

**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: 080420-3

Site Addr: 1005 ISLAND LAKE RD
KALKASKA
Sampled By: BRENDON WOLF/VOK
Date Rec: 8/4/2020
Time Rec: 11:50 AM

Sample No.	Sample ID	Date Sampled	Time Sampled	Sample Matrix
1	INFLUENT	8/4/2020	7:33 AM	WATER
2	EFFLUENT	8/4/2020	7:43 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

PROJECT NO: MONTHLY

LOCATION: 1005 ISLAND LAKE RD
KALKASKA
MI

SAMPLED BY: BRENDON WOLF/VOK

SAMPLE ID: INFLUENT

GTA PROJECT NO: 080420-3

GTA SAMPLE NO: 1

DATE RECEIVED: 8/4/2020
TIME RECEIVED: 11:50 AM

DATE SAMPLED: 8/4/2020
TIME SAMPLED: 7:33 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	33	0.30	mg/L (PPM)	KC	8/30/2020
TOTAL PHOSPHORUS EPA 365.2	6.2	0.050	mg/L (PPM)	LV	8/5/2020

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: BRENDON WOLF/VOK
SAMPLE ID: EFFLUENT

GTA PROJECT NO: 080420-3
GTA SAMPLE NO: 2
DATE RECEIVED: 8/4/2020
TIME RECEIVED: 11:50 AM
DATE SAMPLED: 8/4/2020
TIME SAMPLED: 7:43 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	0.082	0.030	mg/L (PPM)	KC	8/30/2020
CHLORIDE EPA 300.0	240	10	mg/L (PPM)	LV	8/4/2020
NITRATE-N EPA 300.0	1.2	0.10	mg/L (PPM)	LV	8/4/2020
NITRITE-N EPA 300.0	<0.10	0.10	mg/L (PPM)	LV	8/4/2020
SODIUM DISS EPA 200.8	220	5.0	mg/L (PPM)	MR	8/5/2020
TOTAL PHOSPHORUS EPA 365.2	1.5	0.010	mg/L (PPM)	LV	8/4/2020

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: 080420-3
Date Rec: 04-Aug-20
Time Rec: 11:50 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	8/5/2020	0.9999	PPB	200	194	-1.5	PPB	500	387	-12.7
	Blank Obs(PPB):	4.80								

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.

1 QC EPA 300.0 ANIONS

CONTINUING CAL

DATE: 8/4/2020

	<u>TRUE PPM</u>	<u>OBS PPM</u>	<u>%DEV</u>	<u>+/-10%?</u>
CHLORIDE	8	7.46	3.5	PASS
NITRATE-N	3.52	3.36	2.3	PASS
NITRITE-N	3.04	2.70	5.9	PASS

BLANK

DATE: 8/4/2020

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

SPIKE/DUP SPIKE

DATE: 8/4/2020

SAMPLE: PROC BLANK

	<u>SPK OBS</u>	<u>TRUE</u>	<u>%REC</u>	<u>80-120%?</u>
CHLORIDE	3.60	4	90.0	PASS
NITRATE-N	1.79	1.84	97.3	PASS
NITRITE-N	6.39	6.08	105.1	PASS

	<u>DSPK OBS</u>	<u>TRUE</u>	<u>%REC</u>	<u>80-120%?</u>
CHLORIDE	3.55	4	88.8	PASS
NITRATE-N	1.78	1.84	96.7	PASS
NITRITE-N	6.31	6.08	103.8	PASS

	<u>SPK</u>	<u>DSPK</u>	<u>%DEV</u>	<u>+/-10%?</u>
CHLORIDE	90.0	88.8	0.7	PASS
NITRATE-N	97.3	96.7	0.3	PASS
NITRITE-N	105.1	103.8	0.6	PASS

3 QC TOTAL PHOSPHORUS EPA 356.3

CONTINUING CAL

DATE: 8/4/2020

	<u>TRUE PPM</u>	<u>OBS PPM</u>	<u>%DEV</u>	<u>+/-10%?</u>
PHOSPHORUS	0.50	0.49	1.0	PASS

PROCEDURAL BLANK

DATE: 8/4/2020

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

SPIKE/DUP SPIKE

DATE: 8/4/2020

SAMPLE: 080420-3-2

	<u>SPK OBS</u>	<u>TRUE</u>	<u>%REC</u>	<u>80-120%?</u>
PHOSPHORUS	0.82	0.50	164	PASS

	<u>DSPK OBS</u>	<u>TRUE</u>	<u>%REC</u>	<u>80-120%?</u>
PHOSPHORUS	0.41	0.50	82	PASS

	<u>SPK</u>	<u>TRUE</u>	<u>%DEV</u>	<u>+/-15%?</u>
PHOSPHORUS	0.44	0.50	88	PASS

3 QC TOTAL PHOSPHORUS EPA 356.3

CONTINUING CAL

DATE: 8/11/2020

	<u>TRUE PPM</u>	<u>OBS PPM</u>	<u>%DEV</u>	<u>+/-10%?</u>
PHOSPHORUS	0.50	0.53	-2.9	PASS

PROCEDURAL BLANK

DATE: 8/11/2020

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

SPIKE/DUP SPIKE

DATE: 8/11/2020

SAMPLE: 080720-7-2

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

	<u>DSPK OBS</u>	<u>TRUE</u>	<u>%REC</u>	<u>80-120%?</u>
PHOSPHORUS	0.52	0.50	104	PASS

	<u>SPK</u>	<u>DSPK</u>	<u>%DEV</u>	<u>+/-15%?</u>
PHOSPHORUS	106.0	104.0	1.0	PASS

3 QC AMMONIA-N EPA 350.1

CONTINUING CAL

DATE: 8/30/2020

	<u>TRUE PPM</u>	<u>OBS PPM</u>	<u>%DEV</u>	<u>+/-10%?</u>
AMMONIA-N	0.50	0.52	-2.0	PASS

PROCEDURAL BLANK

DATE: 8/30/2020

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

SPIKE/DUP SPIKE

DATE: 8/30/2020

SAMPLE: 080520-1-1

	<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	0.47	0.5	94.0	PASS

	<u>SPK</u>	<u>DSPK</u>	<u>%DEV</u>	<u>+/-15%?</u>
AMMONIA-N	102	94	4.1	PASS

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

Monthly

[illegible]