



Basic Options for Automated Environmental Data Verification
(Additional/Custom Options Available Upon Request)

Reporting Limits (Client Defined)	Client-defined (estimated) reporting limit (RL) exceeded
Screening Levels (Client Defined)	Reportable result (detect or non-detect) exceeds screening value RL exceeds screening value Method detection limit (MDL) exceeds screening value
Detection Limits	Sample result is between the MDL and RL
Completeness	No trip blank No method blank No laboratory control sample (LCS) or blank spike No post-digestion spike No matrix spike (MS) No LCS or blank spike duplicate No MS duplicate No surrogate analyses
Blanks	Parameter detected in blank above RL in field, trip, or rinsate blank Parameter detected in blank above RL in method blank Parameter in preparation blank below the RL Parameter in preparation blank above MDL and below RL Parameter detected in blank above RL in storage blank Parameter detected in blank above RL in calibration blank Parameter detected in blank above RL in reagent blank Negative concentration reported in blank Parameter detected in equipment blank at or greater than RL Parameter detected in equipment blank less than RL Parameter detected in trip blank at or greater than RL Parameter detected in trip blank less than RL Parameter detected in ambient conditions blank at or greater than RL Parameter detected in ambient conditions blank less than RL Parameter detected in field blank at or greater than RL Parameter detected in field blank less than RL Parameter detected in sample and method blank less than RL
Duplicates	Field Duplicate relative percent difference (RPD) acceptance limit exceeded Laboratory Duplicate RPD acceptance limit exceeded



Hold Times	Analysis holding time exceeded Extraction holding time exceeded
Laboratory Control Samples	LCS/LCSD recovery above upper acceptance limit LCS/LCSD recovery below lower acceptance limit More than half LCS/LCSD recoveries outside acceptance limits 25% or more LCS/LCSD recoveries outside acceptance limits LCS/LCSD RPD acceptance limit exceeded
Matrix Spikes	MS/MSD recovery below lower limit MS/MSD recovery above upper limit MS/MSD RPD acceptance limit exceeded MS performed on field quality control (QC) blank Post-digestion spike recovery above upper limit Post-digestion spike recovery below lower limit Post-digestion spike performed on field QC blank Spike recovery possibly affected by sample dilution
Surrogate Recoveries	Surrogate recovery above upper acceptance limit Surrogate recovery below lower acceptance limit
Dissolved	Total dissolved result greater than total and difference outside criteria
Moisture	Percent moisture result exceeds 50%
Calculation Checks	RPD calculation checks Percent recovery checks

Notes:

Client-defined verification, customized reporting and validation services are available upon request.
For a complete list of verification and validation services, contact our data group at data@rubikenv.com.