Grand Traverse Analytical, LLC

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	Site Addr:	1005 ISLAND LAKE RD
Name:			
ClientProj:	QUARTERLY MONITOR WELLS		KALKASKA
		Sampled By:	BRENDON WOLF/IAI
GTA ProjNo:	021225-6	Date Rec:	2/12/2025
		Time Rec:	1:20 PM

Sample No.	Sample ID	Date Sampled	Time Sampled	Sample Matrix
1	MW-1	2/11/2025	2:33 PM	WATER
2	MW-2D	2/11/2025	12:21 PM	WATER
3	MW-2S	2/11/2025	11:32 AM	WATER
4	MW-3	2/11/2025	3:11 PM	WATER
5	MW-4	2/11/2025	10:30 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
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COMPANY:	VILLAGE OF KALKASKA	GTA PROJECT NO:	021225-6
		GTA SAMPLE NO:	1
PROJECT NO:	QUARTERLY MONITOR WELLS		
		DATE RECEIVED:	2/12/2025
LOCATION:	1005 ISLAND LAKE RD	TIME RECEIVED:	1:20 PM
	KALKASKA	DATE SAMPLED:	2/11/2025
	MI	TIME SAMPLED:	2:33 PM
SAMPLED BY:	BRENDON WOLF/IAI	SAMPLE MATRIX:	WATER
SAMPLE ID:	**MW-1**		

SAMPLE RESULTS

Analysis	Concentration	LOD	Units	Analyst	Date Completed
ALKALINITY SM 4500CO2D (BICARBONATE)	170	10	mg/L (PPM)	TR	2/28/2025
ALKALINITY SM 4500CO2D (CARBONATE)	ND	10	mg/L (PPM)	TR	2/28/2025
AMMONIA-N EPA 350.1	<0.015	0.015	mg/L (PPM)	KC	2/21/2025
CHLORIDE EPA 300.0	<10	10	mg/L (PPM)	KC/TR	2/13/2025
CONDUCTIVITY SM2510-B	360	1.0	uS/cm@25C	TR	2/13/2025
NITRATE-N EPA 300.0	<0.20	0.20	mg/L (PPM)	KC/TR	2/13/2025
NITRITE-N EPA 300.0	<0.20	0.20	mg/L (PPM)	KC/TR	2/13/2025
SODIUM DISS EPA 200.8	3.0	0.50	mg/L (PPM)	MR	2/17/2025
TOTAL PHOSPHORUS EPA 365.3	<0.010	0.010	mg/L (PPM)	TR	2/17/2025
TURBIDITY EPA 180.1 - LAB	<0.010	0.010	NTU	TR	2/17/2025

NTU = NEPHELOMETRIC TURBIDITY UNITS.

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	GTA PROJECT NO:	021225-6
		GTA SAMPLE NO:	2
PROJECT NO:	QUARTERLY MONITOR WELLS		
		DATE RECEIVED:	2/12/2025
LOCATION:	1005 ISLAND LAKE RD	TIME RECEIVED:	1:20 PM
	KALKASKA	DATE SAMPLED:	2/11/2025
	MI	TIME SAMPLED:	12:21 PM
SAMPLED BY:	BRENDON WOLF/IAI	SAMPLE MATRIX:	WATER
SAMPLE ID:	**MW-2D**		

SAMPLE RESULTS

Analysis	Concentration	LOD	Units	Analyst	Date Completed
ALKALINITY SM 4500CO2D (BICARBONATE)	230	10	mg/L (PPM)	TR	2/28/2025
ALKALINITY SM 4500CO2D (CARBONATE)	ND	10	mg/L (PPM)	TR	2/28/2025
AMMONIA-N EPA 350.1	<0.015	0.015	mg/L (PPM)	KC	2/21/2025
ARSENIC EPA 200.8	0.0017	0.0010	mg/L (PPM)	MR	2/17/2025
CHLORIDE EPA 300.0	260	10	mg/L (PPM)	KC/TR	2/13/2025
CONDUCTIVITY SM2510-B	1,300	1.0	uS/cm@25C	TR	2/13/2025
NITRATE-N EPA 300.0	<0.20	0.20	mg/L (PPM)	KC/TR	2/13/2025
NITRITE-N EPA 300.0	<0.20	0.20	mg/L (PPM)	KC/TR	2/13/2025
SODIUM DISS EPA 200.8	120	12	mg/L (PPM)	MR	2/17/2025
TOTAL PHOSPHORUS EPA 365.3	<0.010	0.010	mg/L (PPM)	TR	2/17/2025
TURBIDITY EPA 180.1 - LAB	0.23	0.010	NTU	TR	2/17/2025

NTU = NEPHELOMETRIC TURBIDITY UNITS.

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COMPANY:	VILLAGE OF KALKASKA	GTA PROJECT NO:	021225-6
		GTA SAMPLE NO:	3
PROJECT NO:	QUARTERLY MONITOR WELLS		
		DATE RECEIVED:	2/12/2025
LOCATION:	1005 ISLAND LAKE RD	TIME RECEIVED:	1:20 PM
	KALKASKA	DATE SAMPLED:	2/11/2025
	MI	TIME SAMPLED:	11:32 AM
SAMPLED BY:	BRENDON WOLF/IAI	SAMPLE MATRIX:	WATER
SAMPLE ID:	**MW-2S**		

SAMPLE RESULTS

Analysis	Concentration	LOD	Units	Analyst	Date Completed
ALKALINITY SM 4500CO2D (BICARBONATE)	210	10	mg/L (PPM)	TR	2/28/2025
ALKALINITY SM 4500CO2D (CARBONATE)	ND	10	mg/L (PPM)	TR	2/28/2025
AMMONIA-N EPA 350.1	<0.015	0.015	mg/L (PPM)	KC	2/21/2025
ARSENIC EPA 200.8	0.0020	0.0010	mg/L (PPM)	MR	2/17/2025
CHLORIDE EPA 300.0	210	10	mg/L (PPM)	KC/TR	2/13/2025
CONDUCTIVITY SM2510-B	1,200	1.0	uS/cm@25C	TR	2/13/2025
NITRATE-N EPA 300.0	1.6	0.20	mg/L (PPM)	KC/TR	2/13/2025
NITRITE-N EPA 300.0	<0.20	0.20	mg/L (PPM)	KC/TR	2/13/2025
SODIUM DISS EPA 200.8	150	12	mg/L (PPM)	MR	2/17/2025
TOTAL PHOSPHORUS EPA 365.3	0.22	0.010	mg/L (PPM)	TR	2/17/2025
TURBIDITY EPA 180.1 - LAB	0.51	0.010	NTU	TR	2/17/2025

NTU = NEPHELOMETRIC TURBIDITY UNITS.

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DISS = DISSOLVED

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COMPANY:	VILLAGE OF KALKASKA	GTA PROJECT NO:	021225-6
		GTA SAMPLE NO:	4
PROJECT NO:	QUARTERLY MONITOR WELLS		
		DATE RECEIVED:	2/12/2025
LOCATION:	1005 ISLAND LAKE RD	TIME RECEIVED:	1:20 PM
	KALKASKA	DATE SAMPLED:	2/11/2025
	MI	TIME SAMPLED:	3:11 PM
SAMPLED BY:	BRENDON WOLF/IAI	SAMPLE MATRIX:	WATER
SAMPLE ID:	**MW-3**		

SAMPLE RESULTS

Analysis	Concentration	LOD	Units	Analyst	Date Completed
ALKALINITY SM 4500CO2D (BICARBONATE)	160	10	mg/L (PPM)	TR	2/28/2025
ALKALINITY SM 4500CO2D (CARBONATE)	ND	10	mg/L (PPM)	TR	2/28/2025
AMMONIA-N EPA 350.1	0.23	0.015	mg/L (PPM)	KC	2/21/2025
ARSENIC EPA 200.8	0.0013	0.0010	mg/L (PPM)	MR	2/17/2025
CHLORIDE EPA 300.0	<10	10	mg/L (PPM)	KC/TR	2/13/2025
CONDUCTIVITY SM2510-B	350	1.0	uS/cm@25C	TR	2/13/2025
NITRATE-N EPA 300.0	<0.20	0.20	mg/L (PPM)	KC/TR	2/13/2025
NITRITE-N EPA 300.0	<0.20	0.20	mg/L (PPM)	KC/TR	2/13/2025
SODIUM DISS EPA 200.8	2.9	0.50	mg/L (PPM)	MR	2/17/2025
TOTAL PHOSPHORUS EPA 365.3	<0.010	0.010	mg/L (PPM)	TR	2/17/2025
TURBIDITY EPA 180.1 - LAB	0.84	0.010	NTU	TR	2/17/2025

NTU = NEPHELOMETRIC TURBIDITY UNITS.

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DISS = DISSOLVED

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COMPANY:	VILLAGE OF KALKASKA	GTA PROJECT NO:	021225-6
		GTA SAMPLE NO:	5
PROJECT NO:	QUARTERLY MONITOR WELLS		
		DATE RECEIVED:	2/12/2025
LOCATION:	1005 ISLAND LAKE RD	TIME RECEIVED:	1:20 PM
	KALKASKA	DATE SAMPLED:	2/11/2025
	MI	TIME SAMPLED:	10:30 AM
SAMPLED BY:	BRENDON WOLF/IAI	SAMPLE MATRIX:	WATER
SAMPLE ID:	**MW-4**		

SAMPLE RESULTS

Analysis	Concentration	LOD	Units	Analyst	Date Completed
ALKALINITY SM 4500CO2D (BICARBONATE)	160	10	mg/L (PPM)	TR	2/28/2025
ALKALINITY SM 4500CO2D (CARBONATE)	ND	10	mg/L (PPM)	TR	2/28/2025
AMMONIA-N EPA 350.1	<0.015	0.015	mg/L (PPM)	KC	2/21/2025
ARSENIC EPA 200.8	0.0032	0.0010	mg/L (PPM)	MR	2/17/2025
CHLORIDE EPA 300.0	<10	10	mg/L (PPM)	KC/TR	2/13/2025
CONDUCTIVITY SM2510-B	330	1.0	uS/cm@25C	TR	2/13/2025
NITRATE-N EPA 300.0	<0.20	0.20	mg/L (PPM)	KC/TR	2/13/2025
NITRITE-N EPA 300.0	<0.20	0.20	mg/L (PPM)	KC/TR	2/13/2025
SODIUM DISS EPA 200.8	3.4	0.50	mg/L (PPM)	MR	2/17/2025
TOTAL PHOSPHORUS EPA 365.3	0.29	0.010	mg/L (PPM)	TR	2/17/2025
TURBIDITY EPA 180.1 - LAB	2.9	0.010	NTU	TR	2/17/2025

NTU = NEPHELOMETRIC TURBIDITY UNITS.

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

Chain of Custody Record

Client Information	Sampler: Brendon Wolf	Lab PM: Chase, Kirk L.	Carrier Tracking No(s):	COC No: 021225-6
Client Contact: Brendon Wolf		E-Mail: kirk@gtanalytical.com		Page: Page 1 of 1
Company: Infrastructure Alternatives, Inc.				Job #:
Address: 1005 Island Lake Road	Due Date Requested:			
City: Kalkaska	TAT Requested (days):			
State, Zip: MI, 49646				
Phone: 906-286-3021	PO #: PO Not Required			
Email: bwolf@iaiwater.com	WO #:			
Project Name: Quarterly Monitoring Well Samples	Project #:			
Site: KWWTP	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Nitratel Nitrite	Ammonia, Undistilled	Sulfate	Chloride	Total Phosphorus	Bicarbonate Alkalinity as CaCO3	Specific Conductivity	Calcium, Dissolved	Magnesium, Dissolved	Manganese, Dissolved	Potassium, Dissolved	Sodium, Dissolved	Arsenic	Turbidity	Iron, Dissolved	Total Number of containers	Special Instructions/Note:
			Preservation Code:																				
MW-1	2.11.25	2:33PM	G	W			X	X		X	X		X					X		X			
MW-2D	2.11.25	12:21PM	G	W			X	X		X	X		X					X	X	X			
MW-2S	2.11.25	11:32AM	G	W			X	X		X	X		X					X	X	X			
MW-3	2.11.25	3:11PM	G	W			X	X		X	X		X					X	X	X			
MW-4	2.11.25	10:30AM	G	W			X	X		X	X		X					X	X	X			

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Brendon Wolf	2.12.25 7:28	IAI	Devon Lang	2-12-25	
Relinquished by: Devon Lang	Date/Time: 2-12-25 1:17pm	Company IAE	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by: K	Date/Time: 2/12/25 1:20	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 1.5°C on ice