



# St. Johns River

## Water Management District

Ann B. Shortelle, Ph.D., Executive Director

4049 Reid Street • P.O. Box 1429 • Palatka, FL 32178-1429 • 386-329-4500  
On the internet at [www.sjrwmd.com](http://www.sjrwmd.com).

DATE: April 24, 2020  
TO: Prospective Respondents  
FROM: Carol Taylor Miller, Senior Procurement Specialist  
SUBJECT: Addendum #1 to Quote Request #35597 for Ammonia Gas Diffusion Autoanalyzer

As a result of a question asked by a vendor, we are providing the information below.

### **QUESTION:**

1. Section III, Part C (3) states “Detection Limit must be 5 ppb or better. A measurement range of 5 ppb to 400 ppb N must be attainable”
  - How is the detection limit of 5 ppb calculated?
  - Is 5 ppb the lowest calibration point used when calibrating up to 400 ppb?

### **ANSWER:**

To answer the first question this is taken from our SOP for MDL Determination:

Method Detection Limit (MDL) Determination The MDL Determination is performed for each analyte/instrument whenever there is a change in the test method that affects the sensitivity or when there is a change in the instrumentation.

SJRWMD utilizes the EPA’s Method and Procedure for the Determination of the Method Detection Limit, revision 2 (CFR 40, part 136, appendix B) as a guide to MDL Determination.

1. An initial MDL is performed when new instrumentation is implemented or a significant change in the test method has occurred. Form QID 3792 is used for new instrument implementation and changes that may affect sensitivity. This form includes a calculated MDL value based on the SD and results of a verification analysis with an expected recovery of 70%-130%. This form is also referenced in QID 2065, Implementing Laboratory Methods and Analysis.

Document Name: SOP Demonstration of Capability and MDL Determination QID 797

---

#### GOVERNING BOARD

Douglas Burnett, CHAIRMAN  
ST. AUGUSTINE

Ron Howse, TREASURER  
COCOA

Douglas C. Bournique  
VERO BEACH

Daniel Davis  
JACKSONVILLE

Susan Dolan  
SANFORD

2. The MDL procedure is not applicable to certain analytes at the SJRWMD Laboratory including: BOD, Color, Chlorophyll, pH, Specific Conductance, Turbidity, TSS, VSS, TDS [see section 4 in Method Detection Limit (MDL) Determination for SJRWMD protocol for these analytes].

3. The MDL is determined using the following protocol:

3.1. Spiking level typically 2-10 times the MDL (once spiking level is determined, this value is used unless a change is approved by QAO)

3.1.1. If changed an initial MDL must be repeated at this level

3.2. For each analyte perform seven analyses of spiked sample

3.2.1. Spiked samples used must be prepared in at least 3 batches on 3 separate calendar days

3.2.2. At least two spiked samples in each batch

3.2.3. If more than one instrument for an analyte, process seven samples for each instrument

As to the **second question**, we are currently using 5 ppb as the lowest calibration point when calibrating to 400 ppb.

**NOTE:** The Quote submittal date remains **April 29, 2020, 2:00 p.m.** Quote must be emailed to [cmiller@sjrwmd.com](mailto:cmiller@sjrwmd.com) as an attachment in PDF format.

If you have any questions, please call me at (386) 329-4170 or e-mail [cmiller@sjrwmd.com](mailto:cmiller@sjrwmd.com).