

**INDEPENDENT TESTING LAB**

830 ROBINWOOD COURT, TRAVERSE CITY, MI 49686

PH: 231-929-0905

FAX: 231-929-0894

www.gtanalytical.com

Company: VILLAGE OF KALKASKA
Name:
ClientProj: MONTHLY
GTA ProjNo: 120319-1

Site Addr: 1005 ISLAND LAKE RD
KALKASKA
Sampled By: JAKE TURNIPSEED/VOK
Date Rec: 12/3/2019
Time Rec: 10:20 AM

Sample No.	Sample ID	Date Sampled	Time Sampled	Sample Matrix
1	INFLUENT	12/3/2019	7:29 AM	WATER
2	EFFLUENT	12/3/2019	7:34 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
Grand Traverse Analytical
830 Robinwood Court
Traverse City, MI 49686
Ph: 231-929-0905
Fx: 231-929-0894
SP: 231-590-0291
kirk@gtanalytical.com



INDEPENDENT TESTING LAB

830 ROBINWOOD COURT, TRAVERSE CITY, MI 49686

PH: 231-929-0905

FAX: 231-929-0894

www.gtanalytical.com

COMPANY:	VILLAGE OF KALKASKA	GTA PROJECT NO:	120319-1
PROJECT NO:	MONTHLY	GTA SAMPLE NO:	1
LOCATION:	1005 ISLAND LAKE RD	DATE RECEIVED:	12/3/2019
	KALKASKA	TIME RECEIVED:	10:20 AM
	MI	DATE SAMPLED:	12/3/2019
		TIME SAMPLED:	7:29 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	27	0.30	mg/L (PPM)	KC	12/5/2019
TOTAL PHOSPHORUS EPA 365.2	4.3	0.050	mg/L (PPM)	LV	12/23/2019

ND = NOT DETECTED, RESULT < LOD

LOD = LIMIT OF DETECTION

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

DISS = DISSOLVED

**INDEPENDENT TESTING LAB**

830 ROBINWOOD COURT, TRAVERSE CITY, MI 49686

PH: 231-929-0905

FAX: 231-929-0894

www.gtanalytical.com

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: 120319-1
GTA SAMPLE NO: 2
DATE RECEIVED: 12/3/2019
TIME RECEIVED: 10:20 AM
DATE SAMPLED: 12/3/2019
TIME SAMPLED: 7:34 AM
SAMPLE MATRIX: WATER

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	0.35	0.015	mg/L (PPM)	KC	12/5/2019
CHLORIDE EPA 300.0	420	10	mg/L (PPM)	LV	12/3/2019
NITRATE-N EPA 300.0	1.2	0.10	mg/L (PPM)	LV	12/3/2019
NITRITE-N EPA 300.0	<0.10	0.10	mg/L (PPM)	LV	12/3/2019
SODIUM DISS EPA 200.8	330	2.5	mg/L (PPM)	MR	12/3/2019
TOTAL PHOSPHORUS EPA 365.2	0.14	0.010	mg/L (PPM)	LV	12/23/2019

ND = NOT DETECTED, RESULT < 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: 120319-1
Date Rec: 03-Dec-19
Time Rec: 10:20 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	12/3/2019	0.9997	PPB	200	240	9.1	PPB	500	580	7.4
	Blank Obs(PPB):	28.00								

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 AMMONIA-N EPA 350.1

CONTINUING CAL

DATE: 12/5/2019

	<u>TRUE PPM</u>	<u>OBS PPM</u>	<u>%DEV</u>	<u>+/-10%?</u>
AMMONIA-N	0.50	0.50	0.0	PASS

PROCEDURAL BLANK

DATE: 12/5/2019

	<u>OBS PPM</u>	<u><0.01PPM?</u>
AMMONIA-N	0	PASS

SPIKE/DUP SPIKE

DATE: 12/5/2019

SAMPLE: 112219-2-1

	<u>SPK OBS</u>	<u>TRUE</u>	<u>%REC</u>	<u>80-120%?</u>
AMMONIA-N	0.48	0.5	96.0	PASS

	<u>DSPK OBS</u>	<u>TRUE</u>	<u>%REC</u>	<u>80-120%?</u>
AMMONIA-N	0.49	0.5	98.0	PASS

	<u>SPK</u>	<u>DSPK</u>	<u>%DEV</u>	<u>+/-15%?</u>
AMMONIA-N	96	98	-1.0	PASS

3 QC TOTAL PHOSPHORUS EPA 356.3

CONTINUING CAL

DATE: 12/23/2019

	<u>TRUE PPM</u>	<u>OBS PPM</u>	<u>%DEV</u>	<u>+/-10%?</u>
PHOSPHORUS	0.50	0.51	-1.0	PASS

PROCEDURAL BLANK

DATE: 12/23/2019

	<u>OBS PPM</u>	<u><0.01PPM?</u>
PHOSPHORUS	0	PASS

SPIKE/DUP SPIKE

DATE: 12/23/2019

SAMPLE: 120319-1-2

	<u>SPK OBS</u>	<u>TRUE</u>	<u>%REC</u>	<u>80-120%?</u>
PHOSPHORUS	0.49	0.50	98	PASS

	<u>DSPK OBS</u>	<u>TRUE</u>	<u>%REC</u>	<u>80-120%?</u>
PHOSPHORUS	0.50	0.50	100	PASS

	<u>SPK</u>	<u>DSPK</u>	<u>%DEV</u>	<u>+/-15%?</u>
PHOSPHORUS	98.0	100.0	-1.0	PASS

1 QC EPA 300.0 ANIONS

CONTINUING CAL

DATE: 12/3/2019

	<u>TRUE PPM</u>	<u>OBS PPM</u>	<u>%DEV</u>	<u>+/-10%?</u>
CHLORIDE	8	8.04	-0.2	PASS
NITRATE-N	3.52	3.01	7.8	PASS
NITRITE-N	3.04	3.36	-5.0	PASS

BLANK

DATE: 12/3/2019

	<u>OBS PPM</u>	<u><0.1PPM?</u>
CHLORIDE	0	PASS
NITRATE-N	0	PASS
NITRITE-N	0	PASS

SPIKE/DUP SPIKE

DATE: 12/3/2019

SAMPLE: PROC BLANK

	<u>SPK OBS</u>	<u>TRUE</u>	<u>%REC</u>	<u>80-120%?</u>
CHLORIDE	4.44	4	111.0	PASS
NITRATE-N	1.75	1.84	95.1	PASS
NITRITE-N	5.51	6.08	90.6	PASS

	<u>DSPK OBS</u>	<u>TRUE</u>	<u>%REC</u>	<u>80-120%?</u>
CHLORIDE	NOT	4		FAIL
NITRATE-N	DONE	1.84		FAIL
NITRITE-N		6.08		FAIL

	<u>SPK</u>	<u>DSPK</u>	<u>%DEV</u>	<u>+/-10%?</u>
CHLORIDE	111.0	0.0	100.0	FAIL
NITRATE-N	95.1	0.0	100.0	FAIL
NITRITE-N	90.6	0.0	100.0	FAIL

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

monthly

[illegible]