

Table A-25

Quality Control Acceptance Criteria for Method E405.1 — Biochemical Oxygen Demand

RL - Water = 10 mg/L
Precision Water (RPD) = ±20

QC Check	Minimum Frequency	Acceptance Criteria	Corrective Action ^a	Flagging Criteria ^b
Probe calibration	Daily (prior to sample analysis)	Manufacturer recommendations	None	None
Dilution Water Blank	One per analytical batch	< 0.2 mg/L dissolved oxygen depletion	Correct problem then reprep and analyze dilution water blank	Apply J to all positive results and UJ to non-detects for all results in the associated analytical batch.
Laboratory Control Sample (LCS) - (glucose/glutamic acid)	One per preparation and analytical batch	Laboratory Control Limits	Correct problem then reprep and analyze the LCS	For specific analyte(s) 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 <10%, R flag results.
Duplicates	One duplicate per every 40 samples	RPD <20%	None	Flagging to be based on site information and reviewer's judgement. Recommended flags are J for positive results and UJ for non-detects.
MDL study	Once per year	Detection limits established shall be < the RLs in this table	None	Apply R to all results for the specific analyte(s) in all samples analyzed

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

^b Flagging criteria are applied when acceptance criteria were not met and corrective action was not successful or corrective action was not performed.