Annual Report 202,

Well Water

McKenzie

1625 Lakeshore Drive Shuniah ON P7A OT2

Drinking Water System Number 260009932



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ANNUAL WELL WATER REPORT

LAKEHEAD DISTRICT SCHOOL BOARD

McKENZIE PUBLIC SCHOOL

1625 Lakeshore Drive, Shuniah, ON P7A 0T2

Drinking-water System Number: 260009932

The Period being reported: January 1, 2023 TO December 31, 2023 Waterworks Type (O. Reg. 170/03): SMALL NON-MUNICIPAL NON-RESIDENTIAL DESIGNATED FACILILTY Population Served: 80

Maximum flow rate Capacity: **1.26 Litres per second** Is this drinking-water system seasonally operated? **NO** Area serviced by the Drinking-water system: **SCHOOL**

The following questions about designated and public facilities are for Small municipal non residential systems only

Number of designated facilities served by the drinking-water system: **ONE** Name of each designated facility: <u>McKENZIE PUBLIC SCHOOL</u> Address of each designated facility: **1625 Lakeshore Drive, Shuniah, ON P7A 0T2**

Interested Authority for each designated facility served: MINISRTY OF EDUCATION

1. DESCRIPTION OF THE SYSTEM:

Source(s) of raw water:

✓ Groundwater

- □ Surface
- □ Ground water under direct influence of surface water

If the source is groundwater or GUDI: Groundwater: Yes GUDI: NO Number of wells: ONE Sample location names: Raw: WELL OUTLET Treated Water: CLASSROOM List of chemicals used: Chlorine Does the Drinking-water system have disinfection: YES

Disinfection methods: (Check the boxes that apply)

✓ Chlorination

- □ Chloramination
- \Box Chlorine Dioxide
- □ Ozonation
- □ UltraViolet
- \Box Others Specify

Treatment type: (Check the boxes that apply)

- \Box Coagulation
- □ Flocculation
- \Box Sedimentation
- □ Filtration
- □ Filter Medium
- \Box Membrane Filtration
- □ Membrane Filtration Type
- □ Alkalinity Adjustment
- □ pH Adjustment
- □ Clarifier- Sludge Blanket
- \Box Clarifier Upflow
- $\hfill\square$ Dissolved Air Flotation
- \Box Fluoridation
- \Box Iron Sequestering
- □ Softening
- □ Stripping
- ✓ Taste and Odour Control
- □ Zebra Mussel Control

2. Adverse Results

Total number of adverse results during this reporting period for microbiological, chemical, chlorine residual, malfunction of other disinfection equipment, turbidity: For each incident of adverse result please list the following:

No adverse conditions for this reporting period.

3. Summary of results

Regulation 170 lab analysis results are summarized in appendix A.

Regulation 243 lab analysis results are summarized in appendix B.

5 year inorganic sampling was completed in 2020. Next 60 month tests are due in 2025.

 Major Expenses incurred during the period covered by the report To install required equipment: N/A To repair equipment: N/A To replace equipment: \$10,000

6. Providing information relating to compliance with the regulation:

A copy of the annual report given to each designated facility served by the drinking-water system; Yes

A copy of the annual report given to each Interested Authority of each designated facility served by the drinking-water system **Yes, the Ministry of Education**

A copy of the annual report will be provided to every person who requests a copy Yes, by contacting the school main office or the Board's web site

Means that were used to share the information in this annual report: Web Site: <u>www.lakeheadschools.ca</u>

Date of the report: June 14, 2024

Name of the Author: Kyle Ulvang Address of the author: 2135 SILLS ST. THUNDER BAY, ONT. Telephone number of the author: 625-5177 Email address of the author: kyle_ulvang@lakeheadschools.ca

	Comula			Anions and Nutrients		Microbiological Tests						Total Metals
Description	Sample Tags	Sample Name	Sampling Date			Coliforms, Escherichia coli [E. coli] MPN/100mL			Coliforms, total P/A/100mL	Heterotrophic plate count [HPC] CFU/mL	Turbidity NTU	lead total wetais
Raw	McKenzie PS Reg 170	Raw Water Pump Room	03-01-2023	handle (as hy hig/e	Marte (as N) mg/c	<1	comornis, eschenenia con je: conj i / A/ come	<1	comonits, cotar 1799 200m2	neterotropine plate count (in e) er o/me	randiary into	ccuu, cotur pg/c
Distribution	McKenzie PS Reg 170	Distribution Room 10	03-01-2023				Not Detected		Not Detected	44		
Distribution	McKenzie PS Reg 170	Distribution Room 2	03-01-2023				Not Detected			4		
Raw	McKenzie PS Reg 170	Raw Water Pump Room	17-01-2023			41		<1				
Distribution	McKenzie PS Reg 170	Distribution Day Care	17-01-2023				Not Detected		Not Detected	3		
Distribution	McKenzie PS Reg 170	Distribution JK Room	17-01-2023				Not Detected		Not Detected	1		
Raw	McKenzie PS Reg 170	Raw Water Pump Room	31-01-2023			<1		<1		-		
Distribution	McKenzie PS Reg 170	Distribution Room 10	31-01-2023				Not Detected		Not Detected	106		
Distribution	McKenzie PS Reg 170	Distribution Room 2	31-01-2023				Not Detected		Not Detected	7		
Raw	McKenzie PS Reg 170	Raw Water Pump Room	14-02-2023			<1		<1				
Distribution	McKenzie PS Reg 170	Distribution Day Care	14-02-2023				Not Detected		Not Detected	7		
Distribution	McKenzie PS Reg 170	Distribution JK Room	14-02-2023				Not Detected		Not Detected	19		
Raw	McKenzie PS Reg 170	Raw Water Pump Room	02-03-2023			4		<1				
Distribution	McKenzie PS Reg 170	Distribution Room 10	02-03-2023				Not Detected		Not Detected	18		
Distribution	McKenzie PS Reg 170	Distribution Room 2	02-03-2023				Not Detected		Not Detected	6		
Raw	McKenzie PS Reg 170	Raw Water Pump Room	14-03-2023			4		<1				
Distribution	McKenzie PS Reg 170	Distribution Day Care	14-03-2023				Not Detected		Not Detected	<1		
Distribution	McKenzie PS Reg 170	Distribution JK Room	14-03-2023				Not Detected		Not Detected	4		
Treated	McKenzie PS Reg 170	Treated Water McKenzie	14-03-2023	<0.020	<0.010							
Raw	McKenzie PS Reg 170	Raw Water Pump Room	28-03-2023			<1		<1				
Distribution	McKenzie PS Reg 170	Distribution Room 2	28-03-2023				Not Detected		Not Detected	<1		
Distribution	McKenzie PS Reg 170	Distribution Room 10	28-03-2023				Not Detected		Not Detected	6		
Raw	McKenzie PS Reg 170	Raw Water Pump Room	11-04-2023			<1		<1				
Distribution	McKenzie PS Reg 170	Distribution JK Room	11-04-2023				Not Detected		Not Detected	32		
Distribution	McKenzie PS Reg 170	Distribution Day Care	11-04-2023				Not Detected			<1		
Raw	McKenzie PS Reg 170	Raw Water Pump Room	27-04-2023			<1		<1				
Distribution	McKenzie PS Reg 170	Distribution Room 10	27-04-2023				Not Detected		Not Detected	39		
Distribution	McKenzie PS Reg 170	Distribution Room 2	27-04-2023				Not Detected		Not Detected	7		
Raw	McKenzie PS Reg 170	Raw Water Pump Room	09-05-2023			<1		<1				
Distribution	McKenzie PS Reg 170	Distribution Day Care	09-05-2023				Not Detected		Not Detected	<1		
Distribution	McKenzie PS Reg 170	Distribution JK Room	09-05-2023				Not Detected		Not Detected	<1		
Raw	McKenzie PS Reg 170	Raw Water Pump Room	23-05-2023			<1		<1				
Distribution	McKenzie PS Reg 170	Distribution Room 10	23-05-2023				Not Detected		Not Detected	46		
Distribution	McKenzie PS Reg 170	Distribution Room 2	23-05-2023				Not Detected		Not Detected	12		
Raw	McKenzie PS Reg 170	Raw Water Pump Room	06-06-2023			<1		<1				
Distribution	McKenzie PS Reg 170	Distribution JK Room	06-06-2023				Not Detected		Not Detected	179		
Distribution	McKenzie PS Reg 170	Distribution Room 1	06-06-2023				Not Detected		Not Detected	206		
Distribution	McKenzie PS Reg 170	Distribution Day Care	22-06-2023				Not Detected			<1		
Distribution	McKenzie PS Reg 170	JK/SK Lunch Room	22-06-2023				Not Detected		Not Detected	<1		
Raw	McKenzie PS Reg 170	Raw Water Pump Room	22-06-2023			<1		<1				
Treated	McKenzie PS Reg 170	Treated Water McKenzie	22-06-2023	<0.020	<0.010							
Raw	McKenzie PS Reg 170	Raw Water Pump Room	28-08-2023			<1		<1				
Distribution	McKenzie PS Reg 170	Distribution Room 10	28-08-2023				Not Detected		Not Detected	1		
Distribution	McKenzie PS Reg 170	Distribution Room 2	28-08-2023				Not Detected		Not Detected	<1		
Raw	McKenzie PS Reg 170	Raw Water Pump Room	29-08-2023			<1		<1				
Distribution	McKenzie PS Reg 170	Distribution Room 1	29-08-2023				Not Detected		Not Detected	<1		
Distribution	McKenzie PS Reg 170	Distribution JK Room	29-08-2023				Not Detected		Not Detected	<1		
Raw	McKenzie PS Reg 170	Raw Water Pump Room	12-09-2023			<1		<1				
Distribution	McKenzie PS Reg 170	Distribution Room 1 Daycare	12-09-2023				Not Detected			<1		
Distribution	McKenzie PS Reg 170	Distribution JK Room	12-09-2023				Not Detected		Not Detected	4		
Treated	McKenzie PS Reg 170	Treated Water McKenzie	12-09-2023	<0.020	<0.010							
Raw	McKenzie PS Reg 170	Raw Water Pump Room	26-09-2023			<1		<1				
Distribution	McKenzie PS Reg 170	Distribution Room 2	26-09-2023				Not Detected			<1		
Distribution	McKenzie PS Reg 170	Distribution Room 10	26-09-2023				Not Detected		Not Detected	<1		
Raw	McKenzie PS Reg 170	Raw Water Pump Room	10-10-2023			<1		<1				
Distribution	McKenzie PS Reg 170	Distribution JK Room	10-10-2023				Not Detected			<1		
Distribution	McKenzie PS Reg 170	Distribution Day Care	10-10-2023				Not Detected		Not Detected	<1		
Raw	McKenzie PS Reg 170	Raw Water Pump Room	24-10-2023			<1		<1				
Distribution	McKenzie PS Reg 170	Distribution Room 10	24-10-2023				Not Detected			<1		
Distribution	McKenzie PS Reg 170	Distribution Room 2	24-10-2023				Not Detected		Not Detected	<1		
Raw	McKenzie PS Reg 170	Raw Water Pump Room	07-11-2023			<1		<1				
Distribution	McKenzie PS Reg 170	Distribution JK Room	07-11-2023				Not Detected			<1		
Distribution	McKenzie PS Reg 170	Distribution Day Care	07-11-2023				Not Detected		Not Detected	<1		
Raw	McKenzie PS Reg 170	Raw Water Pump Room	21-11-2023			<1		<1				
Distribution	McKenzie PS Reg 170	Distribution Room 10	21-11-2023				Not Detected			<1		
Distribution	McKenzie PS Reg 170	Distribution Room 2	21-11-2023				Not Detected		Not Detected	<1		
Raw	McKenzie PS Reg 170	Raw Water Pump Room	05-12-2023			<1		<1				
Distribution	McKenzie PS Reg 170	Distribution Day Care Rm 1	05-12-2023				Not Detected			<1		
Distribution	McKenzie PS Reg 170	Distribution-JK/SK Rm	05-12-2023				Not Detected		Not Detected	<1		
Treated	McKenzie PS Reg 170	Treated Water McKenzie Rm 10	05-12-2023	<0.020	<0.010							
Raw	McKenzie PS Reg 170	Raw Water Pump Room	19-12-2023			<1		<1				
Distribution	McKenzie PS Reg 170	Distribution Room 10	19-12-2023				Not Detected			57		
Distribution	McKenzie PS Reg 170	Distribution Room 2	19-12-2023				Not Detected		Not Detected	7		

Sample				Anions and Nutrients		Microbiological Tests						Total Metals
Description	Sample Tags	Name	Sampling Date	Nitrate (as N) mg/L	Nitrite (as N) mg/L	Coliforms, Escherichia coli [E. coli] MPN/100mL	Coliforms, Escherichia coli [E. coli] P/A/100mL	Coliforms, total MPN/100mL	Coliforms, total P/A/100mL	Heterotrophic plate count [HPC] CFU/mL	Turbidity NTU	Lead, total µg/L
Plumbing Standing	McKenzie PS Reg 243 Leads	McKenzie PS: mac 5a - S	06-06-2023									<1.0
Plumbing Flushed	McKenzie PS Reg 243 Leads	McKenzie PS: mac 5b - F	06-06-2023									<1.0
Plumbing Standing	McKenzie PS Reg 243 Leads	McKenzie PS: mac 6a - S	06-06-2023									<1.0
Plumbing Flushed	McKenzie PS Reg 243 Leads	McKenzie PS: mac 6b - F	06-06-2023									<1.0
Plumbing Standing	McKenzie PS Reg 243 Leads	McKenzie PS: mac 7a - S	06-06-2023									<1.0
Plumbing Flushed	McKenzie PS Reg 243 Leads	McKenzie PS: mac 7b - F	06-06-2023									<1.0