

## EXECUTIVE SUMMARY

This Quality Control Summary Report (QCSR) provides a detailed evaluation and validation of the analytical data obtained during the Remedial Investigation conducted by James M. Montgomery, Consulting Engineers, Inc. (JMM) for Operable Unit 1 at Hill Air Force Base, Utah. During the RI, soil, sediment, surface water, and groundwater samples were collected and analyzed. The analyses performed included: volatile organic compounds, base neutral and acid extractable compounds, total fuel hydrocarbons, metals, and anions (for water samples only). In addition to the data evaluation, the report contains a concise discussion of the soil gas investigation, the deep and shallow soil boring program, inclinometer installation, monitoring well installation, geophysical logging, surveying, and soil, surface water and groundwater sampling.

Analytical data from the quality control samples were evaluated on the basis of precision, accuracy, representativeness, completeness, and comparability, and were used to validate associated sample data. Precision was evaluated using the results of the matrix spike/matrix spike duplicate sampling pairs, laboratory control sample pairs, and field duplicate sample pairs. Accuracy was evaluated using the analytical results of the matrix spike/matrix spike duplicate samples, laboratory control samples, and surrogate spike samples. Representativeness was evaluated by the results of method blank, equipment blank, trip blank, and field duplicate analyses. Completeness was determined by holding time criteria and the evaluation of precision and accuracy. Comparability was achieved by using standard analytical methods, field procedures, and units of measure.

With the few exceptions that are noted, the results of the QC sample analyses indicate that the precision and accuracy goals of 90 percent were achieved for all analyses, and the measured concentrations are representative of environmental conditions. The completeness goal of 90 percent for this project was also met and all data are considered valid with the exception of one volatile organic analysis that exceeded its holding time, seven base neutral and acid extractable analyses whose surrogate spike recoveries were outside the QC limit, and one pair of field duplicates for which precision criteria were not met for the metals analyses. Although these exceptions are not quantitatively valid, the results can be used on a qualitative basis.

Overall, the data generated during this Remedial Investigation are, with few exceptions, valid and can be used with a high degree of confidence to evaluate environmental conditions at Operable Unit 1. All of the QC criteria goals and data quality objectives outlined in the RI/FS Work Plan and the QAPP (JMM, 1990) were met.