-02 | 18:36 |
| | | | | COPPER | 23.3 | mg/kg | | Y | Y | P | J | | 13 | | | | D058-02 | 18:36 |
| | | | | IRON | 38800 | mg/kg | | Y | Y | P | | | | | | | D058-02 | 18:36 |
| | | | | LEAD | 10.4 | mg/kg | | Y | Y | P | | | | | | | D058-02 | 19:30 |
| | | | | MAGNESIUM | 723 | mg/kg | | Y | Y | P | | | | | | | D058-02 | 18:36 |
| | | | | MANGANESE | 143 | mg/kg | | Y | Y | P | J | | 08A | | | | D058-02 | 18:36 |
| | | | | NICKEL | 8.05 | mg/kg | | Y | Y | P | J | | 13 | | | | D058-02 | 18:36 |
| | | | | POTASSIUM | 974 | mg/kg | | Y | Y | P | | | | | | | D058-02 | 18:36 |
| | | | | SELENIUM | 1.21 | mg/kg | U | N | Y | U | U | | | | | | D058-02 | 19:30 |

# Validation Qualifier Data Entry Verification

Run Date: October 26, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10228Q-01** | | | | | | | | | | | | | | | | | | |
| JS0002 | SW6010B | SW3050 | N 0 1 | SILVER | 1.21 | mg/kg | U | N | Y | U | U | | | | | | D058-02 | 18:36 |
| | | | | SODIUM | 121 | mg/kg | U | N | Y | U | U | | | | | | D058-02 | 18:36 |
| | | | | THALLIUM | 2.42 | mg/kg | U | N | Y | U | U | | | | | | D058-02 | 19:30 |
| | | | | VANADIUM | 39.8 | mg/kg | | Y | Y | P | | | | | | | D058-02 | 18:36 |
| | | | | ZINC | 25 | mg/kg | | Y | Y | P | J | | 13 | | | | D058-02 | 18:36 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .121 | mg/kg | U | N | Y | U | U | | | | | | D058-02 | 13:54 |
| JS0003 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 9820 | mg/kg | | Y | Y | P | | | | | | | D058-03 | 18:41 |
| | | | | ANTIMONY | 11.5 | mg/kg | U | N | Y | U | UJ | | 08A | | | | D058-03 | 18:41 |
| | | | | ARSENIC | 6.14 | mg/kg | | Y | Y | P | | | | | | | D058-03 | 19:35 |
| | | | | BARIUM | 23 | mg/kg | | Y | Y | P | | | | | | | D058-03 | 18:41 |
| | | | | BERYLLIUM | .154 | mg/kg | J | Y | Y | P | J | | 15 | | | | D058-03 | 18:41 |
| | | | | CADMIUM | .577 | mg/kg | U | N | Y | U | U | | | | | | D058-03 | 18:41 |
| | | | | CALCIUM | 395 | mg/kg | | Y | Y | P | | | | | | | D058-03 | 18:41 |
| | | | | CHROMIUM | 17.5 | mg/kg | | Y | Y | P | J | | 08A | 13 | | | D058-03 | 18:41 |
| | | | | COBALT | 2.81 | mg/kg | | Y | Y | P | | | | | | | D058-03 | 18:41 |
| | | | | COPPER | 8.65 | mg/kg | | Y | Y | P | J | | 13 | | | | D058-03 | 18:41 |
| | | | | IRON | 19500 | mg/kg | | Y | Y | P | | | | | | | D058-03 | 18:41 |
| | | | | LEAD | 6.95 | mg/kg | | Y | Y | P | | | | | | | D058-03 | 19:35 |
| | | | | MAGNESIUM | 358 | mg/kg | | Y | Y | P | | | | | | | D058-03 | 18:41 |
| | | | | MANGANESE | 119 | mg/kg | | Y | Y | P | J | | 08A | | | | D058-03 | 18:41 |
| | | | | NICKEL | 3.35 | mg/kg | | Y | Y | P | J | | 13 | | | | D058-03 | 18:41 |
| | | | | POTASSIUM | 192 | mg/kg | J | Y | Y | F | B | | 06B | 15 | | | D058-03 | 18:41 |
| | | | | SELENIUM | 1.15 | mg/kg | U | N | Y | U | U | | | | | | D058-03 | 19:35 |
| | | | | SILVER | 1.15 | mg/kg | U | N | Y | U | U | | | | | | D058-03 | 18:41 |
| | | | | SODIUM | 115 | mg/kg | U | N | Y | U | U | | | | | | D058-03 | 18:41 |
| | | | | THALLIUM | 2.31 | mg/kg | U | N | Y | U | U | | | | | | D058-03 | 19:35 |
| | | | | VANADIUM | 26 | mg/kg | | Y | Y | P | | | | | | | D058-03 | 18:41 |
| | | | | ZINC | 13.5 | mg/kg | | Y | Y | P | J | | 13 | | | | D058-03 | 18:41 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .024 | mg/kg | J | Y | Y | P | J | | 15 | | | | D058-03 | 13:57 |
| JS0004 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 26100 | mg/kg | | Y | Y | P | | | | | | | D058-04 | 18:45 |
| | | | | ANTIMONY | 12.4 | mg/kg | U | N | Y | U | UJ | | 08A | | | | D058-04 | 18:45 |
| | | | | ARSENIC | 12.7 | mg/kg | | Y | Y | P | | | | | | | D058-04 | 19:40 |
| | | | | BARIUM | 29.3 | mg/kg | | Y | Y | P | | | | | | | D058-04 | 18:45 |
| | | | | BERYLLIUM | .503 | mg/kg | J | Y | Y | P | J | | 15 | | | | D058-04 | 18:45 |
| | | | | CADMIUM | .621 | mg/kg | U | N | Y | U | U | | | | | | D058-04 | 18:45 |
| | | | | CALCIUM | 73.3 | mg/kg | J | Y | Y | P | J | | 15 | | | | D058-04 | 18:45 |
| | | | | CHROMIUM | 31.5 | mg/kg | | Y | Y | P | J | | 08A | 13 | | | D058-04 | 18:45 |
| | | | | COBALT | 7.09 | mg/kg | | Y | Y | P | | | | | | | D058-04 | 18:45 |
| | | | | COPPER | 29.5 | mg/kg | | Y | Y | P | J | | 13 | | | | D058-04 | 18:45 |
| | | | | IRON | 52800 | mg/kg | | Y | Y | P | | | | | | | D058-04 | 18:45 |

# Validation Qualifier Data Entry Verification

Run Date: October 26, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10228Q-01** | | | | | | | | | | | | | | | | | | |
| JS0004 | SW6010B | SW3050 | N 0 1 | LEAD | 14.5 | mg/kg | | Y | Y | P | | | | | | | D058-04 | 19:40 |
| | | | | MAGNESIUM | 725 | mg/kg | | Y | Y | P | | | | | | | D058-04 | 18:45 |
| | | | | MANGANESE | 123 | mg/kg | | Y | Y | P | J | | 08A | | | | D058-04 | 18:45 |
| | | | | NICKEL | 13.2 | mg/kg | | Y | Y | P | J | | 13 | | | | D058-04 | 18:45 |
| | | | | POTASSIUM | 766 | mg/kg | | Y | Y | P | | | | | | | D058-04 | 18:45 |
| | | | | SELENIUM | 1.24 | mg/kg | U | N | Y | U | U | | | | | | D058-04 | 19:40 |
| | | | | SILVER | 1.24 | mg/kg | U | N | Y | U | U | | | | | | D058-04 | 18:45 |
| | | | | SODIUM | 124 | mg/kg | U | N | Y | U | U | | | | | | D058-04 | 18:45 |
| | | | | THALLIUM | .738 | mg/kg | J | Y | Y | P | J | | 15 | | | | D058-04 | 19:40 |
| | | | | VANADIUM | 54.1 | mg/kg | | Y | Y | P | | | | | | | D058-04 | 18:45 |
| | | | | ZINC | 41.7 | mg/kg | | Y | Y | P | J | | 13 | | | | D058-04 | 18:45 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .124 | mg/kg | U | N | Y | U | U | | | | | | D058-04 | 13:59 |
| JS0005 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 24100 | mg/kg | | Y | Y | P | | | | | | | D058-05 | 19:20 |
| | | | | ANTIMONY | 4.68 | mg/kg | J | Y | Y | P | J | | 08A | 15 | | | D058-05 | 19:20 |
| | | | | ARSENIC | 15.4 | mg/kg | | Y | Y | P | | | | | | | D058-05 | 20:14 |
| | | | | BARIUM | 26.4 | mg/kg | | Y | Y | P | | | | | | | D058-05 | 19:20 |
| | | | | BERYLLIUM | .465 | mg/kg | J | Y | Y | P | J | | 15 | | | | D058-05 | 19:20 |
| | | | | CADMIUM | .619 | mg/kg | U | N | Y | U | U | | | | | | D058-05 | 19:20 |
| | | | | CALCIUM | 48.5 | mg/kg | J | Y | Y | P | J | | 15 | | | | D058-05 | 19:20 |
| | | | | CHROMIUM | 33.9 | mg/kg | | Y | Y | P | J | | 08A | 13 | | | D058-05 | 19:20 |
| | | | | COBALT | 7.74 | mg/kg | | Y | Y | P | | | | | | | D058-05 | 19:20 |
| | | | | COPPER | 27.4 | mg/kg | | Y | Y | P | J | | 13 | | | | D058-05 | 19:20 |
| | | | | IRON | 55000 | mg/kg | | Y | Y | U | | | | | | | D058-05 | 19:20 |
| | | | | LEAD | 14 | mg/kg | | Y | Y | P | | | | | | | D058-05 | 20:14 |
| | | | | MAGNESIUM | 668 | mg/kg | | Y | Y | P | | | | | | | D058-05 | 19:20 |
| | | | | MANGANESE | 121 | mg/kg | | Y | Y | P | J | | 08A | | | | D058-05 | 19:20 |
| | | | | NICKEL | 12.1 | mg/kg | | Y | Y | P | J | | 13 | | | | D058-05 | 19:20 |
| | | | | POTASSIUM | 569 | mg/kg | J | Y | Y | F | B | | 06B | 15 | | | D058-05 | 19:20 |
| | | | | SELENIUM | 1.24 | mg/kg | U | N | Y | U | U | | | | | | D058-05 | 20:14 |
| | | | | SILVER | 1.24 | mg/kg | U | N | Y | U | U | | | | | | D058-05 | 19:20 |
| | | | | SODIUM | 124 | mg/kg | U | N | Y | U | U | | | | | | D058-05 | 19:20 |
| | | | | THALLIUM | 1.01 | mg/kg | J | Y | Y | P | J | | 15 | | | | D058-05 | 20:14 |
| | | | | VANADIUM | 56.8 | mg/kg | | Y | Y | P | | | | | | | D058-05 | 19:20 |
| | | | | ZINC | 38.1 | mg/kg | | Y | Y | P | J | | 13 | | | | D058-05 | 19:20 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .124 | mg/kg | U | N | Y | U | U | | | | | | D058-05 | 14:02 |
| JS0001 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-01 | 18:20 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-01 | 18:20 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-01 | 18:20 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-01 | 18:20 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-01 | 18:20 |

# Validation Qualifier Data Entry Verification

Run Date: October 26, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10228Q-01** | | | | | | | | | | | | | | | | | | |
| JS0001 | SW8330 | METHOD | N 0 1 | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-01 | 18:20 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-01 | 18:20 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-01 | 18:20 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-01 | 18:20 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-01 | 18:20 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-01 | 18:20 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-01 | 18:20 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-01 | 18:20 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-01 | 18:20 |
| JS0002 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-02 | 18:59 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-02 | 18:59 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-02 | 18:59 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-02 | 18:59 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-02 | 18:59 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-02 | 18:59 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-02 | 18:59 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-02 | 18:59 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-02 | 18:59 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-02 | 18:59 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-02 | 18:59 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-02 | 18:59 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-02 | 18:59 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-02 | 18:59 |
| JS0003 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-03 | 19:37 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-03 | 19:37 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-03 | 19:37 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-03 | 19:37 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-03 | 19:37 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-03 | 19:37 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-03 | 19:37 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-03 | 19:37 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-03 | 19:37 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-03 | 19:37 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-03 | 19:37 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-03 | 19:37 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-03 | 19:37 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-03 | 19:37 |
| JS0004 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-04 | 20:15 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-04 | 20:15 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-04 | 20:15 |

# Validation Qualifier Data Entry Verification

Run Date: October 26, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10228Q-01** | | | | | | | | | | | | | | | | | | |
| JS0004 | SW8330 | METHOD | N 0 1 | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-04 | 20:15 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-04 | 20:15 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-04 | 20:15 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-04 | 20:15 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-04 | 20:15 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-04 | 20:15 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-04 | 20:15 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-04 | 20:15 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-04 | 20:15 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-04 | 20:15 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-04 | 20:15 |
| JS0005 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-05 | 20:54 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-05 | 20:54 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-05 | 20:54 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-05 | 20:54 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-05 | 20:54 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-05 | 20:54 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-05 | 20:54 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-05 | 20:54 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-05 | 20:54 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-05 | 20:54 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-05 | 20:54 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-05 | 20:54 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-05 | 20:54 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | D058-05 | 20:54 |
| JS0001 | E314.0 | NONE | N 0 1 | PERCHLORATE | .0581 | mg/kg | U | N | Y | U | U | | | | | | D058-01 | 15:01 |
| JS0002 | E314.0 | NONE | N 0 1 | PERCHLORATE | .0604 | mg/kg | U | N | Y | U | U | | | | | | D058-02 | 15:18 |
| JS0003 | E314.0 | NONE | N 0 1 | PERCHLORATE | .0577 | mg/kg | U | N | Y | U | U | | | | | | D058-03 | 15:35 |
| JS0004 | E314.0 | NONE | N 0 1 | PERCHLORATE | .0621 | mg/kg | U | N | Y | U | U | | | | | | D058-04 | 15:52 |
| JS0005 | E314.0 | NONE | N 0 1 | PERCHLORATE | .0619 | mg/kg | U | N | Y | U | U | | | | | | D058-05 | 16:10 |
| **10228Q-02** | | | | | | | | | | | | | | | | | | |
| JS3002 | SW6010B | SW3010 | N 0 1 | ALUMINUM | .158 | mg/L | J | Y | Y | P | J | 15 | | | | | E117-01 | 16:55 |
| | | | | ANTIMONY | .0434 | mg/L | J | Y | Y | P | J | 15 | | | | | E117-01 | 16:55 |
| | | | | ARSENIC | .01 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 20:50 |
| | | | | BARIUM | .00513 | mg/L | J | Y | Y | P | J | 15 | | | | | E117-01 | 16:55 |
| | | | | BERYLLIUM | .001 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 16:55 |
| | | | | CADMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 16:55 |
| | | | | CALCIUM | 1.02 | mg/L | | Y | Y | P | | | | | | | E117-01 | 16:55 |
| | | | | CHROMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 16:55 |

# Validation Qualifier Data Entry Verification

Run Date: October 26, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10228Q-02** | | | | | | | | | | | | | | | | | | |
| JS3002 | SW6010B | SW3010 | N 0 1 | COBALT | .02 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 16:55 |
| | | | | COPPER | .02 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 16:55 |
| | | | | IRON | .12 | mg/L | J | Y | Y | P | J | | 15 | | | | E117-01 | 16:55 |
| | | | | LEAD | .01 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 20:50 |
| | | | | MAGNESIUM | .458 | mg/L | J | Y | Y | P | J | | 15 | | | | E117-01 | 16:55 |
| | | | | MANGANESE | .213 | mg/L | | Y | Y | P | | | | | | | E117-01 | 16:55 |
| | | | | NICKEL | .02 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 16:55 |
| | | | | POTASSIUM | 5 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 16:55 |
| | | | | SELENIUM | .00197 | mg/L | J | Y | Y | P | J | | 15 | | | | E117-01 | 20:50 |
| | | | | SILVER | .01 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 16:55 |
| | | | | SODIUM | .881 | mg/L | J | Y | Y | P | J | | 15 | | | | E117-01 | 16:55 |
| | | | | THALLIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 20:50 |
| | | | | VANADIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 16:55 |
| | | | | ZINC | .00896 | mg/L | J | Y | Y | F | B | | 06B | 15 | | | E117-01 | 16:55 |
| | SW7470A | TOTAL | N 0 1 | MERCURY | .0005 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 15:51 |
| JS3002 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 18:04 |
| | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 18:04 |
| | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 18:04 |
| | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 18:04 |
| | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 18:04 |
| | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 18:04 |
| | | | | 2-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 18:04 |
| | | | | 3-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 18:04 |
| | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 18:04 |
| | | | | 4-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 18:04 |
| | | | | HMX | .001 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 18:04 |
| | | | | NITROBENZENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 18:04 |
| | | | | RDX | .0004 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 18:04 |
| | | | | TETRYL | .0004 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 18:04 |
| JS3002 | E314.0 | NONE | N 0 1 | PERCHLORATE | .005 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 02:46 |
| JS3002 | SW8260B | SW5030 | N 0 1 | 1,1,1,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 14:28 |
| | | | | 1,1,1-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 14:28 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 14:28 |
| | | | | 1,1,2-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 14:28 |
| | | | | 1,1-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 14:28 |
| | | | | 1,1-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 14:28 |
| | | | | 1,1-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 14:28 |
| | | | | 1,2,3-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 14:28 |
| | | | | 1,2,3-TRICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 14:28 |
| | | | | 1,2,4-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 14:28 |

# Validation Qualifier Data Entry Verification

Run Date: October 26, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10228Q-02** | | | | | | | | | | | | | | | | | | |
| JS3002 | SW8260B | SW5030 | N 0 1 | 1,2,4-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 14:28 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .01 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 14:28 |
| | | | | 1,2-DIBROMOETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 14:28 |
| | | | | 1,2-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 14:28 |
| | | | | 1,2-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 14:28 |
| | | | | 1,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 14:28 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 14:28 |
| | | | | 1,3-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 14:28 |
| | | | | 1,3-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 14:28 |
| | | | | 1,4-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 14:28 |
| | | | | 2,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 14:28 |
| | | | | 2-BUTANONE | .02 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 14:28 |
| | | | | 2-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 14:28 |
| | | | | 2-HEXANONE | .02 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 14:28 |
| | | | | 4-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 14:28 |
| | | | | 4-METHYL-2-PENTANONE | .01 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 14:28 |
| | | | | ACETONE | .02 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 14:28 |
| | | | | BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 14:28 |
| | | | | BROMOBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 14:28 |
| | | | | BROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 14:28 |
| | | | | BROMODICHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 14:28 |
| | | | | BROMOFORM | .005 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 14:28 |
| | | | | BROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 14:28 |
| | | | | CARBON DISULFIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 14:28 |
| | | | | CARBON TETRACHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 14:28 |
| | | | | CHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 14:28 |
| | | | | CHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 14:28 |
| | | | | CHLOROFORM | .005 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 14:28 |
| | | | | CHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 14:28 |
| | | | | CIS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 14:28 |
| | | | | CIS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 14:28 |
| | | | | DIBROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 14:28 |
| | | | | DIBROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 14:28 |
| | | | | DICHLORODIFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 14:28 |
| | | | | ETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 14:28 |
| | | | | HEXACHLOROBUTADIENE | .005 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 14:28 |
| | | | | ISOPROPYL BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 14:28 |
| | | | | M/P-XYLENES | .01 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 14:28 |
| | | | | METHYLENE CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 14:28 |
| | | | | N-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 14:28 |

# Validation Qualifier Data Entry Verification

Run Date: October 26, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10228Q-02** | | | | | | | | | | | | | | | | | | |
| JS3002 | SW8260B | SW5030 | N 0 1 | N-PROPYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 14:28 |
| | | | | NAPHTHALENE | .005 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 14:28 |
| | | | | O-XYLENE | .005 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 14:28 |
| | | | | P-ISOPROPYLTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 14:28 |
| | | | | SEC-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 14:28 |
| | | | | STYRENE | .005 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 14:28 |
| | | | | TERT-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 14:28 |
| | | | | TETRACHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 14:28 |
| | | | | TOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 14:28 |
| | | | | TRANS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 14:28 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 14:28 |
| | | | | TRICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 14:28 |
| | | | | TRICHLOROFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 14:28 |
| | | | | VINYL CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E117-01 | 14:28 |

***Quality Assurance Report***
***For Ranges West of Iron Mountain Road***
***Parcel HR-229Q***
***IT Project No 796887***
***Fort McClellan Quality Assurance Report***

## *1.0 Overview*

Two soil samples were collected in support of the investigation at Fort McClellan (FTMC) Parcel HR-229Q, Ranges West of Iron Mountain Road. All samples were submitted to EMAX Laboratories, Inc. for analysis. Soil samples were analyzed for target analyte list (TAL) metals, nitroaromatic-nitramine explosives, and perchlorate. QC samples consisted of 1 equipment rinsate. 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 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 data and validation 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 (DQO) were met, laboratory analytical results and data packages were examined for compliance with SW846 SW6010B/SW7000 Series, SW8330, and U.S. Environmental Protection Agency (EPA) 314.0 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 analytical 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*

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

- Equipment rinsates (ER) are samples of analyte-free deionized water poured into, or 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 an analyte-free matrix, which is analyzed to verify the analysis system is free of contamination. ICBs and CCBs are analyzed immediately after the initial and continuing calibration is 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 |
|---|---|---|---|
| 10229Q-01 | JT0001 & JT0002 | Potassium | Potassium results for samples JT0001 and JT0002 were "B" qualified. |

## *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 matrix spike/matrix spike duplicate (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 2.4-1 Precision Acceptance Criteria**

| Field/Laboratory QC Type | Matrix | |
|---|---|---|
| | Aqueous | Soil |
| Field Duplicate (Both Organic & Inorganic) | RPD < 35% | RPD < 50% |
| Perchlorate LCS/LCSD and MS/MSD | RPD < 10% | RPD < 20% |
| 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% |

## *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 SW846 SW6010B/SW7000 Series methodology, nitroaromatic-nitramine explosives by SW8330, and perchlorate by EPA 314.0. Reported results indicate that an acceptable level of analytical accuracy was achieved.

## *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. Soil sample data are being used to assess potential impacts to terrestrial biota that might use the site for food and/or habitat purposes

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-229Q Ranges West of Iron Mountain Road. 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-229Q requirement for completeness is 95% for both aqueous and soil samples. The % Completeness for this task is calculated to be 100%

- % Completeness = (76 / 76) 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-229Q
# Ranges West of Iron Mountain Road
# Analytical Summary
# Project No. 796887

| HR-229Q Soil Sampling | | | | |
|---|---|---|---|---|
| **Sample Location** | **Sample Name** | **Sample Number** | **Date Sampled** | **Analytical Suite** |
| HR-229Q-MW01 | HR-229Q-MW01-SS-JT0001-REG | JT0001 | 06-Apr-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-229Q-MW01-DS-JT0002-REG | JT0002 | 06-Apr-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| **HR-229Q Groundwater Sampling** | | | | |
| HR-229Q-MW01 | HR-229Q-MW01-GW-JT3001-REG | JT3001 | Not Sampled | TAL Metals by SW6010B/SW7471, VOCs by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 and Perchlorate by EPA 314.0. |

# ATTACHMENT B

# DATA VALIDATION SUMMARY REPORT

***Data Validation Summary Report***
***for the Site Investigation Performed at the***
***Ranges West of Iron Mountain Road (Parcel HR-229Q)***
***Fort McClellan***

## *1.0 Introduction*

Level III data validation was performed on 100% of the environmental samples collected at Ranges West of Iron Mountain Road (Parcel HR-229Q). The analytical data consisted of one sample delivery group (SDG) 10229Q-01, which was analyzed by EMAX Laboratories. The chemical parameters for which the samples were analyzed, are identified below:

| **Parameter** (Method) |
|---|
| TAL Metals by SW846 6010B/7470A |
| Nitroaromatic and Nitramine Explosives by SW846 8330 |
| Perchlorate by EPA 314.0 |

## *2.0 Procedures*

The sample data were validated following the logic identified in the *USEPA Contract Laboratory Program (CLP) National Functional Guidelines For Inorganic Data Review (February 1994)* and *USEPA Contract Laboratory Program National Functional Guidelines For Organic Review (October 1999)* for all areas except Blanks. *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's) were applied to all sample results. As the result of the use of Update III SW846 test methods for the analytical data and the application of the 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 Chromatograph (GC) and Gas Chromatograph/Mass Spectra (GC/MS) calibration areas and is due to the fact that the analytical methods are "performance-based", and allows 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, CFR, SOP's, QAP) 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 qualification. No data were rejected.

Individual validation reports have been prepared for each parameter in each SDG 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 Parcel HR-229Q. 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 TAL Metals by SW846 6010B/7471A*

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 exception of the following:

Note: 'B' Qualifiers were applied to all of the following sample results.

| SDG | Samples Affected | Analyte/Analytes | Associated Blank Contamination |
|---|---|---|---|
| 10229Q-01 | JT0001, JT0002 | Potassium | Calibration |

'B' qualifiers assigned to designate blank contamination, which are identification qualifiers, take precedence over estimating qualifiers, assigned due to quantitation.

Matrix Spike / Matrix Spike Duplicate

Batch QC was performed for the project samples and all QC criteria were met.

Laboratory Control Sample (LCS)

All QC criteria were met for the LCS associated with the project sample analyses.

Interference Check Sample (ICS)

All ICS % recoveries for the project samples were acceptable.

ICP Serial Dilutions

All QC criteria were met.

Field Duplicates

No field duplicates were evaluated for this parcel.

Sample Quantitation

Results quantified between the IDL and the RL ("J" flagged by the laboratory) were qualified as estimated (J).

### *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 are within acceptable QC ranges.

Matrix Spike / Matrix Spike Duplicate

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

Laboratory Control Sample (LCS)

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

Field Duplicates

No field duplicates were evaluated for this parcel.

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.

### *4.3 Perchlorate by EPA 314.0*

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

Laboratory Control Sample (LCS)

All QC criteria were met for the LCS associated with the project sample analyses.

Field Duplicates

No field duplicates were evaluated for this parcel.

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.

## *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 "nondetect" may be inaccurate or imprecise. The nondetect result should be estimated.

## Validation Reason Code Definitions

| Reason Code | Definition |
|---|---|
| 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

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10229Q-01** | | | | | | | | | | | | | | | | | | |
| JT0001 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 25100 | mg/kg | | Y | Y | P | | | | | | | D057-01 | 19:25 |
| | | | | ANTIMONY | 12.4 | mg/kg | U | N | Y | U | U | | | | | | D057-01 | 19:25 |
| | | | | ARSENIC | 7.08 | mg/kg | | Y | Y | P | | | | | | | D057-01 | 20:18 |
| | | | | BARIUM | 88.7 | mg/kg | | Y | Y | P | | | | | | | D057-01 | 19:25 |
| | | | | BERYLLIUM | .563 | mg/kg | J | Y | Y | P | J | | 15 | | | | D057-01 | 19:25 |
| | | | | CADMIUM | .618 | mg/kg | U | N | Y | U | U | | | | | | D057-01 | 19:25 |
| | | | | CALCIUM | 260 | mg/kg | | Y | Y | P | | | | | | | D057-01 | 19:25 |
| | | | | CHROMIUM | 33.6 | mg/kg | | Y | Y | P | | | | | | | D057-01 | 19:25 |
| | | | | COBALT | 9.26 | mg/kg | | Y | Y | P | | | | | | | D057-01 | 19:25 |
| | | | | COPPER | 8.38 | mg/kg | | Y | Y | P | | | | | | | D057-01 | 19:25 |
| | | | | IRON | 20700 | mg/kg | | Y | Y | P | | | | | | | D057-01 | 19:25 |
| | | | | LEAD | 16.1 | mg/kg | | Y | Y | P | | | | | | | D057-01 | 20:18 |
| | | | | MAGNESIUM | 935 | mg/kg | | Y | Y | P | | | | | | | D057-01 | 19:25 |
| | | | | MANGANESE | 553 | mg/kg | | Y | Y | P | | | | | | | D057-01 | 19:25 |
| | | | | NICKEL | 11.2 | mg/kg | | Y | Y | P | | | | | | | D057-01 | 19:25 |
| | | | | POTASSIUM | 500 | mg/kg | J | Y | Y | F | B | | 06B | 15 | | | D057-01 | 19:25 |
| | | | | SELENIUM | 1.24 | mg/kg | U | N | Y | U | U | | | | | | D057-01 | 20:18 |
| | | | | SILVER | 1.24 | mg/kg | U | N | Y | U | U | | | | | | D057-01 | 19:25 |
| | | | | SODIUM | 124 | mg/kg | U | N | Y | U | U | | | | | | D057-01 | 19:25 |
| | | | | THALLIUM | 2.47 | mg/kg | U | N | Y | U | U | | | | | | D057-01 | 20:18 |
| | | | | VANADIUM | 34.3 | mg/kg | | Y | Y | P | | | | | | | D057-01 | 19:25 |
| | | | | ZINC | 35.2 | mg/kg | | Y | Y | P | | | | | | | D057-01 | 19:25 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .141 | mg/kg | | Y | Y | P | | | | | | | D057-01 | 12:40 |
| JT0002 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 44400 | mg/kg | | Y | Y | P | | | | | | | D057-02 | 19:30 |
| | | | | ANTIMONY | 12.1 | mg/kg | U | N | Y | U | U | | | | | | D057-02 | 19:30 |
| | | | | ARSENIC | 11.6 | mg/kg | | Y | Y | P | | | | | | | D057-02 | 20:23 |
| | | | | BARIUM | 46.4 | mg/kg | | Y | Y | P | | | | | | | D057-02 | 19:30 |
| | | | | BERYLLIUM | .566 | mg/kg | J | Y | Y | P | J | | 15 | | | | D057-02 | 19:30 |
| | | | | CADMIUM | .604 | mg/kg | U | N | Y | U | U | | | | | | D057-02 | 19:30 |
| | | | | CALCIUM | 124 | mg/kg | | Y | Y | P | | | | | | | D057-02 | 19:30 |
| | | | | CHROMIUM | 33.7 | mg/kg | | Y | Y | P | | | | | | | D057-02 | 19:30 |
| | | | | COBALT | 11 | mg/kg | | Y | Y | P | | | | | | | D057-02 | 19:30 |
| | | | | COPPER | 19.9 | mg/kg | | Y | Y | P | | | | | | | D057-02 | 19:30 |
| | | | | IRON | 36900 | mg/kg | | Y | Y | P | | | | | | | D057-02 | 19:30 |
| | | | | LEAD | 19.6 | mg/kg | | Y | Y | P | | | | | | | D057-02 | 20:23 |
| | | | | MAGNESIUM | 1300 | mg/kg | | Y | Y | P | | | | | | | D057-02 | 19:30 |
| | | | | MANGANESE | 314 | mg/kg | | Y | Y | P | | | | | | | D057-02 | 19:30 |
| | | | | NICKEL | 19.3 | mg/kg | | Y | Y | P | | | | | | | D057-02 | 19:30 |
| | | | | POTASSIUM | 614 | mg/kg | | Y | Y | F | B | | 06B | | | | D057-02 | 19:30 |
| | | | | SELENIUM | 1.21 | mg/kg | U | N | Y | U | U | | | | | | D057-02 | 20:23 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10229Q-01** | | | | | | | | | | | | | | | | | | |
| JT0002 | SW6010B | SW3050 | N 0 1 | SILVER | 1.21 | mg/kg | U | N | Y | U | U | | | | | | D057-02 | 19:30 |
| | | | | SODIUM | 121 | mg/kg | U | N | Y | U | U | | | | | | D057-02 | 19:30 |
| | | | | THALLIUM | 1.06 | mg/kg | J | Y | Y | P | J | | 15 | | | | D057-02 | 20:23 |
| | | | | VANADIUM | 56.6 | mg/kg | | Y | Y | P | | | | | | | D057-02 | 19:30 |
| | | | | ZINC | 45.2 | mg/kg | | Y | Y | P | | | | | | | D057-02 | 19:30 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .27 | mg/kg | | Y | Y | P | | | | | | | D057-02 | 12:43 |
| JT0001 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D057-01 | 17:07 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D057-01 | 17:07 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D057-01 | 17:07 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D057-01 | 17:07 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D057-01 | 17:07 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D057-01 | 17:07 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D057-01 | 17:07 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D057-01 | 17:07 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D057-01 | 17:07 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D057-01 | 17:07 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | D057-01 | 17:07 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D057-01 | 17:07 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | D057-01 | 17:07 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | D057-01 | 17:07 |
| JT0002 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D057-02 | 00:06 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D057-02 | 00:06 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D057-02 | 00:06 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D057-02 | 00:06 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D057-02 | 00:06 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D057-02 | 00:06 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D057-02 | 00:06 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D057-02 | 00:06 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D057-02 | 00:06 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D057-02 | 00:06 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | D057-02 | 00:06 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D057-02 | 00:06 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | D057-02 | 00:06 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | D057-02 | 00:06 |
| JT0001 | E314.0 | NONE | N 0 1 | PERCHLORATE | .0618 | mg/kg | U | N | Y | U | U | | | | | | D057-01 | 14:27 |
| JT0002 | E314.0 | NONE | N 0 1 | PERCHLORATE | .0604 | mg/kg | U | N | Y | U | U | | | | | | D057-02 | 14:44 |

***Quality Assurance Report***
***For Ranges West of Iron Mountain Road***
***Parcel HR-231Q***
***IT Project No 796887***
***Fort McClellan Quality Assurance Report***

## *1.0 Overview*

Three soil samples were collected in support of the investigation at Fort McClellan (FTMC) Parcel HR-231Q, Ranges West of Iron Mountain Road. All samples were submitted to EMAX Laboratories, Inc. for analysis. Soil samples were analyzed for target analyte list (TAL) metals, nitroaromatic-nitramine explosives, and perchlorate. QC samples consisted of the following types and quantities: 1 field duplicate and 1 equipment rinsate. 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 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 data and validation 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 (DQO) were met, laboratory analytical results and data packages were examined for compliance with SW846 SW6010B/SW7000 Series, SW8330, and U.S. Environmental Protection Agency (EPA) 314.0 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 analytical 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*

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

- Equipment rinsates (ER) are samples of analyte-free deionized water poured into, or 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 an analyte-free matrix, which is analyzed to verify the analysis system is free of contamination. ICBs and CCBs are analyzed immediately after the initial and continuing calibration is 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. No reported data from parcel HR-231Q was biased by blank 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.

Overall sampling and anaylsis precision will be assessed using field duplicate samples. Laboratory precision was assessed by laboratory control sample/laboratory control sample duplicate (LCS/LCSD) and matrix spike/matrix spike duplicate (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 2.4-1 Precision Acceptance Criteria**

| Field/Laboratory QC Type | Matrix | |
|---|---|---|
| | Aqueous | Soil |
| Field Duplicate (Both Organic & Inorganic) | RPD < 35% | RPD < 50% |
| Perchlorate LCS/LCSD and MS/MSD | RPD < 10% | RPD < 20% |
| 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% |

## *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 SW846 SW6010B/SW7000 Series methodology, nitroaromatic-nitramine explosives by SW8330, and perchlorate by EPA 314.0. Reported results indicate that an acceptable level of analytical accuracy was achieved.

## *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. Soil sample data are being used to assess potential impacts to terrestrial biota that might use the site for food and/or habitat purposes

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-231Q Ranges West of Iron Mountain Road. 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-231Q requirement for completeness is 95% for both aqueous and soil samples. The % Completeness for this task is calculated to be 100%

- % Completeness = (114 / 114) 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-231Q
# Ranges West of Iron Mountain Road
# Analytical Summary
# Project No. 796887

| HR-231Q Soil Sampling | | | | |
|---|---|---|---|---|
| **Sample Location** | **Sample Name** | **Sample Number** | **Date Sampled** | **Analytical Suite** |
| HR-231Q-MW01 | HR-231Q-MW01-SS-JU0001-REG | JU0001 | 02-Apr-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-231Q-MW01-SS-JU0002-FD | JU0002 | 02-Apr-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-231Q-MW01-DS-JU0003-REG | JU0003 | 02-Apr-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| **HR-231Q Groundwater Sampling** | | | | |
| HR-231Q-MW01 | HR-231Q-MW01-GW-JU3001-REG | JU3001 | Not Sampled | TAL Metals by SW6010B/SW7471, VOCs by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 and Perchlorate by EPA 314.0. |

# ATTACHMENT B

# DATA VALIDATION SUMMARY REPORT

***Data Validation Summary Report***
***for the Site Investigation Performed at the***
***Ranges West of Iron Mountain Road (Parcel HR-231Q)***
***Fort McCellan***

## *1.0 Introduction*

Level III data validation was performed on 100% of the environmental samples collected at Parcel HR-231Q. The analytical data consisted of one sample delivery group (SDG) 10231Q-01, which was analyzed by EMAX Laboratories. The chemical parameters for which the samples were analyzed, are identified below:

| Parameter (Method) |
|---|
| Metals by SW846 6010B and 7471A |
| Nitroaromatic and Nitramine Explosives by SW846 8330 |
| Perchlorate by EPA 314.0 |

## *2.0 Procedures*

The sample data were validated following the logic identified in the *USEPA Contract Laboratory Program (CLP) National Functional Guidelines For Inorganic Data Review (February 1994)* and *USEPA Contract Laboratory Program National Functional Guidelines For Organic Review (October 1999)* for all areas except Blanks. *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's) were applied to all sample results. As the result of the use of Update III SW846 test methods for the analytical data and the application of the 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 Chromatograph (GC) and Gas Chromatograph/Mass Spectra (GC/MS) calibration areas and is due to the fact that the analytical methods are "performance-based", and allows 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, CFR, SOP's, QAP) 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 qualification. No data were rejected.

Individual validation reports have been prepared for each parameter in each SDG 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 Parcel HR-231Q. 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*

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.

Matrix Spike / Matrix Spike Duplicate

No MS/MSD were performed for the project samples.

Laboratory Control Sample (LCS)
All QC criteria were met for the LCS associated with the project sample analyses.

Interference Check Sample (ICS)
All ICS % recoveries for the project samples were acceptable.

ICP Serial Dilutions
No associated serial dilution samples were performed for the project samples.

Field Duplicates
Field duplicates were performed for the project samples and all QC criteria were met.

Sample Quantitation
Results quantified between the IDL and the RL ("J" flagged by the laboratory) were qualified as estimated (J).

### *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 are within acceptable QC ranges.

Matrix Spike / Matrix Spike Duplicate
No MS/MSD were performed for the project samples.

Laboratory Control Sample (LCS)

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

Field Duplicates

Field duplicates were performed for the project samples and all QC criteria were met.

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.

### *4.3 Perchlorate by EPA 314.0*

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

No MS/MSD were performed for the project samples.

Laboratory Control Sample (LCS)

All QC criteria were met for the LCS associated with the project sample analyses.

Field Duplicates

Field duplicates were performed for the project samples and all QC criteria were met.

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.

## *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 "nondetect" may be inaccurate or imprecise. The nondetect result should be estimated.

## Validation Reason Code Definitions

| Reason Code | Definition |
|---|---|
| 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

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10231Q-01** | | | | | | | | | | | | | | | | | | |
| JU0001 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 6000 | mg/kg | | Y | Y | P | | | | | | | D019-01 | 02:01 |
| | | | | ANTIMONY | 4.74 | mg/kg | J | Y | Y | P | J | | 15 | | | | D019-01 | 02:01 |
| | | | | ARSENIC | 2.46 | mg/kg | | Y | Y | P | | | | | | | D019-01 | 21:14 |
| | | | | BARIUM | 43.1 | mg/kg | | Y | Y | P | | | | | | | D019-01 | 02:01 |
| | | | | BERYLLIUM | .349 | mg/kg | J | Y | Y | P | J | | 15 | | | | D019-01 | 02:01 |
| | | | | CADMIUM | .59 | mg/kg | U | N | Y | U | U | | | | | | D019-01 | 02:01 |
| | | | | CALCIUM | 188 | mg/kg | | Y | Y | P | | | | | | | D019-01 | 02:01 |
| | | | | CHROMIUM | 6.71 | mg/kg | | Y | Y | P | | | | | | | D019-01 | 02:01 |
| | | | | COBALT | 3.35 | mg/kg | | Y | Y | P | | | | | | | D019-01 | 02:01 |
| | | | | COPPER | 3.03 | mg/kg | | Y | Y | P | | | | | | | D019-01 | 02:01 |
| | | | | IRON | 9940 | mg/kg | | Y | Y | P | | | | | | | D019-01 | 02:01 |
| | | | | LEAD | 12.2 | mg/kg | | Y | Y | P | | | | | | | D019-01 | 21:14 |
| | | | | MAGNESIUM | 213 | mg/kg | | Y | Y | P | | | | | | | D019-01 | 02:01 |
| | | | | MANGANESE | 76.9 | mg/kg | | Y | Y | P | | | | | | | D019-01 | 02:01 |
| | | | | NICKEL | 2.18 | mg/kg | J | Y | Y | P | J | | 15 | | | | D019-01 | 02:01 |
| | | | | POTASSIUM | 150 | mg/kg | J | Y | Y | P | J | | 15 | | | | D019-01 | 02:01 |
| | | | | SELENIUM | .488 | mg/kg | J | Y | Y | P | J | | 15 | | | | D019-01 | 21:14 |
| | | | | SILVER | 1.18 | mg/kg | U | N | Y | U | U | | | | | | D019-01 | 02:01 |
| | | | | SODIUM | 118 | mg/kg | U | N | Y | U | U | | | | | | D019-01 | 02:01 |
| | | | | THALLIUM | 2.36 | mg/kg | U | N | Y | U | U | | | | | | D019-01 | 21:14 |
| | | | | VANADIUM | 12.6 | mg/kg | | Y | Y | P | | | | | | | D019-01 | 02:01 |
| | | | | ZINC | 10.7 | mg/kg | | Y | Y | P | | | | | | | D019-01 | 02:01 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .118 | mg/kg | U | N | Y | U | U | | | | | | D019-01 | 14:42 |
| JU0002 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 6290 | mg/kg | | Y | Y | | | | | | | | D019-02 | 02:06 |
| | | | | ANTIMONY | 11.7 | mg/kg | U | N | Y | | U | | | | | | D019-02 | 02:06 |
| | | | | ARSENIC | 2.66 | mg/kg | | Y | Y | | | | | | | | D019-02 | 21:18 |
| | | | | BARIUM | 32.5 | mg/kg | | Y | Y | | | | | | | | D019-02 | 02:06 |
| | | | | BERYLLIUM | .234 | mg/kg | J | Y | Y | | J | | 15 | | | | D019-02 | 02:06 |
| | | | | CADMIUM | .585 | mg/kg | U | N | Y | | U | | | | | | D019-02 | 02:06 |
| | | | | CALCIUM | 142 | mg/kg | | Y | Y | | | | | | | | D019-02 | 02:06 |
| | | | | CHROMIUM | 6.48 | mg/kg | | Y | Y | | | | | | | | D019-02 | 02:06 |
| | | | | COBALT | 2.84 | mg/kg | | Y | Y | | | | | | | | D019-02 | 02:06 |
| | | | | COPPER | 3.37 | mg/kg | | Y | Y | | | | | | | | D019-02 | 02:06 |
| | | | | IRON | 8370 | mg/kg | | Y | Y | | | | | | | | D019-02 | 02:06 |
| | | | | LEAD | 10.8 | mg/kg | | Y | Y | | | | | | | | D019-02 | 21:18 |
| | | | | MAGNESIUM | 237 | mg/kg | | Y | Y | | | | | | | | D019-02 | 02:06 |
| | | | | MANGANESE | 64.5 | mg/kg | | Y | Y | | | | | | | | D019-02 | 02:06 |
| | | | | NICKEL | 2.8 | mg/kg | | Y | Y | | | | | | | | D019-02 | 02:06 |
| | | | | POTASSIUM | 203 | mg/kg | J | Y | Y | | J | | 15 | | | | D019-02 | 02:06 |
| | | | | SELENIUM | 1.17 | mg/kg | U | N | Y | | U | | | | | | D019-02 | 21:18 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10231Q-01** | | | | | | | | | | | | | | | | | | |
| JU0002 | SW6010B | SW3050 | N 0 1 | SILVER | 1.17 | mg/kg | U | N | Y | | U | | | | | | D019-02 | 02:06 |
| | | | | SODIUM | 117 | mg/kg | U | N | Y | | U | | | | | | D019-02 | 02:06 |
| | | | | THALLIUM | 2.34 | mg/kg | U | N | Y | | U | | | | | | D019-02 | 21:18 |
| | | | | VANADIUM | 12.2 | mg/kg | | Y | Y | | | | | | | | D019-02 | 02:06 |
| | | | | ZINC | 9.73 | mg/kg | | Y | Y | | | | | | | | D019-02 | 02:06 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .117 | mg/kg | U | N | Y | | U | | | | | | D019-02 | 14:45 |
| JU0003 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 12000 | mg/kg | | Y | Y | P | | | | | | | D019-03 | 02:21 |
| | | | | ANTIMONY | 8.65 | mg/kg | J | Y | Y | P | J | | 15 | | | | D019-03 | 02:21 |
| | | | | ARSENIC | 19.5 | mg/kg | | Y | Y | P | | | | | | | D019-03 | 21:33 |
| | | | | BARIUM | 58.3 | mg/kg | | Y | Y | P | | | | | | | D019-03 | 02:21 |
| | | | | BERYLLIUM | 1.33 | mg/kg | | Y | Y | P | | | | | | | D019-03 | 02:21 |
| | | | | CADMIUM | .623 | mg/kg | U | N | Y | U | U | | | | | | D019-03 | 02:21 |
| | | | | CALCIUM | 63.1 | mg/kg | J | Y | Y | P | J | | 15 | | | | D019-03 | 02:21 |
| | | | | CHROMIUM | 20.4 | mg/kg | | Y | Y | P | | | | | | | D019-03 | 02:21 |
| | | | | COBALT | 12.5 | mg/kg | | Y | Y | P | | | | | | | D019-03 | 02:21 |
| | | | | COPPER | 36.3 | mg/kg | | Y | Y | P | | | | | | | D019-03 | 02:21 |
| | | | | IRON | 94200 | mg/kg | | Y | Y | P | | | | | | | D019-03 | 02:21 |
| | | | | LEAD | 47.4 | mg/kg | | Y | Y | P | | | | | | | D019-03 | 21:33 |
| | | | | MAGNESIUM | 372 | mg/kg | | Y | Y | P | | | | | | | D019-03 | 02:21 |
| | | | | MANGANESE | 362 | mg/kg | | Y | Y | P | | | | | | | D019-03 | 02:21 |
| | | | | NICKEL | 14.5 | mg/kg | | Y | Y | P | | | | | | | D019-03 | 02:21 |
| | | | | POTASSIUM | 219 | mg/kg | J | Y | Y | P | J | | 15 | | | | D019-03 | 02:21 |
| | | | | SELENIUM | 1.25 | mg/kg | U | N | Y | U | U | | | | | | D019-03 | 21:33 |
| | | | | SILVER | 1.25 | mg/kg | U | N | Y | U | U | | | | | | D019-03 | 02:21 |
| | | | | SODIUM | 125 | mg/kg | U | N | Y | U | U | | | | | | D019-03 | 02:21 |
| | | | | THALLIUM | 2.28 | mg/kg | J | Y | Y | P | J | | 15 | | | | D019-03 | 21:33 |
| | | | | VANADIUM | 88.8 | mg/kg | | Y | Y | P | | | | | | | D019-03 | 02:21 |
| | | | | ZINC | 38 | mg/kg | | Y | Y | P | | | | | | | D019-03 | 02:21 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .125 | mg/kg | U | N | Y | U | U | | | | | | D019-03 | 14:47 |
| JU0001 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D019-01 | 04:43 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D019-01 | 04:43 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D019-01 | 04:43 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D019-01 | 04:43 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D019-01 | 04:43 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D019-01 | 04:43 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D019-01 | 04:43 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D019-01 | 04:43 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D019-01 | 04:43 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D019-01 | 04:43 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | D019-01 | 04:43 |

# Validation Qualifier Data Entry Verification

Run Date: October 25, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10231Q-01** | | | | | | | | | | | | | | | | | | |
| JU0001 | SW8330 | METHOD | N 0 1 | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D019-01 | 04:43 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | D019-01 | 04:43 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | D019-01 | 04:43 |
| JU0002 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | | U | | | | | | D019-02 | 05:22 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | | U | | | | | | D019-02 | 05:22 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | | U | | | | | | D019-02 | 05:22 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | | U | | | | | | D019-02 | 05:22 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | | U | | | | | | D019-02 | 05:22 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | | U | | | | | | D019-02 | 05:22 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | | U | | | | | | D019-02 | 05:22 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | | U | | | | | | D019-02 | 05:22 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | | U | | | | | | D019-02 | 05:22 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | | U | | | | | | D019-02 | 05:22 |
| | | | | HMX | .4 | mg/kg | U | N | Y | | U | | | | | | D019-02 | 05:22 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | | U | | | | | | D019-02 | 05:22 |
| | | | | RDX | .4 | mg/kg | U | N | Y | | U | | | | | | D019-02 | 05:22 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | | U | | | | | | D019-02 | 05:22 |
| JU0003 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D019-03 | 06:39 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D019-03 | 06:39 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D019-03 | 06:39 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D019-03 | 06:39 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D019-03 | 06:39 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D019-03 | 06:39 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D019-03 | 06:39 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D019-03 | 06:39 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D019-03 | 06:39 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D019-03 | 06:39 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | D019-03 | 06:39 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D019-03 | 06:39 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | D019-03 | 06:39 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | D019-03 | 06:39 |
| JU0001 | E314.0 | NONE | N 0 1 | PERCHLORATE | .059 | mg/kg | U | N | Y | U | U | | | | | | D019-01 | 19:22 |
| JU0002 | E314.0 | NONE | N 0 1 | PERCHLORATE | .0585 | mg/kg | U | N | Y | | U | | | | | | D019-02 | 19:39 |
| JU0003 | E314.0 | NONE | N 0 1 | PERCHLORATE | .0623 | mg/kg | U | N | Y | U | U | | | | | | D019-03 | 19:56 |

***Quality Assurance Report***
***For Ranges West of Iron Mountain Road***
***Parcel HR-232QX***
***IT Project No 796887***
***Fort McClellan Quality Assurance Report***

## *1.0 Overview*

Fifty soil, 8 sediment, 9 surface water, and 19 groundwater samples were collected in support of the investigation at Fort McClellan (FTMC) Parcel HR-232QX, Ranges West of Iron Mountain Road. All samples were submitted to EMAX Laboratories, Inc. for analysis. Soil, sediment, and surface water samples were analyzed for target analyte list (TAL) metals, nitroaromatic-nitramine explosives, and perchlorate. Groundwater samples were analyzed for (TAL) metals, nitroaromatic-nitramine explosives, perchlorate, and target compound list (TCL) volatiles. QC samples consisted of the following types and quantities: 6 field duplicates, 4 matrix spike/matrix spike duplicates (MS/MSD), 15 trip blanks, and 17 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 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 data and validation 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 (DQO) were met, laboratory analytical results and data packages were examined for compliance with SW846 SW6010B/SW7000 Series, SW8330, SW8260B, and U.S. Environmental Protection Agency (EPA) 314.0 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 analytical holding times were met with the exception of perchlorate analyses for samples ECC0018 and ECC0019. Perchlorate results for samples ECC0018 and ECC0019 were "UJ" qualified.

## *2.2 Rejected Data*

Table 2.2-1 lists all rejected analytical data for soil and aqueous samples. Sample re-collection at this time is not warranted due to all rejected results being reported as non-detect.

**Table 2.2-1 Rejected Analytical Results**

| Sample Delivery Group | Sample Number | Contaminant | Reason |
|---|---|---|---|
| 10232QX-10 | ECC3003, ECC3004, ECC3006 & ECC3018 | Acetone | Calibration Relative Response Factor (RRF) <0.05. |
| 10232QX-12 | ECC3007 | 1,2-Dibromo-3-chloropropane | Calibration Relative Response Factor (RRF) <0.05. |
| 10232QX-14 | ECC3005 & ECC3008 | Acetone | Calibration Relative Response Factor (RRF) <0.05. |
| 10232QX-18 | ECC3011, JF3007 & ECC3015 | Dibromomethane<br>Bromochloromethane<br>2-Butanone (MEK)<br>1,2-Dibromo-3-chloropropane<br>1,2,3-Trichloropropane | Initial Calibration Relative Response Factor (RRF) <0.05. |

## *2.3 Blank Results*

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

- Trip blanks (TBs) consist of a VOC sample vial filled in the laboratory with ASTM Type II reagent grade water, transported to the sampling site, handled like an environmental sample and returned to the laboratory for analysis. Trip blanks are prepared only when VOC samples are collected and analyzed. Trip blanks are used to assess the potential introduction of contaminants from sample containers during the transportation and/or storage procedures. Trip blanks were sent with all aqueous samples shipped to the laboratory requiring volatile analysis.

- Equipment rinsates (ER) are samples of analyte-free deionized water poured into, or 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 an analyte-free matrix which is analyzed to verify the analysis system is free of contamination. ICBs and CCBs are analyzed immediately after the initial and continuing calibration is performed.

Field sample concentrations were evaluated to determine if the sample results could have been biased by the presence of any contamination measured in trip blanks, 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 |
|---|---|---|---|
| 10232QX-02 | ECC0033 | Potassium | Potassium result for sample ECC0033 was "B" qualified. |
| 10232QX-03 | ECC0001, ECC0003, ECC0004, ECC0007, ECC0008, ECC0015, ECC0016 & ECC0024 | Cobalt | Cobalt result for samples ECC0001, ECC0003, ECC0004, ECC0007, ECC0008, ECC0015, ECC0016 & ECC0024 were "B" qualified. |
| | ECC0002 & ECC0018 | Lead | Lead results for samples ECC0002 & ECC0018 were "B" qualified. |
| | ECC0002 & ECC0003 | Chromium | Chromium results for samples ECC0002 & ECC0003 were "B" qualified. |
| | ECC0002, ECC0018 & ECC0020 | Magnesium | Magnesium results for samples ECC0002, ECC0018 & ECC0020 were "B" qualified. |
| | ECC0016 | Nickel | Nickel result for sample ECC0016 was "B" qualified. |

**Table 2.3-1 (Continued)**
**Summary of Blank Contamination**

| Sample Delivery Group | Sample Number | Contaminant | Action |
|---|---|---|---|
| 10232QX-03 (Continued) | ECC0003, ECC0007, ECC0008, ECC0015, ECC0019, ECC0023 & ECC0024 | Potassium | Potassium results for samples ECC0003, ECC0007, ECC0008, ECC0015, ECC0019, ECC0023 & ECC0024 were "B" qualified. |
| | ECC0002 & ECC0020 | Zinc | Zinc results for samples ECC0002 & ECC0020 were "B" qualified. |
| 10232QX-04 | ECC2001, ECC2004 & ECC2005 | Aluminum | Aluminum results for samples ECC2001, ECC2004 & ECC2005 were "B" qualified. |
| | ECC2001 & ECC2004 | Lead | Lead results for samples ECC2001 & ECC2004 were "B" qualified. |
| | ECC2002, ECC2003, ECC2004 & ECC2005 | Calcium | Calcium results for samples ECC2002, ECC2003, ECC2004 & ECC2005 were "B" qualified. |
| | ECC2003 | Copper | Copper result for sample ECC2003 was "B" qualified. |
| | ECC2001, ECC2002, ECC2003 & ECC2005 | Zinc | Zinc result for sample ECC2001, ECC2002, ECC2003 & ECC2005 were "B" qualified. |
| 10232QX-05 | ECC1005 | Potassium | Potassium result for sample ECC1005 was "B" qualified. |
| 10232QX-06 | ECC1009 | Selenium<br>Silver | Selenium and silver results for sample ECC1009 were "B" qualified. |
| 10232QX-08 | ECC0030 | Antimony<br>Beryllium<br>Cobalt | Antimony, beryllium and cobalt results for sample ECC0030 were "B" qualified. |
| 10232QX-09 | ECC0014 | Beryllium | Beryllium result for sample ECC0014 was "B" qualified. |
| 10232QX-10 | ECC3004, ECC3006 & ECC3017 | Aluminum | Aluminum results for samples ECC3004, ECC3006 & ECC3017 were "B" qualified. |
| | ECC3018 | Calcium<br>Cobalt<br>Zinc | Calcium, cobalt and zinc results for sample ECC3018 were "B" qualified. |
| | ECC3003 & ECC3004 | Zinc | Zinc result for sample ECC3003 & ECC3004 were "B" qualified. |

**Table 2.3-1 (Continued)**
**Summary of Blank Contamination**

| Sample Delivery Group | Sample Number | Contaminant | Action |
|---|---|---|---|
| 10232QX-11 | ECC0048, ECC0049, ECC0050 & ECC0051 | Potassium | Potassium result for samples ECC0048, ECC0049, ECC0050 & ECC0051 were "B" qualified. |
| 10232QX-12 | ECC3007 | Aluminum<br>Copper<br>Nickel<br>Silver<br>Vanadium<br>Sodium<br>Calcium<br>Magnesium<br>Selenium | Aluminum, copper, nickel, silver, vanadium, sodium, calcium, magnesium and selenium results for sample ECC3007 were "B" qualified. |
| 10232QX-13 | ECC3001, ECC3010 & ECC3019 | Nickel | Nickel results for samples ECC3001, ECC3010 & ECC3019 were "B" qualified. |
| | ECC3001 & ECC3020 | Silver | Silver results for samples ECC3001 & ECC3020 were "B" qualified. |
| | ECC3001 & ECC3010 | Calcium<br>Magnesium<br>Zinc | Calcium, magnesium and zinc results were "B" qualified. |
| | ECC3019 | Magnesium | Magnesium result for sample ECC3019 was "B" qualified. |
| | ECC3019 & ECC3020 | Zinc | Zinc result for samples ECC3019 & ECC3020 were "B" qualified. |
| | ECC3010 | Cadmium<br>Copper<br>Barium | Cadmium, copper and barium results for sample ECC3010 were "B" qualified. |
| 10232QX-14 | ECC3016 | Arsenic | Arsenic result for sample ECC3016 was "B" qualified. |
| | | Acetone | Acetone result for sample ECC3016 was "B" qualified. |
| 10232QX-15 | ECC3002 | Lead | Lead result for sample ECC3002 was "B" qualified. |
| 10232QX-16 | ECC3009 | Calcium<br>Magnesium | Calcium and magnesium results for sample ECC3009 were "B" qualified. |
| 10232QX-17 | ECC3014 | Selenium<br>Nickel<br>Calcium<br>Magnesium | Selenium, nickel, calcium and magnesium results for sample ECC3014 were "B" qualified. |

**Table 2.3-1 (Continued)**
**Summary of Blank Contamination**

| Sample Delivery Group | Sample Number | Contaminant | Action |
|---|---|---|---|
| 10232QX-18 | ECC3011, ECC3015 & JF3007 | Zinc | Zinc results for samples ECC3011, ECC3015 & JF3007 were "B" qualified. |
| | JF3007 & ECC3011 | Aluminum | Aluminum result for samples JF3007 & ECC3011 were "B" qualified. |
| | ECC3015 & JF3007 | Acetone | Acetone result for sample ECC3016 was "B" qualified. |

## *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.

Overall sampling and analysis precision for this task was assessed using field duplicate (FD) samples. Laboratory precision was assessed by laboratory control sample/laboratory control sample duplicate (LCS/LCSD) and matrix spike/matrix spike duplicate (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 list field duplicate, LCS/LCSD and MS/MSD RPD anomalies.

**Table 2.4-1 Precision Acceptance Criteria**

| Field/Laboratory QC Type | Matrix | |
|---|---|---|
| | Aqueous | Soil |
| Field Duplicate (Both Organic & Inorganic) | RPD < 35% | RPD < 50% |
| Perchlorate LCS/LCSD and MS/MSD | RPD < 10% | RPD < 20% |
| Nitroaromatic and Nitramine Explosives LCS/LCSD and MS/MSD | Refer to Table 8-1of FTMC "Installation Wide Sample and Analysis Plan" | Refer to Table 8-1of FTMC "Installation Wide Sample and Analysis Plan" |
| Metals LCS/LCSD and MS/MSD | RPD < 20% | 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 |
|---|---|---|---|
| 10232QX-03 | ECC0015 (Parent) / ECC0016 (FD) | Manganese (62%) | Manganese results for samples ECC0015 and ECC0016 were "J" qualified due to RPD between parent sample and its corresponding field duplicate exceeding QC criteria. |
| 10232QX-05 | ECC1001 MS/MSD | Manganese (37%) | Manganese results for samples ECC1001, EC1002, ECC1003, ECC1004 & ECC1005 were "J" qualified due to MS/MSD RPD exceeding QC criteria. |
| 10232QX-11 | IPD064SL/SC (LCS/LCSD) | Silver (32%) | Silver results for samples ECC0047, ECC0048, ECC0049, ECC0050 & ECC0051 were "J" / "UJ" qualified due to LCS/LCSD RPD exceeding QC criteria. |
| | ECC0047 (MS/MSD) | Zinc (39%) | Zinc results for samples ECC0047, ECC0048, ECC0049, ECC0050 & ECC0051 were "J" qualified due to MS/MSD RPD exceeding QC criteria. |
| | ECC0050 (Parent) / ECC0051 (FD) | Potassium (77%) Mercury (51%) | Potassium and mercury results for samples ECC0050 and ECC0051 were "J" qualified due to RPD between parent sample and its corresponding field duplicate exceeding QC criteria. |

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

| Sample Delivery Group | Sample Number | Contaminant | Assigned Validation Qualifier |
|---|---|---|---|
| 10232QX-14 | EXE003WL (LCS) / EXE003WY (LCSD) | 1,3,5-Trinitrobenzene (44%)<br>1,3-Dinitrobenzene (36%)<br>2,4,6-Trinitrotoluene (38%)<br>Tetryl (50%)<br>HMX (38%) | 1,3,5-Trinitrobenzene, 1,3-Dinitrobenzene, 2,4,6-Trinitrotoluene, Tetryl and HMX results for samples ECC3005, ECC3008 & ECC3016 were "UJ" qualified due LCS / LCSD 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 SW846 SW6010B/SW7000 Series methodology, nitroaromatic-nitramine explosives by SW8330, perchlorate by EPA 314.0 and TCL volatiles by SW8260B. Reported results indicate that an acceptable level of analytical accuracy was achieved. Surrogate recoveries, LCS/LCSD, and MS/MSD spike recoveries which exceed QC criteria are listed in Table 2.5-1.

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

| Sample Delivery Group | Sample Number | Contaminant | Action |
|---|---|---|---|
| 10232QX-01 | ECC0009 MS/MSD | Antimony (LB)<br>Nickel (HB) | Antimony and nickel results for samples ECC0005, ECC0006, ECC0009, ECC0010, ECC0021, ECC0022, ECC0035, ECC0036, ECC0037, ECC0038, ECC0039, ECC0040, ECC0041, ECC0042 were "J" / "UJ" qualified due to MS/MSD spike recoveries exceeding QC criteria. |

**Table 2.5-1 Summary of Surrogate, LCS/LCSD and MS/MSD Spike Recovery Exceedances (Continued)**

| Sample Delivery Group | Sample Number | Contaminant | Action |
|---|---|---|---|
| 10232QX-02 | ECC0032 MS/MSD | Antimony (LB)<br>Arsenic (LB)<br>Barium (LB)<br>Cobalt (LB)<br>Lead (LB)<br>Nickel (LB)<br>Selenium (LB)<br>Zinc (LB) | Antimony, arsenic, barium, cobalt, lead, nickel, selenium and zinc results for samples ECC0031, ECC0032, ECC0033, ECC0034, ECC0043, ECC0044 and ECC0045 were "J" / "UJ" qualified due to MS/MSD spike recoveries exceeding QC criteria. |
| 10232QX-03 | ECC0003 MS/MSD | Aluminum (HB)<br>Antimony (LB)<br>Iron (HB) | Aluminum, antimony and iron results for samples ECC0001, ECC0002, ECC0003, ECC0004, ECC0007, ECC0008, ECC0015, ECC0016, ECC0018, ECC0019, ECC0020, ECC0023 and ECC0024 were "J"/"UJ" qualified due to MS/MSD spike recoveries exceeding QC criteria. |
| 10232QX-05 | ECC1001 MS/MSD | Aluminum (HB)<br>Manganese (HB,LB) | Aluminum and manganese results for samples ECC1001, ECC1002, ECC1003, ECC1004 and ECC1005 were "J" / "UJ" qualified due to MS/MSD spike recoveries exceeding QC criteria. |
| 10232QX-06 | ECC1006 MS/MSD | Antimony (LB)<br>Barium (HB) | Antimony and barium results for samples ECC0046, ECC1006, ECC1008 and ECC1009 were "J" / "UJ" qualified due to MS/MSD spike recoveries exceeding QC criteria. |
| 10232QX-10 | ECC3017 | Acetone | Acetone result for sample ECC3017 was "J" qualified due to surrogate recovery which exceeds QC criteria. (Toluene-d8 - HB). |
| 10232QX-11 | IPD064SL/SC (LCS/LCSD) | Silver (LB) | Silver results for samples ECC0047, ECC0048, ECC0049, ECC0050 & ECC0051 were "J" / "UJ" qualified due to LCS/LCSD spike recoveries exceeding QC criteria. |
| | ECC0047 MS/MSD | Aluminum (HB)<br>Antimony (LB)<br>Iron (HB)<br>Manganese (LB)<br>Zinc (HB) | Aluminum, antimony, iron, manganese and zinc results for samples ECC0047, ECC0048, ECC0049, ECC0050 and ECC0051 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. Soil sample data are being used to assess potential impacts to terrestrial biota that might use the site for food and/or habitat purposes. Monitoring well locations where chosen to establish groundwater flow direction and site-specific geology, and provide 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-232QX Ranges West of Iron Mountain Road. 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-232QX requirement for completeness is 95% for both aqueous and soil samples. The % Completeness for this task is calculated to be 99.5%

- % Completeness = (4469 / 4491) x 100 = 99.5%.

## *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-232QX
# Ranges West of Iron Mountain Road
# Analytical Summary
# Project No. 796887

## HR-232QX Soil Sampling

| Sample Location | Sample Name | Sample Number | Date Sampled | Analytical Suite |
|---|---|---|---|---|
| HR-232QX-MW01 | HR-232QX-MW01-SS-ECC0001-REG | ECC0001 | 06-Feb-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-232QX-MW01-DS-ECC0002-REG | ECC0002 | 06-Feb-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-232QX-MW02 | HR-232QX-MW02-SS-ECC0003-REG | ECC0003 | 05-Feb-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-232QX-MW02-DS-ECC0004-REG | ECC0004 | 05-Feb-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-232QX-MW03 | HR-232QX-MW03-SS-ECC0005-REG | ECC0005 | 29-Jan-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-232QX-MW03-DS-ECC0006-REG | ECC0006 | 29-Jan-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-232QX-MW04 | HR-232QX-MW04-SS-ECC0007-REG | ECC0007 | 05-Feb-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-232QX-MW04-DS-ECC0008-REG | ECC0008 | 05-Feb-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-232QX-MW05 | HR-232QX-MW05-SS-ECC0009-REG | ECC0009 | 29-Jan-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-232QX-MW05-SS-ECC0009-MS | ECC0009-MS | 29-Jan-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-232QX-MW05-SS-ECC0009-MSD | ECC0009-MSD | 29-Jan-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-232QX-MW05-DS-ECC0010-REG | ECC0010 | 29-Jan-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-232QX-MW06 | HR-232QX-MW06-SS-ECC0011-REG | ECC0011 | 05-Apr-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-232QX-MW06-DS-ECC0012-REG | ECC0012 | 05-Apr-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-232QX-MW07 | HR-232QX-MW07-SS-ECC0013-REG | ECC0013 | 10-Apr-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-232QX-MW07-DS-ECC0014-REG | ECC0014 | 10-Apr-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-232QX-MW08 | HR-232QX-MW08-SS-ECC0015-REG | ECC0015 | 06-Feb-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-232QX-MW08-SS-ECC0016-FD | ECC0016 | 06-Feb-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-232QX-MW08-DS-ECC0018-REG | ECC0018 | 06-Feb-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-232QX-MW09 | HR-232QX-MW09-SS-ECC0019-REG | ECC0019 | 06-Feb-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-232QX-MW09-DS-ECC0020-REG | ECC0020 | 06-Feb-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-232QX-MW10 | HR-232QX-MW10-SS-ECC0021-REG | ECC0021 | 29-Jan-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-232QX-MW10-DS-ECC0022-REG | ECC0022 | 29-Jan-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-232QX-MW11 | HR-232QX-MW11-SS-ECC0023-REG | ECC0023 | 05-Feb-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-232QX-MW11-DS-ECC0024-REG | ECC0024 | 05-Feb-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-232QX-MW12 | HR-232QX-MW12-SS-ECC0025-REG | ECC0025 | 09-Apr-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-232QX-MW12-DS-ECC0026-REG | ECC0026 | 09-Apr-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-232QX-MW13 | HR-232QX-MW13-SS-ECC0027-REG | ECC0027 | 05-Apr-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-232QX-MW13-DS-ECC0028-REG | ECC0028 | 05-Apr-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-232QX-MW14 | HR-232QX-MW14-SS-ECC0029-REG | ECC0029 | 30-Mar-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-232QX-MW14-DS-ECC0030-REG | ECC0030 | 30-Mar-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-232QX-MW15 | HR-232QX-MW15-SS-ECC0031-REG | ECC0031 | 02-Feb-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-232QX-MW15-DS-ECC0032-REG | ECC0032 | 02-Feb-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-232QX-MW15-DS-ECC0032-MS | ECC0032-MS | 02-Feb-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-232QX-MW15-DS-ECC0032-MSD | ECC0032-MSD | 02-Feb-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-232QX-MW16 | HR-232QX-MW16-SS-ECC0033-REG | ECC0033 | 02-Feb-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-232QX-MW16-DS-ECC0034-REG | ECC0034 | 02-Feb-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |

# Ft. McClellan
# Parcel HR-232QX
# Ranges West of Iron Mountain Road
# Analytical Summary
# Project No. 796887

| HR-232QX Soil Sampling | | | | |
|---|---|---|---|---|
| **Sample Location** | **Sample Name** | **Sample Number** | **Date Sampled** | **Analytical Suite** |
| HR-232QX-MW17 | HR-232QX-MW17-SS-ECC0035-REG | ECC0035 | 29-Jan-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-232QX-MW17-DS-ECC0036-REG | ECC0036 | 29-Jan-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-232QX-MW18 | HR-232QX-MW18-SS-ECC0037-REG | ECC0037 | 29-Jan-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-232QX-MW18-DS-ECC0038-REG | ECC0038 | 29-Jan-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-232QX-MW19 | HR-232QX-MW19-SS-ECC0039-REG | ECC0039 | 29-Jan-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-232QX-MW19-DS-ECC0040-REG | ECC0040 | 29-Jan-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-232QX-GP01 | HR-232QX-GP01-SS-ECC0041-REG | ECC0041 | 29-Jan-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-232QX-GP01-DS-ECC0042-REG | ECC0042 | 29-Jan-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-232QX-GP02 | HR-232QX-GP02-SS-ECC0043-REG | ECC0043 | 02-Feb-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-232QX-GP02-DS-ECC0044-REG | ECC0044 | 02-Feb-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-232QX-GP02-DS-ECC0045-FD | ECC0045 | 02-Feb-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-232QX-GP03 | HR-232QX-GP03-SS-ECC0047-REG | ECC0047 | 17-Apr-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-232QX-GP03-SS-ECC0047-MS | ECC0047-MS | 17-Apr-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-232QX-GP03-SS-ECC0047-MSD | ECC0047-MSD | 17-Apr-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-232QX-GP04 | HR-232QX-GP04-DS-ECC0048-REG | ECC0048 | 17-Apr-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-232QX-GP05 | HR-232QX-GP05-SS-ECC0049-REG | ECC0049 | 17-Apr-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-232QX-GP06 | HR-232QX-GP06-DS-ECC0050-REG | ECC0050 | 17-Apr-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-232QX-GP06-DS-ECC0051-FD | ECC0051 | 17-Apr-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-232QX-DEP01 | HR-232QX-DEP01-SS-ECC0046-REG | ECC0046 | 05-Mar-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |

# Ft. McClellan
# Parcel HR-232QX
# Ranges West of Iron Mountain Road
# Analytical Summary
# Project No. 796887

| HR-232QX Groundwater Sampling | | | | |
|---|---|---|---|---|
| **Sample Location** | **Sample Name** | **Sample Number** | **Date Sampled** | **Analytical Suite** |
| HR-232QX-MW01 | HR-232QX-MW01-GW-ECC3001-REG | ECC3001 | 27-Apr-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-232QX-MW02 | HR-232QX-MW02-GW-ECC3002-REG | ECC3002 | 10-May-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-232QX-MW03 | HR-232QX-MW03-GW-ECC3003-REG | ECC3003 | 17-Apr-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-232QX-MW04 | HR-232QX-MW04-GW-ECC3004-REG | ECC3004 | 17-Apr-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-232QX-MW05 | HR-232QX-MW05-GW-ECC3005-REG | ECC3005 | 01-May-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-232QX-MW06 | HR-232QX-MW06-GW-ECC3006-REG | ECC3006 | 18-Apr-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-232QX-MW07 | HR-232QX-MW07-GW-ECC3007-REG | ECC3007 | 24-Apr-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-232QX-MW08 | HR-232QX-MW08-GW-ECC3008-REG | ECC3008 | 01-May-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-232QX-MW09 | HR-232QX-MW09-GW-ECC3009-REG | ECC3009 | 21-May-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-232QX-MW10 | HR-232QX-MW10-GW-ECC3010-REG | ECC3010 | 25-Apr-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-232QX-MW11 | HR-232QX-MW11-GW-ECC3011-REG | ECC3011 | 04-Jun-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-232QX-MW11-GW-JF3007-FD | JF3007 | 04-Jun-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-232QX-MW12 | HR-232QX-MW12-GW-ECC3012-REG | ECC3012 | Not Sampled | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-232QX-MW13 | HR-232QX-MW13-GW-ECC3013-REG | ECC3013 | Not Sampled | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-232QX-MW14 | HR-232QX-MW14-GW-ECC3014-REG | ECC3014 | 24-May-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-232QX-MW15 | HR-232QX-MW15-GW-ECC3015-REG | ECC3015 | 06-Jun-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-232QX-MW16 | HR-232QX-MW16-GW-ECC3016-REG | ECC3016 | 01-May-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-232QX-MW17 | HR-232QX-MW17-GW-ECC3017-REG | ECC3017 | 16-Apr-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-232QX-MW18 | HR-232QX-MW18-GW-ECC3018-REG | ECC3018 | 16-Apr-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-232QX-MW19 | HR-232QX-MW19-GW-ECC3019-REG | ECC3019 | 26-Apr-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-232QX-MW19-GW-ECC3020-FD | ECC3020 | 26-Apr-01 | TAL Metals by SW6010B/SW7471, Volatiles by SW8260B, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |

# Ft. McClellan
# Parcel HR-232QX
# Ranges West of Iron Mountain Road
# Analytical Summary
# Project No. 796887

## HR-232QX Sediment-Surface Water Sampling

| Sample Location | Sample Name | Sample Number | Date Sampled | Analytical Suite |
|---|---|---|---|---|
| HR-232QX-SW/SD01 | HR-232QX-SW/SD01-SD-ECC1001-REG | ECC1001 | 01-Mar-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330, Perchlorate by EPA 314.0, TOC by SW9060 and Grain size by ASTM 421/422. |
| | HR-232QX-SW/SD01-SW-ECC2001-REG | ECC2001 | 01-Mar-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-232QX-SW/SD02 | HR-232QX-SW/SD02-SD-ECC1002-REG | ECC1002 | 01-Mar-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330, Perchlorate by EPA 314.0, TOC by SW9060 and Grain size by ASTM 421/422. |
| | HR-232QX-SW/SD02-SW-ECC2002-REG | ECC2002 | 01-Mar-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-232QX-SW/SD03 | HR-232QX-SW/SD03-SD-ECC1003-REG | ECC1003 | 01-Mar-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330, Perchlorate by EPA 314.0, TOC by SW9060 and Grain size by ASTM 421/422. |
| | HR-232QX-SW/SD03-SW-ECC2003-REG | ECC2003 | 01-Mar-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-232QX-SW/SD04 | HR-232QX-SW/SD04-SD-ECC1004-REG | ECC1004 | 01-Mar-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330, Perchlorate by EPA 314.0, TOC by SW9060 and Grain size by ASTM 421/422. |
| | HR-232QX-SW/SD04-SW-ECC2004-REG | ECC2004 | 01-Mar-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-232QX-SW/SD05 | HR-232QX-SW/SD05-SD-ECC1005-REG | ECC1005 | 01-Mar-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330, Perchlorate by EPA 314.0, TOC by SW9060 and Grain size by ASTM 421/422. |
| | HR-232QX-SW/SD05-SW-ECC2005-REG | ECC2005 | 01-Mar-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-232QX-SW/SD06 | HR-232QX-SW/SD06-SD-ECC2006-REG | ECC2006 | 06-Mar-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330, Perchlorate by EPA 314.0, TOC by SW9060 and Grain size by ASTM 421/422. |
| | HR-232QX-SW/SD06-SW-ECC1006-REG | ECC1006 | 06-Mar-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-232QX-SW/SD06-SW-ECC1006-MS | ECC1006-MS | 06-Mar-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-232QX-SW/SD06-SW-ECC1006-MSD | ECC1006-MSD | 06-Mar-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-232QX-SW/SD07 | HR-232QX-SW/SD07-SD-ECC1007-REG | ECC1007 | Not sampled | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330, Perchlorate by EPA 314.0, TOC by SW9060 and Grain size by ASTM 421/422. |
| | HR-232QX-SW/SD07-SW-ECC2007-REG | ECC2007 | Not sampled | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-232QX-SW/SD08 | HR-232QX-SW/SD08-SD-ECC1008-REG | ECC1008 | 06-Mar-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330, Perchlorate by EPA 314.0, TOC by SW9060 and Grain size by ASTM 421/422. |
| | HR-232QX-SW/SD08-SW-ECC2008-REG | ECC2008 | 06-Mar-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| | HR-232QX-SW/SD08-SW-ECC2009-FD | ECC2009 | 06-Mar-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |
| HR-232QX-SW/SD09 | HR-232QX-SW/SD09-SD-ECC1009-REG | ECC1009 | 06-Mar-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330, Perchlorate by EPA 314.0, TOC by SW9060 and Grain size by ASTM 421/422. |
| | HR-232QX-SW/SD09-SW-ECC2011-REG | ECC2011 | 06-Mar-01 | TAL Metals by SW6010B/SW7471, Nitroaromatic-Nitramine Explosives by SW8330 & Perchlorate by EPA 314.0. |

# ATTACHMENT B

# DATA VALIDATION SUMMARY REPORT

***Data Validation Summary Report***
***for the Site Investigation Performed at the***
***Ranges West of Iron Mountain Road (Parcel HR-232QX)***
***Fort McClellan***

## *1.0 Introduction*

Level III data validation was performed on 100% of the environmental samples collected at Ranges West of Iron Mountain Road (Parcel HR-232QX). The analytical data consisted of eighteen sample delivery groups (SDG) 10232QX-1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, and 18, 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) |
|---|
| Volatile Organics by GC/MS SW846 8260B |
| TAL Metals by SW846 6010B/7470A/7471A |
| Nitroaromatic and Nitramine Explosives by SW846 8330 |
| Perchlorate by EPA 314.0 |
| Total Organic Carbon (TOC) by 9060 |

## *2.0 Procedures*

The sample data were validated following the logic identified in the *USEPA Contract Laboratory Program (CLP) National Functional Guidelines For Inorganic Data Review (February 1994)* and *USEPA Contract Laboratory Program National Functional Guidelines For Organic Review (October 1999)* for all areas except Blanks. *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's) were applied to all sample results. As the result of the use of Update III SW846 test methods for the analytical data and the application of the 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 Chromatograph (GC) and Gas Chromatograph/Mass Spectra (GC/MS) calibration areas and is due to the fact that the analytical methods are "performance-based", and allows 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, CFR, SOP's, QAP) 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 qualification. The only rejected data ('R' qualified) were due to "poor performing" volatile compounds (ketones, some halogenated hydrocarbons, e.g.), which exhibited poor calibration responses in the associated calibration data, and samples that were reanalyzed and have more than one set of results reported. The "R" qualifier was assigned to the samples with more than one set of results to indicate that a given result should not be used to characterize a particular constituent or an analysis for a given sample.

Individual validation reports have been prepared for each parameter in each SDG 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 Parcel HR-232QX. 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 Volatile Organics by GC/MS SW846 8260B*

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:

<u>Holding Times</u>

Technical holding time criteria were met for all samples.

Initial and Continuing Calibration

The initial calibration and continuing calibrations associated with the project samples met QC criteria, with the exception of the following:

- The following exhibited individual ICAL RRF<.1 and/or CCAL %D's > 20%:

| SDG Number | Samples Affected | Compound(s) | Validation Qualifier |
|---|---|---|---|
| 10232QX-10 | ECC3004, ECC3006, ECC3017, ECC3018 | Bromomethane | UJ |
| | ECC3003 | Carbon tetrachloride | UJ |
| | ECC3003, ECC3004, ECC3006, ECC3017, ECC3018 | Acetone | R/J |
| 10232QX-12 | ECC3007 | 1,2-Dibromo-3-Chloropropane, Acetone, 2-Butanone, 2-Hexanone, 4-Methyl-2-pentanone | R/UJ |
| 10232QX-13 | ECC3001, ECC3010, ECC3019, ECC3020 | 2-Hexanone, Bromomethane, Carbon disulfide, Dichlorodifluoromethane | UJ |
| 10232QX-14 | ECC3005, ECC3008, ECC3016 | Acetone, 2-Hexanone, Chloromethane | R/UJ/B |
| 10232QX-15 | ECC3002 | Dichlorodifluoromethane | UJ |
| 10232QX-16 | ECC3009 | Chloroethane | UJ |
| 10232QX-17 | ECC3014 | Chloroethane | UJ |
| 10232QX-18 | ECC3015 | Acetone, Carbon disulfide | UJ/B |
| | ECC3011, JF3007 | Chloromethane | UJ |
| | ECC3011, ECC3015, JF3007 | 1,2,3-Thrichloropropane, 1,2-Dibromo-3-Chloropropane, 2-Butanone, Bromochloromethane, Dibromomethane, Bromomethane | R/UJ/B |

Blanks

The 5X/10X rule for contaminants found in the associated equipment rinses, trip blanks, and method blanks was applied to all sample results. All were acceptable with the exception of the following:

Note: 'B' Qualifier was applied to the following sample results.

| SDG | Samples Affected | Compound | Associated Blank Contamination |
|---|---|---|---|
| 10232QX-14 | ECC3016 | Acetone | Trip |
| 10232QX-18 | ECC3015, JF3007 | Acetone | Method/ER |

B' qualifiers assigned to designate blank contamination, which are identification qualifiers, take precedence over estimating qualifiers, assigned due to quantitation.

Surrogate Recoveries

All surrogate recoveries are within acceptable QC with the exception of the following:

| SDG Number | Samples Affected | Compound(s) | Validation Qualifier |
|---|---|---|---|
| 10232QX-10 | ECC3017 | Acetone | J |

Matrix Spike / Matrix Spike Duplicate

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

Laboratory Control Sample (LCS)

LCS 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.

Internal Standards

All internal standards met QC criteria

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.

### *4.2 TAL 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 exception of the following:

Note: 'B' Qualifiers were applied to all of the following sample results.

| SDG | Samples Affected | Analyte/Analytes | Associated Blank Contamination |
|---|---|---|---|
| 10232QX-2 | ECC0033 | Potassium | Calibration |
| 10232QX-3 | ECC0001, ECC0003, ECC0004, ECC0007, ECC0008, ECC0015, ECC0016, ECC0024 | Cobalt | Calibration |
| | ECC0002, ECC0018 | Lead | Method |
| | ECC0002, ECC0003 | Chromium | Calibration |
| | ECC0002, ECC0018, ECC0020 | Magnesium | Calibration |
| | ECC0016 | Nickel | Method |
| | ECC0003, ECC0007, ECC0008, ECC0015, ECC0019, ECC0023, ECC0024 | Potassium | Method |
| | ECC0002, ECC0020 | Zinc | Calibration |
| 10232QX-4 | ECC2001, ECC2004, ECC2005 | Aluminum | Method |
| | ECC2001, ECC2004 | Lead | Calibration |
| | ECC2002, ECC2003, ECC2004, ECC2005 | Calcium | ER |
| | ECC2003 | Copper | Calibration |
| | ECC2001, ECC2002, ECC2003, ECC2005 | Zinc | ER |
| 10232QX-5 | ECC1005 | Potassium | Calibration |
| 10232QX-6 | ECC1009 | Selenium, Silver | Calibration |
| 10232QX-8 | ECC0030 | Antimony, Beryllium, Cobalt | Calibration |
| 10232QX-9 | ECC0014 | Beryllium | Calibration |

| SDG | Samples Affected | Analyte/Analytes | Associated Blank Contamination |
|---|---|---|---|
| 10232QX-10 | ECC3004, ECC3006, ECC3017 | Aluminum | Method |
| | ECC3018 | Calcium, Cobalt, Zinc | ER |
| | ECC3003, ECC3004 | Zinc | ER |
| 10232QX-11 | ECC0048, ECC0049, ECC0050, ECC0051 | Potassium | Method |
| 10232QX-12 | ECC3007 | Aluminum, Copper, Nickel, Silver, Vanadium, Sodium, Calcium, Magnesium, Selenium | Method/Calibration/ER |
| 10232QX-13 | ECC3001, ECC3010, ECC3019 | Nickel | Calibration |
| | ECC3001, ECC3020 | Silver | Calibration |
| | ECC3001, ECC3010 | Calcium, Magnesium, Zinc | ER |
| | ECC3019 | Manganese | Calibration |
| | ECC3019, ECC3020 | Zinc | ER |
| | ECC3010 | Cadmium, Copper, Barium | Calibration/ER |
| 10232QX-14 | ECC3016 | Arsenic | Method |
| 10232QX-15 | ECC3002 | Lead | Method |
| 10232QX-16 | ECC3009 | Calcium, Magnesium | ER |
| 10232QX-17 | ECC3014 | Selenium, Nickel, Calcium, Magnesium | Method/Calibration/ER |
| 10232QX-18 | ECC3011, ECC3015, JF3007 | Zinc | ER |
| | JF3007, ECC3011 | Aluminum | ER |

'B' qualifiers assigned to designate blank contamination, which are identification qualifiers, take precedence over estimating qualifiers, assigned due to quantitation.

Matrix Spike / Matrix Spike Duplicate

Batch QC was performed for the project samples and all QC criteria were met, with the exception of the following:

| SDG | Samples Affected | Element/Elements | Validation Qualifier |
|---|---|---|---|
| 10232QX-1 | ALL | Antimony, Nickel | J/UJ |
| 10232QX-2 | ALL | Antimony, Arsenic, Barium, Cobalt, Lead, Nickel, Selenium, Zinc | J/UJ |
| 10232QX-3 | ALL | Aluminum, Antimony, Iron | J/UJ |
| 10232QX-5 | ALL | Aluminum, Manganese | J/UJ |
| 10232QX-6 | ALL | Antimony, Barium | J/UJ |
| 10232QX-11 | ALL | Aluminum, Antimony, Iron, Manganese, Zinc | J/UJ |
| 10232QX-13 | ALL | Aluminum | J |

Laboratory Control Sample (LCS)

All QC criteria were met for the LCS associated with the project sample analyses, with the exception of the following:

| SDG | Samples Affected | Element/Elements | Validation Qualifier |
|---|---|---|---|
| 10232QX-11 | ALL | Silver | J/UJ |

Interference Check Sample (ICS)

All ICS % recoveries for the project samples were acceptable.

ICP Serial Dilutions

All QC criteria were met, with the exception of the following:

| SDG | Samples Affected | Element/Elements | Validation Qualifier |
|---|---|---|---|
| 10232QX-1 | ALL | Arsenic, Zinc | J |
| 10232QX-2 | ALL | Zinc, Chromium | J |
| 10232QX-3 | ALL | Zinc | J |
| 10232QX-5 | ALL | Chromium, Vanadium, Zinc | J |
| 10232QX-6 | ALL | Zinc | J |
| 10232QX-10 | ECC3003, 3004, 3018 | Zinc | B |
| 10232QX-13 | ALL | Aluminum, Iron | J |

Field Duplicates

Original and field duplicate results were evaluated and no problems were identified, with the exception of the following:

| SDG | Samples Affected | Element/Elements | Validation Qualifier |
|---|---|---|---|
| 10232QX-3 | ECC0015 (original), ECC0016 (duplicate) | Manganese | J |
| 10232QX-11 | ECC0050 (original), ECC0051 (duplicate) | Potassium, Mercury | J |

Sample Quantitation

Results quantified between the IDL and the RL ("J" flagged by the laboratory) were qualified as estimated (J).

### *4.3 Nitroaromatic and Nitramine Explosives by SW846 8330*

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 Calibration

The initial calibration and continuing calibrations associated with the project samples met QC criteria, with the exception of the following:

The following exhibited individual CCAL %D's > 15%:

| SDG Number | Samples Affected | Compound(s) | Validation Qualifier |
|---|---|---|---|
| 10232QX-2 | ALL | 1,3,5-Trinitrobenzene, 1,3-Dinitrobenzene, 2,4,6-Trinitrotoluene, 2,4-Dinitrotoluene, 2,6-Dinitrotoluene, 2-Amino-2,6-dinitrotoluene, HMX, Nitrobenzene, RDX, Tetryl, p-Nitrotoluene | UJ |

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 are within acceptable QC ranges.

Matrix Spike / Matrix Spike Duplicate

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

Laboratory Control Sample (LCS)

LCS was performed for the project samples and all QC criteria were met with the exception of the following:

| SDG Number | Samples Affected | Compound(s) | Validation Qualifier |
|---|---|---|---|
| 10232QX-14 | ECC3005, ECC3008, ECC3016 | 1,3,5-Trinitrobenzene, 1,3-Dinitrobenzene, 2,4,6-Trinitrotoluene, HMX, Tetryl | UJ |

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.

### *4.4 Perchlorate by EPA 314.0*

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 with the exception of the following:

| SDG Number | Samples Affected | Compound(s) | Validation Qualifier |
|---|---|---|---|
| 10232QX-10 | ECC3018 | Perchlorate | UJ |
| 10232QX-13 | ECC3019 | Perchlorate | UJ |

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

Laboratory Control Sample (LCS)

All QC criteria were met for the LCS associated with the project sample analyses.

Field Duplicates

Original and field duplicate results were evaluated and no problems were noted.

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.

### *4.5. Total Organic Carbon by 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. All was acceptable no qualification was necessary.

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, no qualification was necessary.

Matrix Spike / Matrix Spike Duplicate

MS/MSD were performed for the project samples, and all QC criteria were met. No qualification was necessary.

Laboratory Control Sample

Laboratory Control Sample (LCS) was performed for the project samples and all QC criteria were met. No qualification was necessary.

Field Duplicates

Original and field duplicate results were evaluated and no problems were noted.

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 "nondetect" may be inaccurate or imprecise. The nondetect result should be estimated.

## Validation Reason Code Definitions

| Reason Code | Definition |
|---|---|
| 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

Run Date: October 9, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **0232QX-10** | | | | | | | | | | | | | | | | | | |
| ECC3003 | SW6010B | SW3010 | N 0 1 | ALUMINUM | .453 | mg/L | | Y | Y | P | | | | | | | D150-02 | 19:45 |
| | | | | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 19:45 |
| | | | | ARSENIC | .01 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 22:04 |
| | | | | BARIUM | .0801 | mg/L | | Y | Y | P | | | | | | | D150-02 | 19:45 |
| | | | | BERYLLIUM | .001 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 19:45 |
| | | | | CADMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 19:45 |
| | | | | CALCIUM | 67.7 | mg/L | | Y | Y | P | | | | | | | D150-02 | 19:45 |
| | | | | CHROMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 19:45 |
| | | | | COBALT | .02 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 19:45 |
| | | | | COPPER | .02 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 19:45 |
| | | | | IRON | .448 | mg/L | | Y | Y | P | | | | | | | D150-02 | 19:45 |
| | | | | LEAD | .01 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 22:04 |
| | | | | MAGNESIUM | 15.1 | mg/L | | Y | Y | P | | | | | | | D150-02 | 19:45 |
| | | | | MANGANESE | .338 | mg/L | | Y | Y | P | | | | | | | D150-02 | 19:45 |
| | | | | NICKEL | .02 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 19:45 |
| | | | | POTASSIUM | 5 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 19:45 |
| | | | | SELENIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 22:04 |
| | | | | SILVER | .01 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 19:45 |
| | | | | SODIUM | 2.61 | mg/L | | Y | Y | P | | | | | | | D150-02 | 19:45 |
| | | | | THALLIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 22:04 |
| | | | | VANADIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 19:45 |
| | | | | ZINC | .00637 | mg/L | J | Y | Y | F | B | | 06C | 13 | 15 | | D150-02 | 19:45 |
| | SW7470A | TOTAL | N 0 1 | MERCURY | .0005 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 17:19 |
| ECC3004 | SW6010B | SW3010 | N 0 1 | ALUMINUM | .301 | mg/L | | Y | Y | F | B | | 06A | | | | D150-03 | 19:50 |
| | | | | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 19:50 |
| | | | | ARSENIC | .01 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 22:08 |
| | | | | BARIUM | .0441 | mg/L | | Y | Y | P | | | | | | | D150-03 | 19:50 |
| | | | | BERYLLIUM | .001 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 19:50 |
| | | | | CADMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 19:50 |
| | | | | CALCIUM | 44.7 | mg/L | | Y | Y | P | | | | | | | D150-03 | 19:50 |
| | | | | CHROMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 19:50 |
| | | | | COBALT | .02 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 19:50 |
| | | | | COPPER | .02 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 19:50 |
| | | | | IRON | .351 | mg/L | | Y | Y | P | | | | | | | D150-03 | 19:50 |
| | | | | LEAD | .01 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 22:08 |
| | | | | MAGNESIUM | 7.24 | mg/L | | Y | Y | P | | | | | | | D150-03 | 19:50 |
| | | | | MANGANESE | .0065 | mg/L | J | Y | Y | P | J | | 15 | | | | D150-03 | 19:50 |
| | | | | NICKEL | .02 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 19:50 |
| | | | | POTASSIUM | 5 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 19:50 |
| | | | | SELENIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 22:08 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **0232QX-10** | | | | | | | | | | | | | | | | | | |
| ECC3004 | SW6010B | SW3010 | N 0 1 | SILVER | .01 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 19:50 |
| | | | | SODIUM | .87 | mg/L | J | Y | Y | P | J | | 15 | | | | D150-03 | 19:50 |
| | | | | THALLIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 22:08 |
| | | | | VANADIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 19:50 |
| | | | | ZINC | .00731 | mg/L | J | Y | Y | F | B | | 06C | 13 | 15 | | D150-03 | 19:50 |
| | SW7470A | TOTAL | N 0 1 | MERCURY | .0005 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 17:22 |
| ECC3006 | SW6010B | SW3010 | N 0 1 | ALUMINUM | .178 | mg/L | J | Y | Y | F | B | | 06A | | | | D176-05 | 19:04 |
| | | | | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 19:04 |
| | | | | ARSENIC | .01 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 21:25 |
| | | | | BARIUM | .0762 | mg/L | | Y | Y | P | | | | | | | D176-05 | 19:04 |
| | | | | BERYLLIUM | .001 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 19:04 |
| | | | | CADMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 19:04 |
| | | | | CALCIUM | 52.9 | mg/L | | Y | Y | P | | | | | | | D176-05 | 19:04 |
| | | | | CHROMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 19:04 |
| | | | | COBALT | .02 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 19:04 |
| | | | | COPPER | .02 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 19:04 |
| | | | | IRON | .158 | mg/L | J | Y | Y | P | J | | 15 | | | | D176-05 | 19:04 |
| | | | | LEAD | .01 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 21:25 |
| | | | | MAGNESIUM | 4.85 | mg/L | | Y | Y | P | | | | | | | D176-05 | 19:04 |
| | | | | MANGANESE | .0921 | mg/L | | Y | Y | P | | | | | | | D176-05 | 19:04 |
| | | | | NICKEL | .02 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 19:04 |
| | | | | POTASSIUM | 5 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 19:04 |
| | | | | SELENIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 21:25 |
| | | | | SILVER | .01 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 19:04 |
| | | | | SODIUM | .87 | mg/L | J | Y | Y | P | J | | 15 | | | | D176-05 | 19:04 |
| | | | | THALLIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 21:25 |
| | | | | VANADIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 19:04 |
| | | | | ZINC | .02 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 19:04 |
| | SW7470A | TOTAL | N 0 1 | MERCURY | .0005 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 17:34 |
| ECC3017 | SW6010B | SW3010 | N 0 1 | ALUMINUM | .123 | mg/L | J | Y | Y | F | B | | 06A | 15 | | | D134-02 | 19:08 |
| | | | | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 19:08 |
| | | | | ARSENIC | .01 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 21:30 |
| | | | | BARIUM | .0727 | mg/L | | Y | Y | P | | | | | | | D134-02 | 19:08 |
| | | | | BERYLLIUM | .001 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 19:08 |
| | | | | CADMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 19:08 |
| | | | | CALCIUM | 7.84 | mg/L | | Y | Y | P | | | | | | | D134-02 | 19:08 |
| | | | | CHROMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 19:08 |
| | | | | COBALT | .02 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 19:08 |
| | | | | COPPER | .02 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 19:08 |
| | | | | IRON | 6.1 | mg/L | | Y | Y | P | | | | | | | D134-02 | 19:08 |

# Validation Qualifier Data Entry Verification

Run Date: October 9, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **0232QX-10** | | | | | | | | | | | | | | | | | | |
| ECC3017 | SW6010B | SW3010 | N 0 1 | LEAD | .01 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 21:30 |
| | | | | MAGNESIUM | 16.4 | mg/L | | Y | Y | P | | | | | | | D134-02 | 19:08 |
| | | | | MANGANESE | .548 | mg/L | | Y | Y | P | | | | | | | D134-02 | 19:08 |
| | | | | NICKEL | .0141 | mg/L | J | Y | Y | P | J | | 15 | | | | D134-02 | 19:08 |
| | | | | POTASSIUM | 2.52 | mg/L | J | Y | Y | P | J | | 15 | | | | D134-02 | 19:08 |
| | | | | SELENIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 21:30 |
| | | | | SILVER | .01 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 19:08 |
| | | | | SODIUM | 5.68 | mg/L | | Y | Y | P | | | | | | | D134-02 | 19:08 |
| | | | | THALLIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 21:30 |
| | | | | VANADIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 19:08 |
| | | | | ZINC | .02 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 19:08 |
| | SW7470A | TOTAL | N 0 1 | MERCURY | .0005 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 17:14 |
| ECC3018 | SW6010B | SW3010 | N 0 1 | ALUMINUM | .349 | mg/L | | Y | Y | P | | | | | | | D134-03 | 19:41 |
| | | | | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | D134-03 | 19:41 |
| | | | | ARSENIC | .01 | mg/L | U | N | Y | U | U | | | | | | D134-03 | 22:00 |
| | | | | BARIUM | .102 | mg/L | | Y | Y | P | | | | | | | D134-03 | 19:41 |
| | | | | BERYLLIUM | .001 | mg/L | U | N | Y | U | U | | | | | | D134-03 | 19:41 |
| | | | | CADMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D134-03 | 19:41 |
| | | | | CALCIUM | 1 | mg/L | | Y | Y | F | B | | 06C | | | | D134-03 | 19:41 |
| | | | | CHROMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D134-03 | 19:41 |
| | | | | COBALT | .0159 | mg/L | J | Y | Y | F | B | | 06C | 15 | | | D134-03 | 19:41 |
| | | | | COPPER | .015 | mg/L | J | Y | Y | P | J | | 15 | | | | D134-03 | 19:41 |
| | | | | IRON | 2.14 | mg/L | | Y | Y | P | | | | | | | D134-03 | 19:41 |
| | | | | LEAD | .01 | mg/L | U | N | Y | U | U | | | | | | D134-03 | 22:00 |
| | | | | MAGNESIUM | 6 | mg/L | | Y | Y | P | | | | | | | D134-03 | 19:41 |
| | | | | MANGANESE | .053 | mg/L | | Y | Y | P | | | | | | | D134-03 | 19:41 |
| | | | | NICKEL | .0306 | mg/L | | Y | Y | P | | | | | | | D134-03 | 19:41 |
| | | | | POTASSIUM | 2.29 | mg/L | J | Y | Y | P | J | | 15 | | | | D134-03 | 19:41 |
| | | | | SELENIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D134-03 | 22:00 |
| | | | | SILVER | .01 | mg/L | U | N | Y | U | U | | | | | | D134-03 | 19:41 |
| | | | | SODIUM | 1.74 | mg/L | | Y | Y | P | | | | | | | D134-03 | 19:41 |
| | | | | THALLIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D134-03 | 22:00 |
| | | | | VANADIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D134-03 | 19:41 |
| | | | | ZINC | .0781 | mg/L | | Y | Y | F | B | | 06C | 13 | | | D134-03 | 19:41 |
| | SW7470A | TOTAL | N 0 1 | MERCURY | .0005 | mg/L | U | N | Y | U | U | | | | | | D134-03 | 17:16 |
| ECC3003 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 14:46 |
| | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 14:46 |
| | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 14:46 |
| | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 14:46 |
| | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 14:46 |

# Validation Qualifier Data Entry Verification

Run Date: October 9, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **0232QX-10** | | | | | | | | | | | | | | | | | | |
| ECC3003 | SW8330 | METHOD | N 0 1 | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 14:46 |
| | | | | 2-NITROTOLUENE | .0015 | mg/L | | Y | Y | P | | | | | | | D150-02 | 14:46 |
| | | | | 3-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 14:46 |
| | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 14:46 |
| | | | | 4-NITROTOLUENE | .00039 | mg/L | J | Y | Y | P | J | | 15 | | | | D150-02 | 14:46 |
| | | | | HMX | .001 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 14:46 |
| | | | | NITROBENZENE | .0004 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 14:46 |
| | | | | RDX | .0004 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 14:46 |
| | | | | TETRYL | .0004 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 14:46 |
| ECC3004 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 15:24 |
| | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 15:24 |
| | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 15:24 |
| | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 15:24 |
| | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 15:24 |
| | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 15:24 |
| | | | | 2-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 15:24 |
| | | | | 3-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 15:24 |
| | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 15:24 |
| | | | | 4-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 15:24 |
| | | | | HMX | .001 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 15:24 |
| | | | | NITROBENZENE | .0004 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 15:24 |
| | | | | RDX | .0004 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 15:24 |
| | | | | TETRYL | .0004 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 15:24 |
| ECC3006 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 16:03 |
| | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 16:03 |
| | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 16:03 |
| | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 16:03 |
| | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 16:03 |
| | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 16:03 |
| | | | | 2-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 16:03 |
| | | | | 3-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 16:03 |
| | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 16:03 |
| | | | | 4-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 16:03 |
| | | | | HMX | .001 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 16:03 |
| | | | | NITROBENZENE | .0004 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 16:03 |
| | | | | RDX | .0004 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 16:03 |
| | | | | TETRYL | .0004 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 16:03 |
| ECC3017 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 12:12 |
| | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 12:12 |
| | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 12:12 |

# Validation Qualifier Data Entry Verification

Run Date: October 9, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **0232QX-10** | | | | | | | | | | | | | | | | |
| ECC3017 | SW8330 | METHOD | N 0 1 | 2,4-DNT | .0004 | mg/L | U | N Y U | U | | | | | | D134-02 | 12:12 |
| | | | | 2,6-DNT | .0004 | mg/L | U | N Y U | U | | | | | | D134-02 | 12:12 |
| | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N Y U | U | | | | | | D134-02 | 12:12 |
| | | | | 2-NITROTOLUENE | .0004 | mg/L | U | N Y U | U | | | | | | D134-02 | 12:12 |
| | | | | 3-NITROTOLUENE | .0004 | mg/L | U | N Y U | U | | | | | | D134-02 | 12:12 |
| | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N Y U | U | | | | | | D134-02 | 12:12 |
| | | | | 4-NITROTOLUENE | .0004 | mg/L | U | N Y U | U | | | | | | D134-02 | 12:12 |
| | | | | HMX | .001 | mg/L | U | N Y U | U | | | | | | D134-02 | 12:12 |
| | | | | NITROBENZENE | .0004 | mg/L | U | N Y U | U | | | | | | D134-02 | 12:12 |
| | | | | RDX | .0004 | mg/L | U | N Y U | U | | | | | | D134-02 | 12:12 |
| | | | | TETRYL | .0004 | mg/L | U | N Y U | U | | | | | | D134-02 | 12:12 |
| ECC3018 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .0004 | mg/L | U | N Y U | U | | | | | | D134-03 | 12:50 |
| | | | | 1,3-DNB | .0004 | mg/L | U | N Y U | U | | | | | | D134-03 | 12:50 |
| | | | | 2,4,6-TNT | .0004 | mg/L | U | N Y U | U | | | | | | D134-03 | 12:50 |
| | | | | 2,4-DNT | .0004 | mg/L | U | N Y U | U | | | | | | D134-03 | 12:50 |
| | | | | 2,6-DNT | .0004 | mg/L | U | N Y U | U | | | | | | D134-03 | 12:50 |
| | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N Y U | U | | | | | | D134-03 | 12:50 |
| | | | | 2-NITROTOLUENE | .0004 | mg/L | U | N Y U | U | | | | | | D134-03 | 12:50 |
| | | | | 3-NITROTOLUENE | .0004 | mg/L | U | N Y U | U | | | | | | D134-03 | 12:50 |
| | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N Y U | U | | | | | | D134-03 | 12:50 |
| | | | | 4-NITROTOLUENE | .0004 | mg/L | U | N Y U | U | | | | | | D134-03 | 12:50 |
| | | | | HMX | .001 | mg/L | U | N Y U | U | | | | | | D134-03 | 12:50 |
| | | | | NITROBENZENE | .0004 | mg/L | U | N Y U | U | | | | | | D134-03 | 12:50 |
| | | | | RDX | .0004 | mg/L | U | N Y U | U | | | | | | D134-03 | 12:50 |
| | | | | TETRYL | .0004 | mg/L | U | N Y U | U | | | | | | D134-03 | 12:50 |
| ECC3003 | E314.0 | NONE | N 0 1 | PERCHLORATE | .005 | mg/L | U | N Y U | U | | | | | | D150-02 | 19:04 |
| ECC3004 | E314.0 | NONE | N 0 1 | PERCHLORATE | .005 | mg/L | U | N Y U | U | | | | | | D150-03 | 19:21 |
| ECC3006 | E314.0 | NONE | N 0 1 | PERCHLORATE | .005 | mg/L | U | N Y U | U | | | | | | D176-05 | 20:47 |
| ECC3017 | E314.0 | NONE | N 0 1 | PERCHLORATE | .005 | mg/L | U | N Y U | U | | | | | | D134-02 | 19:39 |
| ECC3018 | E314.0 | NONE | N 0 1 | PERCHLORATE | .005 | mg/L | U | N Y U | UJ | 02B | | | | | D134-03 | 19:56 |
| ECC3003 | SW8260B | SW5030 | N 0 1 | 1,1,1,2-TETRACHLOROETHANE | .005 | mg/L | U | N Y U | U | | | | | | D150-02 | 09:21 |
| | | | | 1,1,1-TRICHLOROETHANE | .005 | mg/L | U | N Y U | U | | | | | | D150-02 | 09:21 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .005 | mg/L | U | N Y U | U | | | | | | D150-02 | 09:21 |
| | | | | 1,1,2-TRICHLOROETHANE | .005 | mg/L | U | N Y U | U | | | | | | D150-02 | 09:21 |
| | | | | 1,1-DICHLOROETHANE | .005 | mg/L | U | N Y U | U | | | | | | D150-02 | 09:21 |
| | | | | 1,1-DICHLOROETHENE | .005 | mg/L | U | N Y U | U | | | | | | D150-02 | 09:21 |
| | | | | 1,1-DICHLOROPROPENE | .005 | mg/L | U | N Y U | U | | | | | | D150-02 | 09:21 |
| | | | | 1,2,3-TRICHLOROBENZENE | .005 | mg/L | U | N Y U | U | | | | | | D150-02 | 09:21 |
| | | | | 1,2,3-TRICHLOROPROPANE | .005 | mg/L | U | N Y U | U | | | | | | D150-02 | 09:21 |

# Validation Qualifier Data Entry Verification

Run Date: October 9, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **0232QX-10** | | | | | | | | | | | | | | | | | | |
| ECC3003 | SW8260B | SW5030 | N 0 1 | 1,2,4-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 09:21 |
| | | | | 1,2,4-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 09:21 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .01 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 09:21 |
| | | | | 1,2-DIBROMOETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 09:21 |
| | | | | 1,2-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 09:21 |
| | | | | 1,2-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 09:21 |
| | | | | 1,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 09:21 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 09:21 |
| | | | | 1,3-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 09:21 |
| | | | | 1,3-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 09:21 |
| | | | | 1,4-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 09:21 |
| | | | | 2,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 09:21 |
| | | | | 2-BUTANONE | .02 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 09:21 |
| | | | | 2-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 09:21 |
| | | | | 2-HEXANONE | .02 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 09:21 |
| | | | | 4-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 09:21 |
| | | | | 4-METHYL-2-PENTANONE | .01 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 09:21 |
| | | | | ACETONE | .02 | mg/L | U | N | Y | U | R | 05A | | | | | D150-02 | 09:21 |
| | | | | BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 09:21 |
| | | | | BROMOBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 09:21 |
| | | | | BROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 09:21 |
| | | | | BROMODICHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 09:21 |
| | | | | BROMOFORM | .005 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 09:21 |
| | | | | BROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 09:21 |
| | | | | CARBON DISULFIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 09:21 |
| | | | | CARBON TETRACHLORIDE | .005 | mg/L | U | N | Y | U | UJ | 05B | | | | | D150-02 | 09:21 |
| | | | | CHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 09:21 |
| | | | | CHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 09:21 |
| | | | | CHLOROFORM | .005 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 09:21 |
| | | | | CHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 09:21 |
| | | | | CIS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 09:21 |
| | | | | CIS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 09:21 |
| | | | | DIBROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 09:21 |
| | | | | DIBROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 09:21 |
| | | | | DICHLORODIFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 09:21 |
| | | | | ETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 09:21 |
| | | | | HEXACHLOROBUTADIENE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 09:21 |
| | | | | ISOPROPYL BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 09:21 |
| | | | | M/P-XYLENES | .01 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 09:21 |
| | | | | METHYLENE CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 09:21 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **0232QX-10** | | | | | | | | | | | | | | | | | | |
| ECC3003 | SW8260B | SW5030 | N 0 1 | N-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 09:21 |
| | | | | N-PROPYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 09:21 |
| | | | | NAPHTHALENE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 09:21 |
| | | | | O-XYLENE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 09:21 |
| | | | | P-ISOPROPYLTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 09:21 |
| | | | | SEC-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 09:21 |
| | | | | STYRENE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 09:21 |
| | | | | TERT-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 09:21 |
| | | | | TETRACHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 09:21 |
| | | | | TOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 09:21 |
| | | | | TRANS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 09:21 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 09:21 |
| | | | | TRICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 09:21 |
| | | | | TRICHLOROFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 09:21 |
| | | | | VINYL CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-02 | 09:21 |
| ECC3004 | SW8260B | SW5030 | N 0 1 | 1,1,1,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 09:56 |
| | | | | 1,1,1-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 09:56 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 09:56 |
| | | | | 1,1,2-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 09:56 |
| | | | | 1,1-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 09:56 |
| | | | | 1,1-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 09:56 |
| | | | | 1,1-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 09:56 |
| | | | | 1,2,3-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 09:56 |
| | | | | 1,2,3-TRICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 09:56 |
| | | | | 1,2,4-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 09:56 |
| | | | | 1,2,4-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 09:56 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .01 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 09:56 |
| | | | | 1,2-DIBROMOETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 09:56 |
| | | | | 1,2-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 09:56 |
| | | | | 1,2-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 09:56 |
| | | | | 1,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 09:56 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 09:56 |
| | | | | 1,3-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 09:56 |
| | | | | 1,3-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 09:56 |
| | | | | 1,4-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 09:56 |
| | | | | 2,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 09:56 |
| | | | | 2-BUTANONE | .02 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 09:56 |
| | | | | 2-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 09:56 |
| | | | | 2-HEXANONE | .02 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 09:56 |
| | | | | 4-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 09:56 |

# Validation Qualifier Data Entry Verification

Run Date: October 9, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **0232QX-10** | | | | | | | | | | | | | | | | | | |
| ECC3004 | SW8260B | SW5030 | N 0 1 | 4-METHYL-2-PENTANONE | .01 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 09:56 |
| | | | | ACETONE | .02 | mg/L | U | N | Y | U | R | | 05A | | | | D150-03 | 09:56 |
| | | | | BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 09:56 |
| | | | | BROMOBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 09:56 |
| | | | | BROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 09:56 |
| | | | | BROMODICHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 09:56 |
| | | | | BROMOFORM | .005 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 09:56 |
| | | | | BROMOMETHANE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | D150-03 | 09:56 |
| | | | | CARBON DISULFIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 09:56 |
| | | | | CARBON TETRACHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 09:56 |
| | | | | CHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 09:56 |
| | | | | CHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 09:56 |
| | | | | CHLOROFORM | .0042 | mg/L | J | Y | Y | P | J | | 15 | | | | D150-03 | 09:56 |
| | | | | CHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 09:56 |
| | | | | CIS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 09:56 |
| | | | | CIS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 09:56 |
| | | | | DIBROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 09:56 |
| | | | | DIBROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 09:56 |
| | | | | DICHLORODIFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 09:56 |
| | | | | ETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 09:56 |
| | | | | HEXACHLOROBUTADIENE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 09:56 |
| | | | | ISOPROPYL BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 09:56 |
| | | | | M/P-XYLENES | .01 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 09:56 |
| | | | | METHYLENE CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 09:56 |
| | | | | N-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 09:56 |
| | | | | N-PROPYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 09:56 |
| | | | | NAPHTHALENE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 09:56 |
| | | | | O-XYLENE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 09:56 |
| | | | | P-ISOPROPYLTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 09:56 |
| | | | | SEC-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 09:56 |
| | | | | STYRENE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 09:56 |
| | | | | TERT-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 09:56 |
| | | | | TETRACHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 09:56 |
| | | | | TOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 09:56 |
| | | | | TRANS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 09:56 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 09:56 |
| | | | | TRICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 09:56 |
| | | | | TRICHLOROFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 09:56 |
| | | | | VINYL CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D150-03 | 09:56 |
| ECC3006 | SW8260B | SW5030 | N 0 1 | 1,1,1,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 08:46 |

# Validation Qualifier Data Entry Verification

Run Date: October 9, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **0232QX-10** | | | | | | | | | | | | | | | | | | |
| ECC3006 | SW8260B | SW5030 | N 0 1 | 1,1,1-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 08:46 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 08:46 |
| | | | | 1,1,2-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 08:46 |
| | | | | 1,1-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 08:46 |
| | | | | 1,1-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 08:46 |
| | | | | 1,1-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 08:46 |
| | | | | 1,2,3-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 08:46 |
| | | | | 1,2,3-TRICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 08:46 |
| | | | | 1,2,4-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 08:46 |
| | | | | 1,2,4-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 08:46 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .01 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 08:46 |
| | | | | 1,2-DIBROMOETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 08:46 |
| | | | | 1,2-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 08:46 |
| | | | | 1,2-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 08:46 |
| | | | | 1,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 08:46 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 08:46 |
| | | | | 1,3-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 08:46 |
| | | | | 1,3-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 08:46 |
| | | | | 1,4-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 08:46 |
| | | | | 2,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 08:46 |
| | | | | 2-BUTANONE | .02 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 08:46 |
| | | | | 2-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 08:46 |
| | | | | 2-HEXANONE | .02 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 08:46 |
| | | | | 4-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 08:46 |
| | | | | 4-METHYL-2-PENTANONE | .01 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 08:46 |
| | | | | ACETONE | .02 | mg/L | U | N | Y | U | R | | 05A | | | | D176-05 | 08:46 |
| | | | | BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 08:46 |
| | | | | BROMOBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 08:46 |
| | | | | BROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 08:46 |
| | | | | BROMODICHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 08:46 |
| | | | | BROMOFORM | .005 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 08:46 |
| | | | | BROMOMETHANE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | D176-05 | 08:46 |
| | | | | CARBON DISULFIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 08:46 |
| | | | | CARBON TETRACHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 08:46 |
| | | | | CHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 08:46 |
| | | | | CHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 08:46 |
| | | | | CHLOROFORM | .005 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 08:46 |
| | | | | CHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 08:46 |
| | | | | CIS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 08:46 |
| | | | | CIS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 08:46 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **0232QX-10** | | | | | | | | | | | | | | | | | | |
| ECC3006 | SW8260B | SW5030 | N 0 1 | DIBROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 08:46 |
| | | | | DIBROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 08:46 |
| | | | | DICHLORODIFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 08:46 |
| | | | | ETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 08:46 |
| | | | | HEXACHLOROBUTADIENE | .005 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 08:46 |
| | | | | ISOPROPYL BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 08:46 |
| | | | | M/P-XYLENES | .01 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 08:46 |
| | | | | METHYLENE CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 08:46 |
| | | | | N-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 08:46 |
| | | | | N-PROPYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 08:46 |
| | | | | NAPHTHALENE | .005 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 08:46 |
| | | | | O-XYLENE | .005 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 08:46 |
| | | | | P-ISOPROPYLTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 08:46 |
| | | | | SEC-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 08:46 |
| | | | | STYRENE | .005 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 08:46 |
| | | | | TERT-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 08:46 |
| | | | | TETRACHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 08:46 |
| | | | | TOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 08:46 |
| | | | | TRANS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 08:46 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 08:46 |
| | | | | TRICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 08:46 |
| | | | | TRICHLOROFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 08:46 |
| | | | | VINYL CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D176-05 | 08:46 |
| ECC3017 | SW8260B | SW5030 | N 0 1 | 1,1,1,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 04:41 |
| | | | | 1,1,1-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 04:41 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 04:41 |
| | | | | 1,1,2-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 04:41 |
| | | | | 1,1-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 04:41 |
| | | | | 1,1-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 04:41 |
| | | | | 1,1-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 04:41 |
| | | | | 1,2,3-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 04:41 |
| | | | | 1,2,3-TRICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 04:41 |
| | | | | 1,2,4-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 04:41 |
| | | | | 1,2,4-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 04:41 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .01 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 04:41 |
| | | | | 1,2-DIBROMOETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 04:41 |
| | | | | 1,2-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 04:41 |
| | | | | 1,2-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 04:41 |
| | | | | 1,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 04:41 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 04:41 |

# Validation Qualifier Data Entry Verification

Run Date: October 9, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **0232QX-10** | | | | | | | | | | | | | | | | | | |
| ECC3017 | SW8260B | SW5030 | N 0 1 | 1,3-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 04:41 |
| | | | | 1,3-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 04:41 |
| | | | | 1,4-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 04:41 |
| | | | | 2,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 04:41 |
| | | | | 2-BUTANONE | .02 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 04:41 |
| | | | | 2-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 04:41 |
| | | | | 2-HEXANONE | .02 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 04:41 |
| | | | | 4-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 04:41 |
| | | | | 4-METHYL-2-PENTANONE | .01 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 04:41 |
| | | | | ACETONE | .92 | mg/L | E | Y | N | P | R | | 16 | | | | D134-02 | 04:41 |
| | | | | BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 04:41 |
| | | | | BROMOBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 04:41 |
| | | | | BROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 04:41 |
| | | | | BROMODICHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 04:41 |
| | | | | BROMOFORM | .005 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 04:41 |
| | | | | BROMOMETHANE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | D134-02 | 04:41 |
| | | | | CARBON DISULFIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 04:41 |
| | | | | CARBON TETRACHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 04:41 |
| | | | | CHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 04:41 |
| | | | | CHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 04:41 |
| | | | | CHLOROFORM | .005 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 04:41 |
| | | | | CHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 04:41 |
| | | | | CIS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 04:41 |
| | | | | CIS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 04:41 |
| | | | | DIBROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 04:41 |
| | | | | DIBROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 04:41 |
| | | | | DICHLORODIFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 04:41 |
| | | | | ETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 04:41 |
| | | | | HEXACHLOROBUTADIENE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 04:41 |
| | | | | ISOPROPYL BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 04:41 |
| | | | | M/P-XYLENES | .01 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 04:41 |
| | | | | METHYLENE CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 04:41 |
| | | | | N-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 04:41 |
| | | | | N-PROPYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 04:41 |
| | | | | NAPHTHALENE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 04:41 |
| | | | | O-XYLENE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 04:41 |
| | | | | P-ISOPROPYLTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 04:41 |
| | | | | SEC-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 04:41 |
| | | | | STYRENE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 04:41 |
| | | | | TERT-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 04:41 |

# Validation Qualifier Data Entry Verification

Run Date: October 9, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **0232QX-10** | | | | | | | | | | | | | | | | | | |
| ECC3017 | SW8260B | SW5030 | N 0 1 | TETRACHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 04:41 |
| | | | | TOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 04:41 |
| | | | | TRANS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 04:41 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 04:41 |
| | | | | TRICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 04:41 |
| | | | | TRICHLOROFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 04:41 |
| | | | | VINYL CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-02 | 04:41 |
| | SW8260B | SW5030 | N 1 10 | 1,1,1,2-TETRACHLOROETHANE | .05 | mg/L | U | N | N | U | R | | 16 | | | | D134-02T | 11:07 |
| | | | | 1,1,1-TRICHLOROETHANE | .05 | mg/L | U | N | N | U | R | | 16 | | | | D134-02T | 11:07 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .05 | mg/L | U | N | N | U | R | | 16 | | | | D134-02T | 11:07 |
| | | | | 1,1,2-TRICHLOROETHANE | .05 | mg/L | U | N | N | U | R | | 16 | | | | D134-02T | 11:07 |
| | | | | 1,1-DICHLOROETHANE | .05 | mg/L | U | N | N | U | R | | 16 | | | | D134-02T | 11:07 |
| | | | | 1,1-DICHLOROETHENE | .05 | mg/L | U | N | N | U | R | | 16 | | | | D134-02T | 11:07 |
| | | | | 1,1-DICHLOROPROPENE | .05 | mg/L | U | N | N | U | R | | 16 | | | | D134-02T | 11:07 |
| | | | | 1,2,3-TRICHLOROBENZENE | .05 | mg/L | U | N | N | U | R | | 16 | | | | D134-02T | 11:07 |
| | | | | 1,2,3-TRICHLOROPROPANE | .05 | mg/L | U | N | N | U | R | | 16 | | | | D134-02T | 11:07 |
| | | | | 1,2,4-TRICHLOROBENZENE | .05 | mg/L | U | N | N | U | R | | 16 | | | | D134-02T | 11:07 |
| | | | | 1,2,4-TRIMETHYLBENZENE | .05 | mg/L | U | N | N | U | R | | 16 | | | | D134-02T | 11:07 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .1 | mg/L | U | N | N | U | R | | 16 | | | | D134-02T | 11:07 |
| | | | | 1,2-DIBROMOETHANE | .05 | mg/L | U | N | N | U | R | | 16 | | | | D134-02T | 11:07 |
| | | | | 1,2-DICHLOROBENZENE | .05 | mg/L | U | N | N | U | R | | 16 | | | | D134-02T | 11:07 |
| | | | | 1,2-DICHLOROETHANE | .05 | mg/L | U | N | N | U | R | | 16 | | | | D134-02T | 11:07 |
| | | | | 1,2-DICHLOROPROPANE | .05 | mg/L | U | N | N | U | R | | 16 | | | | D134-02T | 11:07 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .05 | mg/L | U | N | N | U | R | | 16 | | | | D134-02T | 11:07 |
| | | | | 1,3-DICHLOROBENZENE | .05 | mg/L | U | N | N | U | R | | 16 | | | | D134-02T | 11:07 |
| | | | | 1,3-DICHLOROPROPANE | .05 | mg/L | U | N | N | U | R | | 16 | | | | D134-02T | 11:07 |
| | | | | 1,4-DICHLOROBENZENE | .05 | mg/L | U | N | N | U | R | | 16 | | | | D134-02T | 11:07 |
| | | | | 2,2-DICHLOROPROPANE | .05 | mg/L | U | N | N | U | R | | 16 | | | | D134-02T | 11:07 |
| | | | | 2-BUTANONE | .2 | mg/L | U | N | N | U | R | | 16 | | | | D134-02T | 11:07 |
| | | | | 2-CHLOROTOLUENE | .05 | mg/L | U | N | N | U | R | | 16 | | | | D134-02T | 11:07 |
| | | | | 2-HEXANONE | .2 | mg/L | U | N | N | U | R | | 16 | | | | D134-02T | 11:07 |
| | | | | 4-CHLOROTOLUENE | .05 | mg/L | U | N | N | U | R | | 16 | | | | D134-02T | 11:07 |
| | | | | 4-METHYL-2-PENTANONE | .1 | mg/L | U | N | N | U | R | | 16 | | | | D134-02T | 11:07 |
| | | | | ACETONE | .82 | mg/L | | Y | Y | P | J | | 05A | 07A | | | D134-02T | 11:07 |
| | | | | BENZENE | .05 | mg/L | U | N | N | U | R | | 16 | | | | D134-02T | 11:07 |
| | | | | BROMOBENZENE | .05 | mg/L | U | N | N | U | R | | 16 | | | | D134-02T | 11:07 |
| | | | | BROMOCHLOROMETHANE | .05 | mg/L | U | N | N | U | R | | 16 | | | | D134-02T | 11:07 |
| | | | | BROMODICHLOROMETHANE | .05 | mg/L | U | N | N | U | R | | 16 | | | | D134-02T | 11:07 |
| | | | | BROMOFORM | .05 | mg/L | U | N | N | U | R | | 16 | | | | D134-02T | 11:07 |
| | | | | BROMOMETHANE | .05 | mg/L | U | N | N | U | R | | 16 | | | | D134-02T | 11:07 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **0232QX-10** | | | | | | | | | | | | | | | | | | |
| ECC3017 | SW8260B | SW5030 | N 1 10 | CARBON DISULFIDE | .05 | mg/L | U | N | N | U | R | | 16 | | | | D134-02T | 11:07 |
| | | | | CARBON TETRACHLORIDE | .05 | mg/L | U | N | N | U | R | | 16 | | | | D134-02T | 11:07 |
| | | | | CHLOROBENZENE | .05 | mg/L | U | N | N | U | R | | 16 | | | | D134-02T | 11:07 |
| | | | | CHLOROETHANE | .05 | mg/L | U | N | N | U | R | | 16 | | | | D134-02T | 11:07 |
| | | | | CHLOROFORM | .05 | mg/L | U | N | N | U | R | | 16 | | | | D134-02T | 11:07 |
| | | | | CHLOROMETHANE | .05 | mg/L | U | N | N | U | R | | 16 | | | | D134-02T | 11:07 |
| | | | | CIS-1,2-DICHLOROETHENE | .05 | mg/L | U | N | N | U | R | | 16 | | | | D134-02T | 11:07 |
| | | | | CIS-1,3-DICHLOROPROPENE | .05 | mg/L | U | N | N | U | R | | 16 | | | | D134-02T | 11:07 |
| | | | | DIBROMOCHLOROMETHANE | .05 | mg/L | U | N | N | U | R | | 16 | | | | D134-02T | 11:07 |
| | | | | DIBROMOMETHANE | .05 | mg/L | U | N | N | U | R | | 16 | | | | D134-02T | 11:07 |
| | | | | DICHLORODIFLUOROMETHANE | .05 | mg/L | U | N | N | U | R | | 16 | | | | D134-02T | 11:07 |
| | | | | ETHYLBENZENE | .05 | mg/L | U | N | N | U | R | | 16 | | | | D134-02T | 11:07 |
| | | | | HEXACHLOROBUTADIENE | .05 | mg/L | U | N | N | U | R | | 16 | | | | D134-02T | 11:07 |
| | | | | ISOPROPYL BENZENE | .05 | mg/L | U | N | N | U | R | | 16 | | | | D134-02T | 11:07 |
| | | | | M/P-XYLENES | .1 | mg/L | U | N | N | U | R | | 16 | | | | D134-02T | 11:07 |
| | | | | METHYLENE CHLORIDE | .05 | mg/L | U | N | N | U | R | | 16 | | | | D134-02T | 11:07 |
| | | | | N-BUTYLBENZENE | .05 | mg/L | U | N | N | U | R | | 16 | | | | D134-02T | 11:07 |
| | | | | N-PROPYLBENZENE | .05 | mg/L | U | N | N | U | R | | 16 | | | | D134-02T | 11:07 |
| | | | | NAPHTHALENE | .05 | mg/L | U | N | N | U | R | | 16 | | | | D134-02T | 11:07 |
| | | | | O-XYLENE | .05 | mg/L | U | N | N | U | R | | 16 | | | | D134-02T | 11:07 |
| | | | | P-ISOPROPYLTOLUENE | .05 | mg/L | U | N | N | U | R | | 16 | | | | D134-02T | 11:07 |
| | | | | SEC-BUTYLBENZENE | .05 | mg/L | U | N | N | U | R | | 16 | | | | D134-02T | 11:07 |
| | | | | STYRENE | .05 | mg/L | U | N | N | U | R | | 16 | | | | D134-02T | 11:07 |
| | | | | TERT-BUTYLBENZENE | .05 | mg/L | U | N | N | U | R | | 16 | | | | D134-02T | 11:07 |
| | | | | TETRACHLOROETHENE | .05 | mg/L | U | N | N | U | R | | 16 | | | | D134-02T | 11:07 |
| | | | | TOLUENE | .05 | mg/L | U | N | N | U | R | | 16 | | | | D134-02T | 11:07 |
| | | | | TRANS-1,2-DICHLOROETHENE | .05 | mg/L | U | N | N | U | R | | 16 | | | | D134-02T | 11:07 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .05 | mg/L | U | N | N | U | R | | 16 | | | | D134-02T | 11:07 |
| | | | | TRICHLOROETHENE | .05 | mg/L | U | N | N | U | R | | 16 | | | | D134-02T | 11:07 |
| | | | | TRICHLOROFLUOROMETHANE | .05 | mg/L | U | N | N | U | R | | 16 | | | | D134-02T | 11:07 |
| | | | | VINYL CHLORIDE | .05 | mg/L | U | N | N | U | R | | 16 | | | | D134-02T | 11:07 |
| ECC3018 | SW8260B | SW5030 | N 0 1 | 1,1,1,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-03R | 11:42 |
| | | | | 1,1,1-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-03R | 11:42 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-03R | 11:42 |
| | | | | 1,1,2-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-03R | 11:42 |
| | | | | 1,1-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-03R | 11:42 |
| | | | | 1,1-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-03R | 11:42 |
| | | | | 1,1-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-03R | 11:42 |
| | | | | 1,2,3-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-03R | 11:42 |
| | | | | 1,2,3-TRICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-03R | 11:42 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **0232QX-10** | | | | | | | | | | | | | | | | | | |
| ECC3018 | SW8260B | SW5030 | N 0 1 | 1,2,4-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-03R | 11:42 |
| | | | | 1,2,4-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-03R | 11:42 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .01 | mg/L | U | N | Y | U | U | | | | | | D134-03R | 11:42 |
| | | | | 1,2-DIBROMOETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-03R | 11:42 |
| | | | | 1,2-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-03R | 11:42 |
| | | | | 1,2-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-03R | 11:42 |
| | | | | 1,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-03R | 11:42 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-03R | 11:42 |
| | | | | 1,3-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-03R | 11:42 |
| | | | | 1,3-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-03R | 11:42 |
| | | | | 1,4-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-03R | 11:42 |
| | | | | 2,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-03R | 11:42 |
| | | | | 2-BUTANONE | .02 | mg/L | U | N | Y | U | U | | | | | | D134-03R | 11:42 |
| | | | | 2-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-03R | 11:42 |
| | | | | 2-HEXANONE | .02 | mg/L | U | N | Y | U | U | | | | | | D134-03R | 11:42 |
| | | | | 4-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-03R | 11:42 |
| | | | | 4-METHYL-2-PENTANONE | .01 | mg/L | U | N | Y | U | U | | | | | | D134-03R | 11:42 |
| | | | | ACETONE | .02 | mg/L | U | N | Y | U | R | | 05A | | | | D134-03R | 11:42 |
| | | | | BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-03R | 11:42 |
| | | | | BROMOBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-03R | 11:42 |
| | | | | BROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-03R | 11:42 |
| | | | | BROMODICHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-03R | 11:42 |
| | | | | BROMOFORM | .005 | mg/L | U | N | Y | U | U | | | | | | D134-03R | 11:42 |
| | | | | BROMOMETHANE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | D134-03R | 11:42 |
| | | | | CARBON DISULFIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-03R | 11:42 |
| | | | | CARBON TETRACHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-03R | 11:42 |
| | | | | CHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-03R | 11:42 |
| | | | | CHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-03R | 11:42 |
| | | | | CHLOROFORM | .005 | mg/L | U | N | Y | U | U | | | | | | D134-03R | 11:42 |
| | | | | CHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-03R | 11:42 |
| | | | | CIS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-03R | 11:42 |
| | | | | CIS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-03R | 11:42 |
| | | | | DIBROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-03R | 11:42 |
| | | | | DIBROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-03R | 11:42 |
| | | | | DICHLORODIFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-03R | 11:42 |
| | | | | ETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-03R | 11:42 |
| | | | | HEXACHLOROBUTADIENE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-03R | 11:42 |
| | | | | ISOPROPYL BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-03R | 11:42 |
| | | | | M/P-XYLENES | .01 | mg/L | U | N | Y | U | U | | | | | | D134-03R | 11:42 |
| | | | | METHYLENE CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-03R | 11:42 |

# Validation Qualifier Data Entry Verification

Run Date: October 9, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **0232QX-10** | | | | | | | | | | | | | | | | | | |
| ECC3018 | SW8260B | SW5030 | N 0 1 | N-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-03R | 11:42 |
| | | | | N-PROPYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-03R | 11:42 |
| | | | | NAPHTHALENE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-03R | 11:42 |
| | | | | O-XYLENE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-03R | 11:42 |
| | | | | P-ISOPROPYLTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-03R | 11:42 |
| | | | | SEC-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-03R | 11:42 |
| | | | | STYRENE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-03R | 11:42 |
| | | | | TERT-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-03R | 11:42 |
| | | | | TETRACHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-03R | 11:42 |
| | | | | TOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-03R | 11:42 |
| | | | | TRANS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-03R | 11:42 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-03R | 11:42 |
| | | | | TRICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-03R | 11:42 |
| | | | | TRICHLOROFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-03R | 11:42 |
| | | | | VINYL CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D134-03R | 11:42 |
| **0232QX-11** | | | | | | | | | | | | | | | | | | |
| ECC0047 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 17900 | mg/kg | | Y | Y | P | J | | 08A | | | | D151-01 | 23:02 |
| | | | | ANTIMONY | 14.2 | mg/kg | U | N | Y | U | UJ | | 08A | | | | D151-01 | 23:02 |
| | | | | ARSENIC | 7.8 | mg/kg | | Y | Y | P | | | | | | | D151-01 | 21:24 |
| | | | | BARIUM | 250 | mg/kg | | Y | Y | P | | | | | | | D151-01 | 23:02 |
| | | | | BERYLLIUM | 1.33 | mg/kg | J | Y | Y | P | J | | 15 | | | | D151-01 | 23:02 |
| | | | | CADMIUM | .708 | mg/kg | U | N | Y | U | U | | | | | | D151-01 | 23:02 |
| | | | | CALCIUM | 391 | mg/kg | | Y | Y | P | | | | | | | D151-01 | 23:02 |
| | | | | CHROMIUM | 30.2 | mg/kg | | Y | Y | P | | | | | | | D151-01 | 23:02 |
| | | | | COBALT | 8.74 | mg/kg | | Y | Y | P | | | | | | | D151-01 | 23:02 |
| | | | | COPPER | 17 | mg/kg | | Y | Y | P | | | | | | | D151-01 | 23:02 |
| | | | | IRON | 24400 | mg/kg | | Y | Y | P | J | | 08A | | | | D151-01 | 23:02 |
| | | | | LEAD | 33.6 | mg/kg | | Y | Y | P | | | | | | | D151-01 | 21:24 |
| | | | | MAGNESIUM | 1130 | mg/kg | | Y | Y | P | | | | | | | D151-01 | 23:02 |
| | | | | MANGANESE | 1540 | mg/kg | | Y | Y | P | J | | 08A | | | | D151-01 | 23:02 |
| | | | | NICKEL | 10.2 | mg/kg | | Y | Y | P | | | | | | | D151-01 | 23:02 |
| | | | | POTASSIUM | 989 | mg/kg | | Y | Y | P | | | | | | | D151-01 | 23:02 |
| | | | | SELENIUM | 1.42 | mg/kg | U | N | Y | U | U | | | | | | D151-01 | 21:24 |
| | | | | SILVER | 1.42 | mg/kg | U | N | Y | U | UJ | | 11A | 11B | | | D151-01 | 23:02 |
| | | | | SODIUM | 142 | mg/kg | U | N | Y | U | U | | | | | | D151-01 | 23:02 |
| | | | | THALLIUM | 2.83 | mg/kg | U | N | Y | U | U | | | | | | D151-01 | 21:24 |
| | | | | VANADIUM | 30.2 | mg/kg | | Y | Y | P | | | | | | | D151-01 | 23:02 |
| | | | | ZINC | 59.1 | mg/kg | | Y | Y | P | J | | 08A | 08B | | | D151-01 | 23:02 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | 0.070 | mg/kg | J | Y | Y | P | J | | 15 | | | | D151-01 | 12:01 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **0232QX-11** | | | | | | | | | | | | | | | | | | |
| ECC0048 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 8470 | mg/kg | | Y | Y | P | J | | 08A | | | | D151-02 | 23:07 |
| | | | | ANTIMONY | 12.7 | mg/kg | U | N | Y | U | UJ | | 08A | | | | D151-02 | 23:07 |
| | | | | ARSENIC | 10.2 | mg/kg | | Y | Y | P | | | | | | | D151-02 | 20:36 |
| | | | | BARIUM | 22.4 | mg/kg | | Y | Y | P | | | | | | | D151-02 | 23:07 |
| | | | | BERYLLIUM | .507 | mg/kg | J | Y | Y | P | J | | 15 | | | | D151-02 | 23:07 |
| | | | | CADMIUM | .635 | mg/kg | U | N | Y | U | U | | | | | | D151-02 | 23:07 |
| | | | | CALCIUM | 136 | mg/kg | | Y | Y | P | | | | | | | D151-02 | 23:07 |
| | | | | CHROMIUM | 13.4 | mg/kg | | Y | Y | P | | | | | | | D151-02 | 23:07 |
| | | | | COBALT | 3.05 | mg/kg | | Y | Y | P | | | | | | | D151-02 | 23:07 |
| | | | | COPPER | 5.92 | mg/kg | | Y | Y | P | | | | | | | D151-02 | 23:07 |
| | | | | IRON | 42500 | mg/kg | | Y | Y | P | J | | 08A | | | | D151-02 | 23:07 |
| | | | | LEAD | 14.2 | mg/kg | | Y | Y | P | | | | | | | D151-02 | 20:36 |
| | | | | MAGNESIUM | 213 | mg/kg | | Y | Y | P | | | | | | | D151-02 | 23:07 |
| | | | | MANGANESE | 107 | mg/kg | | Y | Y | P | J | | 08A | | | | D151-02 | 23:07 |
| | | | | NICKEL | 3.81 | mg/kg | | Y | Y | P | | | | | | | D151-02 | 23:07 |
| | | | | POTASSIUM | 353 | mg/kg | J | Y | Y | F | B | | 06A | 15 | | | D151-02 | 23:07 |
| | | | | SELENIUM | 1.27 | mg/kg | U | N | Y | U | U | | | | | | D151-02 | 20:36 |
| | | | | SILVER | 1.27 | mg/kg | U | N | Y | U | UJ | | 11A | 11B | | | D151-02 | 23:07 |
| | | | | SODIUM | 127 | mg/kg | U | N | Y | U | U | | | | | | D151-02 | 23:07 |
| | | | | THALLIUM | 1.15 | mg/kg | J | Y | Y | P | J | | 15 | | | | D151-02 | 20:36 |
| | | | | VANADIUM | 34 | mg/kg | | Y | Y | P | | | | | | | D151-02 | 23:07 |
| | | | | ZINC | 21.7 | mg/kg | | Y | Y | P | J | | 08A | 08B | | | D151-02 | 23:07 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .127 | mg/kg | U | N | Y | U | U | | | | | | D151-02 | 12:17 |
| ECC0049 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 7110 | mg/kg | | Y | Y | P | J | | 08A | | | | D151-03 | 23:12 |
| | | | | ANTIMONY | 12.6 | mg/kg | U | N | Y | U | UJ | | 08A | | | | D151-03 | 23:12 |
| | | | | ARSENIC | 5.08 | mg/kg | | Y | Y | P | | | | | | | D151-03 | 20:41 |
| | | | | BARIUM | 48.4 | mg/kg | | Y | Y | P | | | | | | | D151-03 | 23:12 |
| | | | | BERYLLIUM | .351 | mg/kg | J | Y | Y | P | J | | 15 | | | | D151-03 | 23:12 |
| | | | | CADMIUM | .631 | mg/kg | U | N | Y | U | U | | | | | | D151-03 | 23:12 |
| | | | | CALCIUM | 183 | mg/kg | | Y | Y | P | | | | | | | D151-03 | 23:12 |
| | | | | CHROMIUM | 7.03 | mg/kg | | Y | Y | P | | | | | | | D151-03 | 23:12 |
| | | | | COBALT | 3.38 | mg/kg | | Y | Y | P | | | | | | | D151-03 | 23:12 |
| | | | | COPPER | 3.41 | mg/kg | | Y | Y | P | | | | | | | D151-03 | 23:12 |
| | | | | IRON | 10900 | mg/kg | | Y | Y | P | J | | 08A | | | | D151-03 | 23:12 |
| | | | | LEAD | 24.1 | mg/kg | | Y | Y | P | | | | | | | D151-03 | 20:41 |
| | | | | MAGNESIUM | 388 | mg/kg | | Y | Y | P | | | | | | | D151-03 | 23:12 |
| | | | | MANGANESE | 285 | mg/kg | | Y | Y | P | J | | 08A | | | | D151-03 | 23:12 |
| | | | | NICKEL | 3.77 | mg/kg | | Y | Y | P | | | | | | | D151-03 | 23:12 |
| | | | | POTASSIUM | 297 | mg/kg | J | Y | Y | F | B | | 06A | 15 | | | D151-03 | 23:12 |
| | | | | SELENIUM | 1.26 | mg/kg | U | N | Y | U | U | | | | | | D151-03 | 20:41 |

# Validation Qualifier Data Entry Verification

Run Date: October 9, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **0232QX-11** | | | | | | | | | | | | | | | | | | | | |
| ECC0049 | SW6010B | SW3050 | N | 0 | 1 | SILVER | 1.26 | mg/kg | U | N | Y | U | UJ | | 11A | 11B | | | D151-03 | 23:12 |
| | | | | | | SODIUM | 126 | mg/kg | U | N | Y | U | U | | | | | | D151-03 | 23:12 |
| | | | | | | THALLIUM | 2.52 | mg/kg | U | N | Y | U | U | | | | | | D151-03 | 20:41 |
| | | | | | | VANADIUM | 14.2 | mg/kg | | Y | Y | P | | | | | | | D151-03 | 23:12 |
| | | | | | | ZINC | 21.6 | mg/kg | | Y | Y | P | J | | 08A | 08B | | | D151-03 | 23:12 |
| | SW7471A | TOTAL | N | 0 | 1 | MERCURY | 0.04 | mg/kg | | Y | Y | P | | | | | | | D151-03 | 12:19 |
| ECC0050 | SW6010B | SW3050 | N | 0 | 1 | ALUMINUM | 4660 | mg/kg | | Y | Y | P | J | | 08A | | | | D151-04 | 23:17 |
| | | | | | | ANTIMONY | 12.5 | mg/kg | U | N | Y | U | UJ | | 08A | | | | D151-04 | 23:17 |
| | | | | | | ARSENIC | 2.69 | mg/kg | | Y | Y | P | | | | | | | D151-04 | 20:45 |
| | | | | | | BARIUM | 38.5 | mg/kg | | Y | Y | P | | | | | | | D151-04 | 23:17 |
| | | | | | | BERYLLIUM | .243 | mg/kg | J | Y | Y | P | J | | 15 | | | | D151-04 | 23:17 |
| | | | | | | CADMIUM | .624 | mg/kg | U | N | Y | U | U | | | | | | D151-04 | 23:17 |
| | | | | | | CALCIUM | 175 | mg/kg | | Y | Y | P | | | | | | | D151-04 | 23:17 |
| | | | | | | CHROMIUM | 4.8 | mg/kg | | Y | Y | P | | | | | | | D151-04 | 23:17 |
| | | | | | | COBALT | 2.3 | mg/kg | J | Y | Y | P | J | | 15 | | | | D151-04 | 23:17 |
| | | | | | | COPPER | 5.45 | mg/kg | | Y | Y | P | | | | | | | D151-04 | 23:17 |
| | | | | | | IRON | 4190 | mg/kg | | Y | Y | P | J | | 08A | | | | D151-04 | 23:17 |
| | | | | | | LEAD | 41.9 | mg/kg | | Y | Y | P | | | | | | | D151-04 | 20:45 |
| | | | | | | MAGNESIUM | 251 | mg/kg | | Y | Y | P | | | | | | | D151-04 | 23:17 |
| | | | | | | MANGANESE | 161 | mg/kg | | Y | Y | P | J | | 08A | | | | D151-04 | 23:17 |
| | | | | | | NICKEL | 3.57 | mg/kg | | Y | Y | P | | | | | | | D151-04 | 23:17 |
| | | | | | | POTASSIUM | 172 | mg/kg | J | Y | Y | F | B | | 06A | 15 | 17 | | D151-04 | 23:17 |
| | | | | | | SELENIUM | 1.25 | mg/kg | U | N | Y | U | U | | | | | | D151-04 | 20:45 |
| | | | | | | SILVER | 1.25 | mg/kg | U | N | Y | U | UJ | | 11A | 11B | | | D151-04 | 23:17 |
| | | | | | | SODIUM | 125 | mg/kg | U | N | Y | U | U | | | | | | D151-04 | 23:17 |
| | | | | | | THALLIUM | 2.5 | mg/kg | U | N | Y | U | U | | | | | | D151-04 | 20:45 |
| | | | | | | VANADIUM | 7.28 | mg/kg | | Y | Y | P | | | | | | | D151-04 | 23:17 |
| | | | | | | ZINC | 20.5 | mg/kg | | Y | Y | P | J | | 08A | 08B | | | D151-04 | 23:17 |
| | SW7471A | TOTAL | N | 0 | 1 | MERCURY | .084 | mg/kg | J | Y | Y | P | J | | 15 | 17 | | | D151-04 | 12:26 |
| ECC0051 | SW6010B | SW3050 | N | 0 | 1 | ALUMINUM | 5840 | mg/kg | | Y | Y | | J | | 08A | | | | D151-05 | 23:22 |
| | | | | | | ANTIMONY | 15.3 | mg/kg | U | N | Y | | UJ | | 08A | | | | D151-05 | 23:22 |
| | | | | | | ARSENIC | 3.68 | mg/kg | | Y | Y | | | | | | | | D151-05 | 20:50 |
| | | | | | | BARIUM | 43.7 | mg/kg | | Y | Y | | | | | | | | D151-05 | 23:22 |
| | | | | | | BERYLLIUM | .337 | mg/kg | J | Y | Y | | J | | 15 | | | | D151-05 | 23:22 |
| | | | | | | CADMIUM | .767 | mg/kg | U | N | Y | | U | | | | | | D151-05 | 23:22 |
| | | | | | | CALCIUM | 209 | mg/kg | | Y | Y | | | | | | | | D151-05 | 23:22 |
| | | | | | | CHROMIUM | 6.67 | mg/kg | | Y | Y | | | | | | | | D151-05 | 23:22 |
| | | | | | | COBALT | 3.44 | mg/kg | | Y | Y | | | | | | | | D151-05 | 23:22 |
| | | | | | | COPPER | 6.47 | mg/kg | | Y | Y | | | | | | | | D151-05 | 23:22 |
| | | | | | | IRON | 5570 | mg/kg | | Y | Y | | J | | 08A | | | | D151-05 | 23:22 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **0232QX-11** | | | | | | | | | | | | | | | | | | |
| ECC0051 | SW6010B | SW3050 | N 0 1 | LEAD | 55.9 | mg/kg | | Y | Y | | | | | | | | D151-05 | 20:50 |
| | | | | MAGNESIUM | 347 | mg/kg | | Y | Y | | | | | | | | D151-05 | 23:22 |
| | | | | MANGANESE | 149 | mg/kg | | Y | Y | | J | | 08A | | | | D151-05 | 23:22 |
| | | | | NICKEL | 4.19 | mg/kg | | Y | Y | | | | | | | | D151-05 | 23:22 |
| | | | | POTASSIUM | 388 | mg/kg | J | Y | Y | | B | | 06A | 15 | 17 | | D151-05 | 23:22 |
| | | | | SELENIUM | 1.53 | mg/kg | U | N | Y | | U | | | | | | D151-05 | 20:50 |
| | | | | SILVER | 1.13 | mg/kg | J | Y | Y | | J | | 11A | 11B | 15 | | D151-05 | 23:22 |
| | | | | SODIUM | 153 | mg/kg | U | N | Y | | U | | | | | | D151-05 | 23:22 |
| | | | | THALLIUM | 3.07 | mg/kg | U | N | Y | | U | | | | | | D151-05 | 20:50 |
| | | | | VANADIUM | 10.6 | mg/kg | | Y | Y | | | | | | | | D151-05 | 23:22 |
| | | | | ZINC | 22.6 | mg/kg | | Y | Y | | | | 08A | | | | D151-05 | 23:22 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .050 | mg/kg | J | Y | Y | | J | | 15 | 17 | | | D151-05 | 12:29 |
| ECC0047 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D151-01 | 16:51 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D151-01 | 16:51 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D151-01 | 16:51 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D151-01 | 16:51 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D151-01 | 16:51 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D151-01 | 16:51 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D151-01 | 16:51 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D151-01 | 16:51 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D151-01 | 16:51 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D151-01 | 16:51 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | D151-01 | 16:51 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D151-01 | 16:51 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | D151-01 | 16:51 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | D151-01 | 16:51 |
| ECC0048 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D151-02 | 14:18 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D151-02 | 14:18 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D151-02 | 14:18 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D151-02 | 14:18 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D151-02 | 14:18 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D151-02 | 14:18 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D151-02 | 14:18 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D151-02 | 14:18 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D151-02 | 14:18 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D151-02 | 14:18 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | D151-02 | 14:18 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D151-02 | 14:18 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | D151-02 | 14:18 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | D151-02 | 14:18 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **0232QX-11** | | | | | | | | | | | | | | | | | | |
| ECC0049 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D151-03 | 14:56 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D151-03 | 14:56 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D151-03 | 14:56 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D151-03 | 14:56 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D151-03 | 14:56 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D151-03 | 14:56 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D151-03 | 14:56 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D151-03 | 14:56 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D151-03 | 14:56 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D151-03 | 14:56 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | D151-03 | 14:56 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D151-03 | 14:56 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | D151-03 | 14:56 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | D151-03 | 14:56 |
| ECC0050 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D151-04 | 18:48 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D151-04 | 18:48 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D151-04 | 18:48 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D151-04 | 18:48 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D151-04 | 18:48 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D151-04 | 18:48 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D151-04 | 18:48 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D151-04 | 18:48 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D151-04 | 18:48 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D151-04 | 18:48 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | D151-04 | 18:48 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D151-04 | 18:48 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | D151-04 | 18:48 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | D151-04 | 18:48 |
| ECC0051 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | | U | | | | | | D151-05 | 19:27 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | | U | | | | | | D151-05 | 19:27 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | | U | | | | | | D151-05 | 19:27 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | | U | | | | | | D151-05 | 19:27 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | | U | | | | | | D151-05 | 19:27 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | | U | | | | | | D151-05 | 19:27 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | | U | | | | | | D151-05 | 19:27 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | | U | | | | | | D151-05 | 19:27 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | | U | | | | | | D151-05 | 19:27 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | | U | | | | | | D151-05 | 19:27 |
| | | | | HMX | .4 | mg/kg | U | N | Y | | U | | | | | | D151-05 | 19:27 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | | U | | | | | | D151-05 | 19:27 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **0232QX-11** | | | | | | | | | | | | | | | | | | | | |
| ECC0051 | SW8330 | METHOD | N | 0 | 1 | RDX | .4 | mg/kg | U | N | Y | | U | | | | | | D151-05 | 19:27 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | | U | | | | | | D151-05 | 19:27 |
| ECC0047 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0708 | mg/kg | U | N | Y | U | U | | | | | | D151-01 | 15:50 |
| ECC0048 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0635 | mg/kg | U | N | Y | U | U | | | | | | D151-02 | 14:49 |
| ECC0049 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0631 | mg/kg | U | N | Y | U | U | | | | | | D151-03 | 15:07 |
| ECC0050 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0624 | mg/kg | U | N | Y | U | U | | | | | | D151-04 | 16:49 |
| ECC0051 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0767 | mg/kg | U | N | Y | | U | | | | | | D151-05 | 17:14 |
| **0232QX-12** | | | | | | | | | | | | | | | | | | | | |
| ECC3007 | SW6010B | SW3010 | N | 0 | 1 | ALUMINUM | .146 | mg/L | J | Y | Y | F | B | | 06A | 15 | | | D214-02 | 23:24 |
| | | | | | | ANTIMONY | .0284 | mg/L | J | Y | Y | P | J | | 15 | | | | D214-02 | 23:24 |
| | | | | | | ARSENIC | .01 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 23:16 |
| | | | | | | BARIUM | .0145 | mg/L | | Y | Y | P | | | | | | | D214-02 | 23:24 |
| | | | | | | BERYLLIUM | .001 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 23:24 |
| | | | | | | CADMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 23:24 |
| | | | | | | CALCIUM | .403 | mg/L | J | Y | Y | F | B | | 06C | 15 | | | D214-02 | 23:24 |
| | | | | | | CHROMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 23:24 |
| | | | | | | COBALT | .0146 | mg/L | J | Y | Y | P | J | | 15 | | | | D214-02 | 23:24 |
| | | | | | | COPPER | .00405 | mg/L | J | Y | Y | F | B | | 06A | 06B | 15 | | D214-02 | 23:24 |
| | | | | | | IRON | .0975 | mg/L | J | Y | Y | P | J | | 15 | | | | D214-02 | 23:24 |
| | | | | | | LEAD | .01 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 23:16 |
| | | | | | | MAGNESIUM | .4 | mg/L | J | Y | Y | F | B | | 06C | 15 | | | D214-02 | 23:24 |
| | | | | | | MANGANESE | .119 | mg/L | | Y | Y | P | | | | | | | D214-02 | 23:24 |
| | | | | | | NICKEL | .0137 | mg/L | J | Y | Y | F | B | | 06A | 06B | | | D214-02 | 23:24 |
| | | | | | | POTASSIUM | 5 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 23:24 |
| | | | | | | SELENIUM | .00319 | mg/L | J | Y | Y | F | B | | 06C | 15 | | | D214-02 | 23:16 |
| | | | | | | SILVER | .00572 | mg/L | J | Y | Y | F | B | | 06A | 06B | 15 | | D214-02 | 23:24 |
| | | | | | | SODIUM | 1.74 | mg/L | | Y | Y | F | B | | 06B | | | | D214-02 | 23:24 |
| | | | | | | THALLIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 23:16 |
| | | | | | | VANADIUM | .00668 | mg/L | J | Y | Y | F | B | | 06A | 06B | 15 | | D214-02 | 23:24 |
| | | | | | | ZINC | .02 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 23:24 |
| | SW7470A | TOTAL | N | 0 | 1 | MERCURY | .0005 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 17:17 |
| ECC3007 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 22:42 |
| | | | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 22:42 |
| | | | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 22:42 |
| | | | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 22:42 |
| | | | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 22:42 |
| | | | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 22:42 |
| | | | | | | 2-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 22:42 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **0232QX-12** | | | | | | | | | | | | | | | | | | |
| ECC3007 | SW8330 | METHOD | N 0 1 | 3-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 22:42 |
| | | | | 4-AM-2,6-DNT | .00039 | mg/L | J | Y | Y | P | J | | 15 | | | | D214-02 | 22:42 |
| | | | | 4-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 22:42 |
| | | | | HMX | .001 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 22:42 |
| | | | | NITROBENZENE | .0004 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 22:42 |
| | | | | RDX | .0004 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 22:42 |
| | | | | TETRYL | .0004 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 22:42 |
| ECC3007 | E314.0 | NONE | N 0 1 | PERCHLORATE | .005 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 14:29 |
| ECC3007 | SW8260B | SW5030 | N 0 1 | 1,1,1,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 05:23 |
| | | | | 1,1,1-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 05:23 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 05:23 |
| | | | | 1,1,2-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 05:23 |
| | | | | 1,1-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 05:23 |
| | | | | 1,1-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 05:23 |
| | | | | 1,1-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 05:23 |
| | | | | 1,2,3-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 05:23 |
| | | | | 1,2,3-TRICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 05:23 |
| | | | | 1,2,4-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 05:23 |
| | | | | 1,2,4-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 05:23 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .01 | mg/L | U | N | Y | U | R | | 05A | | | | D214-02 | 05:23 |
| | | | | 1,2-DIBROMOETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 05:23 |
| | | | | 1,2-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 05:23 |
| | | | | 1,2-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 05:23 |
| | | | | 1,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 05:23 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 05:23 |
| | | | | 1,3-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 05:23 |
| | | | | 1,3-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 05:23 |
| | | | | 1,4-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 05:23 |
| | | | | 2,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 05:23 |
| | | | | 2-BUTANONE | .02 | mg/L | U | N | Y | U | UJ | | 05B | | | | D214-02 | 05:23 |
| | | | | 2-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 05:23 |
| | | | | 2-HEXANONE | .02 | mg/L | U | N | Y | U | UJ | | 05B | | | | D214-02 | 05:23 |
| | | | | 4-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 05:23 |
| | | | | 4-METHYL-2-PENTANONE | .01 | mg/L | U | N | Y | U | UJ | | 05B | | | | D214-02 | 05:23 |
| | | | | ACETONE | .02 | mg/L | U | N | N | P | R | | 05A | 05B | | | D214-02 | 05:23 |
| | | | | BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 05:23 |
| | | | | BROMOBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 05:23 |
| | | | | BROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 05:23 |
| | | | | BROMODICHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 05:23 |
| | | | | BROMOFORM | .005 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 05:23 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **0232QX-12** | | | | | | | | | | | | | | | | | | |
| ECC3007 | SW8260B | SW5030 | N 0 1 | BROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 05:23 |
| | | | | CARBON DISULFIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 05:23 |
| | | | | CARBON TETRACHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 05:23 |
| | | | | CHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 05:23 |
| | | | | CHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 05:23 |
| | | | | CHLOROFORM | .005 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 05:23 |
| | | | | CHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 05:23 |
| | | | | CIS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 05:23 |
| | | | | CIS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 05:23 |
| | | | | DIBROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 05:23 |
| | | | | DIBROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 05:23 |
| | | | | DICHLORODIFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 05:23 |
| | | | | ETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 05:23 |
| | | | | HEXACHLOROBUTADIENE | .005 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 05:23 |
| | | | | ISOPROPYL BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 05:23 |
| | | | | M/P-XYLENES | .01 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 05:23 |
| | | | | METHYLENE CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 05:23 |
| | | | | N-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 05:23 |
| | | | | N-PROPYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 05:23 |
| | | | | NAPHTHALENE | .005 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 05:23 |
| | | | | O-XYLENE | .005 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 05:23 |
| | | | | P-ISOPROPYLTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 05:23 |
| | | | | SEC-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 05:23 |
| | | | | STYRENE | .005 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 05:23 |
| | | | | TERT-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 05:23 |
| | | | | TETRACHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 05:23 |
| | | | | TOLUENE | .0013 | mg/L | J | Y | Y | P | J | | 15 | | | | D214-02 | 05:23 |
| | | | | TRANS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 05:23 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 05:23 |
| | | | | TRICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 05:23 |
| | | | | TRICHLOROFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 05:23 |
| | | | | VINYL CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D214-02 | 05:23 |
| **0232QX-13** | | | | | | | | | | | | | | | | | | |
| ECC3001 | SW6010B | SW3010 | N 0 1 | ALUMINUM | .171 | mg/L | J | Y | Y | P | J | | 08A | 13 | 15 | | D275-02 | 20:55 |
| | | | | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 20:55 |
| | | | | ARSENIC | .01 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 19:47 |
| | | | | BARIUM | .00786 | mg/L | J | Y | Y | P | J | | 15 | | | | D275-02 | 20:55 |
| | | | | BERYLLIUM | .001 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 20:55 |
| | | | | CADMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 20:55 |
| | | | | CALCIUM | .233 | mg/L | J | Y | Y | F | B | | 06C | 15 | | | D275-02 | 20:55 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **0232QX-13** | | | | | | | | | | | | | | | | | | |
| ECC3001 | SW6010B | SW3010 | N 0 1 | CHROMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 20:55 |
| | | | | COBALT | .02 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 20:55 |
| | | | | COPPER | .02 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 20:55 |
| | | | | IRON | .252 | mg/L | | Y | Y | P | J | | 13 | | | | D275-02 | 20:55 |
| | | | | LEAD | .01 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 19:47 |
| | | | | MAGNESIUM | .213 | mg/L | J | Y | Y | F | B | | 06C | | | | D275-02 | 20:55 |
| | | | | MANGANESE | .00957 | mg/L | J | Y | Y | P | J | | 15 | | | | D275-02 | 20:55 |
| | | | | NICKEL | .0142 | mg/L | J | Y | Y | F | B | | 06B | | | | D275-02 | 20:55 |
| | | | | POTASSIUM | 5 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 20:55 |
| | | | | SELENIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 19:47 |
| | | | | SILVER | .00578 | mg/L | J | Y | Y | F | B | | 06B | | | | D275-02 | 20:55 |
| | | | | SODIUM | 1.39 | mg/L | | Y | Y | P | | | | | | | D275-02 | 20:55 |
| | | | | THALLIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 19:47 |
| | | | | VANADIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 20:55 |
| | | | | ZINC | .0059 | mg/L | J | Y | Y | F | B | | 06C | | | | D275-02 | 20:55 |
| | SW7470A | TOTAL | N 0 1 | MERCURY | .0005 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 11:14 |
| ECC3010 | SW6010B | SW3010 | N 0 1 | ALUMINUM | .115 | mg/L | J | Y | Y | P | J | | 08A | 13 | 15 | | D265-02 | 20:41 |
| | | | | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 20:41 |
| | | | | ARSENIC | .01 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 19:34 |
| | | | | BARIUM | .0177 | mg/L | | Y | Y | F | B | | 06C | | | | D265-02 | 20:41 |
| | | | | BERYLLIUM | .001 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 20:41 |
| | | | | CADMIUM | .00771 | mg/L | J | Y | Y | F | B | | 06B | 15 | | | D265-02 | 20:41 |
| | | | | CALCIUM | .31 | mg/L | J | Y | Y | F | B | | 06C | 15 | | | D265-02 | 20:41 |
| | | | | CHROMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 20:41 |
| | | | | COBALT | .00979 | mg/L | J | Y | Y | P | J | | 15 | | | | D265-02 | 20:41 |
| | | | | COPPER | .0032 | mg/L | J | Y | Y | F | B | | 06B | 15 | | | D265-02 | 20:41 |
| | | | | IRON | 1.75 | mg/L | | Y | Y | P | J | | 13 | | | | D265-02 | 20:41 |
| | | | | LEAD | .01 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 19:34 |
| | | | | MAGNESIUM | 1.67 | mg/L | | Y | Y | F | B | | 06C | | | | D265-02 | 20:41 |
| | | | | MANGANESE | .0302 | mg/L | | Y | Y | F | B | | 06B | | | | D265-02 | 20:41 |
| | | | | NICKEL | .0203 | mg/L | | Y | Y | F | B | | 06B | | | | D265-02 | 20:41 |
| | | | | POTASSIUM | 5 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 20:41 |
| | | | | SELENIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 19:34 |
| | | | | SILVER | .01 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 20:41 |
| | | | | SODIUM | 1.06 | mg/L | | Y | Y | P | | | | | | | D265-02 | 20:41 |
| | | | | THALLIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 19:34 |
| | | | | VANADIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 20:41 |
| | | | | ZINC | .0386 | mg/L | | Y | Y | F | B | | 06C | | | | D265-02 | 20:41 |
| | SW7470A | TOTAL | N 0 1 | MERCURY | .0005 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 11:06 |
| ECC3019 | SW6010B | SW3010 | N 0 1 | ALUMINUM | .301 | mg/L | | Y | Y | P | J | | 08A | 13 | | | D265-03 | 20:46 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **0232QX-13** | | | | | | | | | | | | | | | | | | |
| ECC3019 | SW6010B | SW3010 | N 0 1 | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 20:46 |
| | | | | ARSENIC | .01 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 19:38 |
| | | | | BARIUM | .068 | mg/L | | Y | Y | P | | | | | | | D265-03 | 20:46 |
| | | | | BERYLLIUM | .001 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 20:46 |
| | | | | CADMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 20:46 |
| | | | | CALCIUM | 33.7 | mg/L | | Y | Y | P | | | | | | | D265-03 | 20:46 |
| | | | | CHROMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 20:46 |
| | | | | COBALT | .02 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 20:46 |
| | | | | COPPER | .02 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 20:46 |
| | | | | IRON | .376 | mg/L | | Y | Y | P | J | | 13 | | | | D265-03 | 20:46 |
| | | | | LEAD | .01 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 19:38 |
| | | | | MAGNESIUM | 6.48 | mg/L | | Y | Y | P | | | | | | | D265-03 | 20:46 |
| | | | | MANGANESE | .062 | mg/L | | Y | Y | F | B | | 06B | | | | D265-03 | 20:46 |
| | | | | NICKEL | .01 | mg/L | J | Y | Y | F | B | | 06B | 15 | | | D265-03 | 20:46 |
| | | | | POTASSIUM | 5 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 20:46 |
| | | | | SELENIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 19:38 |
| | | | | SILVER | .01 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 20:46 |
| | | | | SODIUM | 1.88 | mg/L | | Y | Y | P | | | | | | | D265-03 | 20:46 |
| | | | | THALLIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 19:38 |
| | | | | VANADIUM | .01 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 20:46 |
| | | | | ZINC | .0267 | mg/L | | Y | Y | F | B | | 06C | | | | D265-03 | 20:46 |
| | SW7470A | TOTAL | N 0 1 | MERCURY | .0005 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 11:09 |
| ECC3020 | SW6010B | SW3010 | N 0 1 | ALUMINUM | .251 | mg/L | | Y | Y | | J | | 08A | 13 | | | D265-04 | 20:51 |
| | | | | ANTIMONY | .1 | mg/L | U | N | Y | | U | | | | | | D265-04 | 20:51 |
| | | | | ARSENIC | .01 | mg/L | U | N | Y | | U | | | | | | D265-04 | 19:43 |
| | | | | BARIUM | .0655 | mg/L | | Y | Y | | | | | | | | D265-04 | 20:51 |
| | | | | BERYLLIUM | .001 | mg/L | U | N | Y | | U | | | | | | D265-04 | 20:51 |
| | | | | CADMIUM | .01 | mg/L | U | N | Y | | U | | | | | | D265-04 | 20:51 |
| | | | | CALCIUM | 33 | mg/L | | Y | Y | | | | | | | | D265-04 | 20:51 |
| | | | | CHROMIUM | .01 | mg/L | U | N | Y | | U | | | | | | D265-04 | 20:51 |
| | | | | COBALT | .02 | mg/L | U | N | Y | | U | | | | | | D265-04 | 20:51 |
| | | | | COPPER | .02 | mg/L | U | N | Y | | U | | | | | | D265-04 | 20:51 |
| | | | | IRON | .356 | mg/L | | Y | Y | | J | | 13 | | | | D265-04 | 20:51 |
| | | | | LEAD | .01 | mg/L | U | N | Y | | U | | | | | | D265-04 | 19:43 |
| | | | | MAGNESIUM | 6.38 | mg/L | | Y | Y | | | | | | | | D265-04 | 20:51 |
| | | | | MANGANESE | .0595 | mg/L | | Y | Y | | | | | | | | D265-04 | 20:51 |
| | | | | NICKEL | .02 | mg/L | U | N | Y | | U | | | | | | D265-04 | 20:51 |
| | | | | POTASSIUM | 5 | mg/L | U | N | Y | | U | | | | | | D265-04 | 20:51 |
| | | | | SELENIUM | .01 | mg/L | U | N | Y | | U | | | | | | D265-04 | 19:43 |
| | | | | SILVER | .00646 | mg/L | J | Y | Y | | B | | 06B | | | | D265-04 | 20:51 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **0232QX-13** | | | | | | | | | | | | | | | | | | |
| ECC3020 | SW6010B | SW3010 | N 0 1 | SODIUM | 1.87 | mg/L | | Y | Y | | | | | | | | D265-04 | 20:51 |
| | | | | THALLIUM | .01 | mg/L | U | N | Y | | U | | | | | | D265-04 | 19:43 |
| | | | | VANADIUM | .01 | mg/L | U | N | Y | | U | | | | | | D265-04 | 20:51 |
| | | | | ZINC | .0241 | mg/L | | Y | Y | | B | | 06C | | | | D265-04 | 20:51 |
| | SW7470A | TOTAL | N 0 1 | MERCURY | .0005 | mg/L | U | N | Y | | U | | | | | | D265-04 | 11:11 |
| ECC3001 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 13:33 |
| | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 13:33 |
| | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 13:33 |
| | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 13:33 |
| | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 13:33 |
| | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 13:33 |
| | | | | 2-NITROTOLUENE | .00029 | mg/L | J | Y | Y | P | J | | 15 | | | | D275-02 | 13:33 |
| | | | | 3-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 13:33 |
| | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 13:33 |
| | | | | 4-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 13:33 |
| | | | | HMX | .001 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 13:33 |
| | | | | NITROBENZENE | .0004 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 13:33 |
| | | | | RDX | .0004 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 13:33 |
| | | | | TETRYL | .0004 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 13:33 |
| ECC3010 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 11:38 |
| | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 11:38 |
| | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 11:38 |
| | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 11:38 |
| | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 11:38 |
| | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 11:38 |
| | | | | 2-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 11:38 |
| | | | | 3-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 11:38 |
| | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 11:38 |
| | | | | 4-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 11:38 |
| | | | | HMX | .001 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 11:38 |
| | | | | NITROBENZENE | .0004 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 11:38 |
| | | | | RDX | .0004 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 11:38 |
| | | | | TETRYL | .0004 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 11:38 |
| ECC3019 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 12:16 |
| | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 12:16 |
| | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 12:16 |
| | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 12:16 |
| | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 12:16 |
| | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 12:16 |
| | | | | 2-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 12:16 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **0232QX-13** | | | | | | | | | | | | | | | | | | |
| ECC3019 | SW8330 | METHOD | N 0 1 | 3-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 12:16 |
| | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 12:16 |
| | | | | 4-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 12:16 |
| | | | | HMX | .001 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 12:16 |
| | | | | NITROBENZENE | .0004 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 12:16 |
| | | | | RDX | .0004 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 12:16 |
| | | | | TETRYL | .0004 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 12:16 |
| ECC3020 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | | U | | | | | | D265-04 | 12:54 |
| | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | | U | | | | | | D265-04 | 12:54 |
| | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | | U | | | | | | D265-04 | 12:54 |
| | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | | U | | | | | | D265-04 | 12:54 |
| | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | | U | | | | | | D265-04 | 12:54 |
| | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | | U | | | | | | D265-04 | 12:54 |
| | | | | 2-NITROTOLUENE | .0004 | mg/L | U | N | Y | | U | | | | | | D265-04 | 12:54 |
| | | | | 3-NITROTOLUENE | .0004 | mg/L | U | N | Y | | U | | | | | | D265-04 | 12:54 |
| | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N | Y | | U | | | | | | D265-04 | 12:54 |
| | | | | 4-NITROTOLUENE | .0004 | mg/L | U | N | Y | | U | | | | | | D265-04 | 12:54 |
| | | | | HMX | .001 | mg/L | U | N | Y | | U | | | | | | D265-04 | 12:54 |
| | | | | NITROBENZENE | .0004 | mg/L | U | N | Y | | U | | | | | | D265-04 | 12:54 |
| | | | | RDX | .0004 | mg/L | U | N | Y | | U | | | | | | D265-04 | 12:54 |
| | | | | TETRYL | .0004 | mg/L | U | N | Y | | U | | | | | | D265-04 | 12:54 |
| ECC3001 | E314.0 | NONE | N 0 1 | PERCHLORATE | .005 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 19:01 |
| ECC3010 | E314.0 | NONE | N 0 1 | PERCHLORATE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 17:54 |
| ECC3019 | E314.0 | NONE | N 0 1 | PERCHLORATE | .005 | mg/L | U | N | Y | U | UJ | | 02B | | | | D265-03 | 18:27 |
| ECC3020 | E314.0 | NONE | N 0 1 | PERCHLORATE | .005 | mg/L | U | N | Y | | U | | | | | | D265-04 | 18:44 |
| ECC3001 | SW8260B | SW5030 | N 0 1 | 1,1,1,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 00:46 |
| | | | | 1,1,1-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 00:46 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 00:46 |
| | | | | 1,1,2-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 00:46 |
| | | | | 1,1-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 00:46 |
| | | | | 1,1-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 00:46 |
| | | | | 1,1-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 00:46 |
| | | | | 1,2,3-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 00:46 |
| | | | | 1,2,3-TRICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 00:46 |
| | | | | 1,2,4-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 00:46 |
| | | | | 1,2,4-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 00:46 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .01 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 00:46 |
| | | | | 1,2-DIBROMOETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 00:46 |
| | | | | 1,2-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 00:46 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **0232QX-13** | | | | | | | | | | | | | | | | | | |
| ECC3001 | SW8260B | SW5030 | N 0 1 | 1,2-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 00:46 |
| | | | | 1,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 00:46 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 00:46 |
| | | | | 1,3-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 00:46 |
| | | | | 1,3-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 00:46 |
| | | | | 1,4-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 00:46 |
| | | | | 2,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 00:46 |
| | | | | 2-BUTANONE | .02 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 00:46 |
| | | | | 2-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 00:46 |
| | | | | 2-HEXANONE | .02 | mg/L | U | N | Y | U | UJ | | 05B | | | | D275-02 | 00:46 |
| | | | | 4-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 00:46 |
| | | | | 4-METHYL-2-PENTANONE | .01 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 00:46 |
| | | | | ACETONE | .02 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 00:46 |
| | | | | BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 00:46 |
| | | | | BROMOBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 00:46 |
| | | | | BROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 00:46 |
| | | | | BROMODICHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 00:46 |
| | | | | BROMOFORM | .005 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 00:46 |
| | | | | BROMOMETHANE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | D275-02 | 00:46 |
| | | | | CARBON DISULFIDE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | D275-02 | 00:46 |
| | | | | CARBON TETRACHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 00:46 |
| | | | | CHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 00:46 |
| | | | | CHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 00:46 |
| | | | | CHLOROFORM | .005 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 00:46 |
| | | | | CHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 00:46 |
| | | | | CIS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 00:46 |
| | | | | CIS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 00:46 |
| | | | | DIBROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 00:46 |
| | | | | DIBROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 00:46 |
| | | | | DICHLORODIFLUOROMETHANE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | D275-02 | 00:46 |
| | | | | ETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 00:46 |
| | | | | HEXACHLOROBUTADIENE | .005 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 00:46 |
| | | | | ISOPROPYL BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 00:46 |
| | | | | M/P-XYLENES | .01 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 00:46 |
| | | | | METHYLENE CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 00:46 |
| | | | | N-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 00:46 |
| | | | | N-PROPYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 00:46 |
| | | | | NAPHTHALENE | .005 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 00:46 |
| | | | | O-XYLENE | .005 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 00:46 |
| | | | | P-ISOPROPYLTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 00:46 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **0232QX-13** | | | | | | | | | | | | | | | | | | |
| ECC3001 | SW8260B | SW5030 | N 0 1 | SEC-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 00:46 |
| | | | | STYRENE | .005 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 00:46 |
| | | | | TERT-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 00:46 |
| | | | | TETRACHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 00:46 |
| | | | | TOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 00:46 |
| | | | | TRANS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 00:46 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 00:46 |
| | | | | TRICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 00:46 |
| | | | | TRICHLOROFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 00:46 |
| | | | | VINYL CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D275-02 | 00:46 |
| ECC3010 | SW8260B | SW5030 | N 0 1 | 1,1,1,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 22:17 |
| | | | | 1,1,1-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 22:17 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 22:17 |
| | | | | 1,1,2-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 22:17 |
| | | | | 1,1-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 22:17 |
| | | | | 1,1-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 22:17 |
| | | | | 1,1-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 22:17 |
| | | | | 1,2,3-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 22:17 |
| | | | | 1,2,3-TRICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 22:17 |
| | | | | 1,2,4-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 22:17 |
| | | | | 1,2,4-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 22:17 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .01 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 22:17 |
| | | | | 1,2-DIBROMOETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 22:17 |
| | | | | 1,2-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 22:17 |
| | | | | 1,2-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 22:17 |
| | | | | 1,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 22:17 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 22:17 |
| | | | | 1,3-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 22:17 |
| | | | | 1,3-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 22:17 |
| | | | | 1,4-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 22:17 |
| | | | | 2,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 22:17 |
| | | | | 2-BUTANONE | .02 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 22:17 |
| | | | | 2-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 22:17 |
| | | | | 2-HEXANONE | .02 | mg/L | U | N | Y | U | UJ | | 05B | | | | D265-02 | 22:17 |
| | | | | 4-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 22:17 |
| | | | | 4-METHYL-2-PENTANONE | .01 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 22:17 |
| | | | | ACETONE | .02 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 22:17 |
| | | | | BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 22:17 |
| | | | | BROMOBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 22:17 |
| | | | | BROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 22:17 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **0232QX-13** | | | | | | | | | | | | | | | | | | |
| ECC3010 | SW8260B | SW5030 | N 0 1 | BROMODICHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 22:17 |
| | | | | BROMOFORM | .005 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 22:17 |
| | | | | BROMOMETHANE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | D265-02 | 22:17 |
| | | | | CARBON DISULFIDE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | D265-02 | 22:17 |
| | | | | CARBON TETRACHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 22:17 |
| | | | | CHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 22:17 |
| | | | | CHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 22:17 |
| | | | | CHLOROFORM | .005 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 22:17 |
| | | | | CHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 22:17 |
| | | | | CIS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 22:17 |
| | | | | CIS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 22:17 |
| | | | | DIBROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 22:17 |
| | | | | DIBROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 22:17 |
| | | | | DICHLORODIFLUOROMETHANE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | D265-02 | 22:17 |
| | | | | ETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 22:17 |
| | | | | HEXACHLOROBUTADIENE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 22:17 |
| | | | | ISOPROPYL BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 22:17 |
| | | | | M/P-XYLENES | .01 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 22:17 |
| | | | | METHYLENE CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 22:17 |
| | | | | N-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 22:17 |
| | | | | N-PROPYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 22:17 |
| | | | | NAPHTHALENE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 22:17 |
| | | | | O-XYLENE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 22:17 |
| | | | | P-ISOPROPYLTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 22:17 |
| | | | | SEC-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 22:17 |
| | | | | STYRENE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 22:17 |
| | | | | TERT-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 22:17 |
| | | | | TETRACHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 22:17 |
| | | | | TOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 22:17 |
| | | | | TRANS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 22:17 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 22:17 |
| | | | | TRICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 22:17 |
| | | | | TRICHLOROFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 22:17 |
| | | | | VINYL CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-02 | 22:17 |
| ECC3019 | SW8260B | SW5030 | N 0 1 | 1,1,1,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 22:54 |
| | | | | 1,1,1-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 22:54 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 22:54 |
| | | | | 1,1,2-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 22:54 |
| | | | | 1,1-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 22:54 |
| | | | | 1,1-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 22:54 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **0232QX-13** | | | | | | | | | | | | | | | | | | |
| ECC3019 | SW8260B | SW5030 | N 0 1 | 1,1-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 22:54 |
| | | | | 1,2,3-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 22:54 |
| | | | | 1,2,3-TRICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 22:54 |
| | | | | 1,2,4-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 22:54 |
| | | | | 1,2,4-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 22:54 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .01 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 22:54 |
| | | | | 1,2-DIBROMOETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 22:54 |
| | | | | 1,2-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 22:54 |
| | | | | 1,2-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 22:54 |
| | | | | 1,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 22:54 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 22:54 |
| | | | | 1,3-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 22:54 |
| | | | | 1,3-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 22:54 |
| | | | | 1,4-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 22:54 |
| | | | | 2,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 22:54 |
| | | | | 2-BUTANONE | .02 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 22:54 |
| | | | | 2-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 22:54 |
| | | | | 2-HEXANONE | .02 | mg/L | U | N | Y | U | UJ | | 05B | | | | D265-03 | 22:54 |
| | | | | 4-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 22:54 |
| | | | | 4-METHYL-2-PENTANONE | .01 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 22:54 |
| | | | | ACETONE | .02 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 22:54 |
| | | | | BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 22:54 |
| | | | | BROMOBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 22:54 |
| | | | | BROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 22:54 |
| | | | | BROMODICHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 22:54 |
| | | | | BROMOFORM | .005 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 22:54 |
| | | | | BROMOMETHANE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | D265-03 | 22:54 |
| | | | | CARBON DISULFIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 22:54 |
| | | | | CARBON TETRACHLORIDE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | D265-03 | 22:54 |
| | | | | CHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 22:54 |
| | | | | CHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 22:54 |
| | | | | CHLOROFORM | .001 | mg/L | J | Y | Y | P | J | | 15 | | | | D265-03 | 22:54 |
| | | | | CHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 22:54 |
| | | | | CIS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 22:54 |
| | | | | CIS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 22:54 |
| | | | | DIBROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 22:54 |
| | | | | DIBROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 22:54 |
| | | | | DICHLORODIFLUOROMETHANE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | D265-03 | 22:54 |
| | | | | ETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 22:54 |
| | | | | HEXACHLOROBUTADIENE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 22:54 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **0232QX-13** | | | | | | | | | | | | | | | | | | |
| ECC3019 | SW8260B | SW5030 | N 0 1 | ISOPROPYL BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 22:54 |
| | | | | M/P-XYLENES | .01 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 22:54 |
| | | | | METHYLENE CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 22:54 |
| | | | | N-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 22:54 |
| | | | | N-PROPYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 22:54 |
| | | | | NAPHTHALENE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 22:54 |
| | | | | O-XYLENE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 22:54 |
| | | | | P-ISOPROPYLTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 22:54 |
| | | | | SEC-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 22:54 |
| | | | | STYRENE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 22:54 |
| | | | | TERT-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 22:54 |
| | | | | TETRACHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 22:54 |
| | | | | TOLUENE | .0014 | mg/L | J | Y | Y | P | J | | 15 | | | | D265-03 | 22:54 |
| | | | | TRANS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 22:54 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 22:54 |
| | | | | TRICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 22:54 |
| | | | | TRICHLOROFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 22:54 |
| | | | | VINYL CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | D265-03 | 22:54 |
| ECC3020 | SW8260B | SW5030 | N 0 1 | 1,1,1,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | | U | | | | | | D265-04 | 23:31 |
| | | | | 1,1,1-TRICHLOROETHANE | .005 | mg/L | U | N | Y | | U | | | | | | D265-04 | 23:31 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | | U | | | | | | D265-04 | 23:31 |
| | | | | 1,1,2-TRICHLOROETHANE | .005 | mg/L | U | N | Y | | U | | | | | | D265-04 | 23:31 |
| | | | | 1,1-DICHLOROETHANE | .005 | mg/L | U | N | Y | | U | | | | | | D265-04 | 23:31 |
| | | | | 1,1-DICHLOROETHENE | .005 | mg/L | U | N | Y | | U | | | | | | D265-04 | 23:31 |
| | | | | 1,1-DICHLOROPROPENE | .005 | mg/L | U | N | Y | | U | | | | | | D265-04 | 23:31 |
| | | | | 1,2,3-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | | U | | | | | | D265-04 | 23:31 |
| | | | | 1,2,3-TRICHLOROPROPANE | .005 | mg/L | U | N | Y | | U | | | | | | D265-04 | 23:31 |
| | | | | 1,2,4-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | | U | | | | | | D265-04 | 23:31 |
| | | | | 1,2,4-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | | U | | | | | | D265-04 | 23:31 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .01 | mg/L | U | N | Y | | U | | | | | | D265-04 | 23:31 |
| | | | | 1,2-DIBROMOETHANE | .005 | mg/L | U | N | Y | | U | | | | | | D265-04 | 23:31 |
| | | | | 1,2-DICHLOROBENZENE | .005 | mg/L | U | N | Y | | U | | | | | | D265-04 | 23:31 |
| | | | | 1,2-DICHLOROETHANE | .005 | mg/L | U | N | Y | | U | | | | | | D265-04 | 23:31 |
| | | | | 1,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | | U | | | | | | D265-04 | 23:31 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | | U | | | | | | D265-04 | 23:31 |
| | | | | 1,3-DICHLOROBENZENE | .005 | mg/L | U | N | Y | | U | | | | | | D265-04 | 23:31 |
| | | | | 1,3-DICHLOROPROPANE | .005 | mg/L | U | N | Y | | U | | | | | | D265-04 | 23:31 |
| | | | | 1,4-DICHLOROBENZENE | .005 | mg/L | U | N | Y | | U | | | | | | D265-04 | 23:31 |
| | | | | 2,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | | U | | | | | | D265-04 | 23:31 |
| | | | | 2-BUTANONE | .02 | mg/L | U | N | Y | | U | | | | | | D265-04 | 23:31 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **0232QX-13** | | | | | | | | | | | | | | | | | | |
| ECC3020 | SW8260B | SW5030 | N 0 1 | 2-CHLOROTOLUENE | .005 | mg/L | U | N | Y | | U | | | | | | D265-04 | 23:31 |
| | | | | 2-HEXANONE | .02 | mg/L | U | N | Y | | UJ | | 05B | | | | D265-04 | 23:31 |
| | | | | 4-CHLOROTOLUENE | .005 | mg/L | U | N | Y | | U | | | | | | D265-04 | 23:31 |
| | | | | 4-METHYL-2-PENTANONE | .01 | mg/L | U | N | Y | | U | | | | | | D265-04 | 23:31 |
| | | | | ACETONE | .02 | mg/L | U | N | Y | | U | | | | | | D265-04 | 23:31 |
| | | | | BENZENE | .005 | mg/L | U | N | Y | | U | | | | | | D265-04 | 23:31 |
| | | | | BROMOBENZENE | .005 | mg/L | U | N | Y | | U | | | | | | D265-04 | 23:31 |
| | | | | BROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | | U | | | | | | D265-04 | 23:31 |
| | | | | BROMODICHLOROMETHANE | .005 | mg/L | U | N | Y | | U | | | | | | D265-04 | 23:31 |
| | | | | BROMOFORM | .005 | mg/L | U | N | Y | | U | | | | | | D265-04 | 23:31 |
| | | | | BROMOMETHANE | .005 | mg/L | U | N | Y | | UJ | | 05B | | | | D265-04 | 23:31 |
| | | | | CARBON DISULFIDE | .005 | mg/L | U | N | Y | | UJ | | 05B | | | | D265-04 | 23:31 |
| | | | | CARBON TETRACHLORIDE | .005 | mg/L | U | N | Y | | U | | | | | | D265-04 | 23:31 |
| | | | | CHLOROBENZENE | .005 | mg/L | U | N | Y | | U | | | | | | D265-04 | 23:31 |
| | | | | CHLOROETHANE | .005 | mg/L | U | N | Y | | U | | | | | | D265-04 | 23:31 |
| | | | | CHLOROFORM | .00095 | mg/L | J | Y | Y | | J | | 15 | | | | D265-04 | 23:31 |
| | | | | CHLOROMETHANE | .005 | mg/L | U | N | Y | | U | | | | | | D265-04 | 23:31 |
| | | | | CIS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | | U | | | | | | D265-04 | 23:31 |
| | | | | CIS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | | U | | | | | | D265-04 | 23:31 |
| | | | | DIBROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | | U | | | | | | D265-04 | 23:31 |
| | | | | DIBROMOMETHANE | .005 | mg/L | U | N | Y | | U | | | | | | D265-04 | 23:31 |
| | | | | DICHLORODIFLUOROMETHANE | .005 | mg/L | U | N | Y | | UJ | | 05B | | | | D265-04 | 23:31 |
| | | | | ETHYLBENZENE | .005 | mg/L | U | N | Y | | U | | | | | | D265-04 | 23:31 |
| | | | | HEXACHLOROBUTADIENE | .005 | mg/L | U | N | Y | | U | | | | | | D265-04 | 23:31 |
| | | | | ISOPROPYL BENZENE | .005 | mg/L | U | N | Y | | U | | | | | | D265-04 | 23:31 |
| | | | | M/P-XYLENES | .01 | mg/L | U | N | Y | | U | | | | | | D265-04 | 23:31 |
| | | | | METHYLENE CHLORIDE | .005 | mg/L | U | N | Y | | U | | | | | | D265-04 | 23:31 |
| | | | | N-BUTYLBENZENE | .005 | mg/L | U | N | Y | | U | | | | | | D265-04 | 23:31 |
| | | | | N-PROPYLBENZENE | .005 | mg/L | U | N | Y | | U | | | | | | D265-04 | 23:31 |
| | | | | NAPHTHALENE | .005 | mg/L | U | N | Y | | U | | | | | | D265-04 | 23:31 |
| | | | | O-XYLENE | .005 | mg/L | U | N | Y | | U | | | | | | D265-04 | 23:31 |
| | | | | P-ISOPROPYLTOLUENE | .005 | mg/L | U | N | Y | | U | | | | | | D265-04 | 23:31 |
| | | | | SEC-BUTYLBENZENE | .005 | mg/L | U | N | Y | | U | | | | | | D265-04 | 23:31 |
| | | | | STYRENE | .005 | mg/L | U | N | Y | | U | | | | | | D265-04 | 23:31 |
| | | | | TERT-BUTYLBENZENE | .005 | mg/L | U | N | Y | | U | | | | | | D265-04 | 23:31 |
| | | | | TETRACHLOROETHENE | .005 | mg/L | U | N | Y | | U | | | | | | D265-04 | 23:31 |
| | | | | TOLUENE | .005 | mg/L | U | N | Y | | U | | | | | | D265-04 | 23:31 |
| | | | | TRANS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | | U | | | | | | D265-04 | 23:31 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | | U | | | | | | D265-04 | 23:31 |
| | | | | TRICHLOROETHENE | .005 | mg/L | U | N | Y | | U | | | | | | D265-04 | 23:31 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **0232QX-13** | | | | | | | | | | | | | | | | | | |
| ECC3020 | SW8260B | SW5030 | N 0 1 | TRICHLOROFLUOROMETHANE | .005 | mg/L | U | N | Y | | U | | | | | | D265-04 | 23:31 |
| | | | | VINYL CHLORIDE | .005 | mg/L | U | N | Y | | U | | | | | | D265-04 | 23:31 |
| **0232QX-14** | | | | | | | | | | | | | | | | | | |
| ECC3005 | SW6010B | SW3010 | N 0 1 | ALUMINUM | .11 | mg/L | J | Y | Y | P | J | | 15 | | | | E026-02 | 22:01 |
| | | | | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 22:01 |
| | | | | ARSENIC | .01 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 23:14 |
| | | | | BARIUM | .055 | mg/L | | Y | Y | P | | | | | | | E026-02 | 22:01 |
| | | | | BERYLLIUM | .001 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 22:01 |
| | | | | CADMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 22:01 |
| | | | | CALCIUM | 17.4 | mg/L | | Y | Y | P | | | | | | | E026-02 | 22:01 |
| | | | | CHROMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 22:01 |
| | | | | COBALT | .02 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 22:01 |
| | | | | COPPER | .02 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 22:01 |
| | | | | IRON | .261 | mg/L | | Y | Y | P | | | | | | | E026-02 | 22:01 |
| | | | | LEAD | .01 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 23:14 |
| | | | | MAGNESIUM | 5.81 | mg/L | | Y | Y | P | | | | | | | E026-02 | 22:01 |
| | | | | MANGANESE | .39 | mg/L | | Y | Y | P | | | | | | | E026-02 | 22:01 |
| | | | | NICKEL | .02 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 22:01 |
| | | | | POTASSIUM | 3.25 | mg/L | J | Y | Y | P | J | | 15 | | | | E026-02 | 22:01 |
| | | | | SELENIUM | .00233 | mg/L | J | Y | Y | P | J | | 15 | | | | E026-02 | 23:14 |
| | | | | SILVER | .01 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 22:01 |
| | | | | SODIUM | 6.13 | mg/L | | Y | Y | P | | | | | | | E026-02 | 22:01 |
| | | | | THALLIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 23:14 |
| | | | | VANADIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 22:01 |
| | | | | ZINC | .02 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 22:01 |
| | SW7470A | TOTAL | N 0 1 | MERCURY | .0005 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 09:50 |
| ECC3008 | SW6010B | SW3010 | N 0 1 | ALUMINUM | .151 | mg/L | J | Y | Y | P | J | | 15 | | | | E026-03 | 22:06 |
| | | | | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 22:06 |
| | | | | ARSENIC | .01 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 23:19 |
| | | | | BARIUM | .00632 | mg/L | J | Y | Y | P | J | | 15 | | | | E026-03 | 22:06 |
| | | | | BERYLLIUM | .001 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 22:06 |
| | | | | CADMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 22:06 |
| | | | | CALCIUM | .735 | mg/L | J | Y | Y | P | J | | 15 | | | | E026-03 | 22:06 |
| | | | | CHROMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 22:06 |
| | | | | COBALT | .0168 | mg/L | J | Y | Y | P | J | | 15 | | | | E026-03 | 22:06 |
| | | | | COPPER | .02 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 22:06 |
| | | | | IRON | .247 | mg/L | | Y | Y | P | | | | | | | E026-03 | 22:06 |
| | | | | LEAD | .01 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 23:19 |
| | | | | MAGNESIUM | .405 | mg/L | J | Y | Y | P | J | | 15 | | | | E026-03 | 22:06 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **0232QX-14** | | | | | | | | | | | | | | | | | | |
| ECC3008 | SW6010B | SW3010 | N 0 1 | MANGANESE | .0127 | mg/L | | Y | Y | P | | | | | | | E026-03 | 22:06 |
| | | | | NICKEL | .02 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 22:06 |
| | | | | POTASSIUM | 5 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 22:06 |
| | | | | SELENIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 23:19 |
| | | | | SILVER | .01 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 22:06 |
| | | | | SODIUM | .816 | mg/L | J | Y | Y | P | J | | 15 | | | | E026-03 | 22:06 |
| | | | | THALLIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 23:19 |
| | | | | VANADIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 22:06 |
| | | | | ZINC | .00808 | mg/L | J | Y | Y | P | J | | 15 | | | | E026-03 | 22:06 |
| | SW7470A | TOTAL | N 0 1 | MERCURY | .0005 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 10:04 |
| ECC3016 | SW6010B | SW3010 | N 0 1 | ALUMINUM | 3.71 | mg/L | | Y | Y | P | | | | | | | E026-04 | 22:11 |
| | | | | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 22:11 |
| | | | | ARSENIC | .00262 | mg/L | J | Y | Y | F | B | | 06A | | | | E026-04 | 23:23 |
| | | | | BARIUM | .178 | mg/L | | Y | Y | P | | | | | | | E026-04 | 22:11 |
| | | | | BERYLLIUM | .00229 | mg/L | | Y | Y | P | | | | | | | E026-04 | 22:11 |
| | | | | CADMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 22:11 |
| | | | | CALCIUM | 85.8 | mg/L | | Y | Y | P | | | | | | | E026-04 | 22:11 |
| | | | | CHROMIUM | .0192 | mg/L | | Y | Y | P | | | | | | | E026-04 | 22:11 |
| | | | | COBALT | .037 | mg/L | | Y | Y | P | | | | | | | E026-04 | 22:11 |
| | | | | COPPER | .017 | mg/L | J | Y | Y | P | J | | 15 | | | | E026-04 | 22:11 |
| | | | | IRON | 1.71 | mg/L | | Y | Y | P | | | | | | | E026-04 | 22:11 |
| | | | | LEAD | .00964 | mg/L | J | Y | Y | P | J | | 15 | | | | E026-04 | 23:23 |
| | | | | MAGNESIUM | 1.7 | mg/L | | Y | Y | P | | | | | | | E026-04 | 22:11 |
| | | | | MANGANESE | 1.98 | mg/L | | Y | Y | P | | | | | | | E026-04 | 22:11 |
| | | | | NICKEL | .0408 | mg/L | | Y | Y | P | | | | | | | E026-04 | 22:11 |
| | | | | POTASSIUM | 5 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 22:11 |
| | | | | SELENIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 23:23 |
| | | | | SILVER | .01 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 22:11 |
| | | | | SODIUM | 1.63 | mg/L | | Y | Y | P | | | | | | | E026-04 | 22:11 |
| | | | | THALLIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 23:23 |
| | | | | VANADIUM | .0062 | mg/L | J | Y | Y | P | J | | 15 | | | | E026-04 | 22:11 |
| | | | | ZINC | .0524 | mg/L | | Y | Y | P | | | | | | | E026-04 | 22:11 |
| | SW7470A | TOTAL | N 0 1 | MERCURY | .0005 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 10:06 |
| ECC3005 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | U | UJ | | 11B | | | | E026-02 | 23:48 |
| | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | U | UJ | | 11B | | | | E026-02 | 23:48 |
| | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | U | UJ | | 11B | | | | E026-02 | 23:48 |
| | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 23:48 |
| | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 23:48 |
| | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 23:48 |
| | | | | 2-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 23:48 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **0232QX-14** | | | | | | | | | | | | | | | | | | | | |
| ECC3005 | SW8330 | METHOD | N | 0 | 1 | 3-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 23:48 |
| | | | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 23:48 |
| | | | | | | 4-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 23:48 |
| | | | | | | HMX | .001 | mg/L | U | N | Y | U | UJ | | 11B | | | | E026-02 | 23:48 |
| | | | | | | NITROBENZENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 23:48 |
| | | | | | | RDX | .0004 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 23:48 |
| | | | | | | TETRYL | .0004 | mg/L | U | N | Y | U | UJ | | 11B | | | | E026-02 | 23:48 |
| ECC3008 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | U | UJ | | 11B | | | | E026-03 | 00:27 |
| | | | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | U | UJ | | 11B | | | | E026-03 | 00:27 |
| | | | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | U | UJ | | 11B | | | | E026-03 | 00:27 |
| | | | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 00:27 |
| | | | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 00:27 |
| | | | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 00:27 |
| | | | | | | 2-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 00:27 |
| | | | | | | 3-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 00:27 |
| | | | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 00:27 |
| | | | | | | 4-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 00:27 |
| | | | | | | HMX | .001 | mg/L | U | N | Y | U | UJ | | 11B | | | | E026-03 | 00:27 |
| | | | | | | NITROBENZENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 00:27 |
| | | | | | | RDX | .0004 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 00:27 |
| | | | | | | TETRYL | .0004 | mg/L | U | N | Y | U | UJ | | 11B | | | | E026-03 | 00:27 |
| ECC3016 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | U | UJ | | 11B | | | | E026-04 | 01:05 |
| | | | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | U | UJ | | 11B | | | | E026-04 | 01:05 |
| | | | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | U | UJ | | 11B | | | | E026-04 | 01:05 |
| | | | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 01:05 |
| | | | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 01:05 |
| | | | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 01:05 |
| | | | | | | 2-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 01:05 |
| | | | | | | 3-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 01:05 |
| | | | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 01:05 |
| | | | | | | 4-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 01:05 |
| | | | | | | HMX | .001 | mg/L | U | N | Y | U | UJ | | 11B | | | | E026-04 | 01:05 |
| | | | | | | NITROBENZENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 01:05 |
| | | | | | | RDX | .0004 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 01:05 |
| | | | | | | TETRYL | .0004 | mg/L | U | N | Y | U | UJ | | 11B | | | | E026-04 | 01:05 |
| ECC3005 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 01:18 |
| ECC3008 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 01:35 |
| ECC3016 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 01:53 |
| ECC3005 | SW8260B | SW5030 | N | 0 | 1 | 1,1,1,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 14:31 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **0232QX-14** | | | | | | | | | | | | | | | | | | |
| ECC3005 | SW8260B | SW5030 | N 0 1 | 1,1,1-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 14:31 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 14:31 |
| | | | | 1,1,2-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 14:31 |
| | | | | 1,1-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 14:31 |
| | | | | 1,1-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 14:31 |
| | | | | 1,1-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 14:31 |
| | | | | 1,2,3-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 14:31 |
| | | | | 1,2,3-TRICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 14:31 |
| | | | | 1,2,4-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 14:31 |
| | | | | 1,2,4-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 14:31 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .01 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 14:31 |
| | | | | 1,2-DIBROMOETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 14:31 |
| | | | | 1,2-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 14:31 |
| | | | | 1,2-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 14:31 |
| | | | | 1,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 14:31 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 14:31 |
| | | | | 1,3-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 14:31 |
| | | | | 1,3-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 14:31 |
| | | | | 1,4-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 14:31 |
| | | | | 2,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 14:31 |
| | | | | 2-BUTANONE | .02 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 14:31 |
| | | | | 2-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 14:31 |
| | | | | 2-HEXANONE | .02 | mg/L | U | N | Y | U | UJ | | 05B | | | | E026-02 | 14:31 |
| | | | | 4-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 14:31 |
| | | | | 4-METHYL-2-PENTANONE | .01 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 14:31 |
| | | | | ACETONE | .02 | mg/L | U | N | Y | U | R | | 05A | | | | E026-02 | 14:31 |
| | | | | BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 14:31 |
| | | | | BROMOBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 14:31 |
| | | | | BROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 14:31 |
| | | | | BROMODICHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 14:31 |
| | | | | BROMOFORM | .005 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 14:31 |
| | | | | BROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 14:31 |
| | | | | CARBON DISULFIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 14:31 |
| | | | | CARBON TETRACHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 14:31 |
| | | | | CHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 14:31 |
| | | | | CHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 14:31 |
| | | | | CHLOROFORM | .005 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 14:31 |
| | | | | CHLOROMETHANE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | E026-02 | 14:31 |
| | | | | CIS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 14:31 |
| | | | | CIS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 14:31 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **0232QX-14** | | | | | | | | | | | | | | | | | | |
| ECC3005 | SW8260B | SW5030 | N 0 1 | DIBROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 14:31 |
| | | | | DIBROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 14:31 |
| | | | | DICHLORODIFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 14:31 |
| | | | | ETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 14:31 |
| | | | | HEXACHLOROBUTADIENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 14:31 |
| | | | | ISOPROPYL BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 14:31 |
| | | | | M/P-XYLENES | .01 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 14:31 |
| | | | | METHYLENE CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 14:31 |
| | | | | N-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 14:31 |
| | | | | N-PROPYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 14:31 |
| | | | | NAPHTHALENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 14:31 |
| | | | | O-XYLENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 14:31 |
| | | | | P-ISOPROPYLTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 14:31 |
| | | | | SEC-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 14:31 |
| | | | | STYRENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 14:31 |
| | | | | TERT-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 14:31 |
| | | | | TETRACHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 14:31 |
| | | | | TOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 14:31 |
| | | | | TRANS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 14:31 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 14:31 |
| | | | | TRICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 14:31 |
| | | | | TRICHLOROFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 14:31 |
| | | | | VINYL CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-02 | 14:31 |
| ECC3008 | SW8260B | SW5030 | N 0 1 | 1,1,1,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 15:06 |
| | | | | 1,1,1-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 15:06 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 15:06 |
| | | | | 1,1,2-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 15:06 |
| | | | | 1,1-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 15:06 |
| | | | | 1,1-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 15:06 |
| | | | | 1,1-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 15:06 |
| | | | | 1,2,3-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 15:06 |
| | | | | 1,2,3-TRICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 15:06 |
| | | | | 1,2,4-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 15:06 |
| | | | | 1,2,4-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 15:06 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .01 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 15:06 |
| | | | | 1,2-DIBROMOETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 15:06 |
| | | | | 1,2-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 15:06 |
| | | | | 1,2-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 15:06 |
| | | | | 1,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 15:06 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 15:06 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **0232QX-14** | | | | | | | | | | | | | | | | | | |
| ECC3008 | SW8260B | SW5030 | N 0 1 | 1,3-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 15:06 |
| | | | | 1,3-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 15:06 |
| | | | | 1,4-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 15:06 |
| | | | | 2,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 15:06 |
| | | | | 2-BUTANONE | .02 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 15:06 |
| | | | | 2-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 15:06 |
| | | | | 2-HEXANONE | .02 | mg/L | U | N | Y | U | UJ | | 05B | | | | E026-03 | 15:06 |
| | | | | 4-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 15:06 |
| | | | | 4-METHYL-2-PENTANONE | .01 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 15:06 |
| | | | | ACETONE | .02 | mg/L | U | N | Y | U | R | | 05A | | | | E026-03 | 15:06 |
| | | | | BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 15:06 |
| | | | | BROMOBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 15:06 |
| | | | | BROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 15:06 |
| | | | | BROMODICHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 15:06 |
| | | | | BROMOFORM | .005 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 15:06 |
| | | | | BROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 15:06 |
| | | | | CARBON DISULFIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 15:06 |
| | | | | CARBON TETRACHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 15:06 |
| | | | | CHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 15:06 |
| | | | | CHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 15:06 |
| | | | | CHLOROFORM | .005 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 15:06 |
| | | | | CHLOROMETHANE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | E026-03 | 15:06 |
| | | | | CIS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 15:06 |
| | | | | CIS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 15:06 |
| | | | | DIBROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 15:06 |
| | | | | DIBROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 15:06 |
| | | | | DICHLORODIFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 15:06 |
| | | | | ETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 15:06 |
| | | | | HEXACHLOROBUTADIENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 15:06 |
| | | | | ISOPROPYL BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 15:06 |
| | | | | M/P-XYLENES | .01 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 15:06 |
| | | | | METHYLENE CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 15:06 |
| | | | | N-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 15:06 |
| | | | | N-PROPYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 15:06 |
| | | | | NAPHTHALENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 15:06 |
| | | | | O-XYLENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 15:06 |
| | | | | P-ISOPROPYLTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 15:06 |
| | | | | SEC-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 15:06 |
| | | | | STYRENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 15:06 |
| | | | | TERT-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 15:06 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **0232QX-14** | | | | | | | | | | | | | | | | | | |
| ECC3008 | SW8260B | SW5030 | N 0 1 | TETRACHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 15:06 |
| | | | | TOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 15:06 |
| | | | | TRANS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 15:06 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 15:06 |
| | | | | TRICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 15:06 |
| | | | | TRICHLOROFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 15:06 |
| | | | | VINYL CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-03 | 15:06 |
| ECC3016 | SW8260B | SW5030 | N 0 1 | 1,1,1,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 15:41 |
| | | | | 1,1,1-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 15:41 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 15:41 |
| | | | | 1,1,2-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 15:41 |
| | | | | 1,1-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 15:41 |
| | | | | 1,1-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 15:41 |
| | | | | 1,1-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 15:41 |
| | | | | 1,2,3-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 15:41 |
| | | | | 1,2,3-TRICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 15:41 |
| | | | | 1,2,4-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 15:41 |
| | | | | 1,2,4-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 15:41 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .01 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 15:41 |
| | | | | 1,2-DIBROMOETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 15:41 |
| | | | | 1,2-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 15:41 |
| | | | | 1,2-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 15:41 |
| | | | | 1,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 15:41 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 15:41 |
| | | | | 1,3-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 15:41 |
| | | | | 1,3-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 15:41 |
| | | | | 1,4-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 15:41 |
| | | | | 2,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 15:41 |
| | | | | 2-BUTANONE | .02 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 15:41 |
| | | | | 2-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 15:41 |
| | | | | 2-HEXANONE | .02 | mg/L | U | N | Y | U | UJ | | 05B | | | | E026-04 | 15:41 |
| | | | | 4-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 15:41 |
| | | | | 4-METHYL-2-PENTANONE | .01 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 15:41 |
| | | | | ACETONE | .012 | mg/L | J | Y | Y | F | B | | 05A | 06D | 15 | | E026-04 | 15:41 |
| | | | | BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 15:41 |
| | | | | BROMOBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 15:41 |
| | | | | BROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 15:41 |
| | | | | BROMODICHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 15:41 |
| | | | | BROMOFORM | .005 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 15:41 |
| | | | | BROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 15:41 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **0232QX-14** | | | | | | | | | | | | | | | | | | |
| ECC3016 | SW8260B | SW5030 | N 0 1 | CARBON DISULFIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 15:41 |
| | | | | CARBON TETRACHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 15:41 |
| | | | | CHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 15:41 |
| | | | | CHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 15:41 |
| | | | | CHLOROFORM | .005 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 15:41 |
| | | | | CHLOROMETHANE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | E026-04 | 15:41 |
| | | | | CIS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 15:41 |
| | | | | CIS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 15:41 |
| | | | | DIBROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 15:41 |
| | | | | DIBROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 15:41 |
| | | | | DICHLORODIFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 15:41 |
| | | | | ETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 15:41 |
| | | | | HEXACHLOROBUTADIENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 15:41 |
| | | | | ISOPROPYL BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 15:41 |
| | | | | M/P-XYLENES | .01 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 15:41 |
| | | | | METHYLENE CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 15:41 |
| | | | | N-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 15:41 |
| | | | | N-PROPYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 15:41 |
| | | | | NAPHTHALENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 15:41 |
| | | | | O-XYLENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 15:41 |
| | | | | P-ISOPROPYLTOLUENE | .0023 | mg/L | J | Y | Y | P | J | | 15 | | | | E026-04 | 15:41 |
| | | | | SEC-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 15:41 |
| | | | | STYRENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 15:41 |
| | | | | TERT-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 15:41 |
| | | | | TETRACHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 15:41 |
| | | | | TOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 15:41 |
| | | | | TRANS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 15:41 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 15:41 |
| | | | | TRICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 15:41 |
| | | | | TRICHLOROFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 15:41 |
| | | | | VINYL CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E026-04 | 15:41 |
| **0232QX-15** | | | | | | | | | | | | | | | | | | |
| ECC3002 | SW6010B | SW3010 | N 0 1 | ALUMINUM | .2 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 21:25 |
| | | | | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 21:25 |
| | | | | ARSENIC | .01 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 22:33 |
| | | | | BARIUM | .00832 | mg/L | J | Y | Y | P | J | | 15 | | | | E097-01 | 21:25 |
| | | | | BERYLLIUM | .001 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 21:25 |
| | | | | CADMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 21:25 |
| | | | | CALCIUM | 2.3 | mg/L | | Y | Y | P | | | | | | | E097-01 | 21:25 |
| | | | | CHROMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 21:25 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **0232QX-15** | | | | | | | | | | | | | | | | | | |
| ECC3002 | SW6010B | SW3010 | N 0 1 | COBALT | .02 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 21:25 |
| | | | | COPPER | .02 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 21:25 |
| | | | | IRON | 9.36 | mg/L | | Y | Y | P | | | | | | | E097-01 | 21:25 |
| | | | | LEAD | .00152 | mg/L | J | Y | Y | F | B | | 06A | 15 | | | E097-01 | 22:33 |
| | | | | MAGNESIUM | 1.55 | mg/L | | Y | Y | P | | | | | | | E097-01 | 21:25 |
| | | | | MANGANESE | .25 | mg/L | | Y | Y | P | | | | | | | E097-01 | 21:25 |
| | | | | NICKEL | .014 | mg/L | J | Y | Y | P | J | | 15 | | | | E097-01 | 21:25 |
| | | | | POTASSIUM | 2.57 | mg/L | J | Y | Y | P | J | | 15 | | | | E097-01 | 21:25 |
| | | | | SELENIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 22:33 |
| | | | | SILVER | .01 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 21:25 |
| | | | | SODIUM | 1.89 | mg/L | | Y | Y | P | | | | | | | E097-01 | 21:25 |
| | | | | THALLIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 22:33 |
| | | | | VANADIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 21:25 |
| | | | | ZINC | .02 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 21:25 |
| | SW7470A | TOTAL | N 0 1 | MERCURY | .0005 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 10:54 |
| ECC3002 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 16:01 |
| | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 16:01 |
| | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 16:01 |
| | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 16:01 |
| | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 16:01 |
| | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 16:01 |
| | | | | 2-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 16:01 |
| | | | | 3-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 16:01 |
| | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 16:01 |
| | | | | 4-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 16:01 |
| | | | | HMX | .001 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 16:01 |
| | | | | NITROBENZENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 16:01 |
| | | | | RDX | .0004 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 16:01 |
| | | | | TETRYL | .0004 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 16:01 |
| ECC3002 | E314.0 | NONE | N 0 1 | PERCHLORATE | .005 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 16:28 |
| ECC3002 | SW8260B | SW5030 | N 0 1 | 1,1,1,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 00:52 |
| | | | | 1,1,1-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 00:52 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 00:52 |
| | | | | 1,1,2-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 00:52 |
| | | | | 1,1-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 00:52 |
| | | | | 1,1-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 00:52 |
| | | | | 1,1-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 00:52 |
| | | | | 1,2,3-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 00:52 |
| | | | | 1,2,3-TRICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 00:52 |
| | | | | 1,2,4-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 00:52 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **0232QX-15** | | | | | | | | | | | | | | | | | | |
| ECC3002 | SW8260B | SW5030 | N 0 1 | 1,2,4-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 00:52 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .01 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 00:52 |
| | | | | 1,2-DIBROMOETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 00:52 |
| | | | | 1,2-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 00:52 |
| | | | | 1,2-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 00:52 |
| | | | | 1,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 00:52 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 00:52 |
| | | | | 1,3-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 00:52 |
| | | | | 1,3-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 00:52 |
| | | | | 1,4-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 00:52 |
| | | | | 2,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 00:52 |
| | | | | 2-BUTANONE | .02 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 00:52 |
| | | | | 2-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 00:52 |
| | | | | 2-HEXANONE | .02 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 00:52 |
| | | | | 4-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 00:52 |
| | | | | 4-METHYL-2-PENTANONE | .01 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 00:52 |
| | | | | ACETONE | .02 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 00:52 |
| | | | | BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 00:52 |
| | | | | BROMOBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 00:52 |
| | | | | BROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 00:52 |
| | | | | BROMODICHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 00:52 |
| | | | | BROMOFORM | .005 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 00:52 |
| | | | | BROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 00:52 |
| | | | | CARBON DISULFIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 00:52 |
| | | | | CARBON TETRACHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 00:52 |
| | | | | CHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 00:52 |
| | | | | CHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 00:52 |
| | | | | CHLOROFORM | .005 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 00:52 |
| | | | | CHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 00:52 |
| | | | | CIS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 00:52 |
| | | | | CIS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 00:52 |
| | | | | DIBROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 00:52 |
| | | | | DIBROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 00:52 |
| | | | | DICHLORODIFLUOROMETHANE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | E097-01 | 00:52 |
| | | | | ETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 00:52 |
| | | | | HEXACHLOROBUTADIENE | .005 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 00:52 |
| | | | | ISOPROPYL BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 00:52 |
| | | | | M/P-XYLENES | .01 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 00:52 |
| | | | | METHYLENE CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 00:52 |
| | | | | N-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 00:52 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **0232QX-15** | | | | | | | | | | | | | | | | | | |
| ECC3002 | SW8260B | SW5030 | N 0 1 | N-PROPYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 00:52 |
| | | | | NAPHTHALENE | .005 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 00:52 |
| | | | | O-XYLENE | .005 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 00:52 |
| | | | | P-ISOPROPYLTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 00:52 |
| | | | | SEC-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 00:52 |
| | | | | STYRENE | .005 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 00:52 |
| | | | | TERT-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 00:52 |
| | | | | TETRACHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 00:52 |
| | | | | TOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 00:52 |
| | | | | TRANS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 00:52 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 00:52 |
| | | | | TRICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 00:52 |
| | | | | TRICHLOROFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 00:52 |
| | | | | VINYL CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E097-01 | 00:52 |
| **0232QX-16** | | | | | | | | | | | | | | | | | | |
| ECC3009 | SW6010B | SW3010 | N 0 1 | ALUMINUM | .0471 | mg/L | J | Y | Y | P | J | | 15 | | | | E177-01 | 11:57 |
| | | | | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | E177-01 | 11:57 |
| | | | | ARSENIC | .01 | mg/L | U | N | Y | U | U | | | | | | E177-01 | 12:02 |
| | | | | BARIUM | .00545 | mg/L | J | Y | Y | P | J | | 15 | | | | E177-01 | 11:57 |
| | | | | BERYLLIUM | .001 | mg/L | U | N | Y | U | U | | | | | | E177-01 | 11:57 |
| | | | | CADMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E177-01 | 11:57 |
| | | | | CALCIUM | .588 | mg/L | J | Y | Y | F | B | | 06C | 15 | | | E177-01 | 11:57 |
| | | | | CHROMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E177-01 | 11:57 |
| | | | | COBALT | .02 | mg/L | U | N | Y | U | U | | | | | | E177-01 | 11:57 |
| | | | | COPPER | .02 | mg/L | U | N | Y | U | U | | | | | | E177-01 | 11:57 |
| | | | | IRON | .016 | mg/L | J | Y | Y | P | J | | 15 | | | | E177-01 | 11:57 |
| | | | | LEAD | .01 | mg/L | U | N | Y | U | U | | | | | | E177-01 | 12:02 |
| | | | | MAGNESIUM | .289 | mg/L | J | Y | Y | F | B | | 06C | 15 | | | E177-01 | 11:57 |
| | | | | MANGANESE | .0109 | mg/L | | Y | Y | P | | | | | | | E177-01 | 11:57 |
| | | | | NICKEL | .02 | mg/L | U | N | Y | U | U | | | | | | E177-01 | 11:57 |
| | | | | POTASSIUM | 5 | mg/L | U | N | Y | U | U | | | | | | E177-01 | 11:57 |
| | | | | SELENIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E177-01 | 12:02 |
| | | | | SILVER | .01 | mg/L | U | N | Y | U | U | | | | | | E177-01 | 11:57 |
| | | | | SODIUM | 1.2 | mg/L | | Y | Y | P | | | | | | | E177-01 | 11:57 |
| | | | | THALLIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E177-01 | 12:02 |
| | | | | VANADIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E177-01 | 11:57 |
| | | | | ZINC | .02 | mg/L | U | N | Y | U | U | | | | | | E177-01 | 11:57 |
| | SW7470A | TOTAL | N 0 1 | MERCURY | .0005 | mg/L | U | N | Y | U | U | | | | | | E177-01 | 10:49 |
| ECC3009 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | U | U | | | | | | E177-01 | 05:27 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **0232QX-16** | | | | | | | | | | | | | | | | |
| ECC3009 | SW8330 | METHOD | N 0 1 | 1,3-DNB | .0004 | mg/L | U | N Y U | U | | | | | | E177-01 | 05:27 |
| | | | | 2,4,6-TNT | .0004 | mg/L | U | N Y U | U | | | | | | E177-01 | 05:27 |
| | | | | 2,4-DNT | .0004 | mg/L | U | N Y U | U | | | | | | E177-01 | 05:27 |
| | | | | 2,6-DNT | .0004 | mg/L | U | N Y U | U | | | | | | E177-01 | 05:27 |
| | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N Y U | U | | | | | | E177-01 | 05:27 |
| | | | | 2-NITROTOLUENE | .0004 | mg/L | U | N Y U | U | | | | | | E177-01 | 05:27 |
| | | | | 3-NITROTOLUENE | .0004 | mg/L | U | N Y U | U | | | | | | E177-01 | 05:27 |
| | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N Y U | U | | | | | | E177-01 | 05:27 |
| | | | | 4-NITROTOLUENE | .0004 | mg/L | U | N Y U | U | | | | | | E177-01 | 05:27 |
| | | | | HMX | .001 | mg/L | U | N Y U | U | | | | | | E177-01 | 05:27 |
| | | | | NITROBENZENE | .0004 | mg/L | U | N Y U | U | | | | | | E177-01 | 05:27 |
| | | | | RDX | .0004 | mg/L | U | N Y U | U | | | | | | E177-01 | 05:27 |
| | | | | TETRYL | .0004 | mg/L | U | N Y U | U | | | | | | E177-01 | 05:27 |
| ECC3009 | E314.0 | NONE | N 0 1 | PERCHLORATE | .005 | mg/L | U | N Y U | U | | | | | | E177-01 | 21:57 |
| ECC3009 | SW8260B | SW5030 | N 0 1 | 1,1,1,2-TETRACHLOROETHANE | .005 | mg/L | U | N Y U | U | | | | | | E177-01 | 05:57 |
| | | | | 1,1,1-TRICHLOROETHANE | .005 | mg/L | U | N Y U | U | | | | | | E177-01 | 05:57 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .005 | mg/L | U | N Y U | U | | | | | | E177-01 | 05:57 |
| | | | | 1,1,2-TRICHLOROETHANE | .005 | mg/L | U | N Y U | U | | | | | | E177-01 | 05:57 |
| | | | | 1,1-DICHLOROETHANE | .005 | mg/L | U | N Y U | U | | | | | | E177-01 | 05:57 |
| | | | | 1,1-DICHLOROETHENE | .005 | mg/L | U | N Y U | U | | | | | | E177-01 | 05:57 |
| | | | | 1,1-DICHLOROPROPENE | .005 | mg/L | U | N Y U | U | | | | | | E177-01 | 05:57 |
| | | | | 1,2,3-TRICHLOROBENZENE | .005 | mg/L | U | N Y U | U | | | | | | E177-01 | 05:57 |
| | | | | 1,2,3-TRICHLOROPROPANE | .005 | mg/L | U | N Y U | U | | | | | | E177-01 | 05:57 |
| | | | | 1,2,4-TRICHLOROBENZENE | .005 | mg/L | U | N Y U | U | | | | | | E177-01 | 05:57 |
| | | | | 1,2,4-TRIMETHYLBENZENE | .005 | mg/L | U | N Y U | U | | | | | | E177-01 | 05:57 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .01 | mg/L | U | N Y U | U | | | | | | E177-01 | 05:57 |
| | | | | 1,2-DIBROMOETHANE | .005 | mg/L | U | N Y U | U | | | | | | E177-01 | 05:57 |
| | | | | 1,2-DICHLOROBENZENE | .005 | mg/L | U | N Y U | U | | | | | | E177-01 | 05:57 |
| | | | | 1,2-DICHLOROETHANE | .005 | mg/L | U | N Y U | U | | | | | | E177-01 | 05:57 |
| | | | | 1,2-DICHLOROPROPANE | .005 | mg/L | U | N Y U | U | | | | | | E177-01 | 05:57 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .005 | mg/L | U | N Y U | U | | | | | | E177-01 | 05:57 |
| | | | | 1,3-DICHLOROBENZENE | .005 | mg/L | U | N Y U | U | | | | | | E177-01 | 05:57 |
| | | | | 1,3-DICHLOROPROPANE | .005 | mg/L | U | N Y U | U | | | | | | E177-01 | 05:57 |
| | | | | 1,4-DICHLOROBENZENE | .005 | mg/L | U | N Y U | U | | | | | | E177-01 | 05:57 |
| | | | | 2,2-DICHLOROPROPANE | .005 | mg/L | U | N Y U | U | | | | | | E177-01 | 05:57 |
| | | | | 2-BUTANONE | .02 | mg/L | U | N Y U | U | | | | | | E177-01 | 05:57 |
| | | | | 2-CHLOROTOLUENE | .005 | mg/L | U | N Y U | U | | | | | | E177-01 | 05:57 |
| | | | | 2-HEXANONE | .02 | mg/L | U | N Y U | U | | | | | | E177-01 | 05:57 |
| | | | | 4-CHLOROTOLUENE | .005 | mg/L | U | N Y U | U | | | | | | E177-01 | 05:57 |
| | | | | 4-METHYL-2-PENTANONE | .01 | mg/L | U | N Y U | U | | | | | | E177-01 | 05:57 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **0232QX-16** | | | | | | | | | | | | | | | | | | |
| ECC3009 | SW8260B | SW5030 | N 0 1 | ACETONE | .02 | mg/L | U | N | Y | U | U | | | | | | E177-01 | 05:57 |
| | | | | BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E177-01 | 05:57 |
| | | | | BROMOBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E177-01 | 05:57 |
| | | | | BROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E177-01 | 05:57 |
| | | | | BROMODICHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E177-01 | 05:57 |
| | | | | BROMOFORM | .005 | mg/L | U | N | Y | U | U | | | | | | E177-01 | 05:57 |
| | | | | BROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E177-01 | 05:57 |
| | | | | CARBON DISULFIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E177-01 | 05:57 |
| | | | | CARBON TETRACHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E177-01 | 05:57 |
| | | | | CHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E177-01 | 05:57 |
| | | | | CHLOROETHANE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | E177-01 | 05:57 |
| | | | | CHLOROFORM | .005 | mg/L | U | N | Y | U | U | | | | | | E177-01 | 05:57 |
| | | | | CHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E177-01 | 05:57 |
| | | | | CIS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E177-01 | 05:57 |
| | | | | CIS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | E177-01 | 05:57 |
| | | | | DIBROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E177-01 | 05:57 |
| | | | | DIBROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E177-01 | 05:57 |
| | | | | DICHLORODIFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E177-01 | 05:57 |
| | | | | ETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E177-01 | 05:57 |
| | | | | HEXACHLOROBUTADIENE | .005 | mg/L | U | N | Y | U | U | | | | | | E177-01 | 05:57 |
| | | | | ISOPROPYL BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E177-01 | 05:57 |
| | | | | M/P-XYLENES | .01 | mg/L | U | N | Y | U | U | | | | | | E177-01 | 05:57 |
| | | | | METHYLENE CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E177-01 | 05:57 |
| | | | | N-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E177-01 | 05:57 |
| | | | | N-PROPYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E177-01 | 05:57 |
| | | | | NAPHTHALENE | .005 | mg/L | U | N | Y | U | U | | | | | | E177-01 | 05:57 |
| | | | | O-XYLENE | .005 | mg/L | U | N | Y | U | U | | | | | | E177-01 | 05:57 |
| | | | | P-ISOPROPYLTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E177-01 | 05:57 |
| | | | | SEC-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E177-01 | 05:57 |
| | | | | STYRENE | .005 | mg/L | U | N | Y | U | U | | | | | | E177-01 | 05:57 |
| | | | | TERT-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E177-01 | 05:57 |
| | | | | TETRACHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E177-01 | 05:57 |
| | | | | TOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E177-01 | 05:57 |
| | | | | TRANS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E177-01 | 05:57 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | E177-01 | 05:57 |
| | | | | TRICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E177-01 | 05:57 |
| | | | | TRICHLOROFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E177-01 | 05:57 |
| | | | | VINYL CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E177-01 | 05:57 |
| **0232QX-17** | | | | | | | | | | | | | | | | | | |
| ECC3014 | SW6010B | SW3010 | N 0 1 | ALUMINUM | .253 | mg/L | | Y | Y | P | | | | | | | E221-01 | 18:55 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **0232QX-17** | | | | | | | | | | | | | | | | | | |
| ECC3014 | SW6010B | SW3010 | N 0 1 | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 18:55 |
| | | | | ARSENIC | .01 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 14:03 |
| | | | | BARIUM | .00953 | mg/L | J | Y | Y | P | J | | 15 | | | | E221-01 | 18:55 |
| | | | | BERYLLIUM | .001 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 18:55 |
| | | | | CADMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 18:55 |
| | | | | CALCIUM | .894 | mg/L | J | Y | Y | F | B | | 06C | 15 | | | E221-01 | 18:55 |
| | | | | CHROMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 18:55 |
| | | | | COBALT | .02 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 18:55 |
| | | | | COPPER | .02 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 18:55 |
| | | | | IRON | .566 | mg/L | | Y | Y | P | | | | | | | E221-01 | 18:55 |
| | | | | LEAD | .01 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 14:03 |
| | | | | MAGNESIUM | .553 | mg/L | J | Y | Y | F | B | | 06C | 15 | | | E221-01 | 18:55 |
| | | | | MANGANESE | .256 | mg/L | | Y | Y | P | | | | | | | E221-01 | 18:55 |
| | | | | NICKEL | .0111 | mg/L | J | Y | Y | F | B | | 06B | 15 | | | E221-01 | 18:55 |
| | | | | POTASSIUM | 5 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 18:55 |
| | | | | SELENIUM | .00185 | mg/L | J | Y | Y | F | B | | 06A | 15 | | | E221-01 | 14:03 |
| | | | | SILVER | .01 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 18:55 |
| | | | | SODIUM | .84 | mg/L | J | Y | Y | P | J | | 15 | | | | E221-01 | 18:55 |
| | | | | THALLIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 14:03 |
| | | | | VANADIUM | .01 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 18:55 |
| | | | | ZINC | .0106 | mg/L | J | Y | Y | P | J | | 15 | | | | E221-01 | 18:55 |
| | SW7470A | TOTAL | N 0 1 | MERCURY | .0005 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 11:26 |
| ECC3014 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 13:54 |
| | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 13:54 |
| | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 13:54 |
| | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 13:54 |
| | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 13:54 |
| | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 13:54 |
| | | | | 2-NITROTOLUENE | .00032 | mg/L | J | Y | Y | P | J | | 15 | | | | E221-01 | 13:54 |
| | | | | 3-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 13:54 |
| | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 13:54 |
| | | | | 4-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 13:54 |
| | | | | HMX | .001 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 13:54 |
| | | | | NITROBENZENE | .0004 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 13:54 |
| | | | | RDX | .0004 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 13:54 |
| | | | | TETRYL | .0004 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 13:54 |
| ECC3014 | E314.0 | NONE | N 0 1 | PERCHLORATE | .005 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 04:07 |
| ECC3014 | SW8260B | SW5030 | N 0 1 | 1,1,1,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 08:56 |
| | | | | 1,1,1-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 08:56 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 08:56 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **0232QX-17** | | | | | | | | | | | | | | | | | | |
| ECC3014 | SW8260B | SW5030 | N 0 1 | 1,1,2-TRICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 08:56 |
| | | | | 1,1-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 08:56 |
| | | | | 1,1-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 08:56 |
| | | | | 1,1-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 08:56 |
| | | | | 1,2,3-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 08:56 |
| | | | | 1,2,3-TRICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 08:56 |
| | | | | 1,2,4-TRICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 08:56 |
| | | | | 1,2,4-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 08:56 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .01 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 08:56 |
| | | | | 1,2-DIBROMOETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 08:56 |
| | | | | 1,2-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 08:56 |
| | | | | 1,2-DICHLOROETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 08:56 |
| | | | | 1,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 08:56 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 08:56 |
| | | | | 1,3-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 08:56 |
| | | | | 1,3-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 08:56 |
| | | | | 1,4-DICHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 08:56 |
| | | | | 2,2-DICHLOROPROPANE | .005 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 08:56 |
| | | | | 2-BUTANONE | .02 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 08:56 |
| | | | | 2-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 08:56 |
| | | | | 2-HEXANONE | .02 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 08:56 |
| | | | | 4-CHLOROTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 08:56 |
| | | | | 4-METHYL-2-PENTANONE | .01 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 08:56 |
| | | | | ACETONE | .02 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 08:56 |
| | | | | BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 08:56 |
| | | | | BROMOBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 08:56 |
| | | | | BROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 08:56 |
| | | | | BROMODICHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 08:56 |
| | | | | BROMOFORM | .005 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 08:56 |
| | | | | BROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 08:56 |
| | | | | CARBON DISULFIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 08:56 |
| | | | | CARBON TETRACHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 08:56 |
| | | | | CHLOROBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 08:56 |
| | | | | CHLOROETHANE | .005 | mg/L | U | N | Y | U | UJ | | 05B | | | | E221-01 | 08:56 |
| | | | | CHLOROFORM | .005 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 08:56 |
| | | | | CHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 08:56 |
| | | | | CIS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 08:56 |
| | | | | CIS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 08:56 |
| | | | | DIBROMOCHLOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 08:56 |
| | | | | DIBROMOMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 08:56 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **0232QX-17** | | | | | | | | | | | | | | | | | | |
| ECC3014 | SW8260B | SW5030 | N 0 1 | DICHLORODIFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 08:56 |
| | | | | ETHYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 08:56 |
| | | | | HEXACHLOROBUTADIENE | .005 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 08:56 |
| | | | | ISOPROPYL BENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 08:56 |
| | | | | M/P-XYLENES | .01 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 08:56 |
| | | | | METHYLENE CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 08:56 |
| | | | | N-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 08:56 |
| | | | | N-PROPYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 08:56 |
| | | | | NAPHTHALENE | .005 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 08:56 |
| | | | | O-XYLENE | .005 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 08:56 |
| | | | | P-ISOPROPYLTOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 08:56 |
| | | | | SEC-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 08:56 |
| | | | | STYRENE | .005 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 08:56 |
| | | | | TERT-BUTYLBENZENE | .005 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 08:56 |
| | | | | TETRACHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 08:56 |
| | | | | TOLUENE | .005 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 08:56 |
| | | | | TRANS-1,2-DICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 08:56 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .005 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 08:56 |
| | | | | TRICHLOROETHENE | .005 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 08:56 |
| | | | | TRICHLOROFLUOROMETHANE | .005 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 08:56 |
| | | | | VINYL CHLORIDE | .005 | mg/L | U | N | Y | U | U | | | | | | E221-01 | 08:56 |
| **0232QX18** | | | | | | | | | | | | | | | | | | |
| ECC3011 | SW6010 | TOTREC | N 0 1 | ALUMINUM | .0421 | mg/L | B | Y | Y | F | B | | 15 | 06C | | | EEC6LW | 13:35 |
| | | | | ANTIMONY | .06 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 13:35 |
| | | | | ARSENIC | .01 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 13:35 |
| | | | | BARIUM | .175 | mg/L | B | Y | Y | P | J | | 15 | | | | EEC6LW | 13:35 |
| | | | | BERYLLIUM | .005 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 13:35 |
| | | | | CADMIUM | .005 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 13:35 |
| | | | | CALCIUM | 1.02 | mg/L | B | Y | Y | P | J | | 15 | | | | EEC6LW | 13:35 |
| | | | | CHROMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 13:35 |
| | | | | COBALT | .0144 | mg/L | B | Y | Y | P | J | | 15 | | | | EEC6LW | 13:35 |
| | | | | COPPER | .025 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 13:35 |
| | | | | IRON | .0925 | mg/L | B | Y | Y | P | J | | 15 | | | | EEC6LW | 13:35 |
| | | | | LEAD | .003 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 13:35 |
| | | | | MAGNESIUM | .421 | mg/L | B | Y | Y | P | J | | 15 | | | | EEC6LW | 13:35 |
| | | | | MANGANESE | 1.33 | mg/L | | Y | Y | P | | | | | | | EEC6LW | 13:35 |
| | | | | NICKEL | .0034 | mg/L | B | Y | Y | P | J | | 15 | | | | EEC6LW | 13:35 |
| | | | | POTASSIUM | .398 | mg/L | B | Y | Y | P | J | | 15 | | | | EEC6LW | 13:35 |
| | | | | SELENIUM | .005 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 13:35 |
| | | | | SILVER | .01 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 13:35 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **0232QX18** | | | | | | | | | | | | | | | | | | |
| ECC3011 | SW6010 | TOTREC | N 0 1 | SODIUM | .733 | mg/L | B | Y | Y | P | J | | 15 | | | | EEC6LW | 13:35 |
| | | | | THALLIUM | .0048 | mg/L | B | Y | Y | P | J | | 15 | | | | EEC6LW | 13:35 |
| | | | | VANADIUM | .05 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 13:35 |
| | | | | ZINC | .0058 | mg/L | B | Y | Y | F | B | | 15 | 06C | | | EEC6LW | 13:35 |
| | SW7470 | TOTAL | N 0 1 | MERCURY | .0002 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 14:36 |
| ECC3015 | SW6010 | TOTREC | N 0 1 | ALUMINUM | .386 | mg/L | | Y | Y | P | | | | | | | EELQQW | 14:24 |
| | | | | ANTIMONY | .06 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 14:24 |
| | | | | ARSENIC | .01 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 14:24 |
| | | | | BARIUM | .0552 | mg/L | B | Y | Y | P | J | | 15 | | | | EELQQW | 14:24 |
| | | | | BERYLLIUM | .005 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 14:24 |
| | | | | CADMIUM | .005 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 14:24 |
| | | | | CALCIUM | 32.6 | mg/L | | Y | Y | P | | | | | | | EELQQW | 14:24 |
| | | | | CHROMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 14:24 |
| | | | | COBALT | .0063 | mg/L | B | Y | Y | P | J | | 15 | | | | EELQQW | 14:24 |
| | | | | COPPER | .025 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 14:24 |
| | | | | IRON | .4 | mg/L | | Y | Y | P | | | | | | | EELQQW | 14:24 |
| | | | | LEAD | .003 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 14:24 |
| | | | | MAGNESIUM | 4.29 | mg/L | B | Y | Y | P | J | | 15 | | | | EELQQW | 14:24 |
| | | | | MANGANESE | .0579 | mg/L | | Y | Y | P | | | | | | | EELQQW | 14:24 |
| | | | | NICKEL | .04 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 14:24 |
| | | | | POTASSIUM | 9.72 | mg/L | | Y | Y | P | | | | | | | EELQQW | 14:24 |
| | | | | SELENIUM | .005 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 14:24 |
| | | | | SILVER | .01 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 14:24 |
| | | | | SODIUM | 3.94 | mg/L | B | Y | Y | P | J | | 15 | | | | EELQQW | 14:24 |
| | | | | THALLIUM | .01 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 14:24 |
| | | | | VANADIUM | .05 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 14:24 |
| | | | | ZINC | .0068 | mg/L | B | Y | Y | F | B | | 15 | 06C | | | EELQQW | 14:24 |
| | SW7470 | TOTAL | N 0 1 | MERCURY | .0002 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 14:58 |
| JF3007 | SW6010 | TOTREC | N 0 1 | ALUMINUM | .0424 | mg/L | B | Y | Y | | B | | 15 | 06C | | | EEC6NW | 13:39 |
| | | | | ANTIMONY | .06 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 13:39 |
| | | | | ARSENIC | .01 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 13:39 |
| | | | | BARIUM | .173 | mg/L | B | Y | Y | | J | | 15 | | | | EEC6NW | 13:39 |
| | | | | BERYLLIUM | .005 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 13:39 |
| | | | | CADMIUM | .005 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 13:39 |
| | | | | CALCIUM | 1.02 | mg/L | B | Y | Y | | J | | 15 | | | | EEC6NW | 13:39 |
| | | | | CHROMIUM | .01 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 13:39 |
| | | | | COBALT | .0138 | mg/L | B | Y | Y | | J | | 15 | | | | EEC6NW | 13:39 |
| | | | | COPPER | .025 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 13:39 |
| | | | | IRON | .104 | mg/L | | Y | Y | | | | | | | | EEC6NW | 13:39 |
| | | | | LEAD | .003 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 13:39 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **0232QX18** | | | | | | | | | | | | | | | | | | |
| JF3007 | SW6010 | TOTREC | N 0 1 | MAGNESIUM | .416 | mg/L | B | Y | Y | | J | | 15 | | | | EEC6NW | 13:39 |
| | | | | MANGANESE | 1.32 | mg/L | | Y | Y | | | | | | | | EEC6NW | 13:39 |
| | | | | NICKEL | .0038 | mg/L | B | Y | Y | | J | | 15 | | | | EEC6NW | 13:39 |
| | | | | POTASSIUM | .404 | mg/L | B | Y | Y | | J | | 15 | | | | EEC6NW | 13:39 |
| | | | | SELENIUM | .005 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 13:39 |
| | | | | SILVER | .01 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 13:39 |
| | | | | SODIUM | .698 | mg/L | B | Y | Y | | J | | 15 | | | | EEC6NW | 13:39 |
| | | | | THALLIUM | .01 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 13:39 |
| | | | | VANADIUM | .05 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 13:39 |
| | | | | ZINC | .0062 | mg/L | B | Y | Y | | B | | 15 | 06C | | | EEC6NW | 13:39 |
| | SW7470 | TOTAL | N 0 1 | MERCURY | .0002 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 14:39 |
| ECC3011 | SW8330 | METHOD | N 0 1 | 1,3,5-TRINITROBENZENE | .0002 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 19:08 |
| | | | | 1,3-DINITROBENZENE | .0002 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 19:08 |
| | | | | 2,4,6-TRINITROTOLUENE | .0002 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 19:08 |
| | | | | 2,4-DINITROTOLUENE | .000072 | mg/L | J | Y | Y | P | J | | 15 | | | | EEC6LW | 19:08 |
| | | | | 2,6-DINITROTOLUENE | .00017 | mg/L | J | Y | Y | P | J | | 15 | | | | EEC6LW | 19:08 |
| | | | | 2-AMINO-4,6-DINITROTOLUENE | .0002 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 19:08 |
| | | | | 2-NITROTOLUENE | .0003 | mg/L | G U | N | Y | U | | | | | | | EEC6LW | 19:08 |
| | | | | 3-NITROTOLUENE | .0002 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 19:08 |
| | | | | 4-AMINO-2,6-DINITROTOLUENE | .0002 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 19:08 |
| | | | | 4-NITROTOLUENE | .0002 | mg/L | G U | N | Y | U | | | | | | | EEC6LW | 19:08 |
| | | | | HMX | .0005 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 19:08 |
| | | | | NITROBENZENE | .0002 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 19:08 |
| | | | | RDX | .0005 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 19:08 |
| | | | | TETRYL | .0002 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 19:08 |
| ECC3015 | SW8330 | METHOD | N 0 1 | 1,3,5-TRINITROBENZENE | .0002 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 23:47 |
| | | | | 1,3-DINITROBENZENE | .0002 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 23:47 |
| | | | | 2,4,6-TRINITROTOLUENE | .000092 | mg/L | J | Y | Y | P | J | | 15 | | | | EELQQW | 23:47 |
| | | | | 2,4-DINITROTOLUENE | .0002 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 23:47 |
| | | | | 2,6-DINITROTOLUENE | .0002 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 23:47 |
| | | | | 2-AMINO-4,6-DINITROTOLUENE | .0002 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 23:47 |
| | | | | 2-NITROTOLUENE | .0002 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 23:47 |
| | | | | 3-NITROTOLUENE | .0002 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 23:47 |
| | | | | 4-AMINO-2,6-DINITROTOLUENE | .0002 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 23:47 |
| | | | | 4-NITROTOLUENE | .0002 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 23:47 |
| | | | | HMX | .0005 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 23:47 |
| | | | | NITROBENZENE | .0002 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 23:47 |
| | | | | RDX | .0005 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 23:47 |
| | | | | TETRYL | .0002 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 23:47 |
| JF3007 | SW8330 | METHOD | N 0 1 | 1,3,5-TRINITROBENZENE | .0002 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 19:24 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **0232QX18** | | | | | | | | | | | | | | | | | | |
| JF3007 | SW8330 | METHOD | N 0 1 | 1,3-DINITROBENZENE | .0002 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 19:24 |
| | | | | 2,4,6-TRINITROTOLUENE | .0002 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 19:24 |
| | | | | 2,4-DINITROTOLUENE | .0002 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 19:24 |
| | | | | 2,6-DINITROTOLUENE | .00015 | mg/L | J | Y | Y | P | J | | 15 | | | | EEC6NW | 19:24 |
| | | | | 2-AMINO-4,6-DINITROTOLUENE | .0002 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 19:24 |
| | | | | 2-NITROTOLUENE | .00025 | mg/L | G U | N | Y | | U | | | | | | EEC6NW | 19:24 |
| | | | | 3-NITROTOLUENE | .0002 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 19:24 |
| | | | | 4-AMINO-2,6-DINITROTOLUENE | .0002 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 19:24 |
| | | | | 4-NITROTOLUENE | .0002 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 19:24 |
| | | | | HMX | .0005 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 19:24 |
| | | | | NITROBENZENE | .0002 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 19:24 |
| | | | | RDX | .0005 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 19:24 |
| | | | | TETRYL | .0002 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 19:24 |
| ECC3011 | E314.0 | NONE | N 0 1 | PERCHLORATE | .005 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 00:00 |
| ECC3015 | E314.0 | NONE | N 0 1 | PERCHLORATE | .005 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 00:00 |
| JF3007 | E314.0 | NONE | N 0 1 | PERCHLORATE | .005 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 00:00 |
| ECC3011 | SW8260 | SW5030 | N 0 1 | 1,1,1,2-TETRACHLOROETHANE | .001 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 15:23 |
| | | | | 1,1,1-TRICHLOROETHANE | .001 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 15:23 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .001 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 15:23 |
| | | | | 1,1,2-TRICHLOROETHANE | .001 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 15:23 |
| | | | | 1,1-DICHLOROETHANE | .001 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 15:23 |
| | | | | 1,1-DICHLOROETHENE | .001 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 15:23 |
| | | | | 1,1-DICHLOROPROPENE | .001 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 15:23 |
| | | | | 1,2,3-TRICHLOROBENZENE | .001 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 15:23 |
| | | | | 1,2,3-TRICHLOROPROPANE | .001 | mg/L | U | N | Y | U | R | | 04A | 05A | | | EEC6LW | 15:23 |
| | | | | 1,2,4-TRICHLOROBENZENE | .001 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 15:23 |
| | | | | 1,2,4-TRIMETHYLBENZENE | .001 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 15:23 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .002 | mg/L | U | N | Y | U | R | | 04A | 05A | | | EEC6LW | 15:23 |
| | | | | 1,2-DIBROMOETHANE | .001 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 15:23 |
| | | | | 1,2-DICHLOROBENZENE | .001 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 15:23 |
| | | | | 1,2-DICHLOROETHANE | .001 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 15:23 |
| | | | | 1,2-DICHLOROPROPANE | .001 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 15:23 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .001 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 15:23 |
| | | | | 1,3-DICHLOROBENZENE | .001 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 15:23 |
| | | | | 1,3-DICHLOROPROPANE | .001 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 15:23 |
| | | | | 1,4-DICHLOROBENZENE | .001 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 15:23 |
| | | | | 2,2-DICHLOROPROPANE | .001 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 15:23 |
| | | | | 2-BUTANONE | .005 | mg/L | U | N | Y | U | R | | 04A | 05A | | | EEC6LW | 15:23 |
| | | | | 2-CHLOROTOLUENE | .001 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 15:23 |
| | | | | 2-HEXANONE | .005 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 15:23 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **0232QX18** | | | | | | | | | | | | | | | | | | |
| ECC3011 | SW8260 | SW5030 | N 0 1 | 4-CHLOROTOLUENE | .001 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 15:23 |
| | | | | 4-METHYL-2-PENTANONE | .005 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 15:23 |
| | | | | ACETONE | .01 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 15:23 |
| | | | | BENZENE | .001 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 15:23 |
| | | | | BROMOBENZENE | .001 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 15:23 |
| | | | | BROMOCHLOROMETHANE | .001 | mg/L | U | N | Y | U | R | | 04A | 05A | | | EEC6LW | 15:23 |
| | | | | BROMODICHLOROMETHANE | .001 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 15:23 |
| | | | | BROMOFORM | .001 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 15:23 |
| | | | | BROMOMETHANE | .002 | mg/L | U | N | Y | U | UJ | | 04B | | | | EEC6LW | 15:23 |
| | | | | CARBON DISULFIDE | .001 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 15:23 |
| | | | | CARBON TETRACHLORIDE | .001 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 15:23 |
| | | | | CHLOROBENZENE | .001 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 15:23 |
| | | | | CHLORODIBROMOMETHANE | .001 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 15:23 |
| | | | | CHLOROETHANE | .002 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 15:23 |
| | | | | CHLOROFORM | .001 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 15:23 |
| | | | | CHLOROMETHANE | .002 | mg/L | U | N | Y | U | UJ | | 04B | | | | EEC6LW | 15:23 |
| | | | | CIS-1,2-DICHLOROETHENE | .001 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 15:23 |
| | | | | CIS-1,3-DICHLOROPROPENE | .001 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 15:23 |
| | | | | DIBROMOMETHANE | .001 | mg/L | U | N | Y | U | R | | 04A | 05A | | | EEC6LW | 15:23 |
| | | | | DICHLORODIFLUOROMETHANE | .002 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 15:23 |
| | | | | ETHYLBENZENE | .001 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 15:23 |
| | | | | HEXACHLOROBUTADIENE | .001 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 15:23 |
| | | | | ISOPROPYLBENZENE | .001 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 15:23 |
| | | | | M-XYLENE & P-XYLENE | .001 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 15:23 |
| | | | | METHYLENE CHLORIDE | .001 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 15:23 |
| | | | | N-BUTYLBENZENE | .001 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 15:23 |
| | | | | N-PROPYLBENZENE | .001 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 15:23 |
| | | | | NAPHTHALENE | .001 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 15:23 |
| | | | | O-XYLENE | .001 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 15:23 |
| | | | | P-ISOPROPYLTOLUENE | .001 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 15:23 |
| | | | | SEC-BUTYLBENZENE | .001 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 15:23 |
| | | | | STYRENE | .001 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 15:23 |
| | | | | TERT-BUTYLBENZENE | .001 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 15:23 |
| | | | | TETRACHLOROETHENE | .001 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 15:23 |
| | | | | TOLUENE | .001 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 15:23 |
| | | | | TRANS-1,2-DICHLOROETHENE | .001 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 15:23 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .001 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 15:23 |
| | | | | TRICHLOROETHENE | .001 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 15:23 |
| | | | | TRICHLOROFLUOROMETHANE | .002 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 15:23 |
| | | | | VINYL CHLORIDE | .002 | mg/L | U | N | Y | U | U | | | | | | EEC6LW | 15:23 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **0232QX18** | | | | | | | | | | | | | | | | | | |
| ECC3015 | SW8260 | SW5030 | N 0 1 | 1,1,1,2-TETRACHLOROETHANE | .001 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 20:39 |
| | | | | 1,1,1-TRICHLOROETHANE | .001 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 20:39 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .001 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 20:39 |
| | | | | 1,1,2-TRICHLOROETHANE | .001 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 20:39 |
| | | | | 1,1-DICHLOROETHANE | .001 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 20:39 |
| | | | | 1,1-DICHLOROETHENE | .001 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 20:39 |
| | | | | 1,1-DICHLOROPROPENE | .001 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 20:39 |
| | | | | 1,2,3-TRICHLOROBENZENE | .001 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 20:39 |
| | | | | 1,2,3-TRICHLOROPROPANE | .001 | mg/L | U | N | Y | U | R | | 04A | 05A | | | EELQQW | 20:39 |
| | | | | 1,2,4-TRICHLOROBENZENE | .001 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 20:39 |
| | | | | 1,2,4-TRIMETHYLBENZENE | .001 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 20:39 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .002 | mg/L | U | N | Y | U | R | | 04A | 05A | | | EELQQW | 20:39 |
| | | | | 1,2-DIBROMOETHANE | .001 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 20:39 |
| | | | | 1,2-DICHLOROBENZENE | .001 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 20:39 |
| | | | | 1,2-DICHLOROETHANE | .001 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 20:39 |
| | | | | 1,2-DICHLOROPROPANE | .001 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 20:39 |
| | | | | 1,3,5-TRIMETHYLBENZENE | .001 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 20:39 |
| | | | | 1,3-DICHLOROBENZENE | .001 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 20:39 |
| | | | | 1,3-DICHLOROPROPANE | .001 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 20:39 |
| | | | | 1,4-DICHLOROBENZENE | .001 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 20:39 |
| | | | | 2,2-DICHLOROPROPANE | .001 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 20:39 |
| | | | | 2-BUTANONE | .005 | mg/L | U | N | Y | U | R | | 04A | 05A | | | EELQQW | 20:39 |
| | | | | 2-CHLOROTOLUENE | .001 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 20:39 |
| | | | | 2-HEXANONE | .005 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 20:39 |
| | | | | 4-CHLOROTOLUENE | .001 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 20:39 |
| | | | | 4-METHYL-2-PENTANONE | .005 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 20:39 |
| | | | | ACETONE | .0038 | mg/L | J B | Y | Y | F | B | | 06A | 04A | 05A | 05B | EELQQW | 20:39 |
| | | | | BENZENE | .001 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 20:39 |
| | | | | BROMOBENZENE | .001 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 20:39 |
| | | | | BROMOCHLOROMETHANE | .001 | mg/L | U | N | Y | U | R | | 04A | 05A | | | EELQQW | 20:39 |
| | | | | BROMODICHLOROMETHANE | .001 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 20:39 |
| | | | | BROMOFORM | .001 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 20:39 |
| | | | | BROMOMETHANE | .002 | mg/L | U | N | Y | U | UJ | | 05B | | | | EELQQW | 20:39 |
| | | | | CARBON DISULFIDE | .001 | mg/L | U | N | Y | U | UJ | | 05B | | | | EELQQW | 20:39 |
| | | | | CARBON TETRACHLORIDE | .001 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 20:39 |
| | | | | CHLOROBENZENE | .001 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 20:39 |
| | | | | CHLORODIBROMOMETHANE | .001 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 20:39 |
| | | | | CHLOROETHANE | .002 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 20:39 |
| | | | | CHLOROFORM | .001 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 20:39 |
| | | | | CHLOROMETHANE | .002 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 20:39 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **0232QX18** | | | | | | | | | | | | | | | | | | |
| ECC3015 | SW8260 | SW5030 | N 0 1 | CIS-1,2-DICHLOROETHENE | .001 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 20:39 |
| | | | | CIS-1,3-DICHLOROPROPENE | .001 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 20:39 |
| | | | | DIBROMOMETHANE | .001 | mg/L | U | N | Y | U | R | | 04A | 05A | | | EELQQW | 20:39 |
| | | | | DICHLORODIFLUOROMETHANE | .002 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 20:39 |
| | | | | ETHYLBENZENE | .001 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 20:39 |
| | | | | HEXACHLOROBUTADIENE | .001 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 20:39 |
| | | | | ISOPROPYLBENZENE | .001 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 20:39 |
| | | | | M-XYLENE & P-XYLENE | .001 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 20:39 |
| | | | | METHYLENE CHLORIDE | .001 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 20:39 |
| | | | | N-BUTYLBENZENE | .001 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 20:39 |
| | | | | N-PROPYLBENZENE | .001 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 20:39 |
| | | | | NAPHTHALENE | .001 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 20:39 |
| | | | | O-XYLENE | .001 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 20:39 |
| | | | | P-ISOPROPYLTOLUENE | .001 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 20:39 |
| | | | | SEC-BUTYLBENZENE | .001 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 20:39 |
| | | | | STYRENE | .001 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 20:39 |
| | | | | TERT-BUTYLBENZENE | .001 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 20:39 |
| | | | | TETRACHLOROETHENE | .001 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 20:39 |
| | | | | TOLUENE | .001 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 20:39 |
| | | | | TRANS-1,2-DICHLOROETHENE | .001 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 20:39 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .001 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 20:39 |
| | | | | TRICHLOROETHENE | .001 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 20:39 |
| | | | | TRICHLOROFLUOROMETHANE | .002 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 20:39 |
| | | | | VINYL CHLORIDE | .002 | mg/L | U | N | Y | U | U | | | | | | EELQQW | 20:39 |
| JF3007 | SW8260 | SW5030 | N 0 1 | 1,1,1,2-TETRACHLOROETHANE | .001 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 15:49 |
| | | | | 1,1,1-TRICHLOROETHANE | .001 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 15:49 |
| | | | | 1,1,2,2-TETRACHLOROETHANE | .001 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 15:49 |
| | | | | 1,1,2-TRICHLOROETHANE | .001 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 15:49 |
| | | | | 1,1-DICHLOROETHANE | .001 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 15:49 |
| | | | | 1,1-DICHLOROETHENE | .001 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 15:49 |
| | | | | 1,1-DICHLOROPROPENE | .001 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 15:49 |
| | | | | 1,2,3-TRICHLOROBENZENE | .001 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 15:49 |
| | | | | 1,2,3-TRICHLOROPROPANE | .001 | mg/L | U | N | Y | | R | | 04A | 05A | | | EEC6NW | 15:49 |
| | | | | 1,2,4-TRICHLOROBENZENE | .001 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 15:49 |
| | | | | 1,2,4-TRIMETHYLBENZENE | .001 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 15:49 |
| | | | | 1,2-DIBROMO-3-CHLOROPROPANE | .002 | mg/L | U | N | Y | | R | | 04A | 05A | | | EEC6NW | 15:49 |
| | | | | 1,2-DIBROMOETHANE | .001 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 15:49 |
| | | | | 1,2-DICHLOROBENZENE | .001 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 15:49 |
| | | | | 1,2-DICHLOROETHANE | .001 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 15:49 |
| | | | | 1,2-DICHLOROPROPANE | .001 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 15:49 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **0232QX18** | | | | | | | | | | | | | | | | | | |
| JF3007 | SW8260 | SW5030 | N 0 1 | 1,3,5-TRIMETHYLBENZENE | .001 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 15:49 |
| | | | | 1,3-DICHLOROBENZENE | .001 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 15:49 |
| | | | | 1,3-DICHLOROPROPANE | .001 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 15:49 |
| | | | | 1,4-DICHLOROBENZENE | .001 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 15:49 |
| | | | | 2,2-DICHLOROPROPANE | .001 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 15:49 |
| | | | | 2-BUTANONE | .005 | mg/L | U | N | Y | | R | | 04A | 05A | | | EEC6NW | 15:49 |
| | | | | 2-CHLOROTOLUENE | .001 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 15:49 |
| | | | | 2-HEXANONE | .005 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 15:49 |
| | | | | 4-CHLOROTOLUENE | .001 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 15:49 |
| | | | | 4-METHYL-2-PENTANONE | .005 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 15:49 |
| | | | | ACETONE | .004 | mg/L | J | Y | Y | | B | | 06C | 15 | | | EEC6NW | 15:49 |
| | | | | BENZENE | .001 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 15:49 |
| | | | | BROMOBENZENE | .001 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 15:49 |
| | | | | BROMOCHLOROMETHANE | .001 | mg/L | U | N | Y | | R | | 04A | 05A | | | EEC6NW | 15:49 |
| | | | | BROMODICHLOROMETHANE | .001 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 15:49 |
| | | | | BROMOFORM | .001 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 15:49 |
| | | | | BROMOMETHANE | .002 | mg/L | U | N | Y | | UJ | | 04B | | | | EEC6NW | 15:49 |
| | | | | CARBON DISULFIDE | .001 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 15:49 |
| | | | | CARBON TETRACHLORIDE | .001 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 15:49 |
| | | | | CHLOROBENZENE | .001 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 15:49 |
| | | | | CHLORODIBROMOMETHANE | .001 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 15:49 |
| | | | | CHLOROETHANE | .002 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 15:49 |
| | | | | CHLOROFORM | .001 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 15:49 |
| | | | | CHLOROMETHANE | .002 | mg/L | U | N | Y | | UJ | | 04B | | | | EEC6NW | 15:49 |
| | | | | CIS-1,2-DICHLOROETHENE | .001 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 15:49 |
| | | | | CIS-1,3-DICHLOROPROPENE | .001 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 15:49 |
| | | | | DIBROMOMETHANE | .001 | mg/L | U | N | Y | | R | | 04A | 05A | | | EEC6NW | 15:49 |
| | | | | DICHLORODIFLUOROMETHANE | .002 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 15:49 |
| | | | | ETHYLBENZENE | .001 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 15:49 |
| | | | | HEXACHLOROBUTADIENE | .001 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 15:49 |
| | | | | ISOPROPYLBENZENE | .001 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 15:49 |
| | | | | M-XYLENE & P-XYLENE | .001 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 15:49 |
| | | | | METHYLENE CHLORIDE | .001 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 15:49 |
| | | | | N-BUTYLBENZENE | .001 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 15:49 |
| | | | | N-PROPYLBENZENE | .001 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 15:49 |
| | | | | NAPHTHALENE | .001 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 15:49 |
| | | | | O-XYLENE | .001 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 15:49 |
| | | | | P-ISOPROPYLTOLUENE | .001 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 15:49 |
| | | | | SEC-BUTYLBENZENE | .001 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 15:49 |
| | | | | STYRENE | .001 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 15:49 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **0232QX18** | | | | | | | | | | | | | | | | | | |
| JF3007 | SW8260 | SW5030 | N 0 1 | TERT-BUTYLBENZENE | .001 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 15:49 |
| | | | | TETRACHLOROETHENE | .001 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 15:49 |
| | | | | TOLUENE | .001 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 15:49 |
| | | | | TRANS-1,2-DICHLOROETHENE | .001 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 15:49 |
| | | | | TRANS-1,3-DICHLOROPROPENE | .001 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 15:49 |
| | | | | TRICHLOROETHENE | .001 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 15:49 |
| | | | | TRICHLOROFLUOROMETHANE | .002 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 15:49 |
| | | | | VINYL CHLORIDE | .002 | mg/L | U | N | Y | | U | | | | | | EEC6NW | 15:49 |
| **10232QX-1** | | | | | | | | | | | | | | | | | | |
| ECC0005 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 7010 | mg/kg | | Y | Y | P | | | | | | | A255-01 | 21:08 |
| | | | | ANTIMONY | 12.5 | mg/kg | U | N | Y | U | UJ | | 08A | | | | A255-01 | 21:08 |
| | | | | ARSENIC | 4.14 | mg/kg | | Y | Y | P | J | | 13 | | | | A255-01 | 16:12 |
| | | | | BARIUM | 124 | mg/kg | | Y | Y | P | | | | | | | A255-01 | 21:08 |
| | | | | BERYLLIUM | 1.23 | mg/kg | J | Y | Y | P | J | | 15 | | | | A255-01 | 21:08 |
| | | | | CADMIUM | .625 | mg/kg | U | N | Y | U | U | | | | | | A255-01 | 21:08 |
| | | | | CALCIUM | 236 | mg/kg | | Y | Y | P | | | | | | | A255-01 | 21:08 |
| | | | | CHROMIUM | 9.28 | mg/kg | | Y | Y | P | | | | | | | A255-01 | 21:08 |
| | | | | COBALT | 16.9 | mg/kg | | Y | Y | P | | | | | | | A255-01 | 21:08 |
| | | | | COPPER | 10.1 | mg/kg | | Y | Y | P | | | | | | | A255-01 | 21:08 |
| | | | | IRON | 16800 | mg/kg | | Y | Y | P | | | | | | | A255-01 | 21:08 |
| | | | | LEAD | 26.2 | mg/kg | | Y | Y | P | | | | | | | A255-01 | 16:12 |
| | | | | MAGNESIUM | 283 | mg/kg | | Y | Y | P | | | | | | | A255-01 | 21:08 |
| | | | | MANGANESE | 1630 | mg/kg | | Y | Y | P | | | | | | | A255-01 | 21:08 |
| | | | | NICKEL | 8.5 | mg/kg | | Y | Y | P | J | | 08A | | | | A255-01 | 21:08 |
| | | | | POTASSIUM | 625 | mg/kg | U | N | Y | U | U | | | | | | A255-01 | 21:08 |
| | | | | SELENIUM | 1.25 | mg/kg | U | N | Y | U | U | | | | | | A255-01 | 16:12 |
| | | | | SILVER | 1.25 | mg/kg | U | N | Y | U | U | | | | | | A255-01 | 21:08 |
| | | | | SODIUM | 125 | mg/kg | U | N | Y | U | U | | | | | | A255-01 | 21:08 |
| | | | | THALLIUM | 2.5 | mg/kg | U | N | Y | U | U | | | | | | A255-01 | 16:12 |
| | | | | VANADIUM | 12.5 | mg/kg | | Y | Y | P | | | | | | | A255-01 | 21:08 |
| | | | | ZINC | 44.2 | mg/kg | | Y | Y | P | J | | 13 | | | | A255-01 | 21:08 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .085 | mg/kg | J | Y | Y | P | J | | 15 | | | | A255-01 | 11:42 |
| ECC0006 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 3890 | mg/kg | | Y | Y | P | | | | | | | A255-02 | 21:13 |
| | | | | ANTIMONY | 5.01 | mg/kg | J | Y | Y | P | J | | 08A | 15 | | | A255-02 | 21:13 |
| | | | | ARSENIC | 4.27 | mg/kg | | Y | Y | P | J | | 13 | | | | A255-02 | 16:17 |
| | | | | BARIUM | 98.5 | mg/kg | | Y | Y | P | | | | | | | A255-02 | 21:13 |
| | | | | BERYLLIUM | 5.51 | mg/kg | | Y | Y | P | | | | | | | A255-02 | 21:13 |
| | | | | CADMIUM | .62 | mg/kg | U | N | Y | U | U | | | | | | A255-02 | 21:13 |
| | | | | CALCIUM | 3870 | mg/kg | | Y | Y | P | | | | | | | A255-02 | 21:13 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10232QX-1** | | | | | | | | | | | | | | | | | | |
| ECC0006 | SW6010B | SW3050 | N 0 1 | CHROMIUM | 17.2 | mg/kg | | Y | Y | P | | | | | | | A255-02 | 21:13 |
| | | | | COBALT | 25.3 | mg/kg | | Y | Y | P | | | | | | | A255-02 | 21:13 |
| | | | | COPPER | 36.5 | mg/kg | | Y | Y | P | | | | | | | A255-02 | 21:13 |
| | | | | IRON | 24600 | mg/kg | | Y | Y | P | | | | | | | A255-02 | 21:13 |
| | | | | LEAD | 12.5 | mg/kg | | Y | Y | P | | | | | | | A255-02 | 16:17 |
| | | | | MAGNESIUM | 784 | mg/kg | | Y | Y | P | | | | | | | A255-02 | 21:13 |
| | | | | MANGANESE | 106 | mg/kg | | Y | Y | P | | | | | | | A255-02 | 21:13 |
| | | | | NICKEL | 42.6 | mg/kg | | Y | Y | P | J | | 08A | | | | A255-02 | 21:13 |
| | | | | POTASSIUM | 189 | mg/kg | J | Y | Y | P | J | | 15 | | | | A255-02 | 21:13 |
| | | | | SELENIUM | 1.24 | mg/kg | U | N | Y | U | U | | | | | | A255-02 | 16:17 |
| | | | | SILVER | 1.24 | mg/kg | U | N | Y | U | U | | | | | | A255-02 | 21:13 |
| | | | | SODIUM | 76.8 | mg/kg | J | Y | Y | P | J | | 15 | | | | A255-02 | 21:13 |
| | | | | THALLIUM | 2.48 | mg/kg | U | N | Y | U | U | | | | | | A255-02 | 16:17 |
| | | | | VANADIUM | 12.7 | mg/kg | | Y | Y | P | | | | | | | A255-02 | 21:13 |
| | | | | ZINC | 125 | mg/kg | | Y | Y | P | J | | 13 | | | | A255-02 | 21:13 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .048 | mg/kg | J | Y | Y | P | J | | 15 | | | | A255-02 | 11:44 |
| ECC0009 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 6280 | mg/kg | | Y | Y | P | | | | | | | A247-01 | 20:06 |
| | | | | ANTIMONY | 12.4 | mg/kg | U | N | Y | U | UJ | | 08A | | | | A247-01 | 20:06 |
| | | | | ARSENIC | 5.34 | mg/kg | | Y | Y | P | J | | 13 | | | | A247-01 | 15:43 |
| | | | | BARIUM | 62.5 | mg/kg | | Y | Y | P | | | | | | | A247-01 | 20:06 |
| | | | | BERYLLIUM | .373 | mg/kg | J | Y | Y | P | J | | 15 | | | | A247-01 | 20:06 |
| | | | | CADMIUM | .62 | mg/kg | U | N | Y | U | U | | | | | | A247-01 | 20:06 |
| | | | | CALCIUM | 348 | mg/kg | | Y | Y | P | | | | | | | A247-01 | 20:06 |
| | | | | CHROMIUM | 13 | mg/kg | | Y | Y | P | | | | | | | A247-01 | 20:06 |
| | | | | COBALT | 6.71 | mg/kg | | Y | Y | P | | | | | | | A247-01 | 20:06 |
| | | | | COPPER | 7.09 | mg/kg | | Y | Y | P | | | | | | | A247-01 | 20:06 |
| | | | | IRON | 17500 | mg/kg | | Y | Y | P | | | | | | | A247-01 | 20:06 |
| | | | | LEAD | 17.7 | mg/kg | | Y | Y | P | | | | | | | A247-01 | 15:43 |
| | | | | MAGNESIUM | 184 | mg/kg | | Y | Y | P | | | | | | | A247-01 | 20:06 |
| | | | | MANGANESE | 325 | mg/kg | | Y | Y | P | | | | | | | A247-01 | 20:06 |
| | | | | NICKEL | 3.63 | mg/kg | | Y | Y | P | J | | 08A | | | | A247-01 | 20:06 |
| | | | | POTASSIUM | 224 | mg/kg | J | Y | Y | P | J | | 15 | | | | A247-01 | 20:06 |
| | | | | SELENIUM | 1.24 | mg/kg | U | N | Y | U | U | | | | | | A247-01 | 15:43 |
| | | | | SILVER | 1.24 | mg/kg | U | N | Y | U | U | | | | | | A247-01 | 20:06 |
| | | | | SODIUM | 124 | mg/kg | U | N | Y | U | U | | | | | | A247-01 | 20:06 |
| | | | | THALLIUM | 2.48 | mg/kg | U | N | Y | U | U | | | | | | A247-01 | 15:43 |
| | | | | VANADIUM | 17 | mg/kg | | Y | Y | P | | | | | | | A247-01 | 20:06 |
| | | | | ZINC | 25.5 | mg/kg | | Y | Y | P | J | | 13 | | | | A247-01 | 20:06 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .079 | mg/kg | J | Y | Y | P | J | | 15 | | | | A247-01 | 11:02 |
| ECC0010 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 5580 | mg/kg | | Y | Y | P | | | | | | | A247-02 | 20:11 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10232QX-1** | | | | | | | | | | | | | | | | | | |
| ECC0010 | SW6010B | SW3050 | N 0 1 | ANTIMONY | 12.1 | mg/kg | U | N | Y | U | UJ | | 08A | | | | A247-02 | 20:11 |
| | | | | ARSENIC | 9.36 | mg/kg | | Y | Y | P | J | | 13 | | | | A247-02 | 14:55 |
| | | | | BARIUM | 14.6 | mg/kg | | Y | Y | P | | | | | | | A247-02 | 20:11 |
| | | | | BERYLLIUM | .693 | mg/kg | J | Y | Y | P | J | | 15 | | | | A247-02 | 20:11 |
| | | | | CADMIUM | .605 | mg/kg | U | N | Y | U | U | | | | | | A247-02 | 20:11 |
| | | | | CALCIUM | 15.4 | mg/kg | J | Y | Y | P | J | | 15 | | | | A247-02 | 20:11 |
| | | | | CHROMIUM | 10 | mg/kg | | Y | Y | P | | | | | | | A247-02 | 20:11 |
| | | | | COBALT | 6.3 | mg/kg | | Y | Y | P | | | | | | | A247-02 | 20:11 |
| | | | | COPPER | 37.4 | mg/kg | | Y | Y | P | | | | | | | A247-02 | 20:11 |
| | | | | IRON | 32100 | mg/kg | | Y | Y | P | | | | | | | A247-02 | 20:11 |
| | | | | LEAD | 26 | mg/kg | | Y | Y | P | | | | | | | A247-02 | 14:55 |
| | | | | MAGNESIUM | 69.4 | mg/kg | J | Y | Y | P | J | | 15 | | | | A247-02 | 20:11 |
| | | | | MANGANESE | 87.9 | mg/kg | | Y | Y | P | | | | | | | A247-02 | 20:11 |
| | | | | NICKEL | 11.9 | mg/kg | | Y | Y | P | J | | 08A | | | | A247-02 | 20:11 |
| | | | | POTASSIUM | 221 | mg/kg | J | Y | Y | P | J | | 15 | | | | A247-02 | 20:11 |
| | | | | SELENIUM | 1.21 | mg/kg | U | N | Y | U | U | | | | | | A247-02 | 14:55 |
| | | | | SILVER | 1.21 | mg/kg | U | N | Y | U | U | | | | | | A247-02 | 20:11 |
| | | | | SODIUM | 121 | mg/kg | U | N | Y | U | U | | | | | | A247-02 | 20:11 |
| | | | | THALLIUM | 2.42 | mg/kg | U | N | Y | U | U | | | | | | A247-02 | 14:55 |
| | | | | VANADIUM | 29.8 | mg/kg | | Y | Y | P | | | | | | | A247-02 | 20:11 |
| | | | | ZINC | 49.5 | mg/kg | | Y | Y | P | J | | 13 | | | | A247-02 | 20:11 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .096 | mg/kg | J | Y | Y | P | J | | 15 | | | | A247-02 | 11:12 |
| ECC0021 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 11100 | mg/kg | | Y | Y | P | | | | | | | A247-03 | 20:16 |
| | | | | ANTIMONY | 13 | mg/kg | U | N | Y | U | UJ | | 08A | | | | A247-03 | 20:16 |
| | | | | ARSENIC | 8.54 | mg/kg | | Y | Y | P | J | | 13 | | | | A247-03 | 15:00 |
| | | | | BARIUM | 162 | mg/kg | | Y | Y | P | | | | | | | A247-03 | 20:16 |
| | | | | BERYLLIUM | 1.49 | mg/kg | | Y | Y | P | | | | | | | A247-03 | 20:16 |
| | | | | CADMIUM | .649 | mg/kg | U | N | Y | U | U | | | | | | A247-03 | 20:16 |
| | | | | CALCIUM | 1040 | mg/kg | | Y | Y | P | | | | | | | A247-03 | 20:16 |
| | | | | CHROMIUM | 13 | mg/kg | | Y | Y | P | | | | | | | A247-03 | 20:16 |
| | | | | COBALT | 14.1 | mg/kg | | Y | Y | P | | | | | | | A247-03 | 20:16 |
| | | | | COPPER | 19.3 | mg/kg | | Y | Y | P | | | | | | | A247-03 | 20:16 |
| | | | | IRON | 24600 | mg/kg | | Y | Y | P | | | | | | | A247-03 | 20:16 |
| | | | | LEAD | 53.2 | mg/kg | | Y | Y | P | | | | | | | A247-03 | 15:00 |
| | | | | MAGNESIUM | 420 | mg/kg | | Y | Y | P | | | | | | | A247-03 | 20:16 |
| | | | | MANGANESE | 2290 | mg/kg | | Y | Y | P | | | | | | | A247-03 | 20:16 |
| | | | | NICKEL | 12 | mg/kg | | Y | Y | P | J | | 08A | | | | A247-03 | 20:16 |
| | | | | POTASSIUM | 282 | mg/kg | J | Y | Y | P | J | | 15 | | | | A247-03 | 20:16 |
| | | | | SELENIUM | 1.3 | mg/kg | U | N | Y | U | U | | | | | | A247-03 | 15:00 |
| | | | | SILVER | 1.3 | mg/kg | U | N | Y | U | U | | | | | | A247-03 | 20:16 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10232QX-1** | | | | | | | | | | | | | | | | | | |
| ECC0021 | SW6010B | SW3050 | N 0 1 | SODIUM | 130 | mg/kg | U | N | Y | U | U | | | | | | A247-03 | 20:16 |
| | | | | THALLIUM | 2.6 | mg/kg | U | N | Y | U | U | | | | | | A247-03 | 15:00 |
| | | | | VANADIUM | 25.3 | mg/kg | | Y | Y | P | | | | | | | A247-03 | 20:16 |
| | | | | ZINC | 50.6 | mg/kg | | Y | Y | P | J | | 13 | | | | A247-03 | 20:16 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .053 | mg/kg | J | Y | Y | P | J | | 15 | | | | A247-03 | 11:15 |
| ECC0022 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 7280 | mg/kg | | Y | Y | P | | | | | | | A247-04 | 20:21 |
| | | | | ANTIMONY | 6.7 | mg/kg | J | Y | Y | P | J | | 08A | 15 | | | A247-04 | 20:21 |
| | | | | ARSENIC | 3.05 | mg/kg | | Y | Y | P | J | | 13 | | | | A247-04 | 15:05 |
| | | | | BARIUM | 19.5 | mg/kg | | Y | Y | P | | | | | | | A247-04 | 20:21 |
| | | | | BERYLLIUM | .747 | mg/kg | J | Y | Y | P | J | | 15 | | | | A247-04 | 20:21 |
| | | | | CADMIUM | .567 | mg/kg | U | N | Y | U | U | | | | | | A247-04 | 20:21 |
| | | | | CALCIUM | 36.9 | mg/kg | J | Y | Y | P | J | | 15 | | | | A247-04 | 20:21 |
| | | | | CHROMIUM | 15.7 | mg/kg | | Y | Y | P | | | | | | | A247-04 | 20:21 |
| | | | | COBALT | 15.6 | mg/kg | | Y | Y | P | | | | | | | A247-04 | 20:21 |
| | | | | COPPER | 60.1 | mg/kg | | Y | Y | P | | | | | | | A247-04 | 20:21 |
| | | | | IRON | 49400 | mg/kg | | Y | Y | P | | | | | | | A247-04 | 20:21 |
| | | | | LEAD | 25.4 | mg/kg | | Y | Y | P | | | | | | | A247-04 | 15:05 |
| | | | | MAGNESIUM | 44.3 | mg/kg | J | Y | Y | P | J | | 15 | | | | A247-04 | 20:21 |
| | | | | MANGANESE | 82.7 | mg/kg | | Y | Y | P | | | | | | | A247-04 | 20:21 |
| | | | | NICKEL | 4.46 | mg/kg | | Y | Y | P | J | | 08A | | | | A247-04 | 20:21 |
| | | | | POTASSIUM | 312 | mg/kg | J | Y | Y | P | J | | 15 | | | | A247-04 | 20:21 |
| | | | | SELENIUM | 1.13 | mg/kg | U | N | Y | U | U | | | | | | A247-04 | 15:05 |
| | | | | SILVER | 1.13 | mg/kg | U | N | Y | U | U | | | | | | A247-04 | 20:21 |
| | | | | SODIUM | 113 | mg/kg | U | N | Y | U | U | | | | | | A247-04 | 20:21 |
| | | | | THALLIUM | 2.27 | mg/kg | U | N | Y | U | U | | | | | | A247-04 | 15:05 |
| | | | | VANADIUM | 21.1 | mg/kg | | Y | Y | P | | | | | | | A247-04 | 20:21 |
| | | | | ZINC | 60.1 | mg/kg | | Y | Y | P | J | | 13 | | | | A247-04 | 20:21 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .061 | mg/kg | J | Y | Y | P | J | | 15 | | | | A247-04 | 11:24 |
| ECC0035 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 6190 | mg/kg | | Y | Y | P | | | | | | | A255-03 | 21:18 |
| | | | | ANTIMONY | 12.3 | mg/kg | U | N | Y | U | UJ | | 08A | | | | A255-03 | 21:18 |
| | | | | ARSENIC | 2.78 | mg/kg | | Y | Y | P | J | | 13 | | | | A255-03 | 16:22 |
| | | | | BARIUM | 58.6 | mg/kg | | Y | Y | P | | | | | | | A255-03 | 21:18 |
| | | | | BERYLLIUM | .647 | mg/kg | J | Y | Y | P | J | | 15 | | | | A255-03 | 21:18 |
| | | | | CADMIUM | .613 | mg/kg | U | N | Y | U | U | | | | | | A255-03 | 21:18 |
| | | | | CALCIUM | 508 | mg/kg | | Y | Y | P | | | | | | | A255-03 | 21:18 |
| | | | | CHROMIUM | 8.38 | mg/kg | | Y | Y | P | | | | | | | A255-03 | 21:18 |
| | | | | COBALT | 21.6 | mg/kg | | Y | Y | P | | | | | | | A255-03 | 21:18 |
| | | | | COPPER | 4.1 | mg/kg | | Y | Y | P | | | | | | | A255-03 | 21:18 |
| | | | | IRON | 7210 | mg/kg | | Y | Y | P | | | | | | | A255-03 | 21:18 |
| | | | | LEAD | 41.4 | mg/kg | | Y | Y | P | | | | | | | A255-03 | 16:22 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10232QX-1** | | | | | | | | | | | | | | | | | | |
| ECC0035 | SW6010B | SW3050 | N 0 1 | MAGNESIUM | 229 | mg/kg | | Y | Y | P | | | | | | | A255-03 | 21:18 |
| | | | | MANGANESE | 1030 | mg/kg | | Y | Y | P | | | | | | | A255-03 | 21:18 |
| | | | | NICKEL | 4.5 | mg/kg | | Y | Y | P | J | | 08A | | | | A255-03 | 21:18 |
| | | | | POTASSIUM | 229 | mg/kg | J | Y | Y | P | J | | 15 | | | | A255-03 | 21:18 |
| | | | | SELENIUM | 1.23 | mg/kg | U | N | Y | U | U | | | | | | A255-03 | 16:22 |
| | | | | SILVER | 1.23 | mg/kg | U | N | Y | U | U | | | | | | A255-03 | 21:18 |
| | | | | SODIUM | 123 | mg/kg | U | N | Y | U | U | | | | | | A255-03 | 21:18 |
| | | | | THALLIUM | 2.45 | mg/kg | U | N | Y | U | U | | | | | | A255-03 | 16:22 |
| | | | | VANADIUM | 12.4 | mg/kg | | Y | Y | P | | | | | | | A255-03 | 21:18 |
| | | | | ZINC | 20.1 | mg/kg | | Y | Y | P | J | | 13 | | | | A255-03 | 21:18 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .047 | mg/kg | J | Y | Y | P | J | | 15 | | | | A255-03 | 11:54 |
| ECC0036 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 8170 | mg/kg | | Y | Y | P | | | | | | | A255-04 | 21:32 |
| | | | | ANTIMONY | 4.46 | mg/kg | J | Y | Y | P | J | | 08A | 15 | | | A255-04 | 21:32 |
| | | | | ARSENIC | 9.8 | mg/kg | | Y | Y | P | J | | 13 | | | | A255-04 | 16:39 |
| | | | | BARIUM | 138 | mg/kg | | Y | Y | P | | | | | | | A255-04 | 21:32 |
| | | | | BERYLLIUM | 6.71 | mg/kg | | Y | Y | P | | | | | | | A255-04 | 21:32 |
| | | | | CADMIUM | .492 | mg/kg | J | Y | Y | P | J | | 15 | | | | A255-04 | 21:32 |
| | | | | CALCIUM | 2040 | mg/kg | | Y | Y | P | | | | | | | A255-04 | 21:32 |
| | | | | CHROMIUM | 23.3 | mg/kg | | Y | Y | P | | | | | | | A255-04 | 21:32 |
| | | | | COBALT | 27.5 | mg/kg | | Y | Y | P | | | | | | | A255-04 | 21:32 |
| | | | | COPPER | 40.9 | mg/kg | | Y | Y | P | | | | | | | A255-04 | 21:32 |
| | | | | IRON | 43600 | mg/kg | | Y | Y | P | | | | | | | A255-04 | 21:32 |
| | | | | LEAD | 39.6 | mg/kg | | Y | Y | P | | | | | | | A255-04 | 16:39 |
| | | | | MAGNESIUM | 1770 | mg/kg | | Y | Y | P | | | | | | | A255-04 | 21:32 |
| | | | | MANGANESE | 889 | mg/kg | | Y | Y | P | | | | | | | A255-04 | 21:32 |
| | | | | NICKEL | 86.4 | mg/kg | | Y | Y | P | J | | 08A | | | | A255-04 | 21:32 |
| | | | | POTASSIUM | 338 | mg/kg | J | Y | Y | P | J | | 15 | | | | A255-04 | 21:32 |
| | | | | SELENIUM | 1.25 | mg/kg | U | N | Y | U | U | | | | | | A255-04 | 16:39 |
| | | | | SILVER | 1.25 | mg/kg | U | N | Y | U | U | | | | | | A255-04 | 21:32 |
| | | | | SODIUM | 52.9 | mg/kg | J | Y | Y | P | J | | 15 | | | | A255-04 | 21:32 |
| | | | | THALLIUM | .7 | mg/kg | J | Y | Y | P | J | | 15 | | | | A255-04 | 16:39 |
| | | | | VANADIUM | 51.5 | mg/kg | | Y | Y | P | | | | | | | A255-04 | 21:32 |
| | | | | ZINC | 335 | mg/kg | | Y | Y | P | J | | 13 | | | | A255-04 | 21:32 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .106 | mg/kg | J | Y | Y | P | J | | 15 | | | | A255-04 | 11:56 |
| ECC0037 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 9200 | mg/kg | | Y | Y | P | | | | | | | A247-05 | 20:40 |
| | | | | ANTIMONY | 12.8 | mg/kg | U | N | Y | U | UJ | | 08A | | | | A247-05 | 20:40 |
| | | | | ARSENIC | 4.88 | mg/kg | | Y | Y | P | J | | 13 | | | | A247-05 | 15:10 |
| | | | | BARIUM | 149 | mg/kg | | Y | Y | P | | | | | | | A247-05 | 20:40 |
| | | | | BERYLLIUM | 1.18 | mg/kg | J | Y | Y | P | J | | 15 | | | | A247-05 | 20:40 |
| | | | | CADMIUM | .638 | mg/kg | U | N | Y | U | U | | | | | | A247-05 | 20:40 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10232QX-1** | | | | | | | | | | | | | | | | | | |
| ECC0037 | SW6010B | SW3050 | N 0 1 | CALCIUM | 658 | mg/kg | | Y | Y | P | | | | | | | A247-05 | 20:40 |
| | | | | CHROMIUM | 12.4 | mg/kg | | Y | Y | P | | | | | | | A247-05 | 20:40 |
| | | | | COBALT | 24.5 | mg/kg | | Y | Y | P | | | | | | | A247-05 | 20:40 |
| | | | | COPPER | 13.6 | mg/kg | | Y | Y | P | | | | | | | A247-05 | 20:40 |
| | | | | IRON | 15700 | mg/kg | | Y | Y | P | | | | | | | A247-05 | 20:40 |
| | | | | LEAD | 39.4 | mg/kg | | Y | Y | P | | | | | | | A247-05 | 15:10 |
| | | | | MAGNESIUM | 372 | mg/kg | | Y | Y | P | | | | | | | A247-05 | 20:40 |
| | | | | MANGANESE | 1260 | mg/kg | | Y | Y | P | | | | | | | A247-05 | 20:40 |
| | | | | NICKEL | 8.81 | mg/kg | | Y | Y | P | J | | 08A | | | | A247-05 | 20:40 |
| | | | | POTASSIUM | 275 | mg/kg | J | Y | Y | P | J | | 15 | | | | A247-05 | 20:40 |
| | | | | SELENIUM | 1.28 | mg/kg | U | N | Y | U | U | | | | | | A247-05 | 15:10 |
| | | | | SILVER | 1.28 | mg/kg | U | N | Y | U | U | | | | | | A247-05 | 20:40 |
| | | | | SODIUM | 128 | mg/kg | U | N | Y | U | U | | | | | | A247-05 | 20:40 |
| | | | | THALLIUM | 2.55 | mg/kg | U | N | Y | U | U | | | | | | A247-05 | 15:10 |
| | | | | VANADIUM | 20.7 | mg/kg | | Y | Y | P | | | | | | | A247-05 | 20:40 |
| | | | | ZINC | 44.2 | mg/kg | | Y | Y | P | J | | 13 | | | | A247-05 | 20:40 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .059 | mg/kg | J | Y | Y | P | J | | 15 | | | | A247-05 | 11:26 |
| ECC0038 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 9830 | mg/kg | | Y | Y | P | | | | | | | A247-06 | 20:44 |
| | | | | ANTIMONY | 11.6 | mg/kg | U | N | Y | U | UJ | | 08A | | | | A247-06 | 20:44 |
| | | | | ARSENIC | 6.05 | mg/kg | | Y | Y | P | J | | 13 | | | | A247-06 | 15:48 |
| | | | | BARIUM | 27.2 | mg/kg | | Y | Y | P | | | | | | | A247-06 | 20:44 |
| | | | | BERYLLIUM | .882 | mg/kg | J | Y | Y | P | J | | 15 | | | | A247-06 | 20:44 |
| | | | | CADMIUM | .578 | mg/kg | U | N | Y | U | U | | | | | | A247-06 | 20:44 |
| | | | | CALCIUM | 41.5 | mg/kg | J | Y | Y | P | J | | 15 | | | | A247-06 | 20:44 |
| | | | | CHROMIUM | 13.7 | mg/kg | | Y | Y | P | | | | | | | A247-06 | 20:44 |
| | | | | COBALT | 1.15 | mg/kg | J | Y | Y | P | J | | 15 | | | | A247-06 | 20:44 |
| | | | | COPPER | 53.4 | mg/kg | | Y | Y | P | | | | | | | A247-06 | 20:44 |
| | | | | IRON | 32700 | mg/kg | | Y | Y | P | | | | | | | A247-06 | 20:44 |
| | | | | LEAD | 19.9 | mg/kg | | Y | Y | P | | | | | | | A247-06 | 15:48 |
| | | | | MAGNESIUM | 101 | mg/kg | J | Y | Y | P | J | | 15 | | | | A247-06 | 20:44 |
| | | | | MANGANESE | 4.31 | mg/kg | | Y | Y | P | | | | | | | A247-06 | 20:44 |
| | | | | NICKEL | 5.93 | mg/kg | | Y | Y | P | J | | 08A | | | | A247-06 | 20:44 |
| | | | | POTASSIUM | 571 | mg/kg | J | Y | Y | P | J | | 15 | | | | A247-06 | 20:44 |
| | | | | SELENIUM | 1.16 | mg/kg | U | N | Y | U | U | | | | | | A247-06 | 15:48 |
| | | | | SILVER | 1.16 | mg/kg | U | N | Y | U | U | | | | | | A247-06 | 20:44 |
| | | | | SODIUM | 39.1 | mg/kg | J | Y | Y | P | J | | 15 | | | | A247-06 | 20:44 |
| | | | | THALLIUM | 2.31 | mg/kg | U | N | Y | U | U | | | | | | A247-06 | 15:48 |
| | | | | VANADIUM | 20.1 | mg/kg | | Y | Y | P | | | | | | | A247-06 | 20:44 |
| | | | | ZINC | 52 | mg/kg | | Y | Y | P | J | | 13 | | | | A247-06 | 20:44 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .051 | mg/kg | J | Y | Y | P | J | | 15 | | | | A247-06 | 11:29 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10232QX-1** | | | | | | | | | | | | | | | | | | |
| ECC0039 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 4620 | mg/kg | | Y | Y | P | | | | | | | A247-07 | 20:49 |
| | | | | ANTIMONY | 11.8 | mg/kg | U | N | Y | U | UJ | | 08A | | | | A247-07 | 20:49 |
| | | | | ARSENIC | 1.63 | mg/kg | | Y | Y | P | J | | 13 | | | | A247-07 | 15:53 |
| | | | | BARIUM | 39.9 | mg/kg | | Y | Y | P | | | | | | | A247-07 | 20:49 |
| | | | | BERYLLIUM | .265 | mg/kg | J | Y | Y | P | J | | 15 | | | | A247-07 | 20:49 |
| | | | | CADMIUM | .591 | mg/kg | U | N | Y | U | U | | | | | | A247-07 | 20:49 |
| | | | | CALCIUM | 172 | mg/kg | | Y | Y | P | | | | | | | A247-07 | 20:49 |
| | | | | CHROMIUM | 5.07 | mg/kg | | Y | Y | P | | | | | | | A247-07 | 20:49 |
| | | | | COBALT | 2.32 | mg/kg | J | Y | Y | P | J | | 15 | | | | A247-07 | 20:49 |
| | | | | COPPER | 3.82 | mg/kg | | Y | Y | P | | | | | | | A247-07 | 20:49 |
| | | | | IRON | 5380 | mg/kg | | Y | Y | P | | | | | | | A247-07 | 20:49 |
| | | | | LEAD | 10.4 | mg/kg | | Y | Y | P | | | | | | | A247-07 | 15:53 |
| | | | | MAGNESIUM | 135 | mg/kg | | Y | Y | P | | | | | | | A247-07 | 20:49 |
| | | | | MANGANESE | 289 | mg/kg | | Y | Y | P | | | | | | | A247-07 | 20:49 |
| | | | | NICKEL | 2.32 | mg/kg | J | Y | Y | P | J | | 15 | 08A | | | A247-07 | 20:49 |
| | | | | POTASSIUM | 151 | mg/kg | J | Y | Y | P | J | | 15 | | | | A247-07 | 20:49 |
| | | | | SELENIUM | 1.18 | mg/kg | U | N | Y | U | U | | | | | | A247-07 | 15:53 |
| | | | | SILVER | 1.18 | mg/kg | U | N | Y | U | U | | | | | | A247-07 | 20:49 |
| | | | | SODIUM | 118 | mg/kg | U | N | Y | U | U | | | | | | A247-07 | 20:49 |
| | | | | THALLIUM | 2.36 | mg/kg | U | N | Y | U | U | | | | | | A247-07 | 15:53 |
| | | | | VANADIUM | 7.56 | mg/kg | | Y | Y | P | | | | | | | A247-07 | 20:49 |
| | | | | ZINC | 9.97 | mg/kg | | Y | Y | P | J | | 13 | | | | A247-07 | 20:49 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .037 | mg/kg | J | Y | Y | P | J | | 15 | | | | A247-07 | 11:31 |
| ECC0040 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 3580 | mg/kg | | Y | Y | P | | | | | | | A247-08 | 20:54 |
| | | | | ANTIMONY | 12 | mg/kg | U | N | Y | U | UJ | | 08A | | | | A247-08 | 20:54 |
| | | | | ARSENIC | 3.96 | mg/kg | | Y | Y | P | J | | 13 | | | | A247-08 | 15:58 |
| | | | | BARIUM | 4.74 | mg/kg | | Y | Y | P | | | | | | | A247-08 | 20:54 |
| | | | | BERYLLIUM | .155 | mg/kg | J | Y | Y | P | J | | 15 | | | | A247-08 | 20:54 |
| | | | | CADMIUM | .601 | mg/kg | U | N | Y | U | U | | | | | | A247-08 | 20:54 |
| | | | | CALCIUM | 37.3 | mg/kg | J | Y | Y | P | J | | 15 | | | | A247-08 | 20:54 |
| | | | | CHROMIUM | 19.4 | mg/kg | | Y | Y | P | | | | | | | A247-08 | 20:54 |
| | | | | COBALT | 2.4 | mg/kg | U | N | Y | U | U | | | | | | A247-08 | 20:54 |
| | | | | COPPER | 6.1 | mg/kg | | Y | Y | P | | | | | | | A247-08 | 20:54 |
| | | | | IRON | 26000 | mg/kg | | Y | Y | P | | | | | | | A247-08 | 20:54 |
| | | | | LEAD | 4.87 | mg/kg | | Y | Y | P | | | | | | | A247-08 | 15:58 |
| | | | | MAGNESIUM | 41.5 | mg/kg | J | Y | Y | P | J | | 15 | | | | A247-08 | 20:54 |
| | | | | MANGANESE | 31.1 | mg/kg | | Y | Y | P | | | | | | | A247-08 | 20:54 |
| | | | | NICKEL | 1.62 | mg/kg | J | Y | Y | P | J | | 15 | 08A | | | A247-08 | 20:54 |
| | | | | POTASSIUM | 155 | mg/kg | J | Y | Y | P | J | | 15 | | | | A247-08 | 20:54 |
| | | | | SELENIUM | 1.2 | mg/kg | U | N | Y | U | U | | | | | | A247-08 | 15:58 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10232QX-1** | | | | | | | | | | | | | | | | | | |
| ECC0040 | SW6010B | SW3050 | N 0 1 | SILVER | 1.2 | mg/kg | U | N | Y | U | U | | | | | | A247-08 | 20:54 |
| | | | | SODIUM | 120 | mg/kg | U | N | Y | U | U | | | | | | A247-08 | 20:54 |
| | | | | THALLIUM | 2.4 | mg/kg | U | N | Y | U | U | | | | | | A247-08 | 15:58 |
| | | | | VANADIUM | 33.4 | mg/kg | | Y | Y | P | | | | | | | A247-08 | 20:54 |
| | | | | ZINC | 8.5 | mg/kg | | Y | Y | P | J | | 13 | | | | A247-08 | 20:54 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .027 | mg/kg | J | Y | Y | P | J | | 15 | | | | A247-08 | 11:34 |
| ECC0041 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 4790 | mg/kg | | Y | Y | P | | | | | | | A247-09 | 20:59 |
| | | | | ANTIMONY | 12.5 | mg/kg | U | N | Y | U | UJ | | 08A | | | | A247-09 | 20:59 |
| | | | | ARSENIC | 3.6 | mg/kg | | Y | Y | P | J | | 13 | | | | A247-09 | 16:03 |
| | | | | BARIUM | 50.1 | mg/kg | | Y | Y | P | | | | | | | A247-09 | 20:59 |
| | | | | BERYLLIUM | .669 | mg/kg | J | Y | Y | P | J | | 15 | | | | A247-09 | 20:59 |
| | | | | CADMIUM | .623 | mg/kg | U | N | Y | U | U | | | | | | A247-09 | 20:59 |
| | | | | CALCIUM | 124 | mg/kg | J | Y | Y | P | J | | 15 | | | | A247-09 | 20:59 |
| | | | | CHROMIUM | 12.9 | mg/kg | | Y | Y | P | | | | | | | A247-09 | 20:59 |
| | | | | COBALT | 8.49 | mg/kg | | Y | Y | P | | | | | | | A247-09 | 20:59 |
| | | | | COPPER | 9.21 | mg/kg | | Y | Y | P | | | | | | | A247-09 | 20:59 |
| | | | | IRON | 12000 | mg/kg | | Y | Y | P | | | | | | | A247-09 | 20:59 |
| | | | | LEAD | 16.4 | mg/kg | | Y | Y | P | | | | | | | A247-09 | 16:03 |
| | | | | MAGNESIUM | 137 | mg/kg | | Y | Y | P | | | | | | | A247-09 | 20:59 |
| | | | | MANGANESE | 184 | mg/kg | | Y | Y | P | | | | | | | A247-09 | 20:59 |
| | | | | NICKEL | 4.99 | mg/kg | | Y | Y | P | J | | 08A | | | | A247-09 | 20:59 |
| | | | | POTASSIUM | 161 | mg/kg | J | Y | Y | P | J | | 15 | | | | A247-09 | 20:59 |
| | | | | SELENIUM | 1.25 | mg/kg | U | N | Y | U | U | | | | | | A247-09 | 16:03 |
| | | | | SILVER | 1.25 | mg/kg | U | N | Y | U | U | | | | | | A247-09 | 20:59 |
| | | | | SODIUM | 125 | mg/kg | U | N | Y | U | U | | | | | | A247-09 | 20:59 |
| | | | | THALLIUM | 2.49 | mg/kg | U | N | Y | U | U | | | | | | A247-09 | 16:03 |
| | | | | VANADIUM | 14.3 | mg/kg | | Y | Y | P | | | | | | | A247-09 | 20:59 |
| | | | | ZINC | 24.4 | mg/kg | | Y | Y | P | J | | 13 | | | | A247-09 | 20:59 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .034 | mg/kg | J | Y | Y | P | J | | 15 | | | | A247-09 | 11:37 |
| ECC0042 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 4380 | mg/kg | | Y | Y | P | | | | | | | A247-10 | 21:03 |
| | | | | ANTIMONY | 11.9 | mg/kg | U | N | Y | U | UJ | | 08A | | | | A247-10 | 21:03 |
| | | | | ARSENIC | 5.02 | mg/kg | | Y | Y | P | J | | 13 | | | | A247-10 | 16:07 |
| | | | | BARIUM | 40.4 | mg/kg | | Y | Y | P | | | | | | | A247-10 | 21:03 |
| | | | | BERYLLIUM | 1.31 | mg/kg | | Y | Y | P | | | | | | | A247-10 | 21:03 |
| | | | | CADMIUM | .597 | mg/kg | U | N | Y | U | U | | | | | | A247-10 | 21:03 |
| | | | | CALCIUM | 6890 | mg/kg | | Y | Y | P | | | | | | | A247-10 | 21:03 |
| | | | | CHROMIUM | 5.39 | mg/kg | | Y | Y | P | | | | | | | A247-10 | 21:03 |
| | | | | COBALT | 4.81 | mg/kg | | Y | Y | P | | | | | | | A247-10 | 21:03 |
| | | | | COPPER | 31.5 | mg/kg | | Y | Y | P | | | | | | | A247-10 | 21:03 |
| | | | | IRON | 30300 | mg/kg | | Y | Y | P | | | | | | | A247-10 | 21:03 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10232QX-1** | | | | | | | | | | | | | | | | | | |
| ECC0042 | SW6010B | SW3050 | N 0 1 | LEAD | 8.57 | mg/kg | | Y | Y | P | | | | | | | A247-10 | 16:07 |
| | | | | MAGNESIUM | 1300 | mg/kg | | Y | Y | P | | | | | | | A247-10 | 21:03 |
| | | | | MANGANESE | 32.1 | mg/kg | | Y | Y | P | | | | | | | A247-10 | 21:03 |
| | | | | NICKEL | 27.3 | mg/kg | | Y | Y | P | J | | 08A | | | | A247-10 | 21:03 |
| | | | | POTASSIUM | 206 | mg/kg | J | Y | Y | P | J | | 15 | | | | A247-10 | 21:03 |
| | | | | SELENIUM | 1.19 | mg/kg | U | N | Y | U | U | | | | | | A247-10 | 16:07 |
| | | | | SILVER | 1.19 | mg/kg | U | N | Y | U | U | | | | | | A247-10 | 21:03 |
| | | | | SODIUM | 94.1 | mg/kg | J | Y | Y | P | J | | 15 | | | | A247-10 | 21:03 |
| | | | | THALLIUM | 2.39 | mg/kg | U | N | Y | U | U | | | | | | A247-10 | 16:07 |
| | | | | VANADIUM | 5.82 | mg/kg | | Y | Y | P | | | | | | | A247-10 | 21:03 |
| | | | | ZINC | 102 | mg/kg | | Y | Y | P | J | | 13 | | | | A247-10 | 21:03 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .046 | mg/kg | J | Y | Y | P | J | | 15 | | | | A247-10 | 11:39 |
| ECC0005 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | A255-01 | 07:06 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | A255-01 | 07:06 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A255-01 | 07:06 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A255-01 | 07:06 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A255-01 | 07:06 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A255-01 | 07:06 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A255-01 | 07:06 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A255-01 | 07:06 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A255-01 | 07:06 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A255-01 | 07:06 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | A255-01 | 07:06 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A255-01 | 07:06 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | A255-01 | 07:06 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | A255-01 | 07:06 |
| ECC0006 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | A255-02 | 07:46 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | A255-02 | 07:46 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A255-02 | 07:46 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A255-02 | 07:46 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A255-02 | 07:46 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A255-02 | 07:46 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A255-02 | 07:46 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A255-02 | 07:46 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A255-02 | 07:46 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A255-02 | 07:46 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | A255-02 | 07:46 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A255-02 | 07:46 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | A255-02 | 07:46 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | A255-02 | 07:46 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10232QX-1** | | | | | | | | | | | | | | | | | | | | |
| ECC0009 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-01 | 01:42 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-01 | 01:42 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-01 | 01:42 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-01 | 01:42 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-01 | 01:42 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-01 | 01:42 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-01 | 01:42 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-01 | 01:42 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-01 | 01:42 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-01 | 01:42 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-01 | 01:42 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-01 | 01:42 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-01 | 01:42 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-01 | 01:42 |
| ECC0010 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-02 | 03:43 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-02 | 03:43 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-02 | 03:43 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-02 | 03:43 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-02 | 03:43 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-02 | 03:43 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-02 | 03:43 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-02 | 03:43 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-02 | 03:43 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-02 | 03:43 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-02 | 03:43 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-02 | 03:43 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-02 | 03:43 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-02 | 03:43 |
| ECC0021 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-03 | 04:24 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-03 | 04:24 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-03 | 04:24 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-03 | 04:24 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-03 | 04:24 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-03 | 04:24 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-03 | 04:24 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-03 | 04:24 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-03 | 04:24 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-03 | 04:24 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-03 | 04:24 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-03 | 04:24 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10232QX-1** | | | | | | | | | | | | | | | | | | |
| ECC0021 | SW8330 | METHOD | N 0 1 | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-03 | 04:24 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-03 | 04:24 |
| ECC0022 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-04 | 05:04 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-04 | 05:04 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-04 | 05:04 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-04 | 05:04 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-04 | 05:04 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-04 | 05:04 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-04 | 05:04 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-04 | 05:04 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-04 | 05:04 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-04 | 05:04 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-04 | 05:04 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-04 | 05:04 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-04 | 05:04 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-04 | 05:04 |
| ECC0035 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | A255-03 | 11:37 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | A255-03 | 11:37 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A255-03 | 11:37 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A255-03 | 11:37 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A255-03 | 11:37 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A255-03 | 11:37 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A255-03 | 11:37 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A255-03 | 11:37 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A255-03 | 11:37 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A255-03 | 11:37 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | A255-03 | 11:37 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A255-03 | 11:37 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | A255-03 | 11:37 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | A255-03 | 11:37 |
| ECC0036 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | A255-04 | 12:18 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | A255-04 | 12:18 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A255-04 | 12:18 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A255-04 | 12:18 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A255-04 | 12:18 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A255-04 | 12:18 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A255-04 | 12:18 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A255-04 | 12:18 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A255-04 | 12:18 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A255-04 | 12:18 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10232QX-1** | | | | | | | | | | | | | | | | | | | | |
| ECC0036 | SW8330 | METHOD | N | 0 | 1 | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | A255-04 | 12:18 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A255-04 | 12:18 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | A255-04 | 12:18 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | A255-04 | 12:18 |
| ECC0037 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-05 | 05:45 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-05 | 05:45 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-05 | 05:45 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-05 | 05:45 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-05 | 05:45 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-05 | 05:45 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-05 | 05:45 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-05 | 05:45 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-05 | 05:45 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-05 | 05:45 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-05 | 05:45 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-05 | 05:45 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-05 | 05:45 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-05 | 05:45 |
| ECC0038 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-06 | 06:25 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-06 | 06:25 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-06 | 06:25 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-06 | 06:25 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-06 | 06:25 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-06 | 06:25 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-06 | 06:25 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-06 | 06:25 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-06 | 06:25 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-06 | 06:25 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-06 | 06:25 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-06 | 06:25 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-06 | 06:25 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-06 | 06:25 |
| ECC0039 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-07 | 22:20 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-07 | 22:20 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-07 | 22:20 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-07 | 22:20 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-07 | 22:20 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-07 | 22:20 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-07 | 22:20 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-07 | 22:20 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10232QX-1** | | | | | | | | | | | | | | | | | | |
| ECC0039 | SW8330 | METHOD | N 0 1 | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-07 | 22:20 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-07 | 22:20 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-07 | 22:20 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-07 | 22:20 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-07 | 22:20 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-07 | 22:20 |
| ECC0040 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-08 | 23:00 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-08 | 23:00 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-08 | 23:00 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-08 | 23:00 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-08 | 23:00 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-08 | 23:00 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-08 | 23:00 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-08 | 23:00 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-08 | 23:00 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-08 | 23:00 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-08 | 23:00 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-08 | 23:00 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-08 | 23:00 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-08 | 23:00 |
| ECC0041 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-09 | 23:41 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-09 | 23:41 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-09 | 23:41 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-09 | 23:41 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-09 | 23:41 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-09 | 23:41 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-09 | 23:41 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-09 | 23:41 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-09 | 23:41 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-09 | 23:41 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-09 | 23:41 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-09 | 23:41 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-09 | 23:41 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-09 | 23:41 |
| ECC0042 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-10 | 00:21 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-10 | 00:21 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-10 | 00:21 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-10 | 00:21 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-10 | 00:21 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-10 | 00:21 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10232QX-1** | | | | | | | | | | | | | | | | | | | | |
| ECC0042 | SW8330 | METHOD | N | 0 | 1 | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-10 | 00:21 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-10 | 00:21 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-10 | 00:21 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-10 | 00:21 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-10 | 00:21 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-10 | 00:21 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-10 | 00:21 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | A247-10 | 00:21 |
| ECC0005 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0625 | mg/kg | U | N | Y | U | U | | | | | | A255-01 | 22:41 |
| ECC0006 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .062 | mg/kg | U | N | Y | U | U | | | | | | A255-02 | 22:58 |
| ECC0009 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .062 | mg/kg | U | N | Y | U | U | | | | | | A247-01 | 18:23 |
| ECC0010 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0605 | mg/kg | U | N | Y | U | U | | | | | | A247-02 | 19:15 |
| ECC0021 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0649 | mg/kg | U | N | Y | U | U | | | | | | A247-03 | 19:32 |
| ECC0022 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0567 | mg/kg | U | N | Y | U | U | | | | | | A247-04 | 19:49 |
| ECC0035 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0613 | mg/kg | U | N | Y | U | U | | | | | | A255-03 | 23:15 |
| ECC0036 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0626 | mg/kg | U | N | Y | U | U | | | | | | A255-04 | 23:32 |
| ECC0037 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0638 | mg/kg | U | N | Y | U | U | | | | | | A247-05 | 20:06 |
| ECC0038 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0578 | mg/kg | U | N | Y | U | U | | | | | | A247-06 | 20:23 |
| ECC0039 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0591 | mg/kg | U | N | Y | U | U | | | | | | A247-07 | 20:40 |
| ECC0040 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0601 | mg/kg | U | N | Y | U | U | | | | | | A247-08 | 21:32 |
| ECC0041 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0623 | mg/kg | U | N | Y | U | U | | | | | | A247-09 | 21:49 |
| ECC0042 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0597 | mg/kg | U | N | Y | U | U | | | | | | A247-10 | 22:06 |
| **10232QX-2** | | | | | | | | | | | | | | | | | | | | |
| ECC0031 | SW6010B | SW3050 | N | 0 | 1 | ALUMINUM | 15900 | mg/kg | | Y | Y | P | | | | | | | B031-01 | 23:39 |
| | | | | | | ANTIMONY | 11.7 | mg/kg | U | N | Y | U | UJ | | 08A | | | | B031-01 | 23:39 |
| | | | | | | ARSENIC | 16.2 | mg/kg | | Y | Y | P | J | | 08A | | | | B031-01 | 18:49 |
| | | | | | | BARIUM | 158 | mg/kg | | Y | Y | P | J | | 08A | | | | B031-01 | 23:39 |
| | | | | | | BERYLLIUM | 1.89 | mg/kg | | Y | Y | P | | | | | | | B031-01 | 23:39 |
| | | | | | | CADMIUM | .585 | mg/kg | U | N | Y | U | U | | | | | | B031-01 | 23:39 |
| | | | | | | CALCIUM | 770 | mg/kg | | Y | Y | P | | | | | | | B031-01 | 23:39 |
| | | | | | | CHROMIUM | 21.5 | mg/kg | | Y | Y | P | J | | 13 | | | | B031-01 | 23:39 |
| | | | | | | COBALT | 29.9 | mg/kg | | Y | Y | P | J | | 08A | | | | B031-01 | 23:39 |
| | | | | | | COPPER | 32.2 | mg/kg | | Y | Y | P | | | | | | | B031-01 | 23:39 |
| | | | | | | IRON | 70100 | mg/kg | | Y | Y | P | | | | | | | B031-01 | 23:39 |
| | | | | | | LEAD | 29.8 | mg/kg | | Y | Y | P | J | | 08A | | | | B031-01 | 18:49 |
| | | | | | | MAGNESIUM | 856 | mg/kg | | Y | Y | P | | | | | | | B031-01 | 23:39 |
| | | | | | | MANGANESE | 1940 | mg/kg | | Y | Y | P | | | | | | | B031-01 | 23:39 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10232QX-2** | | | | | | | | | | | | | | | | |
| ECC0031 | SW6010B | SW3050 | N 0 1 | NICKEL | 39.7 | mg/kg | | Y Y P | J | | 08A | | | | B031-01 | 23:39 |
| | | | | POTASSIUM | 1590 | mg/kg | | Y Y P | | | | | | | B031-01 | 23:39 |
| | | | | SELENIUM | .595 | mg/kg | J | Y Y P | J | | 08A | 15 | | | B031-01 | 18:49 |
| | | | | SILVER | 1.17 | mg/kg | U | N Y U | U | | | | | | B031-01 | 23:39 |
| | | | | SODIUM | 23.4 | mg/kg | J | Y Y P | J | | 15 | | | | B031-01 | 23:39 |
| | | | | THALLIUM | 1.09 | mg/kg | J | Y Y P | J | | 15 | | | | B031-01 | 18:49 |
| | | | | VANADIUM | 27.8 | mg/kg | | Y Y P | | | | | | | B031-01 | 23:39 |
| | | | | ZINC | 108 | mg/kg | | Y Y P | J | | 08A | 13 | | | B031-01 | 23:39 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .046 | mg/kg | J | Y Y P | J | | 15 | | | | B031-01 | 16:04 |
| ECC0032 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 6040 | mg/kg | | Y Y P | | | | | | | B031-02R | 00:00 |
| | | | | ANTIMONY | 7.13 | mg/kg | J | Y Y P | J | | 08A | 15 | | | B031-02R | 00:00 |
| | | | | ARSENIC | 9.82 | mg/kg | | Y Y P | J | | 08A | | | | B031-02R | 12:43 |
| | | | | BARIUM | 355 | mg/kg | | Y Y P | J | | 08A | | | | B031-02R | 00:00 |
| | | | | BERYLLIUM | 3.03 | mg/kg | | Y Y P | | | | | | | B031-02R | 00:00 |
| | | | | CADMIUM | .589 | mg/kg | U | N Y U | U | | | | | | B031-02R | 00:00 |
| | | | | CALCIUM | 40.1 | mg/kg | J | Y Y P | J | | 15 | | | | B031-02R | 00:00 |
| | | | | CHROMIUM | 12.3 | mg/kg | | Y Y P | J | | 13 | | | | B031-02R | 00:00 |
| | | | | COBALT | 65.7 | mg/kg | | Y Y P | J | | 08A | | | | B031-02R | 00:00 |
| | | | | COPPER | 28.9 | mg/kg | | Y Y P | | | | | | | B031-02R | 00:00 |
| | | | | IRON | 92200 | mg/kg | | Y Y P | | | | | | | B031-02R | 00:00 |
| | | | | LEAD | 34.3 | mg/kg | | Y Y P | J | | 08A | | | | B031-02R | 12:43 |
| | | | | MAGNESIUM | 68.9 | mg/kg | J | Y Y P | J | | 15 | | | | B031-02R | 00:00 |
| | | | | MANGANESE | 7310 | mg/kg | | Y Y P | | | | | | | B031-02R | 00:00 |
| | | | | NICKEL | 52.4 | mg/kg | | Y Y P | J | | 08A | | | | B031-02R | 00:00 |
| | | | | POTASSIUM | 1060 | mg/kg | | Y Y P | | | | | | | B031-02R | 00:00 |
| | | | | SELENIUM | 1.18 | mg/kg | U | N Y U | UJ | | 08A | | | | B031-02R | 12:43 |
| | | | | SILVER | 1.18 | mg/kg | U | N Y U | U | | | | | | B031-02R | 00:00 |
| | | | | SODIUM | 54.2 | mg/kg | J | Y Y P | J | | 15 | | | | B031-02R | 00:00 |
| | | | | THALLIUM | 2.62 | mg/kg | | Y Y P | | | | | | | B031-02R | 12:43 |
| | | | | VANADIUM | 13.5 | mg/kg | | Y Y P | | | | | | | B031-02R | 00:00 |
| | | | | ZINC | 142 | mg/kg | | Y Y P | J | | 08A | 13 | | | B031-02R | 00:00 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .168 | mg/kg | | Y Y P | | | | | | | B031-02 | 16:07 |
| ECC0033 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 11500 | mg/kg | | Y Y P | | | | | | | B031-03 | 23:49 |
| | | | | ANTIMONY | 12 | mg/kg | U | N Y U | UJ | | 08A | | | | B031-03 | 23:49 |
| | | | | ARSENIC | 7.18 | mg/kg | | Y Y P | J | | 08A | | | | B031-03 | 18:54 |
| | | | | BARIUM | 61.4 | mg/kg | | Y Y P | J | | 08A | | | | B031-03 | 23:49 |
| | | | | BERYLLIUM | .637 | mg/kg | J | Y Y P | J | | 15 | | | | B031-03 | 23:49 |
| | | | | CADMIUM | .601 | mg/kg | U | N Y U | U | | | | | | B031-03 | 23:49 |
| | | | | CALCIUM | 212 | mg/kg | | Y Y P | | | | | | | B031-03 | 23:49 |
| | | | | CHROMIUM | 11.1 | mg/kg | | Y Y P | J | | 13 | | | | B031-03 | 23:49 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10232QX-2** | | | | | | | | | | | | | | | | | | |
| ECC0033 | SW6010B | SW3050 | N 0 1 | COBALT | 7.29 | mg/kg | | Y | Y | P | J | | 08A | | | | B031-03 | 23:49 |
| | | | | COPPER | 8 | mg/kg | | Y | Y | P | | | | | | | B031-03 | 23:49 |
| | | | | IRON | 10500 | mg/kg | | Y | Y | P | | | | | | | B031-03 | 23:49 |
| | | | | LEAD | 13.5 | mg/kg | | Y | Y | P | J | | 08A | | | | B031-03 | 18:54 |
| | | | | MAGNESIUM | 517 | mg/kg | | Y | Y | P | | | | | | | B031-03 | 23:49 |
| | | | | MANGANESE | 685 | mg/kg | | Y | Y | P | | | | | | | B031-03 | 23:49 |
| | | | | NICKEL | 10.5 | mg/kg | | Y | Y | P | J | | 08A | | | | B031-03 | 23:49 |
| | | | | POTASSIUM | 132 | mg/kg | J | Y | Y | F | B | | 06B | | | | B031-03 | 23:49 |
| | | | | SELENIUM | 1.2 | mg/kg | U | N | Y | U | UJ | | 08A | | | | B031-03 | 18:54 |
| | | | | SILVER | 1.2 | mg/kg | U | N | Y | U | U | | | | | | B031-03 | 23:49 |
| | | | | SODIUM | 120 | mg/kg | U | N | Y | U | U | | | | | | B031-03 | 23:49 |
| | | | | THALLIUM | 2.4 | mg/kg | U | N | Y | U | U | | | | | | B031-03 | 18:54 |
| | | | | VANADIUM | 15.7 | mg/kg | | Y | Y | P | | | | | | | B031-03 | 23:49 |
| | | | | ZINC | 24.3 | mg/kg | | Y | Y | P | J | | 08A | 13 | | | B031-03 | 23:49 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .12 | mg/kg | U | N | Y | U | U | | | | | | B031-03 | 16:23 |
| ECC0034 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 16200 | mg/kg | | Y | Y | P | | | | | | | B031-04 | 23:55 |
| | | | | ANTIMONY | 11.9 | mg/kg | U | N | Y | U | UJ | | 08A | | | | B031-04 | 23:55 |
| | | | | ARSENIC | 10.9 | mg/kg | | Y | Y | P | J | | 08A | | | | B031-04 | 18:58 |
| | | | | BARIUM | 157 | mg/kg | | Y | Y | P | J | | 08A | | | | B031-04 | 23:55 |
| | | | | BERYLLIUM | 1.4 | mg/kg | | Y | Y | P | | | | | | | B031-04 | 23:55 |
| | | | | CADMIUM | .595 | mg/kg | U | N | Y | U | U | | | | | | B031-04 | 23:55 |
| | | | | CALCIUM | 191 | mg/kg | | Y | Y | P | | | | | | | B031-04 | 23:55 |
| | | | | CHROMIUM | 37.1 | mg/kg | | Y | Y | P | J | | 13 | | | | B031-04 | 23:55 |
| | | | | COBALT | 10.6 | mg/kg | | Y | Y | P | J | | 08A | | | | B031-04 | 23:55 |
| | | | | COPPER | 46.7 | mg/kg | | Y | Y | P | | | | | | | B031-04 | 23:55 |
| | | | | IRON | 45100 | mg/kg | | Y | Y | P | | | | | | | B031-04 | 23:55 |
| | | | | LEAD | 23.5 | mg/kg | | Y | Y | P | J | | 08A | | | | B031-04 | 18:58 |
| | | | | MAGNESIUM | 679 | mg/kg | | Y | Y | P | | | | | | | B031-04 | 23:55 |
| | | | | MANGANESE | 198 | mg/kg | | Y | Y | P | | | | | | | B031-04 | 23:55 |
| | | | | NICKEL | 23.7 | mg/kg | | Y | Y | P | J | | 08A | | | | B031-04 | 23:55 |
| | | | | POTASSIUM | 2620 | mg/kg | | Y | Y | P | | | | | | | B031-04 | 23:55 |
| | | | | SELENIUM | 2.2 | mg/kg | | Y | Y | P | J | | 08A | | | | B031-04 | 18:58 |
| | | | | SILVER | 1.19 | mg/kg | U | N | Y | U | U | | | | | | B031-04 | 23:55 |
| | | | | SODIUM | 58.5 | mg/kg | J | Y | Y | P | J | | 15 | | | | B031-04 | 23:55 |
| | | | | THALLIUM | .952 | mg/kg | J | Y | Y | P | J | | 15 | | | | B031-04 | 18:58 |
| | | | | VANADIUM | 67.3 | mg/kg | | Y | Y | P | | | | | | | B031-04 | 23:55 |
| | | | | ZINC | 57 | mg/kg | | Y | Y | P | J | | 08A | 13 | | | B031-04 | 23:55 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .043 | mg/kg | J | Y | Y | P | J | | 15 | | | | B031-04 | 16:26 |
| ECC0043 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 11500 | mg/kg | | Y | Y | P | | | | | | | B031-05 | 00:20 |
| | | | | ANTIMONY | 12.6 | mg/kg | U | N | Y | U | UJ | | 08A | | | | B031-05 | 00:20 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10232QX-2** | | | | | | | | | | | | | | | | | | |
| ECC0043 | SW6010B | SW3050 | N 0 1 | ARSENIC | 2.83 | mg/kg | | Y | Y | P | J | | 08A | | | | B031-05 | 19:02 |
| | | | | BARIUM | 117 | mg/kg | | Y | Y | P | J | | 08A | | | | B031-05 | 00:20 |
| | | | | BERYLLIUM | .51 | mg/kg | J | Y | Y | P | J | | 15 | | | | B031-05 | 00:20 |
| | | | | CADMIUM | .628 | mg/kg | U | N | Y | U | U | | | | | | B031-05 | 00:20 |
| | | | | CALCIUM | 1090 | mg/kg | | Y | Y | P | | | | | | | B031-05 | 00:20 |
| | | | | CHROMIUM | 9.37 | mg/kg | | Y | Y | P | J | | 13 | | | | B031-05 | 00:20 |
| | | | | COBALT | 3.93 | mg/kg | | Y | Y | P | J | | 08A | | | | B031-05 | 00:20 |
| | | | | COPPER | 6.39 | mg/kg | | Y | Y | P | | | | | | | B031-05 | 00:20 |
| | | | | IRON | 6500 | mg/kg | | Y | Y | P | | | | | | | B031-05 | 00:20 |
| | | | | LEAD | 13.8 | mg/kg | | Y | Y | P | J | | 08A | | | | B031-05 | 19:02 |
| | | | | MAGNESIUM | 771 | mg/kg | | Y | Y | P | | | | | | | B031-05 | 00:20 |
| | | | | MANGANESE | 635 | mg/kg | | Y | Y | P | | | | | | | B031-05 | 00:20 |
| | | | | NICKEL | 6.9 | mg/kg | | Y | Y | P | J | | 08A | | | | B031-05 | 00:20 |
| | | | | POTASSIUM | 463 | mg/kg | J | Y | Y | P | J | | 15 | | | | B031-05 | 00:20 |
| | | | | SELENIUM | .509 | mg/kg | J | Y | Y | P | J | | 08A | 15 | | | B031-05 | 19:02 |
| | | | | SILVER | 1.26 | mg/kg | U | N | Y | U | U | | | | | | B031-05 | 00:20 |
| | | | | SODIUM | 126 | mg/kg | U | N | Y | U | U | | | | | | B031-05 | 00:20 |
| | | | | THALLIUM | 2.51 | mg/kg | U | N | Y | U | U | | | | | | B031-05 | 19:02 |
| | | | | VANADIUM | 15.3 | mg/kg | | Y | Y | P | | | | | | | B031-05 | 00:20 |
| | | | | ZINC | 29.7 | mg/kg | | Y | Y | P | J | | 08A | 13 | | | B031-05 | 00:20 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .047 | mg/kg | J | Y | Y | P | J | | 15 | | | | B031-05 | 16:28 |
| ECC0044 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 10500 | mg/kg | | Y | Y | P | | | | | | | B031-06 | 00:25 |
| | | | | ANTIMONY | 11.9 | mg/kg | U | N | Y | U | UJ | | 08A | | | | B031-06 | 00:25 |
| | | | | ARSENIC | 8.32 | mg/kg | | Y | Y | P | J | | 08A | | | | B031-06 | 19:06 |
| | | | | BARIUM | 113 | mg/kg | | Y | Y | P | J | | 08A | | | | B031-06 | 00:25 |
| | | | | BERYLLIUM | .272 | mg/kg | J | Y | Y | P | J | | 15 | | | | B031-06 | 00:25 |
| | | | | CADMIUM | .594 | mg/kg | U | N | Y | U | U | | | | | | B031-06 | 00:25 |
| | | | | CALCIUM | 28.8 | mg/kg | J | Y | Y | P | J | | 15 | | | | B031-06 | 00:25 |
| | | | | CHROMIUM | 18.5 | mg/kg | | Y | Y | P | J | | 13 | | | | B031-06 | 00:25 |
| | | | | COBALT | 2.38 | mg/kg | U | N | Y | U | UJ | | 08A | | | | B031-06 | 00:25 |
| | | | | COPPER | 46.1 | mg/kg | | Y | Y | P | | | | | | | B031-06 | 00:25 |
| | | | | IRON | 12100 | mg/kg | | Y | Y | P | | | | | | | B031-06 | 00:25 |
| | | | | LEAD | 14.5 | mg/kg | | Y | Y | P | J | | 08A | | | | B031-06 | 19:06 |
| | | | | MAGNESIUM | 485 | mg/kg | | Y | Y | P | | | | | | | B031-06 | 00:25 |
| | | | | MANGANESE | 1.2 | mg/kg | | Y | Y | P | | | | | | | B031-06 | 00:25 |
| | | | | NICKEL | 2.38 | mg/kg | U | N | Y | U | UJ | | 08A | | | | B031-06 | 00:25 |
| | | | | POTASSIUM | 2790 | mg/kg | | Y | Y | P | | | | | | | B031-06 | 00:25 |
| | | | | SELENIUM | 2.81 | mg/kg | | Y | Y | P | J | | 08A | | | | B031-06 | 19:06 |
| | | | | SILVER | 1.19 | mg/kg | U | N | Y | U | U | | | | | | B031-06 | 00:25 |
| | | | | SODIUM | 69.4 | mg/kg | J | Y | Y | P | J | | 15 | | | | B031-06 | 00:25 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10232QX-2** | | | | | | | | | | | | | | | | |
| ECC0044 | SW6010B | SW3050 | N 0 1 | THALLIUM | 2.38 | mg/kg | U | N Y U | U | | | | | | B031-06 | 19:06 |
| | | | | VANADIUM | 49.2 | mg/kg | | Y Y P | | | | | | | B031-06 | 00:25 |
| | | | | ZINC | 2.69 | mg/kg | | Y Y P | J | | 08A | 13 | | | B031-06 | 00:25 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .119 | mg/kg | U | N Y U | U | | | | | | B031-06 | 16:31 |
| ECC0045 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 10700 | mg/kg | | Y Y | | | | | | | B031-07 | 00:30 |
| | | | | ANTIMONY | 11.8 | mg/kg | U | N Y | UJ | | 08A | | | | B031-07 | 00:30 |
| | | | | ARSENIC | 7.75 | mg/kg | | Y Y | J | | 08A | | | | B031-07 | 19:11 |
| | | | | BARIUM | 118 | mg/kg | | Y Y | J | | 08A | | | | B031-07 | 00:30 |
| | | | | BERYLLIUM | .254 | mg/kg | J | Y Y P | J | | 15 | | | | B031-07 | 00:30 |
| | | | | CADMIUM | .592 | mg/kg | U | N Y | U | | | | | | B031-07 | 00:30 |
| | | | | CALCIUM | 25 | mg/kg | J | Y Y P | J | | 15 | | | | B031-07 | 00:30 |
| | | | | CHROMIUM | 18.3 | mg/kg | | Y Y | J | | 13 | | | | B031-07 | 00:30 |
| | | | | COBALT | 2.37 | mg/kg | U | N Y | UJ | | 08A | | | | B031-07 | 00:30 |
| | | | | COPPER | 38.9 | mg/kg | | Y Y | | | | | | | B031-07 | 00:30 |
| | | | | IRON | 10900 | mg/kg | | Y Y | | | | | | | B031-07 | 00:30 |
| | | | | LEAD | 15.2 | mg/kg | | Y Y | J | | 08A | | | | B031-07 | 19:11 |
| | | | | MAGNESIUM | 496 | mg/kg | | Y Y | J | | 15 | | | | B031-07 | 00:30 |
| | | | | MANGANESE | 1.07 | mg/kg | J | Y Y P | J | | 15 | | | | B031-07 | 00:30 |
| | | | | NICKEL | 1.12 | mg/kg | J | Y Y P | J | | 08A | 15 | | | B031-07 | 00:30 |
| | | | | POTASSIUM | 2680 | mg/kg | | Y Y | | | | | | | B031-07 | 00:30 |
| | | | | SELENIUM | 2.51 | mg/kg | | Y Y | J | | 08A | | | | B031-07 | 19:11 |
| | | | | SILVER | 1.18 | mg/kg | U | N Y | U | | | | | | B031-07 | 00:30 |
| | | | | SODIUM | 65.6 | mg/kg | J | Y Y P | J | | 15 | | | | B031-07 | 00:30 |
| | | | | THALLIUM | 2.37 | mg/kg | U | N Y | U | | | | | | B031-07 | 19:11 |
| | | | | VANADIUM | 47.5 | mg/kg | | Y Y | | | | | | | B031-07 | 00:30 |
| | | | | ZINC | 3.11 | mg/kg | | Y Y | J | | 08A | 13 | | | B031-07 | 00:30 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .118 | mg/kg | U | N Y | U | | | | | | B031-07 | 16:33 |
| ECC0031 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N Y U | UJ | | 05B | | | | B031-01 | 12:28 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N Y U | UJ | | 05B | | | | B031-01 | 12:28 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N Y U | UJ | | 05B | | | | B031-01 | 12:28 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N Y U | UJ | | 05B | | | | B031-01 | 12:28 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N Y U | UJ | | 05B | | | | B031-01 | 12:28 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N Y U | UJ | | 05B | | | | B031-01 | 12:28 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N Y U | UJ | | 05B | | | | B031-01 | 12:28 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N Y U | UJ | | 05B | | | | B031-01 | 12:28 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N Y U | UJ | | 05B | | | | B031-01 | 12:28 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N Y U | UJ | | 05B | | | | B031-01 | 12:28 |
| | | | | HMX | .4 | mg/kg | U | N Y U | UJ | | 05B | | | | B031-01 | 12:28 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N Y U | UJ | | 05B | | | | B031-01 | 12:28 |
| | | | | RDX | .4 | mg/kg | U | N Y U | UJ | | 05B | | | | B031-01 | 12:28 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10232QX-2** | | | | | | | | | | | | | | | | | | | | |
| ECC0031 | SW8330 | METHOD | N | 0 | 1 | TETRYL | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-01 | 12:28 |
| ECC0032 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-02 | 13:09 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-02 | 13:09 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-02 | 13:09 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-02 | 13:09 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-02 | 13:09 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-02 | 13:09 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-02 | 13:09 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-02 | 13:09 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-02 | 13:09 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-02 | 13:09 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-02 | 13:09 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-02 | 13:09 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-02 | 13:09 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-02 | 13:09 |
| ECC0033 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-03 | 15:10 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-03 | 15:10 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-03 | 15:10 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-03 | 15:10 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-03 | 15:10 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-03 | 15:10 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-03 | 15:10 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-03 | 15:10 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-03 | 15:10 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-03 | 15:10 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-03 | 15:10 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-03 | 15:10 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-03 | 15:10 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-03 | 15:10 |
| ECC0034 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-04 | 15:51 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-04 | 15:51 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-04 | 15:51 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-04 | 15:51 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-04 | 15:51 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-04 | 15:51 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-04 | 15:51 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-04 | 15:51 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-04 | 15:51 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-04 | 15:51 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-04 | 15:51 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10232QX-2** | | | | | | | | | | | | | | | | | | |
| ECC0034 | SW8330 | METHOD | N 0 1 | NITROBENZENE | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-04 | 15:51 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-04 | 15:51 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-04 | 15:51 |
| ECC0043 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-05 | 16:31 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-05 | 16:31 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-05 | 16:31 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-05 | 16:31 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-05 | 16:31 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-05 | 16:31 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-05 | 16:31 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-05 | 16:31 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-05 | 16:31 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-05 | 16:31 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-05 | 16:31 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-05 | 16:31 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-05 | 16:31 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-05 | 16:31 |
| ECC0044 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-06 | 17:11 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-06 | 17:11 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-06 | 17:11 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-06 | 17:11 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-06 | 17:11 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-06 | 17:11 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-06 | 17:11 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-06 | 17:11 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-06 | 17:11 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-06 | 17:11 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-06 | 17:11 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-06 | 17:11 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-06 | 17:11 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | UJ | | 05B | | | | B031-06 | 17:11 |
| ECC0045 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | | UJ | | 05B | | | | B031-07 | 17:49 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | | UJ | | 05B | | | | B031-07 | 17:49 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | | UJ | | 05B | | | | B031-07 | 17:49 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | | UJ | | 05B | | | | B031-07 | 17:49 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | | UJ | | 05B | | | | B031-07 | 17:49 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | | UJ | | 05B | | | | B031-07 | 17:49 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | | UJ | | 05B | | | | B031-07 | 17:49 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | | UJ | | 05B | | | | B031-07 | 17:49 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | | UJ | | 05B | | | | B031-07 | 17:49 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10232QX-2** | | | | | | | | | | | | | | | | | | | | |
| ECC0045 | SW8330 | METHOD | N | 0 | 1 | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | | UJ | | 05B | | | | B031-07 | 17:49 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | | UJ | | 05B | | | | B031-07 | 17:49 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | | UJ | | 05B | | | | B031-07 | 17:49 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | | UJ | | 05B | | | | B031-07 | 17:49 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | | UJ | | 05B | | | | B031-07 | 17:49 |
| ECC0031 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0585 | mg/kg | U | N | Y | U | U | | | | | | B031-01 | 22:14 |
| ECC0032 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0589 | mg/kg | U | N | Y | U | U | | | | | | B031-02 | 22:31 |
| ECC0033 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0601 | mg/kg | U | N | Y | U | U | | | | | | B031-03 | 23:23 |
| ECC0034 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0595 | mg/kg | U | N | Y | U | U | | | | | | B031-04 | 23:40 |
| ECC0043 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0628 | mg/kg | U | N | Y | U | U | | | | | | B031-05 | 23:57 |
| ECC0044 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0594 | mg/kg | U | N | Y | U | U | | | | | | B031-06 | 00:14 |
| ECC0045 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0592 | mg/kg | U | N | Y | | U | | | | | | B031-07 | 00:31 |
| **10232QX-3** | | | | | | | | | | | | | | | | | | | | |
| ECC0001 | SW6010B | SW3050 | N | 0 | 1 | ALUMINUM | 4780 | mg/kg | | Y | Y | P | J | | 08A | | | | B058-07 | 18:01 |
| | | | | | | ANTIMONY | 11.8 | mg/kg | U | N | Y | U | UJ | | 08A | | | | B058-07 | 18:01 |
| | | | | | | ARSENIC | 2.13 | mg/kg | | Y | Y | P | | | | | | | B058-07 | 17:33 |
| | | | | | | BARIUM | 14.2 | mg/kg | | Y | Y | P | | | | | | | B058-07 | 18:01 |
| | | | | | | BERYLLIUM | .16 | mg/kg | J | Y | Y | P | J | | 15 | | | | B058-07 | 18:01 |
| | | | | | | CADMIUM | .591 | mg/kg | U | N | Y | U | U | | | | | | B058-07 | 18:01 |
| | | | | | | CALCIUM | 48.4 | mg/kg | J | Y | Y | P | J | | 15 | | | | B058-07 | 18:01 |
| | | | | | | CHROMIUM | 12 | mg/kg | | Y | Y | P | | | | | | | B058-07 | 18:01 |
| | | | | | | COBALT | .828 | mg/kg | J | Y | Y | F | B | | 06B | | | | B058-07 | 18:01 |
| | | | | | | COPPER | 2.21 | mg/kg | J | Y | Y | P | J | | 15 | | | | B058-07 | 18:01 |
| | | | | | | IRON | 10600 | mg/kg | | Y | Y | P | J | | 08A | | | | B058-07 | 18:01 |
| | | | | | | LEAD | 15.2 | mg/kg | | Y | Y | P | | | | | | | B058-07 | 17:33 |
| | | | | | | MAGNESIUM | 95.6 | mg/kg | J | Y | Y | P | J | | 15 | | | | B058-07 | 18:01 |
| | | | | | | MANGANESE | 52.9 | mg/kg | | Y | Y | P | | | | | | | B058-07 | 18:01 |
| | | | | | | NICKEL | 1.09 | mg/kg | J | Y | Y | P | J | | 15 | | | | B058-07 | 18:01 |
| | | | | | | POTASSIUM | 591 | mg/kg | U | N | Y | U | U | | | | | | B058-07 | 18:01 |
| | | | | | | SELENIUM | 1.18 | mg/kg | U | N | Y | U | U | | | | | | B058-07 | 17:33 |
| | | | | | | SILVER | 1.18 | mg/kg | U | N | Y | U | U | | | | | | B058-07 | 18:01 |
| | | | | | | SODIUM | 118 | mg/kg | U | N | Y | U | U | | | | | | B058-07 | 18:01 |
| | | | | | | THALLIUM | 2.36 | mg/kg | U | N | Y | U | U | | | | | | B058-07 | 17:33 |
| | | | | | | VANADIUM | 14.9 | mg/kg | | Y | Y | P | | | | | | | B058-07 | 18:01 |
| | | | | | | ZINC | 9.22 | mg/kg | | Y | Y | P | J | | 13 | | | | B058-07 | 18:01 |
| | SW7471A | TOTAL | N | 0 | 1 | MERCURY | .026 | mg/kg | J | Y | Y | P | J | | 15 | | | | B058-07 | 11:29 |
| ECC0002 | SW6010B | SW3050 | N | 0 | 1 | ALUMINUM | 1220 | mg/kg | | Y | Y | P | J | | 08A | | | | B058-08 | 18:05 |
| | | | | | | ANTIMONY | 11.1 | mg/kg | U | N | Y | U | UJ | | 08A | | | | B058-08 | 18:05 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10232QX-3** | | | | | | | | | | | | | | | | | | |
| ECC0002 | SW6010B | SW3050 | N 0 1 | ARSENIC | 1.11 | mg/kg | U | N | Y | U | U | | | | | | B058-08 | 17:38 |
| | | | | BARIUM | .755 | mg/kg | J | Y | Y | P | J | | 15 | | | | B058-08 | 18:05 |
| | | | | BERYLLIUM | .0164 | mg/kg | J | Y | Y | P | J | | 15 | | | | B058-08 | 18:05 |
| | | | | CADMIUM | .557 | mg/kg | U | N | Y | U | U | | | | | | B058-08 | 18:05 |
| | | | | CALCIUM | 24.9 | mg/kg | J | Y | Y | P | J | | 15 | | | | B058-08 | 18:05 |
| | | | | CHROMIUM | 2.91 | mg/kg | | Y | Y | F | B | | 06B | | | | B058-08 | 18:05 |
| | | | | COBALT | 2.23 | mg/kg | U | N | Y | U | U | | | | | | B058-08 | 18:05 |
| | | | | COPPER | 2.23 | mg/kg | U | N | Y | U | U | | | | | | B058-08 | 18:05 |
| | | | | IRON | 879 | mg/kg | | Y | Y | P | J | | 08A | | | | B058-08 | 18:05 |
| | | | | LEAD | 1.34 | mg/kg | | Y | Y | F | B | | 06A | | | | B058-08 | 17:38 |
| | | | | MAGNESIUM | 12.8 | mg/kg | J | Y | Y | F | B | | 06B | | | | B058-08 | 18:05 |
| | | | | MANGANESE | .507 | mg/kg | J | Y | Y | P | J | | 15 | | | | B058-08 | 18:05 |
| | | | | NICKEL | 2.23 | mg/kg | U | N | Y | U | U | | | | | | B058-08 | 18:05 |
| | | | | POTASSIUM | 557 | mg/kg | U | N | Y | U | U | | | | | | B058-08 | 18:05 |
| | | | | SELENIUM | 1.11 | mg/kg | U | N | Y | U | U | | | | | | B058-08 | 17:38 |
| | | | | SILVER | 1.11 | mg/kg | U | N | Y | U | U | | | | | | B058-08 | 18:05 |
| | | | | SODIUM | 111 | mg/kg | U | N | Y | U | U | | | | | | B058-08 | 18:05 |
| | | | | THALLIUM | 2.23 | mg/kg | U | N | Y | U | U | | | | | | B058-08 | 17:38 |
| | | | | VANADIUM | 4.32 | mg/kg | | Y | Y | P | | | | | | | B058-08 | 18:05 |
| | | | | ZINC | 1.54 | mg/kg | J | Y | Y | F | B | | 06B | 13 | | | B058-08 | 18:05 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .111 | mg/kg | U | N | Y | U | U | | | | | | B058-08 | 11:33 |
| ECC0003 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 3580 | mg/kg | | Y | Y | P | J | | 08A | | | | B058-01 | 17:52 |
| | | | | ANTIMONY | 11.5 | mg/kg | U | N | Y | U | UJ | | 08A | | | | B058-01 | 17:52 |
| | | | | ARSENIC | .621 | mg/kg | J | Y | Y | P | J | | 15 | | | | B058-01 | 17:25 |
| | | | | BARIUM | 28 | mg/kg | | Y | Y | P | | | | | | | B058-01 | 17:52 |
| | | | | BERYLLIUM | .162 | mg/kg | J | Y | Y | P | J | | 15 | | | | B058-01 | 17:52 |
| | | | | CADMIUM | .577 | mg/kg | U | N | Y | U | U | | | | | | B058-01 | 17:52 |
| | | | | CALCIUM | 224 | mg/kg | | Y | Y | P | | | | | | | B058-01 | 17:52 |
| | | | | CHROMIUM | 2.13 | mg/kg | | Y | Y | F | B | | 06B | | | | B058-01 | 17:52 |
| | | | | COBALT | 1.35 | mg/kg | J | Y | Y | F | B | | 06B | | | | B058-01 | 17:52 |
| | | | | COPPER | 1.45 | mg/kg | J | Y | Y | P | J | | 15 | | | | B058-01 | 17:52 |
| | | | | IRON | 2500 | mg/kg | | Y | Y | P | J | | 08A | | | | B058-01 | 17:52 |
| | | | | LEAD | 8.28 | mg/kg | | Y | Y | P | | | | | | | B058-01 | 17:25 |
| | | | | MAGNESIUM | 108 | mg/kg | J | Y | Y | P | J | | 15 | | | | B058-01 | 17:52 |
| | | | | MANGANESE | 114 | mg/kg | | Y | Y | P | | | | | | | B058-01 | 17:52 |
| | | | | NICKEL | 1.76 | mg/kg | J | Y | Y | P | J | | 15 | | | | B058-01 | 17:52 |
| | | | | POTASSIUM | 178 | mg/kg | J | Y | Y | F | B | | 06A | | | | B058-01 | 17:52 |
| | | | | SELENIUM | 1.15 | mg/kg | U | N | Y | U | U | | | | | | B058-01 | 17:25 |
| | | | | SILVER | 1.15 | mg/kg | U | N | Y | U | U | | | | | | B058-01 | 17:52 |
| | | | | SODIUM | 115 | mg/kg | U | N | Y | U | U | | | | | | B058-01 | 17:52 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10232QX-3** | | | | | | | | | | | | | | | | | | |
| ECC0003 | SW6010B | SW3050 | N 0 1 | THALLIUM | 2.31 | mg/kg | U | N | Y | U | U | | | | | | B058-01 | 17:25 |
| | | | | VANADIUM | 3.91 | mg/kg | | Y | Y | P | | | | | | | B058-01 | 17:52 |
| | | | | ZINC | 10 | mg/kg | | Y | Y | P | J | | 13 | | | | B058-01 | 17:52 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .028 | mg/kg | J | Y | Y | P | J | | 15 | | | | B058-01 | 11:07 |
| ECC0004 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 5530 | mg/kg | | Y | Y | P | J | | 08A | | | | B058-02 | 17:06 |
| | | | | ANTIMONY | 11.3 | mg/kg | U | N | Y | U | UJ | | 08A | | | | B058-02 | 17:06 |
| | | | | ARSENIC | 1.62 | mg/kg | | Y | Y | P | | | | | | | B058-02 | 16:41 |
| | | | | BARIUM | 12.9 | mg/kg | | Y | Y | P | | | | | | | B058-02 | 17:06 |
| | | | | BERYLLIUM | .0943 | mg/kg | J | Y | Y | P | J | | 15 | | | | B058-02 | 17:06 |
| | | | | CADMIUM | .564 | mg/kg | U | N | Y | U | U | | | | | | B058-02 | 17:06 |
| | | | | CALCIUM | 64.2 | mg/kg | J | Y | Y | P | J | | 15 | | | | B058-02 | 17:06 |
| | | | | CHROMIUM | 7.92 | mg/kg | | Y | Y | P | | | | | | | B058-02 | 17:06 |
| | | | | COBALT | .794 | mg/kg | J | Y | Y | F | B | | 06B | | | | B058-02 | 17:06 |
| | | | | COPPER | 1.98 | mg/kg | J | Y | Y | P | J | | 15 | | | | B058-02 | 17:06 |
| | | | | IRON | 7950 | mg/kg | | Y | Y | P | J | | 08A | | | | B058-02 | 17:06 |
| | | | | LEAD | 3.34 | mg/kg | | Y | Y | P | | | | | | | B058-02 | 16:41 |
| | | | | MAGNESIUM | 106 | mg/kg | J | Y | Y | P | J | | 15 | | | | B058-02 | 17:06 |
| | | | | MANGANESE | 6.59 | mg/kg | | Y | Y | P | | | | | | | B058-02 | 17:06 |
| | | | | NICKEL | 1.16 | mg/kg | J | Y | Y | P | J | | 15 | | | | B058-02 | 17:06 |
| | | | | POTASSIUM | 564 | mg/kg | U | N | Y | U | U | | | | | | B058-02 | 17:06 |
| | | | | SELENIUM | 1.13 | mg/kg | U | N | Y | U | U | | | | | | B058-02 | 16:41 |
| | | | | SILVER | 1.13 | mg/kg | U | N | Y | U | U | | | | | | B058-02 | 17:06 |
| | | | | SODIUM | 113 | mg/kg | U | N | Y | U | U | | | | | | B058-02 | 17:06 |
| | | | | THALLIUM | 2.25 | mg/kg | U | N | Y | U | U | | | | | | B058-02 | 16:41 |
| | | | | VANADIUM | 12.8 | mg/kg | | Y | Y | P | | | | | | | B058-02 | 17:06 |
| | | | | ZINC | 4.17 | mg/kg | | Y | Y | P | J | | 13 | | | | B058-02 | 17:06 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .04 | mg/kg | J | Y | Y | P | J | | 15 | | | | B058-02 | 11:09 |
| ECC0007 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 6060 | mg/kg | | Y | Y | P | J | | 08A | | | | B058-03 | 17:11 |
| | | | | ANTIMONY | 11.7 | mg/kg | U | N | Y | U | UJ | | 08A | | | | B058-03 | 17:11 |
| | | | | ARSENIC | 2.05 | mg/kg | | Y | Y | P | | | | | | | B058-03 | 16:45 |
| | | | | BARIUM | 29.3 | mg/kg | | Y | Y | P | | | | | | | B058-03 | 17:11 |
| | | | | BERYLLIUM | .273 | mg/kg | J | Y | Y | P | J | | 15 | | | | B058-03 | 17:11 |
| | | | | CADMIUM | .585 | mg/kg | U | N | Y | U | U | | | | | | B058-03 | 17:11 |
| | | | | CALCIUM | 72.6 | mg/kg | J | Y | Y | P | J | | 15 | | | | B058-03 | 17:11 |
| | | | | CHROMIUM | 20.9 | mg/kg | | Y | Y | P | | | | | | | B058-03 | 17:11 |
| | | | | COBALT | 1.55 | mg/kg | J | Y | Y | F | B | | 06B | | | | B058-03 | 17:11 |
| | | | | COPPER | 2.06 | mg/kg | J | Y | Y | P | J | | 15 | | | | B058-03 | 17:11 |
| | | | | IRON | 9800 | mg/kg | | Y | Y | P | J | | 08A | | | | B058-03 | 17:11 |
| | | | | LEAD | 8.27 | mg/kg | | Y | Y | P | | | | | | | B058-03 | 16:45 |
| | | | | MAGNESIUM | 127 | mg/kg | | Y | Y | P | | | | | | | B058-03 | 17:11 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10232QX-3** | | | | | | | | | | | | | | | | | | |
| ECC0007 | SW6010B | SW3050 | N 0 1 | MANGANESE | 88.7 | mg/kg | | Y | Y | P | | | | | | | B058-03 | 17:11 |
| | | | | NICKEL | 2.15 | mg/kg | J | Y | Y | P | J | | 15 | | | | B058-03 | 17:11 |
| | | | | POTASSIUM | 164 | mg/kg | J | Y | Y | F | B | | 06A | | | | B058-03 | 17:11 |
| | | | | SELENIUM | 1.17 | mg/kg | U | N | Y | U | U | | | | | | B058-03 | 16:45 |
| | | | | SILVER | 1.17 | mg/kg | U | N | Y | U | U | | | | | | B058-03 | 17:11 |
| | | | | SODIUM | 117 | mg/kg | U | N | Y | U | U | | | | | | B058-03 | 17:11 |
| | | | | THALLIUM | 2.34 | mg/kg | U | N | Y | U | U | | | | | | B058-03 | 16:45 |
| | | | | VANADIUM | 12.1 | mg/kg | | Y | Y | P | | | | | | | B058-03 | 17:11 |
| | | | | ZINC | 11.3 | mg/kg | | Y | Y | P | J | | 13 | | | | B058-03 | 17:11 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .117 | mg/kg | U | N | Y | U | U | | | | | | B058-03 | 11:11 |
| ECC0008 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 7840 | mg/kg | | Y | Y | P | J | | 08A | | | | B058-04 | 17:16 |
| | | | | ANTIMONY | 11.9 | mg/kg | U | N | Y | U | UJ | | 08A | | | | B058-04 | 17:16 |
| | | | | ARSENIC | 7.52 | mg/kg | | Y | Y | P | | | | | | | B058-04 | 16:49 |
| | | | | BARIUM | 10.4 | mg/kg | | Y | Y | P | | | | | | | B058-04 | 17:16 |
| | | | | BERYLLIUM | .108 | mg/kg | J | Y | Y | P | J | | 15 | | | | B058-04 | 17:16 |
| | | | | CADMIUM | .595 | mg/kg | U | N | Y | U | U | | | | | | B058-04 | 17:16 |
| | | | | CALCIUM | 29.4 | mg/kg | J | Y | Y | P | J | | 15 | | | | B058-04 | 17:16 |
| | | | | CHROMIUM | 18.5 | mg/kg | | Y | Y | P | | | | | | | B058-04 | 17:16 |
| | | | | COBALT | .653 | mg/kg | J | Y | Y | F | B | | 06B | | | | B058-04 | 17:16 |
| | | | | COPPER | 4.19 | mg/kg | | Y | Y | P | | | | | | | B058-04 | 17:16 |
| | | | | IRON | 26100 | mg/kg | | Y | Y | P | J | | 08A | | | | B058-04 | 17:16 |
| | | | | LEAD | 10.1 | mg/kg | | Y | Y | P | | | | | | | B058-04 | 16:49 |
| | | | | MAGNESIUM | 67.9 | mg/kg | J | Y | Y | P | J | | 15 | | | | B058-04 | 17:16 |
| | | | | MANGANESE | 55.6 | mg/kg | | Y | Y | P | | | | | | | B058-04 | 17:16 |
| | | | | NICKEL | 1.94 | mg/kg | J | Y | Y | P | J | | 15 | | | | B058-04 | 17:16 |
| | | | | POTASSIUM | 140 | mg/kg | J | Y | Y | F | B | | 06A | | | | B058-04 | 17:16 |
| | | | | SELENIUM | 1.19 | mg/kg | U | N | Y | U | U | | | | | | B058-04 | 16:49 |
| | | | | SILVER | 1.19 | mg/kg | U | N | Y | U | U | | | | | | B058-04 | 17:16 |
| | | | | SODIUM | 119 | mg/kg | U | N | Y | U | U | | | | | | B058-04 | 17:16 |
| | | | | THALLIUM | .714 | mg/kg | J | Y | Y | P | J | | 15 | | | | B058-04 | 16:49 |
| | | | | VANADIUM | 39.2 | mg/kg | | Y | Y | P | | | | | | | B058-04 | 17:16 |
| | | | | ZINC | 6.42 | mg/kg | | Y | Y | P | J | | 13 | | | | B058-04 | 17:16 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .076 | mg/kg | J | Y | Y | P | J | | 15 | | | | B058-04 | 11:14 |
| ECC0015 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 3840 | mg/kg | | Y | Y | P | J | | 08A | | | | B058-09 | 18:10 |
| | | | | ANTIMONY | 11.8 | mg/kg | U | N | Y | U | UJ | | 08A | | | | B058-09 | 18:10 |
| | | | | ARSENIC | 1.07 | mg/kg | J | Y | Y | P | J | | 15 | | | | B058-09 | 17:42 |
| | | | | BARIUM | 28.5 | mg/kg | | Y | Y | P | | | | | | | B058-09 | 18:10 |
| | | | | BERYLLIUM | .133 | mg/kg | J | Y | Y | P | J | | 15 | | | | B058-09 | 18:10 |
| | | | | CADMIUM | .592 | mg/kg | U | N | Y | U | U | | | | | | B058-09 | 18:10 |
| | | | | CALCIUM | 158 | mg/kg | | Y | Y | P | | | | | | | B058-09 | 18:10 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10232QX-3** | | | | | | | | | | | | | | | | | | | | |
| ECC0015 | SW6010B | SW3050 | N | 0 | 1 | CHROMIUM | 4.18 | mg/kg | | Y | Y | P | | | | | | | B058-09 | 18:10 |
| | | | | | | COBALT | .805 | mg/kg | J | Y | Y | F | B | | 06B | | | | B058-09 | 18:10 |
| | | | | | | COPPER | 2.43 | mg/kg | | Y | Y | P | | | | | | | B058-09 | 18:10 |
| | | | | | | IRON | 3370 | mg/kg | | Y | Y | P | J | | 08A | | | | B058-09 | 18:10 |
| | | | | | | LEAD | 14.2 | mg/kg | | Y | Y | P | | | | | | | B058-09 | 17:42 |
| | | | | | | MAGNESIUM | 127 | mg/kg | | Y | Y | P | | | | | | | B058-09 | 18:10 |
| | | | | | | MANGANESE | 36.7 | mg/kg | | Y | Y | P | J | | 17 | | | | B058-09 | 18:10 |
| | | | | | | NICKEL | 1.74 | mg/kg | J | Y | Y | P | J | | 15 | | | | B058-09 | 18:10 |
| | | | | | | POTASSIUM | 138 | mg/kg | J | Y | Y | F | B | | 06A | | | | B058-09 | 18:10 |
| | | | | | | SELENIUM | 1.18 | mg/kg | U | N | Y | U | U | | | | | | B058-09 | 17:42 |
| | | | | | | SILVER | 1.18 | mg/kg | U | N | Y | U | U | | | | | | B058-09 | 18:10 |
| | | | | | | SODIUM | 118 | mg/kg | U | N | Y | U | U | | | | | | B058-09 | 18:10 |
| | | | | | | THALLIUM | 2.37 | mg/kg | U | N | Y | U | U | | | | | | B058-09 | 17:42 |
| | | | | | | VANADIUM | 6.47 | mg/kg | | Y | Y | P | | | | | | | B058-09 | 18:10 |
| | | | | | | ZINC | 12 | mg/kg | | Y | Y | P | J | | 13 | | | | B058-09 | 18:10 |
| | SW7471A | TOTAL | N | 0 | 1 | MERCURY | .033 | mg/kg | J | Y | Y | P | J | | 15 | | | | B058-09 | 11:35 |
| ECC0016 | SW6010B | SW3050 | N | 0 | 1 | ALUMINUM | 3900 | mg/kg | | Y | Y | | J | | 08A | | | | B058-10 | 18:14 |
| | | | | | | ANTIMONY | 11.9 | mg/kg | U | N | Y | | UJ | | 08A | | | | B058-10 | 18:14 |
| | | | | | | ARSENIC | .931 | mg/kg | J | Y | Y | P | J | | 15 | | | | B058-10 | 17:46 |
| | | | | | | BARIUM | 23.1 | mg/kg | | Y | Y | | | | | | | | B058-10 | 18:14 |
| | | | | | | BERYLLIUM | .173 | mg/kg | J | Y | Y | P | J | | 15 | | | | B058-10 | 18:14 |
| | | | | | | CADMIUM | .595 | mg/kg | U | N | Y | | U | | | | | | B058-10 | 18:14 |
| | | | | | | CALCIUM | 136 | mg/kg | | Y | Y | | | | | | | | B058-10 | 18:14 |
| | | | | | | CHROMIUM | 6.28 | mg/kg | | Y | Y | | | | | | | | B058-10 | 18:14 |
| | | | | | | COBALT | .882 | mg/kg | J | Y | Y | | B | | 06B | | | | B058-10 | 18:14 |
| | | | | | | COPPER | 1.95 | mg/kg | J | Y | Y | P | J | | 15 | | | | B058-10 | 18:14 |
| | | | | | | IRON | 5360 | mg/kg | | Y | Y | | J | | 08A | | | | B058-10 | 18:14 |
| | | | | | | LEAD | 12.2 | mg/kg | | Y | Y | | | | | | | | B058-10 | 17:46 |
| | | | | | | MAGNESIUM | 108 | mg/kg | J | Y | Y | P | J | | 15 | | | | B058-10 | 18:14 |
| | | | | | | MANGANESE | 69.7 | mg/kg | | Y | Y | | J | | 17 | | | | B058-10 | 18:14 |
| | | | | | | NICKEL | 1.01 | mg/kg | J | Y | Y | | B | | 06A | | | | B058-10 | 18:14 |
| | | | | | | POTASSIUM | 595 | mg/kg | U | N | Y | | U | | | | | | B058-10 | 18:14 |
| | | | | | | SELENIUM | 1.19 | mg/kg | U | N | Y | | U | | | | | | B058-10 | 17:46 |
| | | | | | | SILVER | 1.19 | mg/kg | U | N | Y | | U | | | | | | B058-10 | 18:14 |
| | | | | | | SODIUM | 119 | mg/kg | U | N | Y | | U | | | | | | B058-10 | 18:14 |
| | | | | | | THALLIUM | 2.38 | mg/kg | U | N | Y | | U | | | | | | B058-10 | 17:46 |
| | | | | | | VANADIUM | 9.22 | mg/kg | | Y | Y | | | | | | | | B058-10 | 18:14 |
| | | | | | | ZINC | 10.1 | mg/kg | | Y | Y | | J | | 13 | | | | B058-10 | 18:14 |
| | SW7471A | TOTAL | N | 0 | 1 | MERCURY | .026 | mg/kg | J | Y | Y | P | J | | 15 | | | | B058-10 | 11:37 |
| ECC0018 | SW6010B | SW3050 | N | 0 | 1 | ALUMINUM | 2750 | mg/kg | | Y | Y | P | J | | 08A | | | | B058-11 | 18:19 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10232QX-3** | | | | | | | | | | | | | | | | | | |
| ECC0018 | SW6010B | SW3050 | N 0 1 | ANTIMONY | 12.7 | mg/kg | U | N | Y | U | UJ | | 08A | | | | B058-11 | 18:19 |
| | | | | ARSENIC | 1.27 | mg/kg | U | N | Y | U | U | | | | | | B058-11 | 17:50 |
| | | | | BARIUM | .944 | mg/kg | J | Y | Y | P | J | | 15 | | | | B058-11 | 18:19 |
| | | | | BERYLLIUM | 1.27 | mg/kg | U | N | Y | U | U | | | | | | B058-11 | 18:19 |
| | | | | CADMIUM | .634 | mg/kg | U | N | Y | U | U | | | | | | B058-11 | 18:19 |
| | | | | CALCIUM | 40.3 | mg/kg | J | Y | Y | P | J | | 15 | | | | B058-11 | 18:19 |
| | | | | CHROMIUM | 4.09 | mg/kg | | Y | Y | P | | | | | | | B058-11 | 18:19 |
| | | | | COBALT | 2.53 | mg/kg | U | N | Y | U | U | | | | | | B058-11 | 18:19 |
| | | | | COPPER | 2.53 | mg/kg | U | N | Y | U | U | | | | | | B058-11 | 18:19 |
| | | | | IRON | 884 | mg/kg | | Y | Y | P | J | | 08A | | | | B058-11 | 18:19 |
| | | | | LEAD | 1.17 | mg/kg | J | Y | Y | F | B | | 06A | | | | B058-11 | 17:50 |
| | | | | MAGNESIUM | 21.7 | mg/kg | J | Y | Y | F | B | | 06B | | | | B058-11 | 18:19 |
| | | | | MANGANESE | .462 | mg/kg | J | Y | Y | P | J | | 15 | | | | B058-11 | 18:19 |
| | | | | NICKEL | 2.53 | mg/kg | U | N | Y | U | U | | | | | | B058-11 | 18:19 |
| | | | | POTASSIUM | 634 | mg/kg | U | N | Y | U | U | | | | | | B058-11 | 18:19 |
| | | | | SELENIUM | 1.27 | mg/kg | U | N | Y | U | U | | | | | | B058-11 | 17:50 |
| | | | | SILVER | 1.27 | mg/kg | U | N | Y | U | U | | | | | | B058-11 | 18:19 |
| | | | | SODIUM | 127 | mg/kg | U | N | Y | U | U | | | | | | B058-11 | 18:19 |
| | | | | THALLIUM | 2.53 | mg/kg | U | N | Y | U | U | | | | | | B058-11 | 17:50 |
| | | | | VANADIUM | 14.9 | mg/kg | | Y | Y | P | | | | | | | B058-11 | 18:19 |
| | | | | ZINC | 2.53 | mg/kg | U | N | Y | U | U | | | | | | B058-11 | 18:19 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .127 | mg/kg | U | N | Y | U | U | | | | | | B058-11 | 11:40 |
| ECC0019 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 12600 | mg/kg | | Y | Y | P | J | | 08A | | | | B058-12 | 18:24 |
| | | | | ANTIMONY | 12.5 | mg/kg | U | N | Y | U | UJ | | 08A | | | | B058-12 | 18:24 |
| | | | | ARSENIC | 2.9 | mg/kg | | Y | Y | P | | | | | | | B058-12 | 17:55 |
| | | | | BARIUM | 76.2 | mg/kg | | Y | Y | P | | | | | | | B058-12 | 18:24 |
| | | | | BERYLLIUM | .704 | mg/kg | J | Y | Y | P | J | | 15 | | | | B058-12 | 18:24 |
| | | | | CADMIUM | .624 | mg/kg | U | N | Y | U | U | | | | | | B058-12 | 18:24 |
| | | | | CALCIUM | 127 | mg/kg | | Y | Y | P | | | | | | | B058-12 | 18:24 |
| | | | | CHROMIUM | 10 | mg/kg | | Y | Y | P | | | | | | | B058-12 | 18:24 |
| | | | | COBALT | 5.72 | mg/kg | | Y | Y | P | | | | | | | B058-12 | 18:24 |
| | | | | COPPER | 4.22 | mg/kg | | Y | Y | P | | | | | | | B058-12 | 18:24 |
| | | | | IRON | 10800 | mg/kg | | Y | Y | P | J | | 08A | | | | B058-12 | 18:24 |
| | | | | LEAD | 17.4 | mg/kg | | Y | Y | P | | | | | | | B058-12 | 17:55 |
| | | | | MAGNESIUM | 205 | mg/kg | | Y | Y | P | | | | | | | B058-12 | 18:24 |
| | | | | MANGANESE | 875 | mg/kg | | Y | Y | P | | | | | | | B058-12 | 18:24 |
| | | | | NICKEL | 5.25 | mg/kg | | Y | Y | P | | | | | | | B058-12 | 18:24 |
| | | | | POTASSIUM | 196 | mg/kg | J | Y | Y | F | B | | 06A | | | | B058-12 | 18:24 |
| | | | | SELENIUM | 1.25 | mg/kg | U | N | Y | U | U | | | | | | B058-12 | 17:55 |
| | | | | SILVER | 1.25 | mg/kg | U | N | Y | U | U | | | | | | B058-12 | 18:24 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10232QX-3** | | | | | | | | | | | | | | | | | | |
| ECC0019 | SW6010B | SW3050 | N 0 1 | SODIUM | 125 | mg/kg | U | N | Y | U | U | | | | | | B058-12 | 18:24 |
| | | | | THALLIUM | 2.5 | mg/kg | U | N | Y | U | U | | | | | | B058-12 | 17:55 |
| | | | | VANADIUM | 23.4 | mg/kg | | Y | Y | P | | | | | | | B058-12 | 18:24 |
| | | | | ZINC | 22 | mg/kg | | Y | Y | P | J | | 13 | | | | B058-12 | 18:24 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .050 | mg/kg | J | Y | Y | P | J | | 15 | | | | B058-12 | 11:42 |
| ECC0020 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 1800 | mg/kg | | Y | Y | P | J | | 08A | | | | B058-13 | 18:28 |
| | | | | ANTIMONY | 12.4 | mg/kg | U | N | Y | U | UJ | | 08A | | | | B058-13 | 18:28 |
| | | | | ARSENIC | .563 | mg/kg | J | Y | Y | P | J | | 15 | | | | B058-13 | 17:59 |
| | | | | BARIUM | 2.92 | mg/kg | | Y | Y | P | | | | | | | B058-13 | 18:28 |
| | | | | BERYLLIUM | .0345 | mg/kg | J | Y | Y | P | J | | 15 | | | | B058-13 | 18:28 |
| | | | | CADMIUM | .618 | mg/kg | U | N | Y | U | U | | | | | | B058-13 | 18:28 |
| | | | | CALCIUM | 24.7 | mg/kg | J | Y | Y | P | J | | 15 | | | | B058-13 | 18:28 |
| | | | | CHROMIUM | 11.6 | mg/kg | | Y | Y | P | | | | | | | B058-13 | 18:28 |
| | | | | COBALT | 2.47 | mg/kg | U | N | Y | U | U | | | | | | B058-13 | 18:28 |
| | | | | COPPER | 2.47 | mg/kg | U | N | Y | U | U | | | | | | B058-13 | 18:28 |
| | | | | IRON | 2350 | mg/kg | | Y | Y | P | J | | 08A | | | | B058-13 | 18:28 |
| | | | | LEAD | 2.19 | mg/kg | | Y | Y | P | | | | | | | B058-13 | 17:59 |
| | | | | MAGNESIUM | 11.5 | mg/kg | J | Y | Y | F | B | | 06B | | | | B058-13 | 18:28 |
| | | | | MANGANESE | .206 | mg/kg | J | Y | Y | P | J | | 15 | | | | B058-13 | 18:28 |
| | | | | NICKEL | 2.47 | mg/kg | U | N | Y | U | U | | | | | | B058-13 | 18:28 |
| | | | | POTASSIUM | 618 | mg/kg | U | N | Y | U | U | | | | | | B058-13 | 18:28 |
| | | | | SELENIUM | 1.24 | mg/kg | U | N | Y | U | U | | | | | | B058-13 | 17:59 |
| | | | | SILVER | 1.24 | mg/kg | U | N | Y | U | U | | | | | | B058-13 | 18:28 |
| | | | | SODIUM | 124 | mg/kg | U | N | Y | U | U | | | | | | B058-13 | 18:28 |
| | | | | THALLIUM | 2.47 | mg/kg | U | N | Y | U | U | | | | | | B058-13 | 17:59 |
| | | | | VANADIUM | 47.5 | mg/kg | | Y | Y | P | | | | | | | B058-13 | 18:28 |
| | | | | ZINC | .753 | mg/kg | J | Y | Y | F | B | | 06B | 13 | | | B058-13 | 18:28 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .090 | mg/kg | J | Y | Y | P | J | | 15 | | | | B058-13 | 11:45 |
| ECC0023 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 5300 | mg/kg | | Y | Y | P | J | | 08B | | | | B058-05 | 17:20 |
| | | | | ANTIMONY | 11.8 | mg/kg | U | N | Y | U | UJ | | 08A | | | | B058-05 | 17:20 |
| | | | | ARSENIC | 2.13 | mg/kg | | Y | Y | P | | | | | | | B058-05 | 16:53 |
| | | | | BARIUM | 33.9 | mg/kg | | Y | Y | P | | | | | | | B058-05 | 17:20 |
| | | | | BERYLLIUM | .255 | mg/kg | J | Y | Y | P | J | | 15 | | | | B058-05 | 17:20 |
| | | | | CADMIUM | .591 | mg/kg | U | N | Y | U | U | | | | | | B058-05 | 17:20 |
| | | | | CALCIUM | 166 | mg/kg | | Y | Y | P | | | | | | | B058-05 | 17:20 |
| | | | | CHROMIUM | 8.87 | mg/kg | | Y | Y | P | | | | | | | B058-05 | 17:20 |
| | | | | COBALT | 3.63 | mg/kg | | Y | Y | P | | | | | | | B058-05 | 17:20 |
| | | | | COPPER | 2.55 | mg/kg | | Y | Y | P | | | | | | | B058-05 | 17:20 |
| | | | | IRON | 8120 | mg/kg | | Y | Y | P | J | | 08A | | | | B058-05 | 17:20 |
| | | | | LEAD | 9.63 | mg/kg | | Y | Y | P | | | | | | | B058-05 | 16:53 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10232QX-3** | | | | | | | | | | | | | | | | | | |
| ECC0023 | SW6010B | SW3050 | N 0 1 | MAGNESIUM | 151 | mg/kg | | Y | Y | P | | | | | | | B058-05 | 17:20 |
| | | | | MANGANESE | 313 | mg/kg | | Y | Y | P | | | | | | | B058-05 | 17:20 |
| | | | | NICKEL | 2.55 | mg/kg | | Y | Y | P | | | | | | | B058-05 | 17:20 |
| | | | | POTASSIUM | 127 | mg/kg | J | Y | Y | F | B | | 06A | | | | B058-05 | 17:20 |
| | | | | SELENIUM | 1.18 | mg/kg | U | N | Y | U | U | | | | | | B058-05 | 16:53 |
| | | | | SILVER | 1.18 | mg/kg | U | N | Y | U | U | | | | | | B058-05 | 17:20 |
| | | | | SODIUM | 118 | mg/kg | U | N | Y | U | U | | | | | | B058-05 | 17:20 |
| | | | | THALLIUM | 2.36 | mg/kg | U | N | Y | U | U | | | | | | B058-05 | 16:53 |
| | | | | VANADIUM | 9.02 | mg/kg | | Y | Y | P | | | | | | | B058-05 | 17:20 |
| | | | | ZINC | 11 | mg/kg | | Y | Y | P | J | | 13 | | | | B058-05 | 17:20 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .024 | mg/kg | J | Y | Y | P | J | | 15 | | | | B058-05 | 11:16 |
| ECC0024 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 13300 | mg/kg | | Y | Y | P | J | | 08A | | | | B058-06 | 17:56 |
| | | | | ANTIMONY | 12 | mg/kg | U | N | Y | U | UJ | | 08A | | | | B058-06 | 17:56 |
| | | | | ARSENIC | 8.01 | mg/kg | | Y | Y | P | | | | | | | B058-06 | 17:29 |
| | | | | BARIUM | 14 | mg/kg | | Y | Y | P | | | | | | | B058-06 | 17:56 |
| | | | | BERYLLIUM | .204 | mg/kg | J | Y | Y | P | J | | 15 | | | | B058-06 | 17:56 |
| | | | | CADMIUM | .602 | mg/kg | U | N | Y | U | U | | | | | | B058-06 | 17:56 |
| | | | | CALCIUM | 26.1 | mg/kg | J | Y | Y | P | J | | 15 | | | | B058-06 | 17:56 |
| | | | | CHROMIUM | 24.5 | mg/kg | | Y | Y | P | | | | | | | B058-06 | 17:56 |
| | | | | COBALT | 1.17 | mg/kg | J | Y | Y | F | B | | 06B | | | | B058-06 | 17:56 |
| | | | | COPPER | 16.8 | mg/kg | | Y | Y | P | | | | | | | B058-06 | 17:56 |
| | | | | IRON | 44700 | mg/kg | | Y | Y | P | J | | 08A | | | | B058-06 | 17:56 |
| | | | | LEAD | 9.43 | mg/kg | | Y | Y | P | | | | | | | B058-06 | 17:29 |
| | | | | MAGNESIUM | 206 | mg/kg | | Y | Y | P | | | | | | | B058-06 | 17:56 |
| | | | | MANGANESE | 16.7 | mg/kg | | Y | Y | P | | | | | | | B058-06 | 17:56 |
| | | | | NICKEL | 1.45 | mg/kg | J | Y | Y | P | J | | 15 | | | | B058-06 | 17:56 |
| | | | | POTASSIUM | 269 | mg/kg | J | Y | Y | F | B | | 06A | | | | B058-06 | 17:56 |
| | | | | SELENIUM | 1.2 | mg/kg | U | N | Y | U | U | | | | | | B058-06 | 17:29 |
| | | | | SILVER | 1.2 | mg/kg | U | N | Y | U | U | | | | | | B058-06 | 17:56 |
| | | | | SODIUM | 120 | mg/kg | U | N | Y | U | U | | | | | | B058-06 | 17:56 |
| | | | | THALLIUM | .722 | mg/kg | J | Y | Y | P | J | | 15 | | | | B058-06 | 17:29 |
| | | | | VANADIUM | 52 | mg/kg | | Y | Y | P | | | | | | | B058-06 | 17:56 |
| | | | | ZINC | 10.4 | mg/kg | | Y | Y | P | J | | 13 | | | | B058-06 | 17:56 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .059 | mg/kg | J | Y | Y | P | J | | 15 | | | | B058-06 | 11:27 |
| ECC0001 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-07 | 21:40 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-07 | 21:40 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-07 | 21:40 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-07 | 21:40 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-07 | 21:40 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-07 | 21:40 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10232QX-3** | | | | | | | | | | | | | | | | | | |
| ECC0001 | SW8330 | METHOD | N 0 1 | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-07 | 21:40 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-07 | 21:40 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-07 | 21:40 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-07 | 21:40 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-07 | 21:40 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-07 | 21:40 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-07 | 21:40 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-07 | 21:40 |
| ECC0002 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-08 | 22:21 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-08 | 22:21 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-08 | 22:21 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-08 | 22:21 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-08 | 22:21 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-08 | 22:21 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-08 | 22:21 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-08 | 22:21 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-08 | 22:21 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-08 | 22:21 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-08 | 22:21 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-08 | 22:21 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-08 | 22:21 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-08 | 22:21 |
| ECC0003 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-01 | 16:17 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-01 | 16:17 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-01 | 16:17 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-01 | 16:17 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-01 | 16:17 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-01 | 16:17 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-01 | 16:17 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-01 | 16:17 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-01 | 16:17 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-01 | 16:17 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-01 | 16:17 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-01 | 16:17 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-01 | 16:17 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-01 | 16:17 |
| ECC0004 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-02 | 18:18 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-02 | 18:18 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-02 | 18:18 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-02 | 18:18 |

# Validation Qualifier Data Entry Verification

Run Date: October 9, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10232QX-3** | | | | | | | | | | | | | | | | |
| ECC0004 | SW8330 | METHOD | N 0 1 | 2,6-DNT | .4 | mg/kg | U | N Y U | U | | | | | | B058-02 | 18:18 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N Y U | U | | | | | | B058-02 | 18:18 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N Y U | U | | | | | | B058-02 | 18:18 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N Y U | U | | | | | | B058-02 | 18:18 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N Y U | U | | | | | | B058-02 | 18:18 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N Y U | U | | | | | | B058-02 | 18:18 |
| | | | | HMX | .4 | mg/kg | U | N Y U | U | | | | | | B058-02 | 18:18 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N Y U | U | | | | | | B058-02 | 18:18 |
| | | | | RDX | .4 | mg/kg | U | N Y U | U | | | | | | B058-02 | 18:18 |
| | | | | TETRYL | .4 | mg/kg | U | N Y U | U | | | | | | B058-02 | 18:18 |
| ECC0007 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N Y U | U | | | | | | B058-03 | 18:58 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N Y U | U | | | | | | B058-03 | 18:58 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N Y U | U | | | | | | B058-03 | 18:58 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N Y U | U | | | | | | B058-03 | 18:58 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N Y U | U | | | | | | B058-03 | 18:58 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N Y U | U | | | | | | B058-03 | 18:58 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N Y U | U | | | | | | B058-03 | 18:58 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N Y U | U | | | | | | B058-03 | 18:58 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N Y U | U | | | | | | B058-03 | 18:58 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N Y U | U | | | | | | B058-03 | 18:58 |
| | | | | HMX | .4 | mg/kg | U | N Y U | U | | | | | | B058-03 | 18:58 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N Y U | U | | | | | | B058-03 | 18:58 |
| | | | | RDX | .4 | mg/kg | U | N Y U | U | | | | | | B058-03 | 18:58 |
| | | | | TETRYL | .4 | mg/kg | U | N Y U | U | | | | | | B058-03 | 18:58 |
| ECC0008 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N Y U | U | | | | | | B058-04 | 19:39 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N Y U | U | | | | | | B058-04 | 19:39 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N Y U | U | | | | | | B058-04 | 19:39 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N Y U | U | | | | | | B058-04 | 19:39 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N Y U | U | | | | | | B058-04 | 19:39 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N Y U | U | | | | | | B058-04 | 19:39 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N Y U | U | | | | | | B058-04 | 19:39 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N Y U | U | | | | | | B058-04 | 19:39 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N Y U | U | | | | | | B058-04 | 19:39 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N Y U | U | | | | | | B058-04 | 19:39 |
| | | | | HMX | .4 | mg/kg | U | N Y U | U | | | | | | B058-04 | 19:39 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N Y U | U | | | | | | B058-04 | 19:39 |
| | | | | RDX | .4 | mg/kg | U | N Y U | U | | | | | | B058-04 | 19:39 |
| | | | | TETRYL | .4 | mg/kg | U | N Y U | U | | | | | | B058-04 | 19:39 |
| ECC0015 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N Y U | U | | | | | | B058-09 | 23:42 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N Y U | U | | | | | | B058-09 | 23:42 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10232QX-3** | | | | | | | | | | | | | | | | | | |
| ECC0015 | SW8330 | METHOD | N 0 1 | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-09 | 23:42 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-09 | 23:42 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-09 | 23:42 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-09 | 23:42 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-09 | 23:42 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-09 | 23:42 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-09 | 23:42 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-09 | 23:42 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-09 | 23:42 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-09 | 23:42 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-09 | 23:42 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-09 | 23:42 |
| ECC0016 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | | U | | | | | | B058-10 | 00:22 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | | U | | | | | | B058-10 | 00:22 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | | U | | | | | | B058-10 | 00:22 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | | U | | | | | | B058-10 | 00:22 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | | U | | | | | | B058-10 | 00:22 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | | U | | | | | | B058-10 | 00:22 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | | U | | | | | | B058-10 | 00:22 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | | U | | | | | | B058-10 | 00:22 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | | U | | | | | | B058-10 | 00:22 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | | U | | | | | | B058-10 | 00:22 |
| | | | | HMX | .4 | mg/kg | U | N | Y | | U | | | | | | B058-10 | 00:22 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | | U | | | | | | B058-10 | 00:22 |
| | | | | RDX | .4 | mg/kg | U | N | Y | | U | | | | | | B058-10 | 00:22 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | | U | | | | | | B058-10 | 00:22 |
| ECC0018 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-11 | 01:02 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-11 | 01:02 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-11 | 01:02 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-11 | 01:02 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-11 | 01:02 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-11 | 01:02 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-11 | 01:02 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-11 | 01:02 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-11 | 01:02 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-11 | 01:02 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-11 | 01:02 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-11 | 01:02 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-11 | 01:02 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-11 | 01:02 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10232QX-3** | | | | | | | | | | | | | | | | | | |
| ECC0019 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-12 | 01:43 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-12 | 01:43 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-12 | 01:43 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-12 | 01:43 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-12 | 01:43 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-12 | 01:43 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-12 | 01:43 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-12 | 01:43 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-12 | 01:43 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-12 | 01:43 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-12 | 01:43 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-12 | 01:43 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-12 | 01:43 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-12 | 01:43 |
| ECC0020 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-13 | 02:23 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-13 | 02:23 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-13 | 02:23 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-13 | 02:23 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-13 | 02:23 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-13 | 02:23 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-13 | 02:23 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-13 | 02:23 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-13 | 02:23 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-13 | 02:23 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-13 | 02:23 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-13 | 02:23 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-13 | 02:23 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-13 | 02:23 |
| ECC0023 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-05 | 20:19 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-05 | 20:19 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-05 | 20:19 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-05 | 20:19 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-05 | 20:19 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-05 | 20:19 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-05 | 20:19 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-05 | 20:19 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-05 | 20:19 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-05 | 20:19 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-05 | 20:19 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-05 | 20:19 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10232QX-3** | | | | | | | | | | | | | | | | | | | | |
| ECC0023 | SW8330 | METHOD | N | 0 | 1 | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-05 | 20:19 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-05 | 20:19 |
| ECC0024 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-06 | 21:00 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-06 | 21:00 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-06 | 21:00 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-06 | 21:00 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-06 | 21:00 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-06 | 21:00 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-06 | 21:00 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-06 | 21:00 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-06 | 21:00 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-06 | 21:00 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-06 | 21:00 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-06 | 21:00 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-06 | 21:00 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | B058-06 | 21:00 |
| ECC0001 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0591 | mg/kg | U | N | Y | U | U | | | | | | B058-07 | 22:00 |
| ECC0002 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0557 | mg/kg | U | N | Y | U | U | | | | | | B058-08 | 22:17 |
| ECC0003 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0577 | mg/kg | U | N | Y | U | U | | | | | | B058-01 | 19:43 |
| ECC0004 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0564 | mg/kg | U | N | Y | U | U | | | | | | B058-02 | 20:00 |
| ECC0007 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0585 | mg/kg | U | N | Y | U | U | | | | | | B058-03 | 20:17 |
| ECC0008 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0595 | mg/kg | U | N | Y | U | U | | | | | | B058-04 | 21:09 |
| ECC0015 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0592 | mg/kg | U | N | Y | U | U | | | | | | B058-09 | 22:34 |
| ECC0016 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0595 | mg/kg | U | N | Y | | U | | | | | | B058-10 | 22:51 |
| ECC0018 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0634 | mg/kg | U | N | Y | U | U | | | | | | B058-11 | 23:09 |
| ECC0019 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0624 | mg/kg | U | N | Y | U | U | | | | | | B058-12 | 23:26 |
| ECC0020 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0618 | mg/kg | U | N | Y | U | U | | | | | | B058-13 | 23:43 |
| ECC0023 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0591 | mg/kg | U | N | Y | U | U | | | | | | B058-05 | 21:26 |
| ECC0024 | EPA314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0602 | mg/kg | U | N | Y | U | U | | | | | | B058-06 | 21:43 |
| **10232QX-4** | | | | | | | | | | | | | | | | | | | | |
| ECC2001 | SW6010B | SW3010 | N | 0 | 1 | ALUMINUM | .207 | mg/L | | Y | Y | F | B | | 06A | | | | C037-05 | 00:55 |
| | | | | | | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | C037-05 | 00:55 |
| | | | | | | ARSENIC | .01 | mg/L | U | N | Y | U | U | | | | | | C037-05 | 19:34 |
| | | | | | | BARIUM | .0178 | mg/L | | Y | Y | P | | | | | | | C037-05 | 00:55 |
| | | | | | | BERYLLIUM | .001 | mg/L | U | N | Y | U | U | | | | | | C037-05 | 00:55 |
| | | | | | | CADMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | C037-05 | 00:55 |
| | | | | | | CALCIUM | 4.7 | mg/L | | Y | Y | P | | | | | | | C037-05 | 00:55 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10232QX-4** | | | | | | | | | | | | | | | | | | |
| ECC2001 | SW6010B | SW3010 | N 0 1 | CHROMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | C037-05 | 00:55 |
| | | | | COBALT | .02 | mg/L | U | N | Y | U | U | | | | | | C037-05 | 00:55 |
| | | | | COPPER | .02 | mg/L | U | N | Y | U | U | | | | | | C037-05 | 00:55 |
| | | | | IRON | .197 | mg/L | J | Y | Y | P | J | | 15 | | | | C037-05 | 00:55 |
| | | | | LEAD | .00152 | mg/L | J | Y | Y | F | B | | 06B | | | | C037-05 | 19:34 |
| | | | | MAGNESIUM | 1.75 | mg/L | | Y | Y | P | | | | | | | C037-05 | 00:55 |
| | | | | MANGANESE | .00699 | mg/L | J | Y | Y | P | J | | 15 | | | | C037-05 | 00:55 |
| | | | | NICKEL | .02 | mg/L | U | N | Y | U | U | | | | | | C037-05 | 00:55 |
| | | | | POTASSIUM | 5 | mg/L | U | N | Y | U | U | | | | | | C037-05 | 00:55 |
| | | | | SELENIUM | .01 | mg/L | U | N | Y | U | U | | | | | | C037-05 | 19:34 |
| | | | | SILVER | .01 | mg/L | U | N | Y | U | U | | | | | | C037-05 | 00:55 |
| | | | | SODIUM | 1.07 | mg/L | | Y | Y | P | | | | | | | C037-05 | 00:55 |
| | | | | THALLIUM | .01 | mg/L | U | N | Y | U | U | | | | | | C037-05 | 19:34 |
| | | | | VANADIUM | .01 | mg/L | U | N | Y | U | U | | | | | | C037-05 | 00:55 |
| | | | | ZINC | .00645 | mg/L | J | Y | Y | F | B | | 06C | | | | C037-05 | 00:55 |
| | SW7470A | TOTAL | N 0 1 | MERCURY | .0005 | mg/L | U | N | Y | U | U | | | | | | C037-05 | 12:04 |
| ECC2002 | SW6010B | SW3010 | N 0 1 | ALUMINUM | .33 | mg/L | | Y | Y | P | | | | | | | C037-06 | 01:00 |
| | | | | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | C037-06 | 01:00 |
| | | | | ARSENIC | .01 | mg/L | U | N | Y | U | U | | | | | | C037-06 | 19:38 |
| | | | | BARIUM | .0179 | mg/L | | Y | Y | P | | | | | | | C037-06 | 01:00 |
| | | | | BERYLLIUM | .001 | mg/L | U | N | Y | U | U | | | | | | C037-06 | 01:00 |
| | | | | CADMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | C037-06 | 01:00 |
| | | | | CALCIUM | .52 | mg/L | J | Y | Y | F | B | | 06C | | | | C037-06 | 01:00 |
| | | | | CHROMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | C037-06 | 01:00 |
| | | | | COBALT | .02 | mg/L | U | N | Y | U | U | | | | | | C037-06 | 01:00 |
| | | | | COPPER | .02 | mg/L | U | N | Y | U | U | | | | | | C037-06 | 01:00 |
| | | | | IRON | .403 | mg/L | | Y | Y | P | | | | | | | C037-06 | 01:00 |
| | | | | LEAD | .01 | mg/L | U | N | Y | U | U | | | | | | C037-06 | 19:38 |
| | | | | MAGNESIUM | .57 | mg/L | J | Y | Y | P | J | | 15 | | | | C037-06 | 01:00 |
| | | | | MANGANESE | .0286 | mg/L | | Y | Y | P | | | | | | | C037-06 | 01:00 |
| | | | | NICKEL | .02 | mg/L | U | N | Y | U | U | | | | | | C037-06 | 01:00 |
| | | | | POTASSIUM | 5 | mg/L | U | N | Y | U | U | | | | | | C037-06 | 01:00 |
| | | | | SELENIUM | .01 | mg/L | U | N | Y | U | U | | | | | | C037-06 | 19:38 |
| | | | | SILVER | .01 | mg/L | U | N | Y | U | U | | | | | | C037-06 | 01:00 |
| | | | | SODIUM | .795 | mg/L | J | Y | Y | P | J | | 15 | | | | C037-06 | 01:00 |
| | | | | THALLIUM | .01 | mg/L | U | N | Y | U | U | | | | | | C037-06 | 19:38 |
| | | | | VANADIUM | .01 | mg/L | U | N | Y | U | U | | | | | | C037-06 | 01:00 |
| | | | | ZINC | .011 | mg/L | J | Y | Y | F | B | | 06C | | | | C037-06 | 01:00 |
| | SW7470A | TOTAL | N 0 1 | MERCURY | .0005 | mg/L | U | N | Y | U | U | | | | | | C037-06 | 12:06 |
| ECC2003 | SW6010B | SW3010 | N 0 1 | ALUMINUM | 9.71 | mg/L | | Y | Y | P | | | | | | | C037-07 | 01:05 |

# Validation Qualifier Data Entry Verification

Run Date: October 9, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10232QX-4** | | | | | | | | | | | | | | | | | | |
| ECC2003 | SW6010B | SW3010 | N 0 1 | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | C037-07 | 01:05 |
| | | | | ARSENIC | .00545 | mg/L | J | Y | Y | P | J | | 15 | | | | C037-07 | 19:42 |
| | | | | BARIUM | .0624 | mg/L | | Y | Y | P | | | | | | | C037-07 | 01:05 |
| | | | | BERYLLIUM | .001 | mg/L | U | N | Y | U | U | | | | | | C037-07 | 01:05 |
| | | | | CADMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | C037-07 | 01:05 |
| | | | | CALCIUM | 3.01 | mg/L | | Y | Y | F | B | | 06C | | | | C037-07 | 01:05 |
| | | | | CHROMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | C037-07 | 01:05 |
| | | | | COBALT | .02 | mg/L | U | N | Y | U | U | | | | | | C037-07 | 01:05 |
| | | | | COPPER | .00801 | mg/L | J | Y | Y | F | B | | 06B | | | | C037-07 | 01:05 |
| | | | | IRON | 11.6 | mg/L | | Y | Y | P | | | | | | | C037-07 | 01:05 |
| | | | | LEAD | .018 | mg/L | | Y | Y | P | | | | | | | C037-07 | 19:42 |
| | | | | MAGNESIUM | 1.33 | mg/L | | Y | Y | P | | | | | | | C037-07 | 01:05 |
| | | | | MANGANESE | .212 | mg/L | | Y | Y | P | | | | | | | C037-07 | 01:05 |
| | | | | NICKEL | .0115 | mg/L | J | Y | Y | P | J | | 15 | | | | C037-07 | 01:05 |
| | | | | POTASSIUM | 5 | mg/L | U | N | Y | U | U | | | | | | C037-07 | 01:05 |
| | | | | SELENIUM | .01 | mg/L | U | N | Y | U | U | | | | | | C037-07 | 19:42 |
| | | | | SILVER | .01 | mg/L | U | N | Y | U | U | | | | | | C037-07 | 01:05 |
| | | | | SODIUM | 1.34 | mg/L | | Y | Y | P | | | | | | | C037-07 | 01:05 |
| | | | | THALLIUM | .01 | mg/L | U | N | Y | U | U | | | | | | C037-07 | 19:42 |
| | | | | VANADIUM | .0165 | mg/L | | Y | Y | P | | | | | | | C037-07 | 01:05 |
| | | | | ZINC | .148 | mg/L | | Y | Y | F | B | | 06C | | | | C037-07 | 01:05 |
| | SW7470A | TOTAL | N 0 1 | MERCURY | .0005 | mg/L | U | N | Y | U | U | | | | | | C037-07 | 12:09 |
| ECC2004 | SW6010B | SW3010 | N 0 1 | ALUMINUM | .121 | mg/L | J | Y | Y | F | B | | 06A | | | | C037-08 | 01:42 |
| | | | | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | C037-08 | 01:42 |
| | | | | ARSENIC | .01 | mg/L | U | N | Y | U | U | | | | | | C037-08 | 20:13 |
| | | | | BARIUM | .021 | mg/L | | Y | Y | P | | | | | | | C037-08 | 01:42 |
| | | | | BERYLLIUM | .001 | mg/L | U | N | Y | U | U | | | | | | C037-08 | 01:42 |
| | | | | CADMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | C037-08 | 01:42 |
| | | | | CALCIUM | .679 | mg/L | J | Y | Y | F | B | | 06C | | | | C037-08 | 01:42 |
| | | | | CHROMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | C037-08 | 01:42 |
| | | | | COBALT | .02 | mg/L | U | N | Y | U | U | | | | | | C037-08 | 01:42 |
| | | | | COPPER | .02 | mg/L | U | N | Y | U | U | | | | | | C037-08 | 01:42 |
| | | | | IRON | .0659 | mg/L | J | Y | Y | P | J | | 15 | | | | C037-08 | 01:42 |
| | | | | LEAD | .00174 | mg/L | J | Y | Y | F | B | | 06B | | | | C037-08 | 20:13 |
| | | | | MAGNESIUM | .578 | mg/L | J | Y | Y | P | J | | 15 | | | | C037-08 | 01:42 |
| | | | | MANGANESE | .0303 | mg/L | | Y | Y | P | | | | | | | C037-08 | 01:42 |
| | | | | NICKEL | .02 | mg/L | U | N | Y | U | U | | | | | | C037-08 | 01:42 |
| | | | | POTASSIUM | 5 | mg/L | U | N | Y | U | U | | | | | | C037-08 | 01:42 |
| | | | | SELENIUM | .01 | mg/L | U | N | Y | U | U | | | | | | C037-08 | 20:13 |
| | | | | SILVER | .01 | mg/L | U | N | Y | U | U | | | | | | C037-08 | 01:42 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10232QX-4** | | | | | | | | | | | | | | | | | | |
| ECC2004 | SW6010B | SW3010 | N 0 1 | SODIUM | .877 | mg/L | J | Y | Y | P | J | | 15 | | | | C037-08 | 01:42 |
| | | | | THALLIUM | .01 | mg/L | U | N | Y | U | U | | | | | | C037-08 | 20:13 |
| | | | | VANADIUM | .01 | mg/L | U | N | Y | U | U | | | | | | C037-08 | 01:42 |
| | | | | ZINC | .02 | mg/L | U | N | Y | U | U | | | | | | C037-08 | 01:42 |
| | SW7470A | TOTAL | N 0 1 | MERCURY | .0005 | mg/L | U | N | Y | U | U | | | | | | C037-08 | 12:11 |
| ECC2005 | SW6010B | SW3010 | N 0 1 | ALUMINUM | .142 | mg/L | J | Y | Y | F | B | | 06A | | | | C037-09 | 01:46 |
| | | | | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | C037-09 | 01:46 |
| | | | | ARSENIC | .01 | mg/L | U | N | Y | U | U | | | | | | C037-09 | 20:17 |
| | | | | BARIUM | .0396 | mg/L | | Y | Y | P | | | | | | | C037-09 | 01:46 |
| | | | | BERYLLIUM | .001 | mg/L | U | N | Y | U | U | | | | | | C037-09 | 01:46 |
| | | | | CADMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | C037-09 | 01:46 |
| | | | | CALCIUM | .635 | mg/L | J | Y | Y | F | B | | 06C | | | | C037-09 | 01:46 |
| | | | | CHROMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | C037-09 | 01:46 |
| | | | | COBALT | .02 | mg/L | U | N | Y | U | U | | | | | | C037-09 | 01:46 |
| | | | | COPPER | .02 | mg/L | U | N | Y | U | U | | | | | | C037-09 | 01:46 |
| | | | | IRON | .0674 | mg/L | J | Y | Y | P | J | | 15 | | | | C037-09 | 01:46 |
| | | | | LEAD | .01 | mg/L | U | N | Y | U | U | | | | | | C037-09 | 20:17 |
| | | | | MAGNESIUM | .457 | mg/L | J | Y | Y | P | J | | 15 | | | | C037-09 | 01:46 |
| | | | | MANGANESE | .0514 | mg/L | | Y | Y | P | | | | | | | C037-09 | 01:46 |
| | | | | NICKEL | .02 | mg/L | U | N | Y | U | U | | | | | | C037-09 | 01:46 |
| | | | | POTASSIUM | 5 | mg/L | U | N | Y | U | U | | | | | | C037-09 | 01:46 |
| | | | | SELENIUM | .01 | mg/L | U | N | Y | U | U | | | | | | C037-09 | 20:17 |
| | | | | SILVER | .01 | mg/L | U | N | Y | U | U | | | | | | C037-09 | 01:46 |
| | | | | SODIUM | .946 | mg/L | J | Y | Y | P | J | | 15 | | | | C037-09 | 01:46 |
| | | | | THALLIUM | .01 | mg/L | U | N | Y | U | U | | | | | | C037-09 | 20:17 |
| | | | | VANADIUM | .01 | mg/L | U | N | Y | U | U | | | | | | C037-09 | 01:46 |
| | | | | ZINC | .0104 | mg/L | J | Y | Y | F | B | | 06C | | | | C037-09 | 01:46 |
| | SW7470A | TOTAL | N 0 1 | MERCURY | .0005 | mg/L | U | N | Y | U | U | | | | | | C037-09 | 12:14 |
| ECC2001 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | U | U | | | | | | C037-05 | 12:43 |
| | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | U | U | | | | | | C037-05 | 12:43 |
| | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | U | U | | | | | | C037-05 | 12:43 |
| | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | C037-05 | 12:43 |
| | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | C037-05 | 12:43 |
| | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | C037-05 | 12:43 |
| | | | | 2-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | C037-05 | 12:43 |
| | | | | 3-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | C037-05 | 12:43 |
| | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | C037-05 | 12:43 |
| | | | | 4-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | C037-05 | 12:43 |
| | | | | HMX | .001 | mg/L | U | N | Y | U | U | | | | | | C037-05 | 12:43 |
| | | | | NITROBENZENE | .0004 | mg/L | U | N | Y | U | U | | | | | | C037-05 | 12:43 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10232QX-4** | | | | | | | | | | | | | | | | | | |
| ECC2001 | SW8330 | METHOD | N 0 1 | RDX | .0004 | mg/L | U | N | Y | U | U | | | | | | C037-05 | 12:43 |
| | | | | TETRYL | .0004 | mg/L | U | N | Y | U | U | | | | | | C037-05 | 12:43 |
| ECC2002 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | U | U | | | | | | C037-06 | 13:22 |
| | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | U | U | | | | | | C037-06 | 13:22 |
| | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | U | U | | | | | | C037-06 | 13:22 |
| | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | C037-06 | 13:22 |
| | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | C037-06 | 13:22 |
| | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | C037-06 | 13:22 |
| | | | | 2-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | C037-06 | 13:22 |
| | | | | 3-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | C037-06 | 13:22 |
| | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | C037-06 | 13:22 |
| | | | | 4-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | C037-06 | 13:22 |
| | | | | HMX | .001 | mg/L | U | N | Y | U | U | | | | | | C037-06 | 13:22 |
| | | | | NITROBENZENE | .0004 | mg/L | U | N | Y | U | U | | | | | | C037-06 | 13:22 |
| | | | | RDX | .0004 | mg/L | U | N | Y | U | U | | | | | | C037-06 | 13:22 |
| | | | | TETRYL | .0004 | mg/L | U | N | Y | U | U | | | | | | C037-06 | 13:22 |
| ECC2003 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | U | U | | | | | | C037-07 | 14:00 |
| | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | U | U | | | | | | C037-07 | 14:00 |
| | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | U | U | | | | | | C037-07 | 14:00 |
| | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | C037-07 | 14:00 |
| | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | C037-07 | 14:00 |
| | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | C037-07 | 14:00 |
| | | | | 2-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | C037-07 | 14:00 |
| | | | | 3-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | C037-07 | 14:00 |
| | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | C037-07 | 14:00 |
| | | | | 4-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | C037-07 | 14:00 |
| | | | | HMX | .001 | mg/L | U | N | Y | U | U | | | | | | C037-07 | 14:00 |
| | | | | NITROBENZENE | .0004 | mg/L | U | N | Y | U | U | | | | | | C037-07 | 14:00 |
| | | | | RDX | .0004 | mg/L | U | N | Y | U | U | | | | | | C037-07 | 14:00 |
| | | | | TETRYL | .0004 | mg/L | U | N | Y | U | U | | | | | | C037-07 | 14:00 |
| ECC2004 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | U | U | | | | | | C037-08 | 14:39 |
| | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | U | U | | | | | | C037-08 | 14:39 |
| | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | U | U | | | | | | C037-08 | 14:39 |
| | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | C037-08 | 14:39 |
| | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | C037-08 | 14:39 |
| | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | C037-08 | 14:39 |
| | | | | 2-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | C037-08 | 14:39 |
| | | | | 3-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | C037-08 | 14:39 |
| | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | C037-08 | 14:39 |
| | | | | 4-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | C037-08 | 14:39 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10232QX-4** | | | | | | | | | | | | | | | | | | | | |
| ECC2004 | SW8330 | METHOD | N | 0 | 1 | HMX | .001 | mg/L | U | N | Y | U | U | | | | | | C037-08 | 14:39 |
| | | | | | | NITROBENZENE | .0004 | mg/L | U | N | Y | U | U | | | | | | C037-08 | 14:39 |
| | | | | | | RDX | .0004 | mg/L | U | N | Y | U | U | | | | | | C037-08 | 14:39 |
| | | | | | | TETRYL | .0004 | mg/L | U | N | Y | U | U | | | | | | C037-08 | 14:39 |
| ECC2005 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | U | U | | | | | | C037-09 | 15:17 |
| | | | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | U | U | | | | | | C037-09 | 15:17 |
| | | | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | U | U | | | | | | C037-09 | 15:17 |
| | | | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | C037-09 | 15:17 |
| | | | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | C037-09 | 15:17 |
| | | | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | C037-09 | 15:17 |
| | | | | | | 2-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | C037-09 | 15:17 |
| | | | | | | 3-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | C037-09 | 15:17 |
| | | | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | C037-09 | 15:17 |
| | | | | | | 4-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | C037-09 | 15:17 |
| | | | | | | HMX | .001 | mg/L | U | N | Y | U | U | | | | | | C037-09 | 15:17 |
| | | | | | | NITROBENZENE | .0004 | mg/L | U | N | Y | U | U | | | | | | C037-09 | 15:17 |
| | | | | | | RDX | .0004 | mg/L | U | N | Y | U | U | | | | | | C037-09 | 15:17 |
| | | | | | | TETRYL | .0004 | mg/L | U | N | Y | U | U | | | | | | C037-09 | 15:17 |
| ECC2001 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .005 | mg/L | U | N | Y | U | U | | | | | | C037-05 | 20:56 |
| ECC2002 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .005 | mg/L | U | N | Y | U | U | | | | | | C037-06 | 21:13 |
| ECC2003 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .005 | mg/L | U | N | Y | U | U | | | | | | C037-07 | 22:04 |
| ECC2004 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .005 | mg/L | U | N | Y | U | U | | | | | | C037-08 | 22:21 |
| ECC2005 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .005 | mg/L | U | N | Y | U | U | | | | | | C037-09 | 22:39 |
| **10232QX-5** | | | | | | | | | | | | | | | | | | | | |
| ECC1001 | SW6010B | SW3050 | N | 0 | 1 | ALUMINUM | 3050 | mg/kg | | Y | Y | P | J | | 08A | | | | C038-01 | 23:29 |
| | | | | | | ANTIMONY | 12.2 | mg/kg | U | N | Y | U | U | | | | | | C038-01 | 23:29 |
| | | | | | | ARSENIC | 1.5 | mg/kg | | Y | Y | P | | | | | | | C038-01 | 22:37 |
| | | | | | | BARIUM | 13.7 | mg/kg | | Y | Y | P | | | | | | | C038-01 | 23:29 |
| | | | | | | BERYLLIUM | .142 | mg/kg | J | Y | Y | P | J | | 15 | | | | C038-01 | 23:29 |
| | | | | | | CADMIUM | .609 | mg/kg | U | N | Y | U | U | | | | | | C038-01 | 23:29 |
| | | | | | | CALCIUM | 238 | mg/kg | | Y | Y | P | | | | | | | C038-01 | 23:29 |
| | | | | | | CHROMIUM | 6.28 | mg/kg | | Y | Y | P | J | | 13 | | | | C038-01 | 23:29 |
| | | | | | | COBALT | 2.17 | mg/kg | J | Y | Y | P | J | | 15 | | | | C038-01 | 23:29 |
| | | | | | | COPPER | 3.08 | mg/kg | | Y | Y | P | | | | | | | C038-01 | 23:29 |
| | | | | | | IRON | 5520 | mg/kg | | Y | Y | P | | | | | | | C038-01 | 23:29 |
| | | | | | | LEAD | 4.25 | mg/kg | | Y | Y | P | | | | | | | C038-01 | 22:37 |
| | | | | | | MAGNESIUM | 112 | mg/kg | J | Y | Y | P | J | | 15 | | | | C038-01 | 23:29 |
| | | | | | | MANGANESE | 146 | mg/kg | | Y | Y | P | J | | 08A | 08B | | | C038-01 | 23:29 |
| | | | | | | NICKEL | 1.72 | mg/kg | J | Y | Y | P | J | | 15 | | | | C038-01 | 23:29 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10232QX-5** | | | | | | | | | | | | | | | | | | |
| ECC1001 | SW6010B | SW3050 | N 0 1 | POTASSIUM | 609 | mg/kg | U | N | Y | U | U | | | | | | C038-01 | 23:29 |
| | | | | SELENIUM | 1.22 | mg/kg | U | N | Y | U | U | | | | | | C038-01 | 22:37 |
| | | | | SILVER | 1.22 | mg/kg | U | N | Y | U | U | | | | | | C038-01 | 23:29 |
| | | | | SODIUM | 34.7 | mg/kg | J | Y | Y | P | J | | 15 | | | | C038-01 | 23:29 |
| | | | | THALLIUM | 2.44 | mg/kg | U | N | Y | U | U | | | | | | C038-01 | 22:37 |
| | | | | VANADIUM | 7.54 | mg/kg | | Y | Y | P | J | | 13 | | | | C038-01 | 23:29 |
| | | | | ZINC | 15.1 | mg/kg | | Y | Y | P | J | | 13 | | | | C038-01 | 23:29 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .122 | mg/kg | U | N | Y | U | U | | | | | | C038-01 | 16:39 |
| ECC1002 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 5170 | mg/kg | | Y | Y | P | J | | 08A | | | | C038-02 | 23:34 |
| | | | | ANTIMONY | 12.2 | mg/kg | U | N | Y | U | U | | | | | | C038-02 | 23:34 |
| | | | | ARSENIC | 6.88 | mg/kg | | Y | Y | P | | | | | | | C038-02 | 21:48 |
| | | | | BARIUM | 9.38 | mg/kg | | Y | Y | P | | | | | | | C038-02 | 23:34 |
| | | | | BERYLLIUM | .302 | mg/kg | J | Y | Y | P | J | | 15 | | | | C038-02 | 23:34 |
| | | | | CADMIUM | .61 | mg/kg | U | N | Y | U | U | | | | | | C038-02 | 23:34 |
| | | | | CALCIUM | 67.7 | mg/kg | J | Y | Y | P | J | | 15 | | | | C038-02 | 23:34 |
| | | | | CHROMIUM | 10.6 | mg/kg | | Y | Y | P | J | | 13 | | | | C038-02 | 23:34 |
| | | | | COBALT | 3.12 | mg/kg | | Y | Y | P | | | | | | | C038-02 | 23:34 |
| | | | | COPPER | 4.98 | mg/kg | | Y | Y | P | | | | | | | C038-02 | 23:34 |
| | | | | IRON | 15300 | mg/kg | | Y | Y | P | | | | | | | C038-02 | 23:34 |
| | | | | LEAD | 5.1 | mg/kg | | Y | Y | P | | | | | | | C038-02 | 21:48 |
| | | | | MAGNESIUM | 179 | mg/kg | | Y | Y | P | J | | 08A | 08B | | | C038-02 | 23:34 |
| | | | | MANGANESE | 56.9 | mg/kg | | Y | Y | P | | | | | | | C038-02 | 23:34 |
| | | | | NICKEL | 4.69 | mg/kg | | Y | Y | P | | | | | | | C038-02 | 23:34 |
| | | | | POTASSIUM | 610 | mg/kg | U | N | Y | U | U | | | | | | C038-02 | 23:34 |
| | | | | SELENIUM | 1.22 | mg/kg | U | N | Y | U | U | | | | | | C038-02 | 21:48 |
| | | | | SILVER | 1.22 | mg/kg | U | N | Y | U | U | | | | | | C038-02 | 23:34 |
| | | | | SODIUM | 36.3 | mg/kg | J | Y | Y | P | J | | 15 | | | | C038-02 | 23:34 |
| | | | | THALLIUM | 2.44 | mg/kg | U | N | Y | U | U | | | | | | C038-02 | 21:48 |
| | | | | VANADIUM | 17.5 | mg/kg | | Y | Y | P | J | | 13 | | | | C038-02 | 23:34 |
| | | | | ZINC | 15.2 | mg/kg | | Y | Y | P | J | | 13 | | | | C038-02 | 23:34 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .122 | mg/kg | U | N | Y | U | U | | | | | | C038-02 | 16:41 |
| ECC1003 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 7950 | mg/kg | | Y | Y | P | J | | 08A | | | | C038-03 | 23:39 |
| | | | | ANTIMONY | 12.9 | mg/kg | U | N | Y | U | U | | | | | | C038-03 | 23:39 |
| | | | | ARSENIC | 2.24 | mg/kg | | Y | Y | P | | | | | | | C038-03 | 21:53 |
| | | | | BARIUM | 35.7 | mg/kg | | Y | Y | P | | | | | | | C038-03 | 23:39 |
| | | | | BERYLLIUM | .248 | mg/kg | J | Y | Y | P | J | | 15 | | | | C038-03 | 23:39 |
| | | | | CADMIUM | .643 | mg/kg | U | N | Y | U | U | | | | | | C038-03 | 23:39 |
| | | | | CALCIUM | 565 | mg/kg | | Y | Y | P | | | | | | | C038-03 | 23:39 |
| | | | | CHROMIUM | 8.48 | mg/kg | | Y | Y | P | J | | 13 | | | | C038-03 | 23:39 |
| | | | | COBALT | 2.26 | mg/kg | J | Y | Y | P | J | | 15 | | | | C038-03 | 23:39 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10232QX-5** | | | | | | | | | | | | | | | | | | |
| ECC1003 | SW6010B | SW3050 | N 0 1 | COPPER | 4.1 | mg/kg | | Y | Y | P | | | | | | | C038-03 | 23:39 |
| | | | | IRON | 7420 | mg/kg | | Y | Y | P | | | | | | | C038-03 | 23:39 |
| | | | | LEAD | 8.32 | mg/kg | | Y | Y | P | | | | | | | C038-03 | 21:53 |
| | | | | MAGNESIUM | 373 | mg/kg | | Y | Y | P | | | | | | | C038-03 | 23:39 |
| | | | | MANGANESE | 196 | mg/kg | | Y | Y | P | J | | 08A | 08B | | | C038-03 | 23:39 |
| | | | | NICKEL | 3.19 | mg/kg | | Y | Y | P | | | | | | | C038-03 | 23:39 |
| | | | | POTASSIUM | 643 | mg/kg | U | N | Y | U | U | | | | | | C038-03 | 23:39 |
| | | | | SELENIUM | 1.29 | mg/kg | U | N | Y | U | U | | | | | | C038-03 | 21:53 |
| | | | | SILVER | 1.29 | mg/kg | U | N | Y | U | U | | | | | | C038-03 | 23:39 |
| | | | | SODIUM | 129 | mg/kg | U | N | Y | U | U | | | | | | C038-03 | 23:39 |
| | | | | THALLIUM | 2.57 | mg/kg | U | N | Y | U | U | | | | | | C038-03 | 21:53 |
| | | | | VANADIUM | 13.8 | mg/kg | | Y | Y | P | J | | 13 | | | | C038-03 | 23:39 |
| | | | | ZINC | 18.1 | mg/kg | | Y | Y | P | J | | 13 | | | | C038-03 | 23:39 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .129 | mg/kg | U | N | Y | U | U | | | | | | C038-03 | 16:44 |
| ECC1004 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 7650 | mg/kg | | Y | Y | P | J | | 08A | | | | C038-04 | 23:44 |
| | | | | ANTIMONY | 14.3 | mg/kg | U | N | Y | U | U | | | | | | C038-04 | 23:44 |
| | | | | ARSENIC | 5.26 | mg/kg | | Y | Y | P | | | | | | | C038-04 | 21:58 |
| | | | | BARIUM | 24 | mg/kg | | Y | Y | P | | | | | | | C038-04 | 23:44 |
| | | | | BERYLLIUM | .335 | mg/kg | J | Y | Y | P | J | | 15 | | | | C038-04 | 23:44 |
| | | | | CADMIUM | .714 | mg/kg | U | N | Y | U | U | | | | | | C038-04 | 23:44 |
| | | | | CALCIUM | 85.9 | mg/kg | J | Y | Y | P | J | | 15 | | | | C038-04 | 23:44 |
| | | | | CHROMIUM | 8.88 | mg/kg | | Y | Y | P | J | | 13 | | | | C038-04 | 23:44 |
| | | | | COBALT | 2.87 | mg/kg | | Y | Y | P | | | | | | | C038-04 | 23:44 |
| | | | | COPPER | 5.78 | mg/kg | | Y | Y | P | | | | | | | C038-04 | 23:44 |
| | | | | IRON | 11300 | mg/kg | | Y | Y | P | | | | | | | C038-04 | 23:44 |
| | | | | LEAD | 9.4 | mg/kg | | Y | Y | P | | | | | | | C038-04 | 21:58 |
| | | | | MAGNESIUM | 264 | mg/kg | | Y | Y | P | | | | | | | C038-04 | 23:44 |
| | | | | MANGANESE | 42.5 | mg/kg | | Y | Y | P | J | | 08A | 08B | | | C038-04 | 23:44 |
| | | | | NICKEL | 2.72 | mg/kg | J | Y | Y | P | J | | 15 | | | | C038-04 | 23:44 |
| | | | | POTASSIUM | 714 | mg/kg | U | N | Y | U | U | | | | | | C038-04 | 23:44 |
| | | | | SELENIUM | 1.43 | mg/kg | U | N | Y | U | U | | | | | | C038-04 | 21:58 |
| | | | | SILVER | 1.43 | mg/kg | U | N | Y | U | U | | | | | | C038-04 | 23:44 |
| | | | | SODIUM | 33.7 | mg/kg | J | Y | Y | P | J | | 15 | | | | C038-04 | 23:44 |
| | | | | THALLIUM | 2.86 | mg/kg | U | N | Y | U | U | | | | | | C038-04 | 21:58 |
| | | | | VANADIUM | 19.1 | mg/kg | | Y | Y | P | J | | 13 | | | | C038-04 | 23:44 |
| | | | | ZINC | 14.4 | mg/kg | | Y | Y | P | J | | 13 | | | | C038-04 | 23:44 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .181 | mg/kg | | Y | Y | P | | | | | | | C038-04 | 16:54 |
| ECC1005 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 3320 | mg/kg | | Y | Y | P | J | | 08A | | | | C038-05 | 00:03 |
| | | | | ANTIMONY | 12.7 | mg/kg | U | N | Y | U | U | | | | | | C038-05 | 00:03 |
| | | | | ARSENIC | 1.88 | mg/kg | | Y | Y | P | | | | | | | C038-05 | 22:03 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10232QX-5** | | | | | | | | | | | | | | | | | | | | |
| ECC1005 | SW6010B | SW3050 | N | 0 | 1 | BARIUM | 13.3 | mg/kg | | Y | Y | P | | | | | | | C038-05 | 00:03 |
| | | | | | | BERYLLIUM | .186 | mg/kg | J | Y | Y | P | J | | 15 | | | | C038-05 | 00:03 |
| | | | | | | CADMIUM | .634 | mg/kg | U | N | Y | U | U | | | | | | C038-05 | 00:03 |
| | | | | | | CALCIUM | 61.7 | mg/kg | J | Y | Y | P | J | | 15 | | | | C038-05 | 00:03 |
| | | | | | | CHROMIUM | 5.68 | mg/kg | | Y | Y | P | J | | 13 | | | | C038-05 | 00:03 |
| | | | | | | COBALT | 1.58 | mg/kg | J | Y | Y | P | J | | 15 | | | | C038-05 | 00:03 |
| | | | | | | COPPER | 4.18 | mg/kg | | Y | Y | P | | | | | | | C038-05 | 00:03 |
| | | | | | | IRON | 5140 | mg/kg | | Y | Y | P | | | | | | | C038-05 | 00:03 |
| | | | | | | LEAD | 5.75 | mg/kg | | Y | Y | P | | | | | | | C038-05 | 22:03 |
| | | | | | | MAGNESIUM | 158 | mg/kg | | Y | Y | P | | | | | | | C038-05 | 00:03 |
| | | | | | | MANGANESE | 41 | mg/kg | | Y | Y | P | J | | 08A | 08B | | | C038-05 | 00:03 |
| | | | | | | NICKEL | 1.72 | mg/kg | J | Y | Y | P | J | | 15 | | | | C038-05 | 00:03 |
| | | | | | | POTASSIUM | 146 | mg/kg | J | Y | Y | F | B | | 06B | | | | C038-05 | 00:03 |
| | | | | | | SELENIUM | 1.27 | mg/kg | U | N | Y | U | U | | | | | | C038-05 | 22:03 |
| | | | | | | SILVER | 1.27 | mg/kg | U | N | Y | U | U | | | | | | C038-05 | 00:03 |
| | | | | | | SODIUM | 28.3 | mg/kg | J | Y | Y | P | J | | 15 | | | | C038-05 | 00:03 |
| | | | | | | THALLIUM | 2.53 | mg/kg | U | N | Y | U | U | | | | | | C038-05 | 22:03 |
| | | | | | | VANADIUM | 10.6 | mg/kg | | Y | Y | P | J | | 13 | | | | C038-05 | 00:03 |
| | | | | | | ZINC | 6.78 | mg/kg | | Y | Y | P | J | | 13 | | | | C038-05 | 00:03 |
| | SW7471A | TOTAL | N | 0 | 1 | MERCURY | .127 | mg/kg | U | N | Y | U | U | | | | | | C038-05 | 16:56 |
| ECC1001 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C038-01 | 05:35 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C038-01 | 05:35 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C038-01 | 05:35 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C038-01 | 05:35 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C038-01 | 05:35 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C038-01 | 05:35 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C038-01 | 05:35 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C038-01 | 05:35 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C038-01 | 05:35 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C038-01 | 05:35 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | C038-01 | 05:35 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C038-01 | 05:35 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | C038-01 | 05:35 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | C038-01 | 05:35 |
| ECC1002 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C038-02 | 01:44 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C038-02 | 01:44 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C038-02 | 01:44 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C038-02 | 01:44 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C038-02 | 01:44 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C038-02 | 01:44 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10232QX-5** | | | | | | | | | | | | | |
| ECC1002 | SW8330 | METHOD | N 0 1 | 2-NITROTOLUENE | .4 | mg/kg | U | N Y U | U | | | C038-02 | 01:44 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N Y U | U | | | C038-02 | 01:44 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N Y U | U | | | C038-02 | 01:44 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N Y U | U | | | C038-02 | 01:44 |
| | | | | HMX | .4 | mg/kg | U | N Y U | U | | | C038-02 | 01:44 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N Y U | U | | | C038-02 | 01:44 |
| | | | | RDX | .4 | mg/kg | U | N Y U | U | | | C038-02 | 01:44 |
| | | | | TETRYL | .4 | mg/kg | U | N Y U | U | | | C038-02 | 01:44 |
| ECC1003 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N Y U | U | | | C038-03 | 02:23 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N Y U | U | | | C038-03 | 02:23 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N Y U | U | | | C038-03 | 02:23 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N Y U | U | | | C038-03 | 02:23 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N Y U | U | | | C038-03 | 02:23 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N Y U | U | | | C038-03 | 02:23 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N Y U | U | | | C038-03 | 02:23 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N Y U | U | | | C038-03 | 02:23 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N Y U | U | | | C038-03 | 02:23 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N Y U | U | | | C038-03 | 02:23 |
| | | | | HMX | .4 | mg/kg | U | N Y U | U | | | C038-03 | 02:23 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N Y U | U | | | C038-03 | 02:23 |
| | | | | RDX | .4 | mg/kg | U | N Y U | U | | | C038-03 | 02:23 |
| | | | | TETRYL | .4 | mg/kg | U | N Y U | U | | | C038-03 | 02:23 |
| ECC1004 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N Y U | U | | | C038-04 | 04:18 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N Y U | U | | | C038-04 | 04:18 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N Y U | U | | | C038-04 | 04:18 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N Y U | U | | | C038-04 | 04:18 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N Y U | U | | | C038-04 | 04:18 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N Y U | U | | | C038-04 | 04:18 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N Y U | U | | | C038-04 | 04:18 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N Y U | U | | | C038-04 | 04:18 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N Y U | U | | | C038-04 | 04:18 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N Y U | U | | | C038-04 | 04:18 |
| | | | | HMX | .4 | mg/kg | U | N Y U | U | | | C038-04 | 04:18 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N Y U | U | | | C038-04 | 04:18 |
| | | | | RDX | .4 | mg/kg | U | N Y U | U | | | C038-04 | 04:18 |
| | | | | TETRYL | .4 | mg/kg | U | N Y U | U | | | C038-04 | 04:18 |
| ECC1005 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N Y U | U | | | C038-05 | 04:57 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N Y U | U | | | C038-05 | 04:57 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N Y U | U | | | C038-05 | 04:57 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N Y U | U | | | C038-05 | 04:57 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10232QX-5** | | | | | | | | | | | | | | | | | | | | |
| ECC1005 | SW8330 | METHOD | N | 0 | 1 | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C038-05 | 04:57 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C038-05 | 04:57 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C038-05 | 04:57 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C038-05 | 04:57 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C038-05 | 04:57 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C038-05 | 04:57 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | C038-05 | 04:57 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C038-05 | 04:57 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | C038-05 | 04:57 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | C038-05 | 04:57 |
| ECC1001 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0609 | mg/kg | U | N | Y | U | U | | | | | | C038-01 | 05:19 |
| ECC1002 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .061 | mg/kg | U | N | Y | U | U | | | | | | C038-02 | 05:36 |
| ECC1003 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0643 | mg/kg | U | N | Y | U | U | | | | | | C038-03 | 05:54 |
| ECC1004 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0714 | mg/kg | U | N | Y | U | U | | | | | | C038-04 | 06:11 |
| ECC1005 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0634 | mg/kg | U | N | Y | U | U | | | | | | C038-05 | 06:28 |
| ECC1001 | SW9060 | NONE | N | 0 | 1 | TOC | 30.5 | mg/kg | | Y | Y | P | | | | | | | C038-01 | 10:45 |
| ECC1002 | SW9060 | NONE | N | 0 | 1 | TOC | 44.0 | mg/kg | | Y | Y | P | | | | | | | C038-02 | 11:10 |
| ECC1003 | SW9060 | NONE | N | 0 | 1 | TOC | 37.5 | mg/kg | | Y | Y | P | | | | | | | C038-03 | 11:35 |
| ECC1004 | SW9060 | NONE | N | 0 | 1 | TOC | 88.1 | mg/kg | | Y | Y | P | | | | | | | C038-04 | 12:00 |
| ECC1005 | SW9060 | NONE | N | 0 | 1 | TOC | 99.1 | mg/kg | | Y | Y | P | | | | | | | C038-05 | 12:25 |
| **10232QX-6** | | | | | | | | | | | | | | | | | | | | |
| ECC0046 | SW6010B | SW3050 | N | 0 | 1 | ALUMINUM | 9690 | mg/kg | | Y | Y | P | | | | | | | C061-01 | 21:13 |
| | | | | | | ANTIMONY | 14.3 | mg/kg | U | N | Y | U | UJ | | 08A | | | | C061-01 | 21:13 |
| | | | | | | ARSENIC | 5.78 | mg/kg | | Y | Y | P | | | | | | | C061-01 | 20:29 |
| | | | | | | BARIUM | 89.8 | mg/kg | | Y | Y | P | J | | 08A | | | | C061-01 | 21:13 |
| | | | | | | BERYLLIUM | 1.15 | mg/kg | J | Y | Y | P | J | | 15 | | | | C061-01 | 21:13 |
| | | | | | | CADMIUM | .713 | mg/kg | U | N | Y | U | U | | | | | | C061-01 | 21:13 |
| | | | | | | CALCIUM | 355 | mg/kg | | Y | Y | P | | | | | | | C061-01 | 21:13 |
| | | | | | | CHROMIUM | 20 | mg/kg | | Y | Y | P | | | | | | | C061-01 | 21:13 |
| | | | | | | COBALT | 11.7 | mg/kg | | Y | Y | P | | | | | | | C061-01 | 21:13 |
| | | | | | | COPPER | 13.4 | mg/kg | | Y | Y | P | | | | | | | C061-01 | 21:13 |
| | | | | | | IRON | 21300 | mg/kg | | Y | Y | P | | | | | | | C061-01 | 21:13 |
| | | | | | | LEAD | 32.8 | mg/kg | | Y | Y | P | | | | | | | C061-01 | 20:29 |
| | | | | | | MAGNESIUM | 437 | mg/kg | | Y | Y | P | | | | | | | C061-01 | 21:13 |
| | | | | | | MANGANESE | 1670 | mg/kg | | Y | Y | P | | | | | | | C061-01 | 21:13 |
| | | | | | | NICKEL | 9.12 | mg/kg | | Y | Y | P | | | | | | | C061-01 | 21:13 |
| | | | | | | POTASSIUM | 766 | mg/kg | | Y | Y | P | | | | | | | C061-01 | 21:13 |
| | | | | | | SELENIUM | 1.43 | mg/kg | U | N | Y | U | U | | | | | | C061-01 | 20:29 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10232QX-6** | | | | | | | | | | | | | | | | | | |
| ECC0046 | SW6010B | SW3050 | N 0 1 | SILVER | 1.43 | mg/kg | U | N | Y | U | U | | | | | | C061-01 | 21:13 |
| | | | | SODIUM | 33.8 | mg/kg | J | Y | Y | P | J | | 15 | | | | C061-01 | 21:13 |
| | | | | THALLIUM | 2.85 | mg/kg | U | N | Y | U | U | | | | | | C061-01 | 20:29 |
| | | | | VANADIUM | 21.7 | mg/kg | | Y | Y | P | | | | | | | C061-01 | 21:13 |
| | | | | ZINC | 42.9 | mg/kg | | Y | Y | P | J | | 13 | | | | C061-01 | 21:13 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .083 | mg/kg | J | Y | Y | P | J | | 15 | | | | C061-01 | 15:42 |
| ECC1006 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 11100 | mg/kg | | Y | Y | P | | | | | | | C088-01 | 22:03 |
| | | | | ANTIMONY | 13.2 | mg/kg | U | N | Y | U | UJ | | 08A | | | | C088-01 | 22:03 |
| | | | | ARSENIC | 8.02 | mg/kg | | Y | Y | P | | | | | | | C088-01 | 20:34 |
| | | | | BARIUM | 112 | mg/kg | | Y | Y | P | J | | 08A | | | | C088-01 | 22:03 |
| | | | | BERYLLIUM | 1.18 | mg/kg | J | Y | Y | P | J | | 15 | | | | C088-01 | 22:03 |
| | | | | CADMIUM | .66 | mg/kg | U | N | Y | U | U | | | | | | C088-01 | 22:03 |
| | | | | CALCIUM | 1500 | mg/kg | | Y | Y | P | | | | | | | C088-01 | 22:03 |
| | | | | CHROMIUM | 23 | mg/kg | | Y | Y | P | | | | | | | C088-01 | 22:03 |
| | | | | COBALT | 7.52 | mg/kg | | Y | Y | P | | | | | | | C088-01 | 22:03 |
| | | | | COPPER | 8.96 | mg/kg | | Y | Y | P | | | | | | | C088-01 | 22:03 |
| | | | | IRON | 25300 | mg/kg | | Y | Y | P | | | | | | | C088-01 | 22:03 |
| | | | | LEAD | 19.7 | mg/kg | | Y | Y | P | | | | | | | C088-01 | 20:34 |
| | | | | MAGNESIUM | 507 | mg/kg | | Y | Y | P | | | | | | | C088-01 | 22:03 |
| | | | | MANGANESE | 1270 | mg/kg | | Y | Y | P | | | | | | | C088-01 | 22:03 |
| | | | | NICKEL | 10.3 | mg/kg | | Y | Y | P | | | | | | | C088-01 | 22:03 |
| | | | | POTASSIUM | 435 | mg/kg | J | Y | Y | P | J | | 15 | | | | C088-01 | 22:03 |
| | | | | SELENIUM | 1.32 | mg/kg | U | N | Y | U | U | | | | | | C088-01 | 20:34 |
| | | | | SILVER | 1.32 | mg/kg | U | N | Y | U | U | | | | | | C088-01 | 22:03 |
| | | | | SODIUM | 26.6 | mg/kg | J | Y | Y | P | J | | 15 | | | | C088-01 | 22:03 |
| | | | | THALLIUM | 2.64 | mg/kg | U | N | Y | U | U | | | | | | C088-01 | 20:34 |
| | | | | VANADIUM | 33.3 | mg/kg | | Y | Y | P | | | | | | | C088-01 | 22:03 |
| | | | | ZINC | 26 | mg/kg | | Y | Y | P | J | | 13 | | | | C088-01 | 22:03 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .049 | mg/kg | J | Y | Y | P | J | | 15 | | | | C088-01 | 15:20 |
| ECC1008 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 9330 | mg/kg | | Y | Y | P | | | | | | | C088-02 | 21:23 |
| | | | | ANTIMONY | 13.5 | mg/kg | U | N | Y | U | UJ | | 08A | | | | C088-02 | 21:23 |
| | | | | ARSENIC | 5.83 | mg/kg | | Y | Y | P | | | | | | | C088-02 | 20:39 |
| | | | | BARIUM | 84.9 | mg/kg | | Y | Y | P | J | | 08A | | | | C088-02 | 21:23 |
| | | | | BERYLLIUM | .98 | mg/kg | J | Y | Y | P | J | | 15 | | | | C088-02 | 21:23 |
| | | | | CADMIUM | .672 | mg/kg | J | Y | Y | P | J | | 15 | | | | C088-02 | 21:23 |
| | | | | CALCIUM | 1090 | mg/kg | | Y | Y | P | | | | | | | C088-02 | 21:23 |
| | | | | CHROMIUM | 21.3 | mg/kg | | Y | Y | P | | | | | | | C088-02 | 21:23 |
| | | | | COBALT | 14.7 | mg/kg | | Y | Y | P | | | | | | | C088-02 | 21:23 |
| | | | | COPPER | 30 | mg/kg | | Y | Y | P | | | | | | | C088-02 | 21:23 |
| | | | | IRON | 28600 | mg/kg | | Y | Y | P | | | | | | | C088-02 | 21:23 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10232QX-6** | | | | | | | | | | | | | | | | |
| ECC1008 | SW6010B | SW3050 | N 0 1 | LEAD | 61.4 | mg/kg | | Y Y P | | | | | | | C088-02 | 20:39 |
| | | | | MAGNESIUM | 1800 | mg/kg | | Y Y P | | | | | | | C088-02 | 21:23 |
| | | | | MANGANESE | 285 | mg/kg | | Y Y P | | | | | | | C088-02 | 21:23 |
| | | | | NICKEL | 24.1 | mg/kg | | Y Y P | | | | | | | C088-02 | 21:23 |
| | | | | POTASSIUM | 404 | mg/kg | J | Y Y P | J | | 15 | | | | C088-02 | 21:23 |
| | | | | SELENIUM | 1.35 | mg/kg | U | N Y U | U | | | | | | C088-02 | 20:39 |
| | | | | SILVER | 1.35 | mg/kg | U | N Y U | U | | | | | | C088-02 | 21:23 |
| | | | | SODIUM | 30.5 | mg/kg | J | Y Y P | J | | 15 | | | | C088-02 | 21:23 |
| | | | | THALLIUM | 2.71 | mg/kg | U | N Y U | U | | | | | | C088-02 | 20:39 |
| | | | | VANADIUM | 25.9 | mg/kg | | Y Y P | | | | | | | C088-02 | 21:23 |
| | | | | ZINC | 113 | mg/kg | | Y Y P | J | | 13 | | | | C088-02 | 21:23 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .135 | mg/kg | U | N Y U | U | | | | | | C088-02 | 15:29 |
| ECC1009 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 8070 | mg/kg | | Y Y P | | | | | | | C088-03 | 21:28 |
| | | | | ANTIMONY | 14 | mg/kg | U | N Y U | UJ | | 08A | | | | C088-03 | 21:28 |
| | | | | ARSENIC | 4.21 | mg/kg | | Y Y P | | | | | | | C088-03 | 20:43 |
| | | | | BARIUM | 54.6 | mg/kg | | Y Y P | J | | 08A | | | | C088-03 | 21:28 |
| | | | | BERYLLIUM | .52 | mg/kg | J | Y Y P | J | | 15 | | | | C088-03 | 21:28 |
| | | | | CADMIUM | .882 | mg/kg | | Y Y P | | | | | | | C088-03 | 21:28 |
| | | | | CALCIUM | 1570 | mg/kg | | Y Y P | | | | | | | C088-03 | 21:28 |
| | | | | CHROMIUM | 56.3 | mg/kg | | Y Y P | | | | | | | C088-03 | 21:28 |
| | | | | COBALT | 2.26 | mg/kg | J | Y Y P | J | | 15 | | | | C088-03 | 21:28 |
| | | | | COPPER | 44.8 | mg/kg | | Y Y P | | | | | | | C088-03 | 21:28 |
| | | | | IRON | 22300 | mg/kg | | Y Y P | | | | | | | C088-03 | 21:28 |
| | | | | LEAD | 51.8 | mg/kg | | Y Y P | | | | | | | C088-03 | 20:43 |
| | | | | MAGNESIUM | 665 | mg/kg | | Y Y P | | | | | | | C088-03 | 21:28 |
| | | | | MANGANESE | 82.5 | mg/kg | | Y Y P | | | | | | | C088-03 | 21:28 |
| | | | | NICKEL | 3.59 | mg/kg | | Y Y P | | | | | | | C088-03 | 21:28 |
| | | | | POTASSIUM | 675 | mg/kg | J | Y Y P | J | | 15 | | | | C088-03 | 21:28 |
| | | | | SELENIUM | .704 | mg/kg | J | Y Y F | B | | 06B | | | | C088-03 | 20:43 |
| | | | | SILVER | .844 | mg/kg | J | Y Y F | B | | 06B | | | | C088-03 | 21:28 |
| | | | | SODIUM | 39.9 | mg/kg | J | Y Y P | J | | 15 | | | | C088-03 | 21:28 |
| | | | | THALLIUM | 2.8 | mg/kg | U | N Y U | U | | | | | | C088-03 | 20:43 |
| | | | | VANADIUM | 26.9 | mg/kg | | Y Y P | | | | | | | C088-03 | 21:28 |
| | | | | ZINC | 126 | mg/kg | | Y Y P | J | | 13 | | | | C088-03 | 21:28 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .14 | mg/kg | U | N Y U | U | | | | | | C088-03 | 15:32 |
| ECC0046 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N Y U | U | | | | | | C061-01 | 05:38 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N Y U | U | | | | | | C061-01 | 05:38 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N Y U | U | | | | | | C061-01 | 05:38 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N Y U | U | | | | | | C061-01 | 05:38 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N Y U | U | | | | | | C061-01 | 05:38 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10232QX-6** | | | | | | | | | | | | | | | | | | |
| ECC0046 | SW8330 | METHOD | N 0 1 | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C061-01 | 05:38 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C061-01 | 05:38 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C061-01 | 05:38 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C061-01 | 05:38 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C061-01 | 05:38 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | C061-01 | 05:38 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C061-01 | 05:38 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | C061-01 | 05:38 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | C061-01 | 05:38 |
| ECC1006 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C088-01 | 08:11 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C088-01 | 08:11 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C088-01 | 08:11 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C088-01 | 08:11 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C088-01 | 08:11 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C088-01 | 08:11 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C088-01 | 08:11 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C088-01 | 08:11 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C088-01 | 08:11 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C088-01 | 08:11 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | C088-01 | 08:11 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C088-01 | 08:11 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | C088-01 | 08:11 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | C088-01 | 08:11 |
| ECC1008 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C088-02 | 06:54 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C088-02 | 06:54 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C088-02 | 06:54 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C088-02 | 06:54 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C088-02 | 06:54 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C088-02 | 06:54 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C088-02 | 06:54 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C088-02 | 06:54 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C088-02 | 06:54 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C088-02 | 06:54 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | C088-02 | 06:54 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C088-02 | 06:54 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | C088-02 | 06:54 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | C088-02 | 06:54 |
| ECC1009 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C088-03 | 07:33 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C088-03 | 07:33 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C088-03 | 07:33 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10232QX-6** | | | | | | | | | | | | | | | | | | | | |
| ECC1009 | SW8330 | METHOD | N | 0 | 1 | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C088-03 | 07:33 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C088-03 | 07:33 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C088-03 | 07:33 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C088-03 | 07:33 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C088-03 | 07:33 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C088-03 | 07:33 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C088-03 | 07:33 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | C088-03 | 07:33 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C088-03 | 07:33 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | C088-03 | 07:33 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | C088-03 | 07:33 |
| ECC0046 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0713 | mg/kg | U | N | Y | U | U | | | | | | C061-01 | 20:06 |
| ECC1006 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .066 | mg/kg | U | N | Y | U | U | | | | | | C088-01 | 20:24 |
| ECC1008 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0677 | mg/kg | U | N | Y | U | U | | | | | | C088-02 | 21:15 |
| ECC1009 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .07 | mg/kg | U | N | Y | U | U | | | | | | C088-03 | 21:32 |
| ECC1006 | SW9060 | NONE | N | 0 | 2 | TOC | 178 | mg/kg | | Y | Y | P | | | | | | | C088-01 | 14:05 |
| ECC1008 | SW9060 | NONE | N | 0 | 3 | TOC | 268 | mg/kg | | Y | Y | P | | | | | | | C088-02 | 15:35 |
| ECC1009 | SW9060 | NONE | N | 0 | 2 | TOC | 213 | mg/kg | | Y | Y | P | | | | | | | C088-03 | 16:05 |
| **10232QX-7** | | | | | | | | | | | | | | | | | | | | |
| ECC2006 | SW6010B | SW3010 | N | 0 | 1 | ALUMINUM | .247 | mg/L | | Y | Y | P | | | | | | | C087-01 | 18:23 |
| | | | | | | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | C087-01 | 18:23 |
| | | | | | | ARSENIC | .01 | mg/L | U | N | Y | U | U | | | | | | C087-01 | 18:07 |
| | | | | | | BARIUM | .0143 | mg/L | | Y | Y | P | | | | | | | C087-01 | 18:23 |
| | | | | | | BERYLLIUM | .001 | mg/L | U | N | Y | U | U | | | | | | C087-01 | 18:23 |
| | | | | | | CADMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | C087-01 | 18:23 |
| | | | | | | CALCIUM | 9.21 | mg/L | | Y | Y | P | | | | | | | C087-01 | 18:23 |
| | | | | | | CHROMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | C087-01 | 18:23 |
| | | | | | | COBALT | .02 | mg/L | U | N | Y | U | U | | | | | | C087-01 | 18:23 |
| | | | | | | COPPER | .02 | mg/L | U | N | Y | U | U | | | | | | C087-01 | 18:23 |
| | | | | | | IRON | .204 | mg/L | | Y | Y | P | | | | | | | C087-01 | 18:23 |
| | | | | | | LEAD | .01 | mg/L | U | N | Y | U | U | | | | | | C087-01 | 18:07 |
| | | | | | | MAGNESIUM | 1.74 | mg/L | | Y | Y | P | | | | | | | C087-01 | 18:23 |
| | | | | | | MANGANESE | .00229 | mg/L | J | Y | Y | P | J | | 15 | | | | C087-01 | 18:23 |
| | | | | | | NICKEL | .02 | mg/L | U | N | Y | U | U | | | | | | C087-01 | 18:23 |
| | | | | | | POTASSIUM | 5 | mg/L | U | N | Y | U | U | | | | | | C087-01 | 18:23 |
| | | | | | | SELENIUM | .00327 | mg/L | J | Y | Y | P | J | | 15 | | | | C087-01 | 18:07 |
| | | | | | | SILVER | .01 | mg/L | U | N | Y | U | U | | | | | | C087-01 | 18:23 |
| | | | | | | SODIUM | .871 | mg/L | J | Y | Y | P | J | | 15 | | | | C087-01 | 18:23 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10232QX-7** | | | | | | | | | | | | | | | | | | |
| ECC2006 | SW6010B | SW3010 | N 0 1 | THALLIUM | .01 | mg/L | U | N | Y | U | U | | | | | | C087-01 | 18:07 |
| | | | | VANADIUM | .01 | mg/L | U | N | Y | U | U | | | | | | C087-01 | 18:23 |
| | | | | ZINC | .02 | mg/L | U | N | Y | U | U | | | | | | C087-01 | 18:23 |
| | SW7470A | TOTAL | N 0 1 | MERCURY | .0005 | mg/L | U | N | Y | U | U | | | | | | C087-01 | 19:08 |
| ECC2008 | SW6010B | SW3010 | N 0 1 | ALUMINUM | .632 | mg/L | | Y | Y | P | | | | | | | C087-02 | 18:27 |
| | | | | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | C087-02 | 18:27 |
| | | | | ARSENIC | .01 | mg/L | U | N | Y | U | U | | | | | | C087-02 | 18:11 |
| | | | | BARIUM | .0381 | mg/L | | Y | Y | P | | | | | | | C087-02 | 18:27 |
| | | | | BERYLLIUM | .001 | mg/L | U | N | Y | U | U | | | | | | C087-02 | 18:27 |
| | | | | CADMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | C087-02 | 18:27 |
| | | | | CALCIUM | 8.87 | mg/L | | Y | Y | P | | | | | | | C087-02 | 18:27 |
| | | | | CHROMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | C087-02 | 18:27 |
| | | | | COBALT | .02 | mg/L | U | N | Y | U | U | | | | | | C087-02 | 18:27 |
| | | | | COPPER | .02 | mg/L | U | N | Y | U | U | | | | | | C087-02 | 18:27 |
| | | | | IRON | .505 | mg/L | | Y | Y | P | | | | | | | C087-02 | 18:27 |
| | | | | LEAD | .01 | mg/L | U | N | Y | U | U | | | | | | C087-02 | 18:11 |
| | | | | MAGNESIUM | 5.29 | mg/L | | Y | Y | P | | | | | | | C087-02 | 18:27 |
| | | | | MANGANESE | .0125 | mg/L | | Y | Y | P | | | | | | | C087-02 | 18:27 |
| | | | | NICKEL | .02 | mg/L | U | N | Y | U | U | | | | | | C087-02 | 18:27 |
| | | | | POTASSIUM | 5 | mg/L | U | N | Y | U | U | | | | | | C087-02 | 18:27 |
| | | | | SELENIUM | .01 | mg/L | U | N | Y | U | U | | | | | | C087-02 | 18:11 |
| | | | | SILVER | .01 | mg/L | U | N | Y | U | U | | | | | | C087-02 | 18:27 |
| | | | | SODIUM | 1.73 | mg/L | | Y | Y | P | | | | | | | C087-02 | 18:27 |
| | | | | THALLIUM | .01 | mg/L | U | N | Y | U | U | | | | | | C087-02 | 18:11 |
| | | | | VANADIUM | .01 | mg/L | U | N | Y | U | U | | | | | | C087-02 | 18:27 |
| | | | | ZINC | .02 | mg/L | U | N | Y | U | U | | | | | | C087-02 | 18:27 |
| | SW7470A | TOTAL | N 0 1 | MERCURY | .0005 | mg/L | U | N | Y | U | U | | | | | | C087-02 | 19:17 |
| ECC2009 | SW6010B | SW3010 | N 0 1 | ALUMINUM | .456 | mg/L | | Y | Y | | | | | | | | C087-03 | 18:32 |
| | | | | ANTIMONY | .1 | mg/L | U | N | Y | | U | | | | | | C087-03 | 18:32 |
| | | | | ARSENIC | .01 | mg/L | U | N | Y | | U | | | | | | C087-03 | 18:15 |
| | | | | BARIUM | .0367 | mg/L | | Y | Y | | | | | | | | C087-03 | 18:32 |
| | | | | BERYLLIUM | .001 | mg/L | U | N | Y | | U | | | | | | C087-03 | 18:32 |
| | | | | CADMIUM | .01 | mg/L | U | N | Y | | U | | | | | | C087-03 | 18:32 |
| | | | | CALCIUM | 8.75 | mg/L | | Y | Y | | | | | | | | C087-03 | 18:32 |
| | | | | CHROMIUM | .01 | mg/L | U | N | Y | | U | | | | | | C087-03 | 18:32 |
| | | | | COBALT | .02 | mg/L | U | N | Y | | U | | | | | | C087-03 | 18:32 |
| | | | | COPPER | .02 | mg/L | U | N | Y | | U | | | | | | C087-03 | 18:32 |
| | | | | IRON | .423 | mg/L | | Y | Y | | | | | | | | C087-03 | 18:32 |
| | | | | LEAD | .01 | mg/L | U | N | Y | | U | | | | | | C087-03 | 18:15 |
| | | | | MAGNESIUM | 5.24 | mg/L | | Y | Y | | | | | | | | C087-03 | 18:32 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10232QX-7** | | | | | | | | | | | | | | | | | | |
| ECC2009 | SW6010B | SW3010 | N 0 1 | MANGANESE | .01 | mg/L | | Y | Y | | | | | | | | C087-03 | 18:32 |
| | | | | NICKEL | .02 | mg/L | U | N | Y | | U | | | | | | C087-03 | 18:32 |
| | | | | POTASSIUM | 5 | mg/L | U | N | Y | | U | | | | | | C087-03 | 18:32 |
| | | | | SELENIUM | .01 | mg/L | U | N | Y | | U | | | | | | C087-03 | 18:15 |
| | | | | SILVER | .01 | mg/L | U | N | Y | | U | | | | | | C087-03 | 18:32 |
| | | | | SODIUM | 1.71 | mg/L | | Y | Y | | | | | | | | C087-03 | 18:32 |
| | | | | THALLIUM | .01 | mg/L | U | N | Y | | U | | | | | | C087-03 | 18:15 |
| | | | | VANADIUM | .01 | mg/L | U | N | Y | | U | | | | | | C087-03 | 18:32 |
| | | | | ZINC | .02 | mg/L | U | N | Y | | U | | | | | | C087-03 | 18:32 |
| | SW7470A | TOTAL | N 0 1 | MERCURY | .0005 | mg/L | U | N | Y | | U | | | | | | C087-03 | 19:20 |
| ECC2011 | SW6010B | SW3010 | N 0 1 | ALUMINUM | 1.15 | mg/L | | Y | Y | P | | | | | | | C087-04 | 18:36 |
| | | | | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | C087-04 | 18:36 |
| | | | | ARSENIC | .01 | mg/L | U | N | Y | U | U | | | | | | C087-04 | 18:19 |
| | | | | BARIUM | .0198 | mg/L | | Y | Y | P | | | | | | | C087-04 | 18:36 |
| | | | | BERYLLIUM | .001 | mg/L | U | N | Y | U | U | | | | | | C087-04 | 18:36 |
| | | | | CADMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | C087-04 | 18:36 |
| | | | | CALCIUM | 4.25 | mg/L | | Y | Y | P | | | | | | | C087-04 | 18:36 |
| | | | | CHROMIUM | .01 | mg/L | U | N | Y | U | U | | | | | | C087-04 | 18:36 |
| | | | | COBALT | .02 | mg/L | U | N | Y | U | U | | | | | | C087-04 | 18:36 |
| | | | | COPPER | .02 | mg/L | U | N | Y | U | U | | | | | | C087-04 | 18:36 |
| | | | | IRON | .998 | mg/L | | Y | Y | P | | | | | | | C087-04 | 18:36 |
| | | | | LEAD | .01 | mg/L | U | N | Y | U | U | | | | | | C087-04 | 18:19 |
| | | | | MAGNESIUM | 1.61 | mg/L | | Y | Y | P | | | | | | | C087-04 | 18:36 |
| | | | | MANGANESE | .00547 | mg/L | J | Y | Y | P | J | | 15 | | | | C087-04 | 18:36 |
| | | | | NICKEL | .02 | mg/L | U | N | Y | U | U | | | | | | C087-04 | 18:36 |
| | | | | POTASSIUM | 5 | mg/L | U | N | Y | U | U | | | | | | C087-04 | 18:36 |
| | | | | SELENIUM | .01 | mg/L | U | N | Y | U | U | | | | | | C087-04 | 18:19 |
| | | | | SILVER | .01 | mg/L | U | N | Y | U | U | | | | | | C087-04 | 18:36 |
| | | | | SODIUM | .811 | mg/L | J | Y | Y | P | J | | 15 | | | | C087-04 | 18:36 |
| | | | | THALLIUM | .01 | mg/L | U | N | Y | U | U | | | | | | C087-04 | 18:19 |
| | | | | VANADIUM | .01 | mg/L | U | N | Y | U | U | | | | | | C087-04 | 18:36 |
| | | | | ZINC | .0122 | mg/L | J | Y | Y | P | J | | 15 | | | | C087-04 | 18:36 |
| | SW7470A | TOTAL | N 0 1 | MERCURY | .0005 | mg/L | U | N | Y | U | U | | | | | | C087-04 | 19:22 |
| ECC2006 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | U | U | | | | | | C087-01 | 20:39 |
| | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | U | U | | | | | | C087-01 | 20:39 |
| | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | U | U | | | | | | C087-01 | 20:39 |
| | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | C087-01 | 20:39 |
| | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | C087-01 | 20:39 |
| | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | C087-01 | 20:39 |
| | | | | 2-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | C087-01 | 20:39 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10232QX-7** | | | | | | | | | | | | | | | | | | |
| ECC2006 | SW8330 | METHOD | N 0 1 | 3-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | C087-01 | 20:39 |
| | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | C087-01 | 20:39 |
| | | | | 4-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | C087-01 | 20:39 |
| | | | | HMX | .001 | mg/L | U | N | Y | U | U | | | | | | C087-01 | 20:39 |
| | | | | NITROBENZENE | .0004 | mg/L | U | N | Y | U | U | | | | | | C087-01 | 20:39 |
| | | | | RDX | .0004 | mg/L | U | N | Y | U | U | | | | | | C087-01 | 20:39 |
| | | | | TETRYL | .0004 | mg/L | U | N | Y | U | U | | | | | | C087-01 | 20:39 |
| ECC2008 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | U | U | | | | | | C087-02 | 21:18 |
| | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | U | U | | | | | | C087-02 | 21:18 |
| | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | U | U | | | | | | C087-02 | 21:18 |
| | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | C087-02 | 21:18 |
| | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | C087-02 | 21:18 |
| | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | C087-02 | 21:18 |
| | | | | 2-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | C087-02 | 21:18 |
| | | | | 3-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | C087-02 | 21:18 |
| | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | C087-02 | 21:18 |
| | | | | 4-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | C087-02 | 21:18 |
| | | | | HMX | .001 | mg/L | U | N | Y | U | U | | | | | | C087-02 | 21:18 |
| | | | | NITROBENZENE | .0004 | mg/L | U | N | Y | U | U | | | | | | C087-02 | 21:18 |
| | | | | RDX | .0004 | mg/L | U | N | Y | U | U | | | | | | C087-02 | 21:18 |
| | | | | TETRYL | .0004 | mg/L | U | N | Y | U | U | | | | | | C087-02 | 21:18 |
| ECC2009 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | | U | | | | | | C087-03 | 21:56 |
| | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | | U | | | | | | C087-03 | 21:56 |
| | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | | U | | | | | | C087-03 | 21:56 |
| | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | | U | | | | | | C087-03 | 21:56 |
| | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | | U | | | | | | C087-03 | 21:56 |
| | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | | U | | | | | | C087-03 | 21:56 |
| | | | | 2-NITROTOLUENE | .0004 | mg/L | U | N | Y | | U | | | | | | C087-03 | 21:56 |
| | | | | 3-NITROTOLUENE | .0004 | mg/L | U | N | Y | | U | | | | | | C087-03 | 21:56 |
| | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N | Y | | U | | | | | | C087-03 | 21:56 |
| | | | | 4-NITROTOLUENE | .0004 | mg/L | U | N | Y | | U | | | | | | C087-03 | 21:56 |
| | | | | HMX | .001 | mg/L | U | N | Y | | U | | | | | | C087-03 | 21:56 |
| | | | | NITROBENZENE | .0004 | mg/L | U | N | Y | | U | | | | | | C087-03 | 21:56 |
| | | | | RDX | .0004 | mg/L | U | N | Y | | U | | | | | | C087-03 | 21:56 |
| | | | | TETRYL | .0004 | mg/L | U | N | Y | | U | | | | | | C087-03 | 21:56 |
| ECC2011 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | U | U | | | | | | C087-04 | 22:34 |
| | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | U | U | | | | | | C087-04 | 22:34 |
| | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | U | U | | | | | | C087-04 | 22:34 |
| | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | C087-04 | 22:34 |
| | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | C087-04 | 22:34 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10232QX-7** | | | | | | | | | | | | | | | | | | |
| ECC2011 | SW8330 | METHOD | N 0 1 | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | C087-04 | 22:34 |
| | | | | 2-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | C087-04 | 22:34 |
| | | | | 3-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | C087-04 | 22:34 |
| | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | C087-04 | 22:34 |
| | | | | 4-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | C087-04 | 22:34 |
| | | | | HMX | .001 | mg/L | U | N | Y | U | U | | | | | | C087-04 | 22:34 |
| | | | | NITROBENZENE | .0004 | mg/L | U | N | Y | U | U | | | | | | C087-04 | 22:34 |
| | | | | RDX | .0004 | mg/L | U | N | Y | U | U | | | | | | C087-04 | 22:34 |
| | | | | TETRYL | .0004 | mg/L | U | N | Y | U | U | | | | | | C087-04 | 22:34 |
| ECC2006 | E314.0 | NONE | N 0 1 | PERCHLORATE | .005 | mg/L | U | N | Y | U | U | | | | | | C087-01 | 23:47 |
| ECC2008 | E314.0 | NONE | N 0 1 | PERCHLORATE | .005 | mg/L | U | N | Y | U | U | | | | | | C087-02 | 00:04 |
| ECC2009 | E314.0 | NONE | N 0 1 | PERCHLORATE | .005 | mg/L | U | N | Y | | U | | | | | | C087-03 | 00:21 |
| ECC2011 | E314.0 | NONE | N 0 1 | PERCHLORATE | .005 | mg/L | U | N | Y | U | U | | | | | | C087-04 | 00:39 |
| **10232QX-8** | | | | | | | | | | | | | | | | | | |
| ECC0029 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 14500 | mg/kg | | Y | Y | P | | | | | | | C271-01 | 18:42 |
| | | | | ANTIMONY | 11.8 | mg/kg | U | N | Y | U | U | | | | | | C271-01 | 18:42 |
| | | | | ARSENIC | 6.03 | mg/kg | | Y | Y | P | | | | | | | C271-01 | 03:07 |
| | | | | BARIUM | 75.4 | mg/kg | | Y | Y | P | | | | | | | C271-01 | 18:42 |
| | | | | BERYLLIUM | .725 | mg/kg | J | Y | Y | P | J | | 15 | | | | C271-01 | 18:42 |
| | | | | CADMIUM | .592 | mg/kg | U | N | Y | U | U | | | | | | C271-01 | 18:42 |
| | | | | CALCIUM | 3270 | mg/kg | | Y | Y | P | | | | | | | C271-01 | 18:42 |
| | | | | CHROMIUM | 29.3 | mg/kg | | Y | Y | P | | | | | | | C271-01 | 18:42 |
| | | | | COBALT | 8.75 | mg/kg | | Y | Y | P | | | | | | | C271-01 | 18:42 |
| | | | | COPPER | 9.25 | mg/kg | | Y | Y | P | | | | | | | C271-01 | 18:42 |
| | | | | IRON | 20700 | mg/kg | | Y | Y | P | | | | | | | C271-01 | 18:42 |
| | | | | LEAD | 66.8 | mg/kg | | Y | Y | P | | | | | | | C271-01 | 03:07 |
| | | | | MAGNESIUM | 1850 | mg/kg | | Y | Y | P | | | | | | | C271-01 | 18:42 |
| | | | | MANGANESE | 774 | mg/kg | | Y | Y | P | | | | | | | C271-01 | 18:42 |
| | | | | NICKEL | 10.5 | mg/kg | | Y | Y | P | | | | | | | C271-01 | 18:42 |
| | | | | POTASSIUM | 605 | mg/kg | | Y | Y | P | | | | | | | C271-01 | 18:42 |
| | | | | SELENIUM | 1.18 | mg/kg | U | N | Y | U | U | | | | | | C271-01 | 03:07 |
| | | | | SILVER | 1.18 | mg/kg | U | N | Y | U | U | | | | | | C271-01 | 18:42 |
| | | | | SODIUM | 118 | mg/kg | U | N | Y | U | U | | | | | | C271-01 | 18:42 |
| | | | | THALLIUM | .708 | mg/kg | J | Y | Y | P | J | | 15 | | | | C271-01 | 03:07 |
| | | | | VANADIUM | 25.2 | mg/kg | | Y | Y | P | | | | | | | C271-01 | 18:42 |
| | | | | ZINC | 44.3 | mg/kg | | Y | Y | P | | | | | | | C271-01 | 18:42 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .039 | mg/kg | J | Y | Y | P | J | | 15 | | | | C271-01 | 12:14 |
| ECC0030 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 13800 | mg/kg | | Y | Y | P | | | | | | | C271-02 | 18:57 |
| | | | | ANTIMONY | 4.67 | mg/kg | J | Y | Y | F | B | | 06B | | | | C271-02 | 18:57 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10232QX-8** | | | | | | | | | | | | | | | | | | |
| ECC0030 | SW6010B | SW3050 | N 0 1 | ARSENIC | 9.58 | mg/kg | | Y | Y | P | | | | | | | C271-02 | 03:22 |
| | | | | BARIUM | 31.5 | mg/kg | | Y | Y | P | | | | | | | C271-02 | 18:57 |
| | | | | BERYLLIUM | .355 | mg/kg | J | Y | Y | F | B | | 06B | | | | C271-02 | 18:57 |
| | | | | CADMIUM | .619 | mg/kg | U | N | Y | U | U | | | | | | C271-02 | 18:57 |
| | | | | CALCIUM | 31.9 | mg/kg | J | Y | Y | P | J | | 15 | | | | C271-02 | 18:57 |
| | | | | CHROMIUM | 23.8 | mg/kg | | Y | Y | P | | | | | | | C271-02 | 18:57 |
| | | | | COBALT | 2.02 | mg/kg | J | Y | Y | F | B | | 06B | | | | C271-02 | 18:57 |
| | | | | COPPER | 13.1 | mg/kg | | Y | Y | P | | | | | | | C271-02 | 18:57 |
| | | | | IRON | 38900 | mg/kg | | Y | Y | P | | | | | | | C271-02 | 18:57 |
| | | | | LEAD | 9.58 | mg/kg | | Y | Y | P | | | | | | | C271-02 | 03:22 |
| | | | | MAGNESIUM | 447 | mg/kg | | Y | Y | P | | | | | | | C271-02 | 18:57 |
| | | | | MANGANESE | 85.5 | mg/kg | | Y | Y | P | | | | | | | C271-02 | 18:57 |
| | | | | NICKEL | 4.92 | mg/kg | | Y | Y | P | | | | | | | C271-02 | 18:57 |
| | | | | POTASSIUM | 1020 | mg/kg | | Y | Y | P | | | | | | | C271-02 | 18:57 |
| | | | | SELENIUM | 1.24 | mg/kg | U | N | Y | U | U | | | | | | C271-02 | 03:22 |
| | | | | SILVER | 1.24 | mg/kg | U | N | Y | U | U | | | | | | C271-02 | 18:57 |
| | | | | SODIUM | 124 | mg/kg | U | N | Y | U | U | | | | | | C271-02 | 18:57 |
| | | | | THALLIUM | .976 | mg/kg | J | Y | Y | P | J | | 15 | | | | C271-02 | 03:22 |
| | | | | VANADIUM | 40.6 | mg/kg | | Y | Y | P | | | | | | | C271-02 | 18:57 |
| | | | | ZINC | 18.4 | mg/kg | | Y | Y | P | | | | | | | C271-02 | 18:57 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .1 | mg/kg | U | N | Y | U | U | | | | | | C271-02 | 12:16 |
| ECC0029 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C271-01 | 13:55 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C271-01 | 13:55 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C271-01 | 13:55 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C271-01 | 13:55 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C271-01 | 13:55 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C271-01 | 13:55 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C271-01 | 13:55 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C271-01 | 13:55 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C271-01 | 13:55 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C271-01 | 13:55 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | C271-01 | 13:55 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C271-01 | 13:55 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | C271-01 | 13:55 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | C271-01 | 13:55 |
| ECC0030 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C271-02 | 14:34 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | C271-02 | 14:34 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C271-02 | 14:34 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C271-02 | 14:34 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C271-02 | 14:34 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10232QX-8** | | | | | | | | | | | | | | | | | | | | |
| ECC0030 | SW8330 | METHOD | N | 0 | 1 | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C271-02 | 14:34 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C271-02 | 14:34 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C271-02 | 14:34 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | C271-02 | 14:34 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C271-02 | 14:34 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | C271-02 | 14:34 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | C271-02 | 14:34 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | C271-02 | 14:34 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | C271-02 | 14:34 |
| ECC0029 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0592 | mg/kg | U | N | Y | U | U | | | | | | C271-01 | 19:54 |
| ECC0030 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0619 | mg/kg | U | N | Y | U | U | | | | | | C271-02 | 20:11 |
| **10232QX-9** | | | | | | | | | | | | | | | | | | | | |
| ECC0011 | SW6010B | SW3050 | N | 0 | 1 | ALUMINUM | 15100 | mg/kg | | Y | Y | P | | | | | | | D060-01 | 22:42 |
| | | | | | | ANTIMONY | 11.7 | mg/kg | U | N | Y | U | U | | | | | | D060-01 | 22:42 |
| | | | | | | ARSENIC | 7.48 | mg/kg | | Y | Y | P | | | | | | | D060-01 | 01:28 |
| | | | | | | BARIUM | 102 | mg/kg | | Y | Y | P | | | | | | | D060-01 | 22:42 |
| | | | | | | BERYLLIUM | 1.03 | mg/kg | J | Y | Y | P | J | | 15 | | | | D060-01 | 22:42 |
| | | | | | | CADMIUM | .587 | mg/kg | U | N | Y | U | U | | | | | | D060-01 | 22:42 |
| | | | | | | CALCIUM | 1690 | mg/kg | | Y | Y | P | | | | | | | D060-01 | 22:42 |
| | | | | | | CHROMIUM | 20.4 | mg/kg | | Y | Y | P | | | | | | | D060-01 | 22:42 |
| | | | | | | COBALT | 9.68 | mg/kg | | Y | Y | P | | | | | | | D060-01 | 22:42 |
| | | | | | | COPPER | 18.5 | mg/kg | | Y | Y | P | | | | | | | D060-01 | 22:42 |
| | | | | | | IRON | 21100 | mg/kg | | Y | Y | P | | | | | | | D060-01 | 22:42 |
| | | | | | | LEAD | 10.8 | mg/kg | | Y | Y | P | | | | | | | D060-01 | 01:28 |
| | | | | | | MAGNESIUM | 1130 | mg/kg | | Y | Y | P | | | | | | | D060-01 | 22:42 |
| | | | | | | MANGANESE | 313 | mg/kg | | Y | Y | P | | | | | | | D060-01 | 22:42 |
| | | | | | | NICKEL | 17.8 | mg/kg | | Y | Y | P | | | | | | | D060-01 | 22:42 |
| | | | | | | POTASSIUM | 936 | mg/kg | | Y | Y | P | | | | | | | D060-01 | 22:42 |
| | | | | | | SELENIUM | 1.17 | mg/kg | U | N | Y | U | U | | | | | | D060-01 | 01:28 |
| | | | | | | SILVER | 1.17 | mg/kg | U | N | Y | U | U | | | | | | D060-01 | 22:42 |
| | | | | | | SODIUM | 37.2 | mg/kg | J | Y | Y | P | J | | 15 | | | | D060-01 | 22:42 |
| | | | | | | THALLIUM | 2.35 | mg/kg | U | N | Y | U | U | | | | | | D060-01 | 01:28 |
| | | | | | | VANADIUM | 32.1 | mg/kg | | Y | Y | P | | | | | | | D060-01 | 22:42 |
| | | | | | | ZINC | 45.7 | mg/kg | | Y | Y | P | | | | | | | D060-01 | 22:42 |
| | SW7471A | TOTAL | N | 0 | 1 | MERCURY | .117 | mg/kg | U | N | Y | U | U | | | | | | D060-01 | 11:01 |
| ECC0012 | SW6010B | SW3050 | N | 0 | 1 | ALUMINUM | 12700 | mg/kg | | Y | Y | P | | | | | | | D060-02 | 22:47 |
| | | | | | | ANTIMONY | 11.5 | mg/kg | U | N | Y | U | U | | | | | | D060-02 | 22:47 |
| | | | | | | ARSENIC | 15.7 | mg/kg | | Y | Y | P | | | | | | | D060-02 | 01:33 |
| | | | | | | BARIUM | 219 | mg/kg | | Y | Y | P | | | | | | | D060-02 | 22:47 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10232QX-9** | | | | | | | | | | | | | | | | | | |
| ECC0012 | SW6010B | SW3050 | N 0 1 | BERYLLIUM | 1.79 | mg/kg | | Y | Y | P | | | | | | | D060-02 | 22:47 |
| | | | | CADMIUM | .574 | mg/kg | U | N | Y | U | U | | | | | | D060-02 | 22:47 |
| | | | | CALCIUM | 1680 | mg/kg | | Y | Y | P | | | | | | | D060-02 | 22:47 |
| | | | | CHROMIUM | 34.2 | mg/kg | | Y | Y | P | | | | | | | D060-02 | 22:47 |
| | | | | COBALT | 38.4 | mg/kg | | Y | Y | P | | | | | | | D060-02 | 22:47 |
| | | | | COPPER | 34.3 | mg/kg | | Y | Y | P | | | | | | | D060-02 | 22:47 |
| | | | | IRON | 36000 | mg/kg | | Y | Y | P | | | | | | | D060-02 | 22:47 |
| | | | | LEAD | 36.5 | mg/kg | | Y | Y | P | | | | | | | D060-02 | 01:33 |
| | | | | MAGNESIUM | 1110 | mg/kg | | Y | Y | P | | | | | | | D060-02 | 22:47 |
| | | | | MANGANESE | 1360 | mg/kg | | Y | Y | P | | | | | | | D060-02 | 22:47 |
| | | | | NICKEL | 37 | mg/kg | | Y | Y | P | | | | | | | D060-02 | 22:47 |
| | | | | POTASSIUM | 698 | mg/kg | | Y | Y | P | | | | | | | D060-02 | 22:47 |
| | | | | SELENIUM | 1.15 | mg/kg | U | N | Y | U | U | | | | | | D060-02 | 01:33 |
| | | | | SILVER | 1.15 | mg/kg | U | N | Y | U | U | | | | | | D060-02 | 22:47 |
| | | | | SODIUM | 27.3 | mg/kg | J | Y | Y | P | J | | 15 | | | | D060-02 | 22:47 |
| | | | | THALLIUM | 2.3 | mg/kg | U | N | Y | U | U | | | | | | D060-02 | 01:33 |
| | | | | VANADIUM | 38.7 | mg/kg | | Y | Y | P | | | | | | | D060-02 | 22:47 |
| | | | | ZINC | 85.7 | mg/kg | | Y | Y | P | | | | | | | D060-02 | 22:47 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .115 | mg/kg | U | N | Y | U | U | | | | | | D060-02 | 11:03 |
| ECC0013 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 25400 | mg/kg | | Y | Y | P | | | | | | | D080-01 | 23:03 |
| | | | | ANTIMONY | 12.7 | mg/kg | U | N | Y | U | U | | | | | | D080-01 | 23:03 |
| | | | | ARSENIC | 7.41 | mg/kg | | Y | Y | P | | | | | | | D080-01 | 01:48 |
| | | | | BARIUM | 107 | mg/kg | | Y | Y | P | | | | | | | D080-01 | 23:03 |
| | | | | BERYLLIUM | .783 | mg/kg | J | Y | Y | P | J | | 15 | | | | D080-01 | 23:03 |
| | | | | CADMIUM | .637 | mg/kg | U | N | Y | U | U | | | | | | D080-01 | 23:03 |
| | | | | CALCIUM | 440 | mg/kg | | Y | Y | P | | | | | | | D080-01 | 23:03 |
| | | | | CHROMIUM | 14.6 | mg/kg | | Y | Y | P | | | | | | | D080-01 | 23:03 |
| | | | | COBALT | 11.5 | mg/kg | | Y | Y | P | | | | | | | D080-01 | 23:03 |
| | | | | COPPER | 11.2 | mg/kg | | Y | Y | P | | | | | | | D080-01 | 23:03 |
| | | | | IRON | 15600 | mg/kg | | Y | Y | P | | | | | | | D080-01 | 23:03 |
| | | | | LEAD | 28.3 | mg/kg | | Y | Y | P | | | | | | | D080-01 | 01:48 |
| | | | | MAGNESIUM | 774 | mg/kg | | Y | Y | P | | | | | | | D080-01 | 23:03 |
| | | | | MANGANESE | 1620 | mg/kg | | Y | Y | P | | | | | | | D080-01 | 23:03 |
| | | | | NICKEL | 15.7 | mg/kg | | Y | Y | P | | | | | | | D080-01 | 23:03 |
| | | | | POTASSIUM | 576 | mg/kg | J | Y | Y | P | J | | 15 | | | | D080-01 | 23:03 |
| | | | | SELENIUM | 1.27 | mg/kg | U | N | Y | U | U | | | | | | D080-01 | 01:48 |
| | | | | SILVER | 1.27 | mg/kg | U | N | Y | U | U | | | | | | D080-01 | 23:03 |
| | | | | SODIUM | 30.3 | mg/kg | J | Y | Y | P | J | | 15 | | | | D080-01 | 23:03 |
| | | | | THALLIUM | 2.55 | mg/kg | U | N | Y | U | U | | | | | | D080-01 | 01:48 |
| | | | | VANADIUM | 31.7 | mg/kg | | Y | Y | P | | | | | | | D080-01 | 23:03 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10232QX-9** | | | | | | | | | | | | | | | | | | |
| ECC0013 | SW6010B | SW3050 | N 0 1 | ZINC | 37.1 | mg/kg | | Y | Y | P | | | | | | | D080-01 | 23:03 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .053 | mg/kg | J | Y | Y | P | J | | 15 | | | | D080-01 | 11:12 |
| ECC0014 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 21500 | mg/kg | | Y | Y | P | | | | | | | D080-02 | 23:08 |
| | | | | ANTIMONY | 11.5 | mg/kg | U | N | Y | U | U | | | | | | D080-02 | 23:08 |
| | | | | ARSENIC | 8.57 | mg/kg | | Y | Y | P | | | | | | | D080-02 | 01:53 |
| | | | | BARIUM | 20.4 | mg/kg | | Y | Y | P | | | | | | | D080-02 | 23:08 |
| | | | | BERYLLIUM | .238 | mg/kg | J | Y | Y | F | B | | 06B | | | | D080-02 | 23:08 |
| | | | | CADMIUM | .573 | mg/kg | U | N | Y | U | U | | | | | | D080-02 | 23:08 |
| | | | | CALCIUM | 48.2 | mg/kg | J | Y | Y | P | J | | 15 | | | | D080-02 | 23:08 |
| | | | | CHROMIUM | 19.3 | mg/kg | | Y | Y | P | | | | | | | D080-02 | 23:08 |
| | | | | COBALT | 1.85 | mg/kg | J | Y | Y | P | J | | 15 | | | | D080-02 | 23:08 |
| | | | | COPPER | 13.4 | mg/kg | | Y | Y | P | | | | | | | D080-02 | 23:08 |
| | | | | IRON | 26900 | mg/kg | | Y | Y | P | | | | | | | D080-02 | 23:08 |
| | | | | LEAD | 10.6 | mg/kg | | Y | Y | P | | | | | | | D080-02 | 01:53 |
| | | | | MAGNESIUM | 415 | mg/kg | | Y | Y | P | | | | | | | D080-02 | 23:08 |
| | | | | MANGANESE | 83.4 | mg/kg | | Y | Y | P | | | | | | | D080-02 | 23:08 |
| | | | | NICKEL | 8.15 | mg/kg | | Y | Y | P | | | | | | | D080-02 | 23:08 |
| | | | | POTASSIUM | 278 | mg/kg | J | Y | Y | P | J | | 15 | | | | D080-02 | 23:08 |
| | | | | SELENIUM | 1.15 | mg/kg | U | N | Y | U | U | | | | | | D080-02 | 01:53 |
| | | | | SILVER | 1.15 | mg/kg | U | N | Y | U | U | | | | | | D080-02 | 23:08 |
| | | | | SODIUM | 115 | mg/kg | U | N | Y | U | U | | | | | | D080-02 | 23:08 |
| | | | | THALLIUM | .927 | mg/kg | J | Y | Y | P | J | | 15 | | | | D080-02 | 01:53 |
| | | | | VANADIUM | 46.7 | mg/kg | | Y | Y | P | | | | | | | D080-02 | 23:08 |
| | | | | ZINC | 20.7 | mg/kg | | Y | Y | P | | | | | | | D080-02 | 23:08 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .023 | mg/kg | | Y | Y | P | | | | | | | D080-02 | 11:14 |
| ECC0025 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 14400 | mg/kg | | Y | Y | P | | | | | | | D080-03 | 23:13 |
| | | | | ANTIMONY | 5.57 | mg/kg | J | Y | Y | P | J | | 15 | | | | D080-03 | 23:13 |
| | | | | ARSENIC | 7.27 | mg/kg | | Y | Y | P | | | | | | | D080-03 | 01:58 |
| | | | | BARIUM | 77.2 | mg/kg | | Y | Y | P | | | | | | | D080-03 | 23:13 |
| | | | | BERYLLIUM | .861 | mg/kg | J | Y | Y | P | J | | 15 | | | | D080-03 | 23:13 |
| | | | | CADMIUM | .631 | mg/kg | U | N | Y | U | U | | | | | | D080-03 | 23:13 |
| | | | | CALCIUM | 143 | mg/kg | | Y | Y | P | | | | | | | D080-03 | 23:13 |
| | | | | CHROMIUM | 25.7 | mg/kg | | Y | Y | P | | | | | | | D080-03 | 23:13 |
| | | | | COBALT | 34.7 | mg/kg | | Y | Y | P | | | | | | | D080-03 | 23:13 |
| | | | | COPPER | 14.6 | mg/kg | | Y | Y | P | | | | | | | D080-03 | 23:13 |
| | | | | IRON | 37400 | mg/kg | | Y | Y | P | | | | | | | D080-03 | 23:13 |
| | | | | LEAD | 25.1 | mg/kg | | Y | Y | P | | | | | | | D080-03 | 01:58 |
| | | | | MAGNESIUM | 830 | mg/kg | | Y | Y | P | | | | | | | D080-03 | 23:13 |
| | | | | MANGANESE | 1280 | mg/kg | | Y | Y | P | | | | | | | D080-03 | 23:13 |
| | | | | NICKEL | 15 | mg/kg | | Y | Y | P | | | | | | | D080-03 | 23:13 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10232QX-9** | | | | | | | | | | | | | | | | | | |
| ECC0025 | SW6010B | SW3050 | N 0 1 | POTASSIUM | 1660 | mg/kg | | Y | Y | P | | | | | | | D080-03 | 23:13 |
| | | | | SELENIUM | 1.26 | mg/kg | U | N | Y | U | U | | | | | | D080-03 | 01:58 |
| | | | | SILVER | 1.26 | mg/kg | U | N | Y | U | U | | | | | | D080-03 | 23:13 |
| | | | | SODIUM | 126 | mg/kg | U | N | Y | U | U | | | | | | D080-03 | 23:13 |
| | | | | THALLIUM | .698 | mg/kg | J | Y | Y | P | J | | 15 | | | | D080-03 | 01:58 |
| | | | | VANADIUM | 24.2 | mg/kg | | Y | Y | P | | | | | | | D080-03 | 23:13 |
| | | | | ZINC | 37.3 | mg/kg | | Y | Y | P | | | | | | | D080-03 | 23:13 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .126 | mg/kg | U | N | Y | U | U | | | | | | D080-03 | 11:17 |
| ECC0026 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 8920 | mg/kg | | Y | Y | P | | | | | | | D080-04 | 23:18 |
| | | | | ANTIMONY | 12.2 | mg/kg | U | N | Y | U | U | | | | | | D080-04 | 23:18 |
| | | | | ARSENIC | 12.8 | mg/kg | | Y | Y | P | | | | | | | D080-04 | 02:03 |
| | | | | BARIUM | 170 | mg/kg | | Y | Y | P | | | | | | | D080-04 | 23:18 |
| | | | | BERYLLIUM | 3.87 | mg/kg | | Y | Y | P | | | | | | | D080-04 | 23:18 |
| | | | | CADMIUM | .608 | mg/kg | U | N | Y | U | U | | | | | | D080-04 | 23:18 |
| | | | | CALCIUM | 93 | mg/kg | J | Y | Y | P | J | | 15 | | | | D080-04 | 23:18 |
| | | | | CHROMIUM | 18.3 | mg/kg | | Y | Y | P | | | | | | | D080-04 | 23:18 |
| | | | | COBALT | 12.2 | mg/kg | | Y | Y | P | | | | | | | D080-04 | 23:18 |
| | | | | COPPER | 43.9 | mg/kg | | Y | Y | P | | | | | | | D080-04 | 23:18 |
| | | | | IRON | 54800 | mg/kg | | Y | Y | P | | | | | | | D080-04 | 23:18 |
| | | | | LEAD | 23.5 | mg/kg | | Y | Y | P | | | | | | | D080-04 | 02:03 |
| | | | | MAGNESIUM | 757 | mg/kg | | Y | Y | P | | | | | | | D080-04 | 23:18 |
| | | | | MANGANESE | 627 | mg/kg | | Y | Y | P | | | | | | | D080-04 | 23:18 |
| | | | | NICKEL | 39 | mg/kg | | Y | Y | P | | | | | | | D080-04 | 23:18 |
| | | | | POTASSIUM | 2400 | mg/kg | | Y | Y | P | | | | | | | D080-04 | 23:18 |
| | | | | SELENIUM | 1.22 | mg/kg | U | N | Y | U | U | | | | | | D080-04 | 02:03 |
| | | | | SILVER | 1.22 | mg/kg | U | N | Y | U | U | | | | | | D080-04 | 23:18 |
| | | | | SODIUM | 28.9 | mg/kg | J | Y | Y | P | J | | 15 | | | | D080-04 | 23:18 |
| | | | | THALLIUM | 1.44 | mg/kg | J | Y | Y | P | J | | 15 | | | | D080-04 | 02:03 |
| | | | | VANADIUM | 20.4 | mg/kg | | Y | Y | P | | | | | | | D080-04 | 23:18 |
| | | | | ZINC | 124 | mg/kg | | Y | Y | P | | | | | | | D080-04 | 23:18 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .122 | mg/kg | U | N | Y | U | U | | | | | | D080-04 | 11:19 |
| ECC0027 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 16100 | mg/kg | | Y | Y | P | | | | | | | D060-03 | 22:53 |
| | | | | ANTIMONY | 12.1 | mg/kg | U | N | Y | U | U | | | | | | D060-03 | 22:53 |
| | | | | ARSENIC | 5.08 | mg/kg | | Y | Y | P | | | | | | | D060-03 | 01:38 |
| | | | | BARIUM | 86 | mg/kg | | Y | Y | P | | | | | | | D060-03 | 22:53 |
| | | | | BERYLLIUM | 1.21 | mg/kg | | Y | Y | P | | | | | | | D060-03 | 22:53 |
| | | | | CADMIUM | .605 | mg/kg | U | N | Y | U | U | | | | | | D060-03 | 22:53 |
| | | | | CALCIUM | 568 | mg/kg | | Y | Y | P | | | | | | | D060-03 | 22:53 |
| | | | | CHROMIUM | 16.1 | mg/kg | | Y | Y | P | | | | | | | D060-03 | 22:53 |
| | | | | COBALT | 11.3 | mg/kg | | Y | Y | P | | | | | | | D060-03 | 22:53 |

# Validation Qualifier Data Entry Verification

Run Date: October 9, 2001



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10232QX-9** | | | | | | | | | | | | | | | | | | |
| ECC0027 | SW6010B | SW3050 | N 0 1 | COPPER | 14.4 | mg/kg | | Y | Y | P | | | | | | | D060-03 | 22:53 |
| | | | | IRON | 20600 | mg/kg | | Y | Y | P | | | | | | | D060-03 | 22:53 |
| | | | | LEAD | 14.1 | mg/kg | | Y | Y | P | | | | | | | D060-03 | 01:38 |
| | | | | MAGNESIUM | 1100 | mg/kg | | Y | Y | P | | | | | | | D060-03 | 22:53 |
| | | | | MANGANESE | 622 | mg/kg | | Y | Y | P | | | | | | | D060-03 | 22:53 |
| | | | | NICKEL | 20.6 | mg/kg | | Y | Y | P | | | | | | | D060-03 | 22:53 |
| | | | | POTASSIUM | 2070 | mg/kg | | Y | Y | P | | | | | | | D060-03 | 22:53 |
| | | | | SELENIUM | 1.21 | mg/kg | U | N | Y | U | U | | | | | | D060-03 | 01:38 |
| | | | | SILVER | 1.21 | mg/kg | U | N | Y | U | U | | | | | | D060-03 | 22:53 |
| | | | | SODIUM | 27.4 | mg/kg | J | Y | Y | P | J | | 15 | | | | D060-03 | 22:53 |
| | | | | THALLIUM | 2.42 | mg/kg | U | N | Y | U | U | | | | | | D060-03 | 01:38 |
| | | | | VANADIUM | 19.8 | mg/kg | | Y | Y | P | | | | | | | D060-03 | 22:53 |
| | | | | ZINC | 54.7 | mg/kg | | Y | Y | P | | | | | | | D060-03 | 22:53 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .121 | mg/kg | U | N | Y | U | U | | | | | | D060-03 | 11:06 |
| ECC0028 | SW6010B | SW3050 | N 0 1 | ALUMINUM | 6430 | mg/kg | | Y | Y | P | | | | | | | D060-04 | 22:58 |
| | | | | ANTIMONY | 12.4 | mg/kg | U | N | Y | U | U | | | | | | D060-04 | 22:58 |
| | | | | ARSENIC | 13.2 | mg/kg | | Y | Y | P | | | | | | | D060-04 | 01:43 |
| | | | | BARIUM | 16.1 | mg/kg | | Y | Y | P | | | | | | | D060-04 | 22:58 |
| | | | | BERYLLIUM | 1.57 | mg/kg | | Y | Y | P | | | | | | | D060-04 | 22:58 |
| | | | | CADMIUM | .621 | mg/kg | U | N | Y | U | U | | | | | | D060-04 | 22:58 |
| | | | | CALCIUM | 26.7 | mg/kg | J | Y | Y | P | J | | 15 | | | | D060-04 | 22:58 |
| | | | | CHROMIUM | 11 | mg/kg | | Y | Y | P | | | | | | | D060-04 | 22:58 |
| | | | | COBALT | 3.9 | mg/kg | | Y | Y | P | | | | | | | D060-04 | 22:58 |
| | | | | COPPER | 35.9 | mg/kg | | Y | Y | P | | | | | | | D060-04 | 22:58 |
| | | | | IRON | 60100 | mg/kg | | Y | Y | P | | | | | | | D060-04 | 22:58 |
| | | | | LEAD | 12 | mg/kg | | Y | Y | P | | | | | | | D060-04 | 01:43 |
| | | | | MAGNESIUM | 398 | mg/kg | | Y | Y | P | | | | | | | D060-04 | 22:58 |
| | | | | MANGANESE | 271 | mg/kg | | Y | Y | P | | | | | | | D060-04 | 22:58 |
| | | | | NICKEL | 23.2 | mg/kg | | Y | Y | P | | | | | | | D060-04 | 22:58 |
| | | | | POTASSIUM | 2380 | mg/kg | | Y | Y | P | | | | | | | D060-04 | 22:58 |
| | | | | SELENIUM | 1.24 | mg/kg | U | N | Y | U | U | | | | | | D060-04 | 01:43 |
| | | | | SILVER | 1.24 | mg/kg | U | N | Y | U | U | | | | | | D060-04 | 22:58 |
| | | | | SODIUM | 124 | mg/kg | U | N | Y | U | U | | | | | | D060-04 | 22:58 |
| | | | | THALLIUM | 1.55 | mg/kg | J | Y | Y | P | J | | 15 | | | | D060-04 | 01:43 |
| | | | | VANADIUM | 16.3 | mg/kg | | Y | Y | P | | | | | | | D060-04 | 22:58 |
| | | | | ZINC | 88 | mg/kg | | Y | Y | P | | | | | | | D060-04 | 22:58 |
| | SW7471A | TOTAL | N 0 1 | MERCURY | .124 | mg/kg | U | N | Y | U | U | | | | | | D060-04 | 11:09 |
| ECC0011 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D060-01 | 01:23 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D060-01 | 01:23 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D060-01 | 01:23 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10232QX-9** | | | | | | | | | | | | | | | | | | |
| ECC0011 | SW8330 | METHOD | N 0 1 | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D060-01 | 01:23 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D060-01 | 01:23 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D060-01 | 01:23 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D060-01 | 01:23 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D060-01 | 01:23 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D060-01 | 01:23 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D060-01 | 01:23 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | D060-01 | 01:23 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D060-01 | 01:23 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | D060-01 | 01:23 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | D060-01 | 01:23 |
| ECC0012 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D060-02 | 02:01 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D060-02 | 02:01 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D060-02 | 02:01 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D060-02 | 02:01 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D060-02 | 02:01 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D060-02 | 02:01 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D060-02 | 02:01 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D060-02 | 02:01 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D060-02 | 02:01 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D060-02 | 02:01 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | D060-02 | 02:01 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D060-02 | 02:01 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | D060-02 | 02:01 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | D060-02 | 02:01 |
| ECC0013 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D080-01 | 03:57 |
| | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D080-01 | 03:57 |
| | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D080-01 | 03:57 |
| | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D080-01 | 03:57 |
| | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D080-01 | 03:57 |
| | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D080-01 | 03:57 |
| | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D080-01 | 03:57 |
| | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D080-01 | 03:57 |
| | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D080-01 | 03:57 |
| | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D080-01 | 03:57 |
| | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | D080-01 | 03:57 |
| | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D080-01 | 03:57 |
| | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | D080-01 | 03:57 |
| | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | D080-01 | 03:57 |
| ECC0014 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D080-02 | 04:35 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10232QX-9** | | | | | | | | | | | | | | | | | | | | |
| ECC0014 | SW8330 | METHOD | N | 0 | 1 | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D080-02 | 04:35 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D080-02 | 04:35 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D080-02 | 04:35 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D080-02 | 04:35 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D080-02 | 04:35 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D080-02 | 04:35 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D080-02 | 04:35 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D080-02 | 04:35 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D080-02 | 04:35 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | D080-02 | 04:35 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D080-02 | 04:35 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | D080-02 | 04:35 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | D080-02 | 04:35 |
| ECC0025 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D080-03 | 05:14 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D080-03 | 05:14 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D080-03 | 05:14 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D080-03 | 05:14 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D080-03 | 05:14 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D080-03 | 05:14 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D080-03 | 05:14 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D080-03 | 05:14 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D080-03 | 05:14 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D080-03 | 05:14 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | D080-03 | 05:14 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D080-03 | 05:14 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | D080-03 | 05:14 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | D080-03 | 05:14 |
| ECC0026 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D080-04 | 05:52 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D080-04 | 05:52 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D080-04 | 05:52 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D080-04 | 05:52 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D080-04 | 05:52 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D080-04 | 05:52 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D080-04 | 05:52 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D080-04 | 05:52 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D080-04 | 05:52 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D080-04 | 05:52 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | D080-04 | 05:52 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D080-04 | 05:52 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | D080-04 | 05:52 |

# Validation Qualifier Data Entry Verification



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10232QX-9** | | | | | | | | | | | | | | | | | | | | |
| ECC0026 | SW8330 | METHOD | N | 0 | 1 | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | D080-04 | 05:52 |
| ECC0027 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D060-03 | 02:40 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D060-03 | 02:40 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D060-03 | 02:40 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D060-03 | 02:40 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D060-03 | 02:40 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D060-03 | 02:40 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D060-03 | 02:40 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D060-03 | 02:40 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D060-03 | 02:40 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D060-03 | 02:40 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | D060-03 | 02:40 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D060-03 | 02:40 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | D060-03 | 02:40 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | D060-03 | 02:40 |
| ECC0028 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D060-04 | 03:18 |
| | | | | | | 1,3-DNB | .4 | mg/kg | U | N | Y | U | U | | | | | | D060-04 | 03:18 |
| | | | | | | 2,4,6-TNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D060-04 | 03:18 |
| | | | | | | 2,4-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D060-04 | 03:18 |
| | | | | | | 2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D060-04 | 03:18 |
| | | | | | | 2-AM-4,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D060-04 | 03:18 |
| | | | | | | 2-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D060-04 | 03:18 |
| | | | | | | 3-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D060-04 | 03:18 |
| | | | | | | 4-AM-2,6-DNT | .4 | mg/kg | U | N | Y | U | U | | | | | | D060-04 | 03:18 |
| | | | | | | 4-NITROTOLUENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D060-04 | 03:18 |
| | | | | | | HMX | .4 | mg/kg | U | N | Y | U | U | | | | | | D060-04 | 03:18 |
| | | | | | | NITROBENZENE | .4 | mg/kg | U | N | Y | U | U | | | | | | D060-04 | 03:18 |
| | | | | | | RDX | .4 | mg/kg | U | N | Y | U | U | | | | | | D060-04 | 03:18 |
| | | | | | | TETRYL | .4 | mg/kg | U | N | Y | U | U | | | | | | D060-04 | 03:18 |
| ECC0011 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0587 | mg/kg | U | N | Y | U | U | | | | | | D060-01 | 18:10 |
| ECC0012 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0574 | mg/kg | U | N | Y | U | U | | | | | | D060-02 | 19:01 |
| ECC0013 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0637 | mg/kg | U | N | Y | U | U | | | | | | D080-01 | 19:53 |
| ECC0014 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0573 | mg/kg | U | N | Y | U | U | | | | | | D080-02 | 20:10 |
| ECC0025 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0631 | mg/kg | U | N | Y | U | U | | | | | | D080-03 | 20:27 |
| ECC0026 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0608 | mg/kg | U | N | Y | U | U | | | | | | D080-04 | 20:44 |
| ECC0027 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0605 | mg/kg | U | N | Y | U | U | | | | | | D060-03 | 19:18 |
| ECC0028 | E314.0 | NONE | N | 0 | 1 | PERCHLORATE | .0621 | mg/kg | U | N | Y | U | U | | | | | | D060-04 | 19:35 |

***Quality Assurance Report***
***For Supplemental Sampling Ranges West of Iron Mountain Road***
***IT Project No 796887***
***Fort McClellan Quality Assurance Report***

## *1.0 Overview*

Ten groundwater samples were collected in support of the supplemental groundwater investigation at Fort McClellan (FTMC) Parcels HR-91Q, HR-117Q, HR-228Q and HR-232QX. All samples were submitted to EMAX Laboratories, Inc. for analysis. QC samples consisted of the following types and quantities: 6 equipment rinsates (ER). An analytical summary table cross-referencing sample location, sample number, and analytical suite is presented in Attachment A.

One hundred (100) percent of samples 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 data and validation 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 (DQO) were met, laboratory analytical results and data packages were examined for compliance with SW846 8330 and 6010B Series 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 analytical holding times were met.

## *2.2 Rejected Data*

No data was reported by the laboratory as unusable or "R" qualified.

## *2.3 Blank Results*

Descriptions of the type 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.

When target compounds are detected in equipment rinsates, method blanks and/or initial/continuing calibration blanks there is increased uncertainty regarding the positive identification of the same constituents in field samples. When this occurs, detections more than five times the associated blank concentration are assumed to be positive detections in field samples. Because of the added uncertainty for certain "common" laboratory contaminants such as acetone, chloroform, toluene, and various phthalates, these constituents are not assumed present until sample concentrations exceed ten times the associated blank value. This is referred to as the 5X/10X rule.

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. No sample data was affected by blank 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.

Overall sampling and analysis precision for this task was assessed using field duplicate (FD) samples. Laboratory precision was assessed by laboratory control sample/laboratory control sample duplicate (LCS/LCSD) and matrix spike/matrix spike duplicate (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 2.4-1**
**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" |
| TAL Metals LCS/LCSD and MS/MSD | RPD < 20% | RPD < 20% |

## *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 SW846 8330 and 6010B Series methodology. Reported results indicate that an acceptable level of analytical accuracy was achieved.

### *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. Groundwater sample data 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 supplemental groundwater investigation of Parcels HR-91Q, HR-117Q, HR-228Q and HR-232QX. 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

Parcels HR-91Q, HR-117Q, HR-228Q and HR-232QX requirement for completeness is 95% for both aqueous and soil samples. The % Completeness for this task is calculated to be 100%.

- % Completeness = (93 / 93) 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
## Parcels HR-91Q, HR-117Q, HR-228Q and HR-232QX
## Supplemental Groundwater Sampling at Ranges West of Iron Mountain Road
## Project No. 796887

| Sample Location | Sample Name | Sample Number | Date Sampled | Sample Depth | Analytical Suite | Sample Type | Sample Purpose |
|---|---|---|---|---|---|---|---|
| HR-91Q-MW01 | HR-91Q-MW01-GW-JH3011-REG | JH3011 | 7-Jun-02 | NA | Nitroaromatics by 8330 | GW | REG |
| | HR-91Q-MW01-GW-JH3012-REG | JH3012 | 26-Nov-02 | NA | Nitroaromatics by 8330 | GW | REG |
| HR-117Q-MW05 | HR-117Q-MW05-GW-JM3010-REG | JM3010 | 6-Jun-02 | 85 to 115 ft | Antimony by SW6010B | GW | REG |
| | HR-117Q-MW05-GW-JM3012-REG | JM3012 | 13-Sep-02 | 85 to 115 ft | Antimony by SW6010B | GW | REG |
| HR-117Q-MW06 | HR-117Q-MW06-GW-JM3011-REG | JM3011 | 6-Jun-02 | 20 to 30 ft | Nitroaromatics by 8330 | GW | REG |
| | HR-117Q-MW06-GW-JM3013-REG | JM3013 | 5-Dec-02 | 20 to 30 ft | Nitroaromatics by 8330 | GW | REG |
| HR-228Q-MW02 | HR-228Q-MW02-GW-JS3003-REG | JS3003 | 14-Jun-02 | 63 to 83 ft | Antimony by SW6010B | GW | REG |
| | HR-228Q-MW02-GW-JS3004-REG | JS3004 | 20-Sep-02 | 63 to 83 ft | Antimony by SW6010B | GW | REG |
| HR-232QX-MW07 | HR-232QX-MW07-GW-ECC3021-REG | ECC3021 | 4-Jun-02 | 10 to 25 ft | Antimony by SW6010B<br>Nitroaromatics by 8330 | GW | REG |
| | HR-232QX-MW07-GW-ECC3022-REG | ECC3022 | 6-Sep-02 | 10 to 25 ft | Antimony by SW6010B<br>Nitroaromatics by 8330 | GW | REG |

# ATTACHMENT B

# DATA VALIDATION SUMMARY REPORT

***Data Validation Summary Report***
***Supplemental Groundwater Sampling***
***Ranges West of Iron Mountain Road***
***Fort McClellan, Calhoun County, Alabama***

## *1.0 Introduction*

Level III data validation was performed on 100 percent of the environmental samples collected for the supplemental sampling for the ranges west of Iron Mountain Road. The analytical data consisted of delivery groups (SDGs) 1091Q-11, 1091Q-12, 10117Q-13, 10117Q-14, 10117Q-15, 10228Q-04, 10228Q-05, 0232QX-19 and 0232QX-20, which were analyzed by EMAX Laboratories. The chemical parameters for which the samples were analyzed, are identified below:

| **Parameter** (Method) |
|---|
| Metals (Antimony only) by SW846 6010B |
| Nitroaromatic and Nitramine Explosives by SW846 8330 |

## *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. 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 as reported by the laboratory. No validation qualifiers were assigned. 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 the analytical results for the supplemental sampling of the ranges west of Iron Mountain Road. 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 (Antimony only) by SW846 6010B*

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 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 and all were 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.

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.

Field Duplicates

No field duplicate results were evaluated.

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".

### *4.4 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.

2$^{ND}$ 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".

## *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 "nondetect" may be inaccurate or imprecise. The nondetect result should be estimated.

## Validation Reason Code Definitions

| Reason Code | Definition |
|---|---|
| 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

Run Date: March 12, 2003

## 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **0232QX-19** | | | | | | | | | | | | | | | | | | | | |
| ECC3021 | SW6010B | SW3010 | N | 0 | 1 | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | F016-02 | 16:28 |
| ECC3021 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | U | U | | | | | | F016-02 | 03:52 |
| | | | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | U | U | | | | | | F016-02 | 03:52 |
| | | | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | U | U | | | | | | F016-02 | 03:52 |
| | | | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | F016-02 | 03:52 |
| | | | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | F016-02 | 03:52 |
| | | | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | F016-02 | 03:52 |
| | | | | | | 2-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | F016-02 | 03:52 |
| | | | | | | 3-NITROTOLUENE | .0006 | mg/L | U | N | Y | U | U | | | | | | F016-02 | 03:52 |
| | | | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | F016-02 | 03:52 |
| | | | | | | 4-NITROTOLUENE | .0006 | mg/L | U | N | Y | U | U | | | | | | F016-02 | 03:52 |
| | | | | | | HMX | .0004 | mg/L | U | N | Y | U | U | | | | | | F016-02 | 03:52 |
| | | | | | | NITROBENZENE | .0004 | mg/L | U | N | Y | U | U | | | | | | F016-02 | 03:52 |
| | | | | | | RDX | .0004 | mg/L | U | N | Y | U | U | | | | | | F016-02 | 03:52 |
| | | | | | | TETRYL | .0004 | mg/L | U | N | Y | U | U | | | | | | F016-02 | 03:52 |
| **10117Q-13** | | | | | | | | | | | | | | | | | | | | |
| JM3010 | SW6010B | SW3010 | N | 0 | 1 | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | F055-01 | 15:32 |
| JM3011 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | U | U | | | | | | F055-02 | 14:57 |
| | | | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | U | U | | | | | | F055-02 | 14:57 |
| | | | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | U | U | | | | | | F055-02 | 14:57 |
| | | | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | F055-02 | 14:57 |
| | | | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | F055-02 | 14:57 |
| | | | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | F055-02 | 14:57 |
| | | | | | | 2-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | F055-02 | 14:57 |
| | | | | | | 3-NITROTOLUENE | .0006 | mg/L | U | N | Y | U | U | | | | | | F055-02 | 14:57 |
| | | | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | F055-02 | 14:57 |
| | | | | | | 4-NITROTOLUENE | .0006 | mg/L | U | N | Y | U | U | | | | | | F055-02 | 14:57 |
| | | | | | | HMX | .0004 | mg/L | U | N | Y | U | U | | | | | | F055-02 | 14:57 |
| | | | | | | NITROBENZENE | .0004 | mg/L | U | N | Y | U | U | | | | | | F055-02 | 14:57 |
| | | | | | | RDX | .0004 | mg/L | U | N | Y | U | U | | | | | | F055-02 | 14:57 |
| | | | | | | TETRYL | .0004 | mg/L | U | N | Y | U | U | | | | | | F055-02 | 14:57 |
| **10228Q-04** | | | | | | | | | | | | | | | | | | | | |
| JS3003 | SW6010B | SW3010 | N | 0 | 1 | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | F124-02 | 12:33 |
| **1091Q-11** | | | | | | | | | | | | | | | | | | | | |
| JH3011 | SW8330 | METHOD | N | 0 | 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | U | U | | | | | | F057-03 | 16:15 |
| | | | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | U | U | | | | | | F057-03 | 16:15 |
| | | | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | U | U | | | | | | F057-03 | 16:15 |
| | | | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | F057-03 | 16:15 |

# Validation Qualifier Data Entry Verification

Run Date: March 12, 2003

## 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1091Q-11** | | | | | | | | | | | | | | | | | | |
| JH3011 | SW8330 | METHOD | N 0 1 | 2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | F057-03 | 16:15 |
| | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | F057-03 | 16:15 |
| | | | | 2-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | F057-03 | 16:15 |
| | | | | 3-NITROTOLUENE | .0006 | mg/L | U | N | Y | U | U | | | | | | F057-03 | 16:15 |
| | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | F057-03 | 16:15 |
| | | | | 4-NITROTOLUENE | .0006 | mg/L | U | N | Y | U | U | | | | | | F057-03 | 16:15 |
| | | | | HMX | .0004 | mg/L | U | N | Y | U | U | | | | | | F057-03 | 16:15 |
| | | | | NITROBENZENE | .0004 | mg/L | U | N | Y | U | U | | | | | | F057-03 | 16:15 |
| | | | | RDX | .0004 | mg/L | U | N | Y | U | U | | | | | | F057-03 | 16:15 |
| | | | | TETRYL | .0004 | mg/L | U | N | Y | U | U | | | | | | F057-03 | 16:15 |

# Validation Qualifier Data Entry Verification

## Fort McClellan

Run Date: March 12, 2003



| 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **0232QX-20** | | | | | | | | | | | | | | | | | | |
| ECC3022 | SW6010B | SW3010 | N 0 1 | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | 02I062-01 | 18:09 |
| | SW6010B | SW3010 | Y 0 1 | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | 02I062-01 | 18:13 |
| ECC3022 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | U | U | | | | | | 02I062-01 | 22:55 |
| | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | U | U | | | | | | 02I062-01 | 22:55 |
| | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | U | U | | | | | | 02I062-01 | 22:55 |
| | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | 02I062-01 | 22:55 |
| | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | 02I062-01 | 22:55 |
| | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | 02I062-01 | 22:55 |
| | | | | 2-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | 02I062-01 | 22:55 |
| | | | | 3-NITROTOLUENE | .0006 | mg/L | U | N | Y | U | U | | | | | | 02I062-01 | 22:55 |
| | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | 02I062-01 | 22:55 |
| | | | | 4-NITROTOLUENE | .0006 | mg/L | U | N | Y | U | U | | | | | | 02I062-01 | 22:55 |
| | | | | HMX | .0004 | mg/L | U | N | Y | U | U | | | | | | 02I062-01 | 22:55 |
| | | | | NITROBENZENE | .0004 | mg/L | U | N | Y | U | U | | | | | | 02I062-01 | 22:55 |
| | | | | RDX | .0004 | mg/L | U | N | Y | U | U | | | | | | 02I062-01 | 22:55 |
| | | | | TETRYL | .0004 | mg/L | U | N | Y | U | U | | | | | | 02I062-01 | 22:55 |
| **10117Q-14** | | | | | | | | | | | | | | | | | | |
| JM3012 | SW6010B | SW3010 | N 0 1 | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | 02I130-01 | 11:17 |
| | SW6010B | SW3010 | Y 0 1 | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | 02I130-01 | 11:33 |
| **10117Q-15** | | | | | | | | | | | | | | | | | | |
| JM3013 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | U | U | | | | | | 02L039-01W | 19:03 |
| | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | U | U | | | | | | 02L039-01W | 19:03 |
| | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | U | U | | | | | | 02L039-01W | 19:03 |
| | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | 02L039-01W | 19:03 |
| | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | 02L039-01W | 19:03 |
| | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | 02L039-01W | 19:03 |
| | | | | 2-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | 02L039-01W | 19:03 |
| | | | | 3-NITROTOLUENE | .0006 | mg/L | U | N | Y | U | U | | | | | | 02L039-01W | 19:03 |
| | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | 02L039-01W | 19:03 |
| | | | | 4-NITROTOLUENE | .0006 | mg/L | U | N | Y | U | U | | | | | | 02L039-01W | 19:03 |
| | | | | HMX | .0004 | mg/L | U | N | Y | U | U | | | | | | 02L039-01W | 19:03 |
| | | | | NITROBENZENE | .0004 | mg/L | U | N | Y | U | U | | | | | | 02L039-01W | 19:03 |
| | | | | RDX | .0004 | mg/L | U | N | Y | U | U | | | | | | 02L039-01W | 19:03 |
| | | | | TETRYL | .0004 | mg/L | U | N | Y | U | U | | | | | | 02L039-01W | 19:03 |
| **10228Q-05** | | | | | | | | | | | | | | | | | | |
| JS3004 | SW6010B | SW3010 | N 0 1 | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | 02I176-01 | 21:23 |
| | SW6010B | SW3010 | Y 0 1 | ANTIMONY | .1 | mg/L | U | N | Y | U | U | | | | | | 02I176-01 | 21:39 |
| **1091Q-12** | | | | | | | | | | | | | | | | | | |

# Validation Qualifier Data Entry Verification

Run Date: March 12, 2003

## 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: | Analysis Time: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1091Q-12** | | | | | | | | | | | | | | | | | | |
| JH3012 | SW8330 | METHOD | N 0 1 | 1,3,5-TNB | .0004 | mg/L | U | N | Y | U | U | | | | | | 02K234-01 | 18:38 |
| | | | | 1,3-DNB | .0004 | mg/L | U | N | Y | U | U | | | | | | 02K234-01 | 18:38 |
| | | | | 2,4,6-TNT | .0004 | mg/L | U | N | Y | U | U | | | | | | 02K234-01 | 18:38 |
| | | | | 2,4-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | 02K234-01 | 18:38 |
| | | | | 2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | 02K234-01 | 18:38 |
| | | | | 2-AM-4,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | 02K234-01 | 18:38 |
| | | | | 2-NITROTOLUENE | .0004 | mg/L | U | N | Y | U | U | | | | | | 02K234-01 | 18:38 |
| | | | | 3-NITROTOLUENE | .0006 | mg/L | U | N | Y | U | U | | | | | | 02K234-01 | 18:38 |
| | | | | 4-AM-2,6-DNT | .0004 | mg/L | U | N | Y | U | U | | | | | | 02K234-01 | 18:38 |
| | | | | 4-NITROTOLUENE | .0006 | mg/L | U | N | Y | U | U | | | | | | 02K234-01 | 18:38 |
| | | | | HMX | .0004 | mg/L | U | N | Y | U | U | | | | | | 02K234-01 | 18:38 |
| | | | | NITROBENZENE | .0004 | mg/L | U | N | Y | U | U | | | | | | 02K234-01 | 18:38 |
| | | | | RDX | .0004 | mg/L | U | N | Y | U | U | | | | | | 02K234-01 | 18:38 |
| | | | | TETRYL | .0004 | mg/L | U | N | Y | U | U | | | | | | 02K234-01 | 18:38 |