

**TABLE A-15**

Quality Control Acceptance Criteria for Method E350.2 — Nitrogen, Ammonia

**RL - Water = 0.3 mg/L**  
**Accuracy Water (% R) = 75-125**  
**Precision Water (RPD) = ±20**

QC Check	Minimum Frequency	Acceptance Criteria	Corrective Action <sup>a</sup>	Flagging Criteria <sup>b</sup>
Initial Calibration (4 standards and a blank)	Daily before analysis	$r > 0.995$ Calibration MUST meet acceptance criteria prior to sample analysis.	Identify and repeat outlying point(s); recalculate curve using repeated point(s).	Apply R to all results for specific analyte(s) for all samples associated with the calibration
Initial calibration verification (ICV) and continuing calibration verification (CCV)	ICV after calibration; CCV after every 10 samples and at end of run	Response within ±15%.	1) Repeat ICV ; if still out, correct the problem, recalibrate and reanalyze 2) If CCV fails, recalibrate and reanalyze all samples analyzed since last valid CCV.	Apply J to positive results and UJ for non-detects for all results for specific analyte(s) for all samples associated with the calibration
Method blank	1 per preparation batch and analytical batch	< RL	1) If sample analyte concentration is < RL or if the sample analyte concentration is > 10 times the concentration in the method blank, no further action is required 2) If preparative method blank does not meet item 1), re-distill/re-analyze if still within HT and enough sample volume; if not within HT or enough sample, contact project chemist for decision.	Apply U to all results for the specific analyte in all samples in the associated analytical batch whose concentration is less than 5 times the blank concentration.
Laboratory control sample (LCS)	1 per preparation batch and analytical batch	80-120 % recovery	1) If the preparative LCS recovers high outside the acceptance criteria and the analyte is ND, no action is required 2) If the preparative LCS fails the acceptance criteria (other than shown in item 1), re-distillation and reanalysis will be necessary if samples are still within holding time and enough sample volume; if not, contact the project chemist for a decision for possible resampling.	For specific analyte in all samples in the associated analytical batch: if the LCS %R > UCL, apply J to all positive results  if the LCS %R < LCL, apply J to all positive results, apply UJ to all non-detects. If LCS <50%, R flag results.
Matrix spike/matrix spike duplicate (MS/MSD)	One MS/MSD per 40 samples	75-125 % recovery and RPD <20%	If the MS and/or MSD is outside of either accuracy or precision tolerances, reanalyze and double check calculations	For specific analyte in all samples in the associated analytical batch: if the MS/MSD is > UCL, J all hits; if < LCL but greater than 30%, J all hits, UJ all non-detects. If < 30%, R all non-detects and J all hits. If precision outside criteria, J all hits, UJ all non-detects.
Field duplicate	Minimum 10% of field samples	RPD 20 for waters, 35 for soils	Project chemist will evaluate results for possible source of variability; notify data users.	none

<sup>a</sup> All corrective actions associated with project work shall be documented, and all records shall be maintained by the laboratory.

<sup>b</sup> Flagging criteria are applied when acceptance criteria were not met and corrective action was not successful or corrective action was not performed.