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| <b>Date:</b> 12/04/2024   | <b>MA:</b> 3106.1 | <b>Title:</b> ICP-MS Analysis Plus Mo |  |  |
| <b>Method Source:</b> SFAM01.1  |                   | <b>Method:</b> ICP-MS                 |  |  |
| <b>Matrix:</b> Aqueous/Water  |                   |                                       |  |  |
| <b>Summary of Modification</b>  |                   |                                       |  |  |
| The purpose of this modified analysis is to analyze aqueous/water samples for the Target Analytes plus the specified additional analyte by ICP-MS. Unless specifically modified by this modification, all analyses, Quality Control (QC), and reporting requirements specified in the SOW listed in your current EPA agreement remain unchanged and in full force and effect. |                   |                                       |  |  |
| <b>I. Analyte Modifications</b>   |                   |                                       |  | <b>Not applicable</b> <input type="checkbox"/> |

| Analyte         | CAS Number | CRQL (µg/L) | MDL (µg/L) | Spike (µg/L) |
|-----------------|------------|-------------|------------|--------------|
| Molybdenum (Mo) | 7439-98-7  | 5.0         | <5.0       | 50           |

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| <b>II. Calibration and QC Requirements</b>  |  |  |  | <b>Not applicable</b> <input type="checkbox"/>            |
| The Laboratory shall: <ul style="list-style-type: none"> <li>• Ensure that the Method Detection Limit has been determined for Mo in aqueous/water matrix by the preparation and analysis methods used for the samples.</li> <li>• Ensure that the MDL is less than the CRQL for Mo.</li> <li>• Perform the Initial Calibration with a blank and at least one non-blank standard at or below the modified CRQL for Mo.</li> <li>• Add Mo to the ICV and CCV at appropriate mid-point concentration.</li> <li>• Evaluate the ICB and CCB against the modified CRQL for Mo.</li> <li>• Evaluate the Preparation Blanks using the modified CRQL for Mo.</li> <li>• Prepare the Matrix Spike at the modified level. Post-Digestion Spike requirements are per the SOW.</li> <li>• Flag the Duplicates based on the modified CRQL for Mo.</li> <li>• Add Mo to the LCS at 2 times the modified CRQL.</li> </ul> |  |  |  |   |
| <b>III. Preparation and Method Modifications</b>  |  |  |  | <b>Not applicable</b> <input checked="" type="checkbox"/> |
| <b>IV. Special Reporting Requirements</b>   |  |  |  | <b>Not applicable</b> <input type="checkbox"/>            |
| The Laboratory shall: <ul style="list-style-type: none"> <li>• Report the "J" and "U" qualifiers in accordance with the requirements in Exhibit B, Section 3.4.3.2.4.2, using the modified CRQLs.</li> <li>• Add Mo to Form 1.</li> <li>• Ensure that the SDG Narrative is updated as stated in the SOW, including any technical and administrative problems encountered and the corrective action taken. These problems may include interference problems encountered during analysis, dilutions, re-analyses or re-preparations performed, and problems with the analysis of samples. Also include a discussion of any SOW Modified Analysis including a copy of the approved modification with the SDG Narrative.</li> </ul>   |  |  |  |   |

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| <b>Date:</b> 05/11/2017  | <b>MA:</b> 3157.0     | <b>Title:</b> ICP-MS Analysis Plus Molybdenum  |
| <b>Method Source:</b> SFAM01.1   | <b>Method:</b> ICP-MS |  |
| <b>Matrix:</b> Soil/Sediment   |                       |  |
| <b>Summary of Modification</b>   |                       |  |
| The purpose of this modified analysis is to analyze soil/sediment samples by ICP-MS with the addition of the non-routine analyte Molybdenum (Mo). Unless specifically modified by this modification, all analyses, Quality Control (QC), and reporting requirements specified in the SOW listed in your current EPA agreement remain unchanged and in full force and effect. |                       |  |
| <b>I. Analyte Modifications</b>  |                       | <b>Not applicable</b> <input type="checkbox"/> |

| Analyte         | CAS Number | CRQL (mg/kg) | Spike Added (mg/kg) |
|-----------------|------------|--------------|---------------------|
| Molybdenum (Mo) | 7439-98-7  | 2.0          | 100                 |

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| <b>II. Calibration and QC Requirements</b>  | <b>Not applicable</b> <input type="checkbox"/>            |
| <p>The Laboratory shall:</p> <ul style="list-style-type: none"> <li>• Ensure that a Method Detection Limit has been determined for Mo in soil/sediment matrix by the preparation method used for the samples that meets all applicable SOW requirements.</li> <li>• Perform the Initial Calibration with at least one non-blank standard at or below the modified CRQL, converted to µg/L.</li> <li>• Add Mo to the ICV and CCV at appropriate mid-range concentrations.</li> <li>• Evaluate the ICB and CCB against the modified CRQL converted to µg/L.</li> <li>• Evaluate the Preparation Blanks using the modified CRQL.</li> <li>• Perform the Matrix Spike at the level specified above. Post-digestion spike requirements are per the SOW.</li> <li>• Flag the Duplicates based on the modified CRQL.</li> <li>• Prepare the LCS at 2 times the modified CRQL.</li> </ul> |   |
| <b>III. Preparation and Method Modifications</b>  | <b>Not applicable</b> <input checked="" type="checkbox"/> |
| <b>IV. Special Reporting Requirements</b>   | <b>Not applicable</b> <input type="checkbox"/>            |
| <p>The Laboratory shall:</p> <ul style="list-style-type: none"> <li>• Add Molybdenum to Form 1.</li> <li>• Report the "J" and "U" qualifiers in accordance with the requirements in Exhibit B, Section 3.4.3.2.4.2, using the modified CRQL.</li> <li>• Ensure that the SDG Narrative is updated as stated in the SOW, including any technical and administrative problems encountered and the corrective action taken. These problems may include interference problems encountered during analysis, dilutions, re-analyses or re-preparations performed, and problems with the analysis of samples. Also include a discussion of any SOW Modified Analysis including a copy of the approved modification with the SDG Narrative.</li> </ul>   |   |