DEQ Guidance on PT testing:

The laboratory’s proficiency testing (PT) must be handled, managed, analyzed and reported in the same manner as actual environmental samples utilizing the same staff and methods as used for routine analysis, procedures, equipment, facility and frequency of analysis. Oklahoma Laboratory Accreditation Rules OAC 252:301, Field Accreditation Rules OAC 252:302, TNI Accreditation Rules OAC 252:303 and DMRQA all require this for processing of PTs.

What does it mean to analyze PT samples as routine environmental samples?

The following items are not all inclusive but are guidelines to help meet the requirements. Laboratories must have documentation showing how the laboratory handled the PT samples. Accreditation staff will review these records for compliance to the rules.

a) The Laboratory must log in the PT samples as routine samples and track them through the laboratory system in the same manner as routine samples;

b) Make sure the analyst prepares PT samples according to the PT provider’s instructions and then subsequently handle as a routine sample;

c) The laboratory must analyze the PT samples under the same analytical conditions and instrument calibrations as routine samples;

d) The type, composition, concentration, and frequency of quality control samples analyzed with the PT samples are to be the same as with routine samples;

e) PT samples are not to be analyzed multiple times unless routine samples are analyzed multiple times and the results from multiple analyses are calculated in the same manner as routine samples;

f) The laboratory must have procedures in place for the analysis of environmental and PT samples when the concentration range of the samples is outside of its normal range of measurement;

g) The laboratory must perform corrective action for any unacceptable evaluation received from the PT provider for any method or analyte and must report it to the DEQ within 45 days of receipt of results;

h) A laboratory is not allowed to purchase QC standards that are specifically designed for a given PT sample or if the PT provider has given the laboratory analysis instructions beyond those specified;

i) The laboratory is allowed to analyze the same PT sample using different technologies and/or multiple test methods for any analytical test method per technology per analyte. If an unacceptable score for either test method is reported the results for both methods and technologies will be scored as unacceptable.