

**INDEPENDENT TESTING LAB**

830 ROBINWOOD COURT, TRAVERSE CITY, MI 49686

PH: 231-929-0905

FAX: 231-929-0894

www.gtanalytical.com

Company: FIFE LAKE AREA UTILITY AUTHORITY Site Addr: 10701 VANS LANE
Name:
ClientProj: EFFLUENT & FIFE LAKE
GTA ProjNo: 021025-3 Sampled By: FLAUA
Date Rec: 2/10/2025
Time Rec: 3:30 PM

Sample No.	Sample ID	Date Sampled	Time Sampled	Sample Matrix
1	MW-5	2/10/2025	11:56 AM	WATER
2	MW-7	2/10/2025	12:24 PM	WATER
3	MW-12	2/10/2025	1:57 PM	WATER
4	MW-13	2/10/2025	10:58 AM	WATER
5	MW-14	2/10/2025	11:27 AM	WATER
6	MW-15	2/10/2025	12:42 PM	WATER
7	CELL #1	2/10/2025	1:25 PM	WATER
8	CELL #2	2/10/2025	1:34 PM	WATER
9	CELL #3	2/10/2025	1:15 PM	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
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COMPANY: FIFE LAKE AREA UTILITY AUTHORITY
PROJECT NO: EFFLUENT &
LOCATION: 10701 VANS LANE
FIFE LAKE
MI
SAMPLED BY: FLAUA
SAMPLE ID: MW-5

GTA PROJECT NO: 021025-3
GTA SAMPLE NO: 1
DATE RECEIVED: 2/10/2025
TIME RECEIVED: 3:30 PM
DATE SAMPLED: 2/10/2025
TIME SAMPLED: 11:56 AM
SAMPLE MATRIX: WATER

SAMPLE RESULTS

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Completed</u>
AMMONIA-N EPA 350.1	<0.015	0.015	mg/L (PPM)	KC	2/21/2025
CHLORIDE EPA 300.0	74	10	mg/L (PPM)	KC/TR	2/11/2025
CONDUCTIVITY SM2510-B	640	1.0	uS/cm@25C	TR	2/11/2025
NITRATE-N EPA 300.0	5.4	0.20	mg/L (PPM)	KC/TR	2/11/2025
NITRITE-N EPA 300.0	<0.20	0.20	mg/L (PPM)	KC/TR	2/11/2025
SODIUM EPA 200.8	26	5.0	mg/L (PPM)	MR	2/21/2025
TOTAL INORGANIC NITROGEN	5.4	0.42	mg/L (PPM)	KC/TR	2/21/2025
TOTAL PHOSPHORUS EPA 365.3	<0.010	0.010	mg/L (PPM)	TR	2/12/2025

ND = NOT DETECTED, RESULT < LOD

LOD = LIMIT OF DETECTION

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

DISS = DISSOLVED

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PROJECT NO: EFFLUENT &
LOCATION: 10701 VANS LANE
FIFE LAKE
MI
SAMPLED BY: FLAUA
SAMPLE ID: MW-7

GTA PROJECT NO: 021025-3
GTA SAMPLE NO: 2
DATE RECEIVED: 2/10/2025
TIME RECEIVED: 3:30 PM
DATE SAMPLED: 2/10/2025
TIME SAMPLED: 12:24 PM
SAMPLE MATRIX: WATER

SAMPLE RESULTS

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Completed</u>
AMMONIA-N EPA 350.1	<0.015	0.015	mg/L (PPM)	KC	2/21/2025
CHLORIDE EPA 300.0	41	10	mg/L (PPM)	KC/TR	2/11/2025
CONDUCTIVITY SM2510-B	450	1.0	uS/cm@25C	TR	2/11/2025
NITRATE-N EPA 300.0	2.0	0.20	mg/L (PPM)	KC/TR	2/11/2025
NITRITE-N EPA 300.0	<0.20	0.20	mg/L (PPM)	KC/TR	2/11/2025
SODIUM EPA 200.8	15	5.0	mg/L (PPM)	MR	2/21/2025
TOTAL INORGANIC NITROGEN	2.0	0.42	mg/L (PPM)	KC/TR	2/21/2025
TOTAL PHOSPHORUS EPA 365.3	<0.010	0.010	mg/L (PPM)	TR	2/12/2025

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COMPANY: FIFE LAKE AREA UTILITY AUTHORITY
PROJECT NO: EFFLUENT &
LOCATION: 10701 VANS LANE
FIFE LAKE
MI
SAMPLED BY: FLAUA
SAMPLE ID: MW-12

GTA PROJECT NO: 021025-3
GTA SAMPLE NO: 3
DATE RECEIVED: 2/10/2025
TIME RECEIVED: 3:30 PM
DATE SAMPLED: 2/10/2025
TIME SAMPLED: 1:57 PM
SAMPLE MATRIX: WATER

SAMPLE RESULTS

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Completed</u>
AMMONIA-N EPA 350.1	<0.015	0.015	mg/L (PPM)	KC	2/21/2025
CHLORIDE EPA 300.0	70	10	mg/L (PPM)	KC/TR	2/11/2025
CONDUCTIVITY SM2510-B	630	1.0	uS/cm@25C	TR	2/11/2025
NITRATE-N EPA 300.0	6.7	0.20	mg/L (PPM)	KC/TR	2/11/2025
NITRITE-N EPA 300.0	<0.20	0.20	mg/L (PPM)	KC/TR	2/11/2025
SODIUM EPA 200.8	25	5.0	mg/L (PPM)	MR	2/21/2025
TOTAL INORGANIC NITROGEN	6.7	0.42	mg/L (PPM)	KC/TR	2/21/2025
TOTAL PHOSPHORUS EPA 365.3	<0.010	0.010	mg/L (PPM)	TR	2/12/2025

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COMPANY:	FIFE LAKE AREA UTILITY AUTHORITY	GTA PROJECT NO:	021025-3
PROJECT NO:	EFFLUENT &'	GTA SAMPLE NO:	4
LOCATION:	10701 VANS LANE	DATE RECEIVED:	2/10/2025
	FIFE LAKE	TIME RECEIVED:	3:30 PM
	MI	DATE SAMPLED:	2/10/2025
SAMPLED BY:	FLAUA	TIME SAMPLED:	10:58 AM
SAMPLE ID:	MW-13	SAMPLE MATRIX:	WATER

SAMPLE RESULTS

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Completed</u>
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	2/11/2025
CONDUCTIVITY SM2510-B	570	1.0	uS/cm@25C	TR	2/11/2025
NITRATE-N EPA 300.0	7.1	0.20	mg/L (PPM)	KC/TR	2/11/2025
NITRITE-N EPA 300.0	<0.20	0.20	mg/L (PPM)	KC/TR	2/11/2025
SODIUM EPA 200.8	<5.0	5.0	mg/L (PPM)	MR	2/21/2025
TOTAL INORGANIC NITROGEN	7.1	0.42	mg/L (PPM)	KC/TR	2/21/2025
TOTAL PHOSPHORUS EPA 365.3	0.077	0.010	mg/L (PPM)	TR	2/12/2025

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COMPANY: FIFE LAKE AREA UTILITY AUTHORITY
PROJECT NO: EFFLUENT &
LOCATION: 10701 VANS LANE
FIFE LAKE
MI
SAMPLED BY: FLAUA
SAMPLE ID: MW-14

GTA PROJECT NO: 021025-3
GTA SAMPLE NO: 5
DATE RECEIVED: 2/10/2025
TIME RECEIVED: 3:30 PM
DATE SAMPLED: 2/10/2025
TIME SAMPLED: 11:27 AM
SAMPLE MATRIX: WATER

SAMPLE RESULTS

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Completed</u>
AMMONIA-N EPA 350.1	<0.015	0.015	mg/L (PPM)	KC	2/21/2025
CHLORIDE EPA 300.0	65	10	mg/L (PPM)	KC/TR	2/11/2025
CONDUCTIVITY SM2510-B	660	1.0	uS/cm@25C	TR	2/11/2025
NITRATE-N EPA 300.0	2.4	0.20	mg/L (PPM)	KC/TR	2/11/2025
NITRITE-N EPA 300.0	<0.20	0.20	mg/L (PPM)	KC/TR	2/11/2025
SODIUM EPA 200.8	16	5.0	mg/L (PPM)	MR	2/21/2025
TOTAL INORGANIC NITROGEN	2.4	0.42	mg/L (PPM)	KC/TR	2/21/2025
TOTAL PHOSPHORUS EPA 365.3	0.025	0.010	mg/L (PPM)	TR	2/12/2025

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COMPANY: FIFE LAKE AREA UTILITY AUTHORITY
PROJECT NO: EFFLUENT &
LOCATION: 10701 VANS LANE
FIFE LAKE
MI
SAMPLED BY: FLAUA
SAMPLE ID: MW-15

GTA PROJECT NO: 021025-3
GTA SAMPLE NO: 6
DATE RECEIVED: 2/10/2025
TIME RECEIVED: 3:30 PM
DATE SAMPLED: 2/10/2025
TIME SAMPLED: 12:42 PM
SAMPLE MATRIX: WATER

SAMPLE RESULTS

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Completed</u>
AMMONIA-N EPA 350.1	<0.015	0.015	mg/L (PPM)	KC	2/21/2025
CHLORIDE EPA 300.0	70	10	mg/L (PPM)	KC	
CONDUCTIVITY SM2510-B	640	1.0	uS/cm@25C	TR	2/11/2025
NITRATE-N EPA 300.0	5.3	0.20	mg/L (PPM)	KC/TR	2/11/2025
NITRITE-N EPA 300.0	<0.20	0.20	mg/L (PPM)	KC/TR	2/11/2025
SODIUM EPA 200.8	20	5.0	mg/L (PPM)	MR	2/21/2025
TOTAL INORGANIC NITROGEN	5.3	0.42	mg/L (PPM)	KC/TR	2/21/2025
TOTAL PHOSPHORUS EPA 365.3	<0.010	0.010	mg/L (PPM)	TR	2/12/2025

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COMPANY: FIFE LAKE AREA UTILITY AUTHORITY
PROJECT NO: EFFLUENT &
LOCATION: 10701 VANS LANE
FIFE LAKE
MI
SAMPLED BY: FLAUA
SAMPLE ID: CELL #1

GTA PROJECT NO: 021025-3
GTA SAMPLE NO: 7
DATE RECEIVED: 2/10/2025
TIME RECEIVED: 3:30 PM
DATE SAMPLED: 2/10/2025
TIME SAMPLED: 1:25 PM
SAMPLE MATRIX: WATER

SAMPLE ANALYSIS

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Completed</u>
ALKALINITY SM 4500CO2D (BICARBONATE)	380	10	mg/L (PPM)	TR	2/28/2025
ALKALINITY SM 4500CO2D (CARBONATE)	<10	10	mg/L (PPM)	TR	2/28/2025
AMMONIA-N EPA 350.1	46	0.30	mg/L (PPM)	KC	2/21/2025
CHLORIDE EPA 300.0	270	10	mg/L (PPM)	KC/TR	2/11/2025
NITRATE-N EPA 300.0	<0.20	0.20	mg/L (PPM)	KC/TR	2/11/2025
NITRITE-N EPA 300.0	<0.20	0.20	mg/L (PPM)	KC/TR	2/11/2025
SODIUM EPA 200.8	110	50	mg/L (PPM)	MR	2/21/2025
TOTAL INORGANIC NITROGEN	46	0.70	mg/L (PPM)	KC/TR	2/21/2025
TOTAL PHOSPHORUS EPA 365.3	3.5	0.010	mg/L (PPM)	TR	2/12/2025

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COMPANY: FIFE LAKE AREA UTILITY AUTHORITY
PROJECT NO: EFFLUENT &
LOCATION: 10701 VANS LANE
FIFE LAKE
MI
SAMPLED BY: FLAUA
SAMPLE ID: CELL #2

GTA PROJECT NO: 021025-3
GTA SAMPLE NO: 8
DATE RECEIVED: 2/10/2025
TIME RECEIVED: 3:30 PM
DATE SAMPLED: 2/10/2025
TIME SAMPLED: 1:34 PM
SAMPLE MATRIX: WATER

SAMPLE ANALYSIS

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Completed</u>
ALKALINITY SM 4500CO2D (BICARBONATE)	410	10	mg/L (PPM)	TR	2/28/2025
ALKALINITY SM 4500CO2D (CARBONATE)	<10	10	mg/L (PPM)	TR	2/28/2025
AMMONIA-N EPA 350.1	44	0.30	mg/L (PPM)	KC	2/21/2025
CHLORIDE EPA 300.0	220	10	mg/L (PPM)	KC/TR	2/11/2025
NITRATE-N EPA 300.0	<0.20	0.20	mg/L (PPM)	KC/TR	2/11/2025
NITRITE-N EPA 300.0	<0.20	0.20	mg/L (PPM)	KC/TR	2/11/2025
SODIUM EPA 200.8	140	50	mg/L (PPM)	MR	2/21/2025
TOTAL INORGANIC NITROGEN	44	0.70	mg/L (PPM)	KC/TR	2/21/2025
TOTAL PHOSPHORUS EPA 365.3	3.6	0.010	mg/L (PPM)	TR	2/12/2025

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COMPANY: FIFE LAKE AREA UTILITY AUTHORITY
PROJECT NO: EFFLUENT &
LOCATION: 10701 VANS LANE
FIFE LAKE
MI
SAMPLED BY: FLAUA
SAMPLE ID: CELL #3

GTA PROJECT NO: 021025-3
GTA SAMPLE NO: 9
DATE RECEIVED: 2/10/2025
TIME RECEIVED: 3:30 PM
DATE SAMPLED: 2/10/2025
TIME SAMPLED: 1:15 PM
SAMPLE MATRIX: WATER

SAMPLE ANALYSIS

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Completed</u>
ALKALINITY SM 4500CO2D (BICARBONATE)	240	10	mg/L (PPM)	TR	2/28/2025
ALKALINITY SM 4500CO2D (CARBONATE)	<10	10	mg/L (PPM)	TR	2/28/2025
AMMONIA-N EPA 350.1	11	0.060	mg/L (PPM)	KC	2/21/2025
CHLORIDE EPA 300.0	190	10	mg/L (PPM)	KC/TR	2/11/2025
NITRATE-N EPA 300.0	1.4	0.20	mg/L (PPM)	KC/TR	2/11/2025
NITRITE-N EPA 300.0	<0.20	0.20	mg/L (PPM)	KC/TR	2/11/2025
SODIUM EPA 200.8	110	50	mg/L (PPM)	MR	2/21/2025
TOTAL INORGANIC NITROGEN	12	0.46	mg/L (PPM)	KC/TR	2/21/2025
TOTAL PHOSPHORUS EPA 365.3	2.1	0.010	mg/L (PPM)	TR	2/12/2025

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CHAIN OF CUSTODY

PROJECT NUMBER	SITE NAME/ADDRESS	COMPANY/NAME
	10701 VANS LANE, FFC LAKE, MI, 49633	FLAVA
SAMPLED BY	COMPANY	GTA PROJECT #5
	FLAVA	021024-3

SAMPLE INFORMATION

#	SAMPLE ID	DATE SAMPLED	TIME	MATRIX	ANALYSIS
2	MW 5	2/10/25	11:56	w/w	Quarterly MW ↓
2	MW 7	2/10/25	12:24	w/w	
2	MW 12	2/10/25	1:57	w/w	
2	MW 13	2/10/25	10:58	w/w	
2	MW 14	2/10/25	11:27	w/w	
2	MW 15	2/10/25	12:42	w/w	
27	Cell #1	2/10/25	1:25		Standard cell + carbonates
28	Cell #2	↓	1:34		↓ + b1 carbonates
29	Cell #3	↓	1:45		

BILL TO: FLAVA
c/o H+R Block
Kingsley

Temp Rec: ☐

On Ice? ☒ Y ☐ N

REPORT TO:
BRAVARY@provide.net

RELEASED BY

DATE/TIME

RECEIVED BY

DATE/TIME

[Signature]

2/10/25 3:30

[Signature]

2/10/25 3:30

REQUESTED TAT ☒ STANDARD ☐ 1 BUSINESS DAY ☐ 2 BUSINESS DAYS ☐ 3 BUSINESS DAYS