

**INDEPENDENT TESTING LAB**

830 ROBINWOOD COURT, TRAVERSE CITY, MI 49686

PH: 231-929-0905

FAX: 231-929-0894

[www.gtanalytical.com](http://www.gtanalytical.com)

Company: VILLAGE OF KALKASKA  
Name:  
ClientProj: MONTHLY  
GTA ProjNo: 030320-2

Site Addr: 1005 ISLAND LAKE RD  
KALKASKA  
Sampled By: JAKE TURNIPSEED/VOK  
Date Rec: 3/3/2020  
Time Rec: 9:42 AM

| Sample No. | Sample ID | Date Sampled | Time Sampled | Sample Matrix |
|------------|-----------|--------------|--------------|---------------|
| 1          | INFLUENT  | 3/3/2020     | 7:44 AM      | WATER         |
| 2          | EFFLUENT  | 3/3/2020     | 7:47 AM      | WATER         |

ELECTRONIC SIGNATURE REPORT. This is a final report for the following pages of data for the samples specified above. All analysis was performed by the methods stated and all quality control measures required were completed. All quality control information is available upon request.

*Kirk Chase*

Kirk L. Chase/Chemist  
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830 Robinwood Court  
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|             |                     |                 |          |
|-------------|---------------------|-----------------|----------|
| COMPANY:    | VILLAGE OF KALKASKA | GTA PROJECT NO: | 030320-2 |
| PROJECT NO: | MONTHLY             | GTA SAMPLE NO:  | 1        |
| LOCATION:   | 1005 ISLAND LAKE RD | DATE RECEIVED:  | 3/3/2020 |
|             | KALKASKA            | TIME RECEIVED:  | 9:42 AM  |
|             | MI                  | DATE SAMPLED:   | 3/3/2020 |
|             |                     | TIME SAMPLED:   | 7:44 AM  |
| SAMPLED BY: | JAKE TURNIPSEED/VOK | SAMPLE MATRIX:  | WATER    |
| SAMPLE ID:  | INFLUENT            |                 |          |

### SAMPLE ANALYSIS

| <u>Analysis</u>            | <u>Concentration</u> | <u>LOD</u> | <u>Units</u> | <u>Analyst</u> | <u>Date Complete</u> |
|----------------------------|----------------------|------------|--------------|----------------|----------------------|
| AMMONIA-N EPA 350.1        | 25                   | 0.30       | mg/L (PPM)   | KC             | 3/3/2020             |
| TOTAL PHOSPHORUS EPA 365.2 | 5.2                  | 0.050      | mg/L (PPM)   | LV             | 3/5/2020             |

ND = NOT DETECTED, RESULT < LOD

LOD = LIMIT OF DETECTION

s.u. = STANDARD pH UNITS REPORTED AT 25 C

DISS = DISSOLVED

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COMPANY: VILLAGE OF KALKASKA  
PROJECT NO: MONTHLY  
LOCATION: 1005 ISLAND LAKE RD  
KALKASKA  
MI  
SAMPLED BY: JAKE TURNIPSEED/VOK  
SAMPLE ID: EFFLUENT

GTA PROJECT NO: 030320-2  
GTA SAMPLE NO: 2  
DATE RECEIVED: 3/3/2020  
TIME RECEIVED: 9:42 AM  
DATE SAMPLED: 3/3/2020  
TIME SAMPLED: 7:47 AM  
SAMPLE MATRIX: WATER

**SAMPLE ANALYSIS**

| <b><u>Analysis</u></b>     | <b><u>Concentration</u></b> | <b><u>LOD</u></b> | <b><u>Units</u></b> | <b><u>Analyst</u></b> | <b><u>Date Complete</u></b> |
|----------------------------|-----------------------------|-------------------|---------------------|-----------------------|-----------------------------|
| AMMONIA-N EPA 350.1        | <0.030                      | 0.030             | mg/L (PPM)          | KC                    | 3/3/2020                    |
| CHLORIDE EPA 300.0         | 740                         | 10                | mg/L (PPM)          | LV                    | 3/3/2020                    |
| NITRATE-N EPA 300.0        | 0.21                        | 0.10              | mg/L (PPM)          | LV                    | 3/3/2020                    |
| NITRITE-N EPA 300.0        | <0.10                       | 0.10              | mg/L (PPM)          | LV                    | 3/3/2020                    |
| SODIUM DISS EPA 200.8      | 160                         | 5.0               | mg/L (PPM)          | MR                    | 3/13/2020                   |
| TOTAL PHOSPHORUS EPA 365.2 | 0.14                        | 0.010             | mg/L (PPM)          | LV                    | 3/5/2020                    |

ND = NOT DETECTED, RESULT &lt; LOD

LOD = LIMIT OF DETECTION

s.u. = STANDARD pH UNITS REPORTED AT 25 C

DISS = DISSOLVED

**G.T. ANALYTICAL****QAQC - METALS EPA 7000 SERIES**

Company: VILLAGE OF KALKASKA  
Proect no: MONTHLY  
Location: 1005 ISLAND LAKE RD  
KALKASKA  
MI

GTA Project No: 030320-2  
Date Rec: 03-Mar-20  
Time Rec: 9:42 AM

**CALIBRATION and INDEPENDENT CHECK**

| <u>Metals Method:</u> | <u>Date:</u>    | <u>Curve Correlation:</u> | <u>CONTINUING CALIBRATION:</u> |              |             |             | <u>INDEPENDENT CHECK:</u> |              |             |             |
|-----------------------|-----------------|---------------------------|--------------------------------|--------------|-------------|-------------|---------------------------|--------------|-------------|-------------|
|                       |                 |                           | <u>Units:</u>                  | <u>True:</u> | <u>Obs:</u> | <u>%DEV</u> | <u>Units:</u>             | <u>True:</u> | <u>Obs:</u> | <u>%DEV</u> |
| SODIUM EPA 200.8      | 3/13/2020       | 0.9997                    | PPB                            | 200          | 172         | -7.5        | PPB                       | 500          | 494         | -0.6        |
|                       | Blank Obs(PPB): | 3.80                      |                                |              |             |             |                           |              |             |             |

CURVE CORRELATION IS VALID IF IT IS AT LEAST 0.99XXX CURVE CORRELATION IS VALID IF IT IS AT LEAST 0.99XXX  
CONTINUING CAL AND INDEPENDENT CHECK MUST BE LESS THAN 20% DEVIATION.  
BLANK OBSERVED MUST BE ZERO OR LESS THAN DETECTION LIMIT.

### 3 QC TOTAL PHOSPHORUS EPA 356.3

CONTINUING CAL

DATE: 3/5/2020

|            | <u>TRUE PPM</u> | <u>OBS PPM</u> | <u>%DEV</u> | <u>+/-10%?</u> |
|------------|-----------------|----------------|-------------|----------------|
| PHOSPHORUS | 0.50            | 0.54           | -3.8        | PASS           |

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PROCEDURAL BLANK

DATE: 3/5/2020

|            | <u>OBS PPM</u> | <u>&lt;0.01PPM?</u> |
|------------|----------------|---------------------|
| PHOSPHORUS | 0              | PASS                |

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SPIKE/DUP SPIKE

DATE: 3/5/2020

SAMPLE: 030320-2-2

|            | <u>SPK OBS</u> | <u>TRUE</u> | <u>%REC</u> | <u>80-120%?</u> |
|------------|----------------|-------------|-------------|-----------------|
| PHOSPHORUS | 0.54           | 0.50        | 108         | PASS            |

|            | <u>DSPK OBS</u> | <u>TRUE</u> | <u>%REC</u> | <u>80-120%?</u> |
|------------|-----------------|-------------|-------------|-----------------|
| PHOSPHORUS | 0.53            | 0.50        | 106         | PASS            |

|            | <u>SPK</u> | <u>DSPK</u> | <u>%DEV</u> | <u>+/-15%?</u> |
|------------|------------|-------------|-------------|----------------|
| PHOSPHORUS | 108.0      | 106.0       | 0.9         | PASS           |

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# 1 QC EPA 300.0 ANIONS

CONTINUING CAL

DATE: 3/3/2020

|           | <u>TRUE PPM</u> | <u>OBS PPM</u> | <u>%DEV</u> | <u>+/-10%?</u> |
|-----------|-----------------|----------------|-------------|----------------|
| CHLORIDE  | 8               | 8.16           | -1.0        | PASS           |
| NITRATE-N | 3.52            | 3.58           | -0.8        | PASS           |
| NITRITE-N | 3.04            | 3.08           | -0.7        | PASS           |

BLANK

DATE: 3/3/2020

|           | <u>OBS PPM</u> | <u>&lt;0.1PPM?</u> |
|-----------|----------------|--------------------|
| CHLORIDE  | 0              | PASS               |
| NITRATE-N | 0              | PASS               |
| NITRITE-N | 0              | PASS               |

SPIKE/DUP SPIKE

DATE: 3/3/2020

SAMPLE: PROC BLANK

|           | <u>SPK OBS</u> | <u>TRUE</u> | <u>%REC</u> | <u>80-120%?</u> |
|-----------|----------------|-------------|-------------|-----------------|
| CHLORIDE  | 4.63           | 4           | 115.8       | PASS            |
| NITRATE-N | 1.80           | 1.84        | 97.8        | PASS            |
| NITRITE-N | 5.97           | 6.08        | 98.2        | PASS            |

|           | <u>DSPK OBS</u> | <u>TRUE</u> | <u>%REC</u> | <u>80-120%?</u> |
|-----------|-----------------|-------------|-------------|-----------------|
| CHLORIDE  | 4.66            | 4           | 116.5       | PASS            |
| NITRATE-N | 1.80            | 1.84        | 97.8        | PASS            |
| NITRITE-N | 6.00            | 6.08        | 98.7        | PASS            |

|           | <u>SPK</u> | <u>DSPK</u> | <u>%DEV</u> | <u>+/-10%?</u> |
|-----------|------------|-------------|-------------|----------------|
| CHLORIDE  | 115.8      | 116.5       | -0.3        | PASS           |
| NITRATE-N | 97.8       | 97.8        | 0.0         | PASS           |
| NITRITE-N | 98.2       | 98.7        | -0.3        | PASS           |

### 3 QC AMMONIA-N EPA 350.1

CONTINUING CAL

DATE: 3/3/2020

|           | <u>TRUE PPM</u> | <u>OBS PPM</u> | <u>%DEV</u> | <u>+/-10%?</u> |
|-----------|-----------------|----------------|-------------|----------------|
| AMMONIA-N | 0.50            | 0.55           | -4.8        | PASS           |

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PROCEDURAL BLANK

DATE: 3/3/2020

|           | <u>OBS PPM</u> | <u>&lt;0.01PPM?</u> |
|-----------|----------------|---------------------|
| AMMONIA-N | 0              | PASS                |

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SPIKE/DUP SPIKE

DATE: 3/3/2020

SAMPLE: 022520-6-1

|           | <u>SPK OBS</u> | <u>TRUE</u> | <u>%REC</u> | <u>80-120%?</u> |
|-----------|----------------|-------------|-------------|-----------------|
| AMMONIA-N | 0.51           | 0.5         | 102.0       | PASS            |

|           | <u>DSPK OBS</u> | <u>TRUE</u> | <u>%REC</u> | <u>80-120%?</u> |
|-----------|-----------------|-------------|-------------|-----------------|
| AMMONIA-N | 0.54            | 0.5         | 108.0       | PASS            |

|           | <u>SPK</u> | <u>DSPK</u> | <u>%DEV</u> | <u>+/-15%?</u> |
|-----------|------------|-------------|-------------|----------------|
| AMMONIA-N | 102        | 108         | -2.9        | PASS           |

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Traverse City, MI 49686  
Phone (231) 929-0905 Fax (231) 929-0894

## Chain of Custody Record

[illegible]