



Division of Drinking  
and Ground Waters

## INSTRUCTIONS FOR REPORTING NITRATE AND NITRITE ANALYTICAL RESULTS

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These instructions provide information concerning the reporting of nitrate and nitrite analytical results on the required Ohio EPA Inorganic Form 5020. Report forms will need to be corrected if not completed in accordance with these instructions. If you have any questions regarding this information, please contact Wendy Sheeran or Holly Kaloz at (614) 644-2752.

### SECTION 1: Analytical Information

As a reference, the following table lists applicable Maximum Contaminant Levels (MCLs), reporting limits, preservatives and maximum holding times. Any sample that exceeds a MCL must be reported to Ohio EPA by the end of the next business day. All other samples must be reported by the tenth day following the month in which the analysis was completed.

Analyte	MCL	Ohio EPA Reporting Limit*	Preservative	Maximum Holding Time
Nitrate	10 mg/L	0.5 mg/L	4°C	48 hours (14 days if chlorinated)
Nitrite	1 mg/L	0.1 mg/L	4°C	48 hours
Nitrate-Nitrite	10 mg/L	0.5 mg/L	H <sub>2</sub> SO <sub>4</sub>	28 days

\* Ohio EPA reporting limits are the values at and above which laboratories are required to quantify contaminants. Laboratories should report according to their analytical capability (even if lower than the Ohio EPA reporting limit), but should not report non-detections above the reporting limit.

### SECTION 2: Reporting Instructions

#### UNACIDIFIED SAMPLE USING NON-CADMIUM REDUCTION METHOD

(EPA 300.0, SM 4110-B, SM 4500 NO[3]D, or SM 4500-NO[2]-B)

Enter the value for nitrate **as analyzed** in the line for nitrate (1040) and/or enter the value for nitrite **as analyzed** in the line for nitrite (1041).

Parameters	Cont. ID	Sign	Result	Unit	Analysis Date	Method	Analyst Number
Nitrate	1040	+	2.38	mg/L	01/01/03	300.0	9999
Nitrate-Nitrite	1038			mg/L			
Nitrite	1041	<	0.1	mg/L	01/01/03	300.0	9999

Note: Use method code if reporting using paper SSRs (i.e. use 96 for method 300.0)

**ACIDIFIED SAMPLE AND/OR SAMPLE RUN BY CADMIUM REDUCTION METHOD**

(EPA 353.2, SM 4500 NO[3]-E, or SM 4500 NO[3]-F)

Analytical results for acidified samples or for samples analyzed by a cadmium reduction method represent a nitrate-nitrite combined total since individual nitrate or nitrite species cannot be identified. If a separate nitrite analysis is run for the sample, a nitrate value may be obtained by subtracting the nitrite result from the combined nitrate-nitrite result. Otherwise, the nitrate value is assumed to be equal to the combined nitrate-nitrite result, and an assumed value for nitrite may be reported if the combined nitrate-nitrite result is  $\leq 0.1$  mg/L.

**If nitrite was analyzed separately:**

1. Enter the nitrate-nitrite combined value **as analyzed** in the line for nitrate-nitrite (1038).
2. Enter the value for nitrite **as analyzed** in the line for nitrite (1041).
3. a. If the nitrate-nitrite combined value is a detection, subtract the nitrite value from the nitrate-nitrite combined value, and enter the difference in the line for nitrate (1040). Non-detect nitrite results count as zero.
- b. If the nitrate-nitrite combined value is non-detect, enter the nitrate-nitrite combined value in the line for nitrate (1040).

**EXAMPLES**

Parameters	Cont. ID	Sign	Result	Unit	Analysis Date	Method	Analyst Number
Nitrate	1040	+	1.43	mg/L	01/01/03	353.2	9999
Nitrate-Nitrite	1038	+	1.68	mg/L	01/01/03	353.2	9999
Nitrite	1041	+	0.15	mg/L	01/01/03	353.2	9999

Parameters	Cont. ID	Sign	Result	Unit	Analysis Date	Method	Analyst Number
Nitrate	1040	<	0.5	mg/L	01/01/03	353.2	9999
Nitrate-Nitrite	1038	<	0.5	mg/L	01/01/03	353.2	9999
Nitrite	1041	+	0.02	mg/L	01/01/03	353.2	9999

**If nitrite was not analyzed separately:**

1. Enter the nitrate-nitrite combined value **as analyzed** in the line for nitrate-nitrite (1038).
2. Enter the nitrate-nitrite combined value in the line for nitrate (1040).
3. Assumed value for nitrite (1041) depends on result of nitrate-nitrite analysis, as follows:
  - a. If nitrate-nitrite is nondetect (laboratory reporting limit  $\leq 0.1$  mg/L), then enter the nitrate-nitrite combined value in the line for nitrite.
  - b. If nitrate-nitrite is detected  $\leq 0.1$  mg/L, enter a less than (<) sign, then enter the nitrate-nitrite combined value in the line for nitrite.
  - c. If nitrate-nitrite is detected  $> 0.1$  mg/L or nondetect (laboratory reporting limit  $> 0.1$  mg/L), then do not enter a value in the line for nitrite.

Parameters	Cont. ID	Sign	Result	Unit	Analysis Date	Method	Analyst Number
Nitrate	1040	<	0.1	mg/L	01/01/03	353.2	9999
Nitrate-Nitrite	1038	<	0.1	mg/L	01/01/03	353.2	9999
Nitrite	1041	<	0.1	mg/L	01/01/03	353.2	9999

Parameters	Cont. ID	Sign	Result	Unit	Analysis Date	Method	Analyst Number
Nitrate	1040	+	0.065	mg/L	01/01/03	353.2	9999
Nitrate-Nitrite	1038	+	0.065	mg/L	01/01/03	353.2	9999
Nitrite	1041	<	0.065	mg/L	01/01/03	353.2	9999

Parameters	Cont. ID	Sign	Result	Unit	Analysis Date	Method	Analyst Number
Nitrate	1040	+	0.165	mg/L	01/01/03	353.2	9999
Nitrate-Nitrite	1038	+	0.165	mg/L	01/01/03	353.2	9999
Nitrite	1041						

Note: Use method code if reporting using paper SSRs (i.e. use 99 for method 353.2)