UNITED STATES DEPARTMENT OF DEFENSE

Data Validation Guidelines Modules 1, 2, 3, and 4 Revised Table for Sample Qualification in the Presence of Blank Contamination

Environmental Data Quality Workgroup

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Data Validation Guidelines
Modules 1, 2, 3, and 4
Revised Table for Sample Qualification in the Presence of Blank Contamination

NEBELSICK.JOHN.D.1231361207 Digitally signed by NEBELSICK.JOHN.D.1231361207
Date: 2022.02.14 17:28:53 -06'00'

John Nebelsick — Date
Army Principal

GILLETTE.JOHN.S.1123328350 Digitally signed by GILLETTE.JOHN.S.1123328350
Date: 2022.02.10 12:36:33 -06'00'

John Gillette, Ph.D. — Date
Air Force Principal

ADELSON.JORDAN.M.1268693137 Digitally signed by ADELSON.JORDAN.M.1268693137
Date: 2022.02.09 10:44:41 -05'00'

Jordan Adelson, Ph.D. — Date
Navy Principal, EDQW Chair

The Table A below replaces the following tables in the DoD Data Validation Guidelines Modules and supersedes the previous replacement table dated 05/05/2021.

Module 1, Table III

Module 2, Table I

Module 3, Table II

Module 4, Table III

Table A: Sample Qualification in the Presence of Blank Contamination

	Sample		
Row Number	**Result**	**Validated Result**	**Validation Qualifier**
1	**non-detect or detect ≤ LOD**	**Report at LOD**	**U**
2	**> LOD and ≤ 5x blank**	**Report at Sample Result**	**J+**
3	**> 5x blank**	**Report at Sample Result**	**None**

LOD = Limit of Detection

Note 1: The laboratory blank contamination qualifier (typically, B) is a part of the laboratory report. The validation qualifier is identified in the validation report with reason codes for the qualifiers traceable to the blank contamination. See the General Data Validation Guidelines appendices 5 and 7 for examples. During the data usability assessment, the DUA team has both sets of information available.

Note 2: The Data Validation Subgroup acknowledges the differences in the QSM requirements for qualification of the method blank by the laboratory and qualification of all blanks by the validator. The method blank, having gone through only the laboratory processing steps and not the field sample handling, should be the most controlled of the blanks. Additionally, the laboratory may reprocess the method blank and samples in order to address the contamination. The laboratory does not evaluate the results of or qualify data based upon field, equipment, trip, or other blanks.

The Data Validation Subgroup encourages project development teams to set acceptance requirements for blanks based upon project DQOs. In the absence of those project-specific requirements, these guidelines are written to allow for a higher blank contamination tolerance resulting in a more conservative approach to qualification based upon potential contamination. In other words, the assumption that detects in samples are attributed to contamination rather than true sample concentration is minimized, thus minimizing the assumption of false positives.

It is expected that during data usability analysis, the DUA team will review qualifications from the laboratory and from the validator as well as comments contained in the laboratory case narrative and the validation report. The DUA team can then take into consideration whether they believe it more appropriate to consider a result qualified as biased high as a non-detect based upon decision criteria and other quality measures within the data set.