



WHITEHEAD ELTON
REGIONAL WATER CO-OP

2021

ANNUAL REPORT

Board of Directors

President:
Ross Farley

Vice President:
Allan Sutherland

Secretary Treasurer:
Shawna Paulsen

Directors:
Ches Bollman
Danniele Carriere
Trevor Tuttosi

Name of Public Water System:

Whitehead Elton Regional Water Co-operative Inc.

Name of Legal Owner:

Whitehead Elton Regional Water Co-operative Inc.

Contact Person: **Ralph Berg** Manager

(204) 729 6116 Cell

(204) 571 0910 Forrest Reservoir

(204) 752 2378 Water Treatment Plant

Contact Numbers:

Whitehead Elton Regional Water Co-operative Inc.

(204) 729 6116 Cell

(204) 752 2261 R.M. Of Whitehead

(204) 728 7834 R.M. Of Elton

Emergency Numbers:

Whitehead Elton Regional Water Co-operative Inc.

(204) 729 6116 Cell

(204) 730-2867 24 Hour Emergency Line

(204) 752 2261 R.M. Of Whitehead

(204) 728 7834 R.M. Of Elton

Names of Operators:

Ralph Berg

Bo Yeomans

Scott Sul

- 1) ***Introduction***
- 2) ***Description of Water System***
 - I. ***Water Supply Source***
 - II. ***Water Treatment Process***
 - III. ***Classification and Certification***
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- 7) ***Future System Expansion***

APPENDIX A - Bacteria Sample Results

APPENDIX B - Water Use & Monitoring Well Reports

1) Introduction:

The 2021 Whitehead Elton Regional Water Cooperative Inc. Annual Report summarizes the water utility's ability to provide safe economical potable water and comply with provincial standards.

2) Description of the Water System:

The Whitehead Elton Regional Water Cooperative Inc. provides potable water to a population of approximately 2400 residents. Corrective Actions were taken and reported as required during the course of operations. Full results have been attached in Section 3.

The Whitehead Elton Regional Water Cooperative Inc. water system consists of a network of pressure pipelines, a water treatment plant, a booster station, a pressure reducing station and a water storage reservoir. The Whitehead Elton Regional Water Cooperative Inc. owns the Alexander Water Treatment Plant, Dungannan Pressure Reducing Station, Co-op Booster Station and the Forrest Reservoir.

The R.M. of Elton owns three pressure reducing stations and one booster station located east of #10 Highway and north of #1 Highway.

The R.M. of Whitehead owns the pressure reducing station located south of the #1 Highway down Road 115W.

2.1) Water Supply Source

The Whitehead Elton Regional Water Cooperative Inc. receives its water supply from two wells located in the R.M. Of Whitehead. The wells are situated to draw raw water from a sand and gravel aquifer.

The system provides treated water to the R.M. Of Elton, the villages of Forrest and Douglas, the R.M. Of Whitehead, the villages of Alexander and Kemnay and a few residents of the R.M. Of Riverdale and the R.M. Of Cornwallis.

2.11) Water Treatment Process:

The water treatment process is designed to remove hardness, iron, manganese, total dissolved solids, turbidity and arsenic from the raw water supply to meet the water quality standards outlined in the *Guidelines for Canadian Drinking Water Quality (GCDWQ)*. The plant currently provides virus inactivation through chlorine treated water obtaining adequate contact time within the treated water reservoirs.

Re-Chlorination is available at the Forrest Reservoir, but it is not in use. The average daily flow through the Alexander Water Treatment Plant of raw water is 761 cubic meters per day, with the plant rated at a maximum daily flow of raw water of 1,814.4 cubic meters per day and a yearly raw water total of 387,000 cubic meters.

Raw water is diverted from a sand and gravel aquifer by two wells located approximately 2.5 km NE of the Alexander Water Treatment Plant. The well pumps deliver water to the WTP through a 150 mm HDPE raw water pipeline. Water passes through the reverse osmosis system to remove hardness, iron, manganese, total dissolved solids and turbidity. Following the membrane unit, permeate water is passed through a membrane contactor to remove carbon dioxide in the permeate water, therefore increasing the pH. Bypass water (raw water) passes through a 1.4 m diameter manganese greensand filter to remove iron and manganese allowing for hardness and pH adjustment in the treated water. A portion of the permeate water is also passed through the greensand filter for arsenic removal. Treated water from the R.O. Unit is pH buffered with Sodium Hydroxide injection and the combined treatment streams are chlorinated prior to entering the 550 cubic meter, six cell reservoir. The distribution pumps send water through a 200 mm pipeline to the distribution system.

Iron and Manganese are metals that cause laundry and plumbing fixture staining problems and can accumulate in the distribution pipes and cause reduced flow. Calcium Carbonate causes hardness in the water which diminishes the ability of the water to react with soap and lather. Hardness also forms scale deposits in kettles, hot water tanks and plumbing fixtures which can reduce their life expectancy.

2.III) Classification and Certification

- The Alexander Water Treatment Plant is a Class 2 water treatment facility.
- The Whitehead Elton Regional Water Co-operative Inc. water distribution system is Class 1.
- The R.M. Of Whitehead's distribution system is Class 1.
- The R.M. Of Elton's distribution system is classed as a Small Distribution System.

The Facility classifications are used to determine certification requirements for the water system operators. The requirements fall under the Water and Wastewater Facility Operators Regulation under the Environment Act.

3) List of Water Quality Standards

3.I) Water Quality Standards and Monitoring Requirements

The Province of Manitoba has adopted several water quality standards from the Health Canada *Guidelines for Canadian Drinking Water Quality*. The health-based parameters express the *maximum acceptable concentrations, or MAC*, for drinking water. Concentration values in excess of the guidelines constitute a health-related issue and require corrective actions. All health-based parameters were within the limits in 2021 for Whitehead Elton Regional Water Co-operative Inc. and both R.M.'s.

All public water systems, PWS, are required to monitor chlorine residual levels daily. Monitoring is done daily at both the Alexander Water Treatment Plant and the Forrest Reservoir. Results are recorded and at the end of each month, results are forwarded to our Provincial Drinking Water Officer. Copies of the originals must be kept on file and on hand for **TWO YEARS** at each facility.

Bacterial Testing for Total Coliforms and E.coli are done every two weeks, with sample sets being separated by at least 12 days. Chlorine residuals are tested in the distribution system at the same time and location as bacterial samples. All results are kept in the files at the Water Treatment Plant for a period of 2 years.

3.II) Drinking Water Officer Annual Reports

PWS 248.70 Whitehead Elton Regional Water Co-operative Inc.

PWS 248.80 R.M. Of Whitehead

PWS 63.50 R.M. Of Elton

February 1, 2022

2021 Annual Compliance Audit

Water System: WHITEHEAD ELTON REGIONAL - PWS	Code: 248.70
Water System Owner: Whitehead Elton Regional Water Cooperative Inc.	Address: General Delivery, Forrest, MB R0K 0W0
Operating Licence: PWS-11-487-01 A	Expiry Date: November 30, 2021
Water System Assessment Due Date: March 1, 2026	
Public Water System Annual Report Due Date: March 31, 2022	Advisory Notification Plan Due Date: May 1, 2022

- 1) This report documents compliance of the Whitehead Elton Regional Public Water System for the period from January 1 to December 31, 2021.
- 2) This report provides specific information on the non-compliance incidents identified in the summary below.
- 3) Other than the information provided in this report, the water supplier has complied with The Drinking Water Safety Act, its supporting regulations, and the terms and conditions of the water system's current operating licence.
- 4) This report is based on information submitted by the water supplier, agents of the water supplier, and / or the Province of Manitoba.
- 5) Where non-compliance items are identified, the issues do not necessarily translate into increased public health risk. The Office of Drinking Water uses processes, including boil water advisories, to notify water users of a public health risk.

Non-compliance with Treatment Standards:

Water system was compliant in the audited time period.

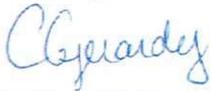
Non-compliance Incidents:

Date	Incident	Outcome
June	Failure to submit bacteriological samples at the frequency specified in your operating licence	Non-compliant Situation Reported to the Office of Drinking
November	Failure to take and/or record disinfection residual measurement within the distribution system	Non-compliant Situation Reported to the Office of Drinking

*Note failure to submit bacteriological samples at the frequency specified or the required number of samples, results in additional non-compliance with other terms and conditions of the operating licence. This includes the applicable bacteriological standards, disinfection standard and monitoring requirements, and other requirements applicable to the location of the missed sample.

If you have any questions, please do not hesitate to contact me at (204) 570-1405.

Sincerely,



Christine Gerardy
Senior Regional Drinking Water Officer

February 1, 2022

2021 Annual Compliance Audit

Water System: WHITEHEAD (WHITEHEAD ELTON REGIONAL) - PWS	Code: 248.80
Water System Owner: Rural Municipality of Whitehead	Address: Box 107, Alexander, MB R0K 0A0
Operating Licence: PWS-12-521-01	Expiry Date: November 30, 2022
Water System Assessment Due Date: March 1, 2024	
Public Water System Annual Report Due Date: N/A	Advisory Notification Plan Due Date: N/A

- 1) This report documents compliance of the Whitehead (Whitehead Elton Regional) Public Water System for the period from January 1 to December 31, 2021.
- 2) This report provides specific information on the non-compliance incidents identified in the summary below.
- 3) Other than the information provided in this report, the water supplier has complied with The Drinking Water Safety Act, its supporting regulations, and the terms and conditions of the water system's current operating licence.
- 4) This report is based on information submitted by the water supplier, agents of the water supplier, and / or the Province of Manitoba.
- 5) Where non-compliance items are identified, the issues do not necessarily translate into increased public health risk. The Office of Drinking Water uses processes, including boil water advisories, to notify water users of a public health risk.

Non-compliance with Treatment Standards:

Water system was compliant in the audited time period.

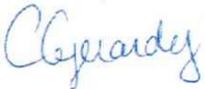
Non-compliance Incidents:

Date	Incident	Outcome
June	Failure to submit bacteriological samples at the frequency specified in your operating licence	Non-compliant Situation Reported to the Office of Drinking

*Note failure to submit bacteriological samples at the frequency specified or the required number of samples, results in additional non-compliance with other terms and conditions of the operating licence. This includes the applicable bacteriological standards, disinfection standard and monitoring requirements, and other requirements applicable to the location of the missed sample.

If you have any questions, please do not hesitate to contact me at (204) 570-1405.

Sincerely,



Christine Gerardy
Senior Regional Drinking Water Officer

February 1, 2022

2021 Annual Compliance Audit

Water System: ELTON (WHITEHEAD ELTON REGIONAL) - PWS	Code: 63.50
Water System Owner: Rural Municipality of Elton	Address: General Delivery, Forrest, MB R0K 0W0
Operating Licence: PWS-11-488-01	Expiry Date: November 30, 2021
Water System Assessment Due Date: March 1, 2024	
Public Water System Annual Report Due Date: N/A	Advisory Notification Plan Due Date: N/A

- 1) This report documents compliance of the Elton (Whitehead Elton Regional) Public Water System for the period from January 1 to December 31, 2021.
- 2) This report provides specific information on the non-compliance incidents identified in the summary below.
- 3) Other than the information provided in this report, the water supplier has complied with The Drinking Water Safety Act, its supporting regulations, and the terms and conditions of the water system's current operating licence.
- 4) This report is based on information submitted by the water supplier, agents of the water supplier, and / or the Province of Manitoba.
- 5) Where non-compliance items are identified, the issues do not necessarily translate into increased public health risk. The Office of Drinking Water uses processes, including boil water advisories, to notify water users of a public health risk.

Non-compliance with Treatment Standards:

Water system was compliant in the audited time period.

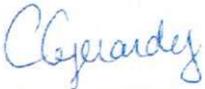
Non-compliance Incidents:

Date	Incident	Outcome
June	Failure to submit bacteriological samples at the frequency specified in your operating licence	Non-compliant Situation Reported to the Office of Drinking

*Note failure to submit bacteriological samples at the frequency specified or the required number of samples, results in additional non-compliance with other terms and conditions of the operating licence. This includes the applicable bacteriological standards, disinfection standard and monitoring requirements, and other requirements applicable to the location of the missed sample.

If you have any questions, please do not hesitate to contact me at (204) 570-1405.

Sincerely,



Christine Gerardy
Senior Regional Drinking Water Officer

3.III) 2020 General Chemical Analysis

As part of the operating licence for Whitehead Elton Regional Water Co-operative Inc., a general chemical analysis of both the raw water and the treated water in the reservoir has to be done every **Three years**. Water samples were sent to the lab on August 26/20 and we will be required to be sample again in 2023.

It is an extensive test including a physical test, Anions and Nutrients, Organic/Inorganic Carbon, Total Metals and Volatile Organic Compounds tests.

The tests are conducted at ALS Labs in Winnipeg. The results are on the following page. The highlighted areas on the results indicate that the raw water exceeds Aesthetic Objectives or Maximum Acceptable Concentrations cited in the *Guidelines for Canadian Drinking Water Standards*. None of the treated water produced exceeds MAC limits or Aesthetic Objectives.

If there are questions that you may have regarding the lab results, please use one of the contact numbers listed and we can assist in any questions or concerns.

3.IV) Arsenic Test

As part of our license with ODW, the Whitehead Elton Regional Water Co-operative Inc. is required to conduct an arsenic test on raw and treated water at the water treatment plant. The results of the Arsenic test are located after the General Chemical Analysis.



Whitehead Elton Regional Water Co-op
ATTN: RALPH BERG
Whitehead Elton Regional - PWS
Box 107
Alexander MB ROK OAO

Date Received: 27-AUG-20
Report Date: 09-SEP-20 10:42 (MT)
Version: FINAL

Client Phone: 204-729-6116

Certificate of Analysis

Lab Work Order #: L2495096
Project P.O. #: NOT SUBMITTED
Job Reference: WHITEHEAD ELTON REGIONAL - PWS 248.70
C of C Numbers:
Legal Site Desc: 46658

Hua Wo
Chemistry Laboratory Manager

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ADDRESS: 1329 Niakwa Road East, Unit 12, Winnipeg, MB R2J 3T4 Canada | Phone: +1 204 255 9720 | Fax: +1 204 255 9721
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Environmental

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Physical Tests (WATER)

		ALS ID		L2495096-1	L2495096-2
		Sampled Date		26-AUG-20	26-AUG-20
		Sampled Time		08:25	08:35
		Sample ID		WHITEHEAD ELTON REGIONAL 1 - RAW	WHITEHEAD ELTON REGIONAL 2 - TREATED
Analyte	Unit	Guide Limit #1	Guide Limit #2		
Colour, True	CU	15	-	<5.0	<5.0
Conductivity	umhos/cm	-	-	1100	294
Hardness (as CaCO3)	mg/L	-	-	629 ^{HTC}	117 ^{HTC}
Langelier Index (4 C)	No Unit	-	-	0.76	-0.18
Langelier Index (60 C)	No Unit	-	-	1.5	0.59
pH	pH units	7.00-10.5	-	7.84	8.02
Total Dissolved Solids	mg/L	500	-	816	200
Transmittance, UV (254 nm)	%T/cm	-	-	90.2	97.3
Turbidity	NTU	-	-	32.0	<0.10

Federal Guidelines for Canadian Drinking Water Quality (JAN, 2020)

#1: GCDWQ - Aesthetic Objective/Other Value (Jan.2020)

#2: GCDWQ - Maximum Acceptable Concentrations (MACs-Jan.2020)

Anions and Nutrients (WATER)

		ALS ID		L2495096-1	L2495096-2
		Sampled Date		26-AUG-20	26-AUG-20
		Sampled Time		08:25	08:35
		Sample ID		WHITEHEAD ELTON REGIONAL 1 - RAW	WHITEHEAD ELTON REGIONAL 2 - TREATED
Analyte	Unit	Guide Limit #1	Guide Limit #2		
Alkalinity, Total (as CaCO3)	mg/L	-	-	327	94.4
Ammonia, Total (as N)	mg/L	-	-	0.237	<0.010
Bicarbonate (HCO3)	mg/L	-	-	399	115
Bromide (Br)	mg/L	-	-	0.076	<0.010
Carbonate (CO3)	mg/L	-	-	<0.60	<0.60
Chloride (Cl)	mg/L	250	-	12.9	5.09
Fluoride (F)	mg/L	-	1.5	0.151	0.032
Hydroxide (OH)	mg/L	-	-	<0.34	<0.34
Nitrate (as N)	mg/L	-	10	<0.010 ^{DLM}	<0.0050
Nitrite (as N)	mg/L	-	1	<0.0020 ^{DLM}	<0.0050 ^{DLM}
Sulfate (SO4)	mg/L	500	-	331	58.3

Federal Guidelines for Canadian Drinking Water Quality (JAN, 2020)

#1: GCDWQ - Aesthetic Objective/Other Value (Jan.2020)

#2: GCDWQ - Maximum Acceptable Concentrations (MACs-Jan.2020)

Organic / Inorganic Carbon (WATER)

		ALS ID		L2495096-1	L2495096-2
		Sampled Date		26-AUG-20	26-AUG-20
		Sampled Time		08:25	08:35
		Sample ID		WHITEHEAD ELTON REGIONAL 1 - RAW	WHITEHEAD ELTON REGIONAL 2 - TREATED
Analyte	Unit	Guide Limit #1	Guide Limit #2		
Dissolved Organic Carbon	mg/L	-	-	2.85	<0.50
Total Organic Carbon	mg/L	-	-	2.59	<0.50

Federal Guidelines for Canadian Drinking Water Quality (JAN, 2020)

#1: GCDWQ - Aesthetic Objective/Other Value (Jan.2020)

#2: GCDWQ - Maximum Acceptable Concentrations (MACs-Jan.2020)

 Detection Limit for result exceeds Guide Limit. Assessment against Guide Limit cannot be made.

 Analytical result for this parameter exceeds Guide Limit listed on this report.

* Please refer to the Reference Information section for an explanation of any qualifiers noted.

Total Metals (WATER)

Analyte	Unit	ALS ID		L2495096-1	L2495096-2
		Guide Limit #1	Guide Limit #2	Sampled Date	Sampled Time
				Sample ID	Sample ID
				WHITEHEAD ELTON REGIONAL 1 - RAW	WHITEHEAD ELTON REGIONAL 2 - TREATED
Aluminum (Al)-Total	mg/L	0.1	-	<0.0030	<0.0030
Antimony (Sb)-Total	mg/L	-	0.006	<0.00010	<0.00010
Arsenic (As)-Total	mg/L	-	0.01	0.0156	0.00122
Barium (Ba)-Total	mg/L	-	2	0.0203	0.00353
Beryllium (Be)-Total	mg/L	-	-	<0.00010	<0.00010
Bismuth (Bi)-Total	mg/L	-	-	<0.000050	<0.000050
Boron (B)-Total	mg/L	-	5	0.091	0.066
Cadmium (Cd)-Total	mg/L	-	0.005	<0.0000050	<0.0000050
Calcium (Ca)-Total	mg/L	-	-	157	28.8
Cesium (Cs)-Total	mg/L	-	-	<0.000010	<0.000010
Chromium (Cr)-Total	mg/L	-	0.05	<0.00010	<0.00010
Cobalt (Co)-Total	mg/L	-	-	<0.00010	<0.00010
Copper (Cu)-Total	mg/L	1	2	<0.00050	0.00075
Iron (Fe)-Total	mg/L	0.3	-	2.55	0.012
Lead (Pb)-Total	mg/L	-	0.005	<0.000050	0.000167
Lithium (Li)-Total	mg/L	-	-	0.0531	0.0133
Magnesium (Mg)-Total	mg/L	-	-	57.6	11.0
Manganese (Mn)-Total	mg/L	0.02	0.12	0.384	0.00165
Molybdenum (Mo)-Total	mg/L	-	-	0.00488	0.000766
Nickel (Ni)-Total	mg/L	-	-	<0.00050	<0.00050
Phosphorus (P)-Total	mg/L	-	-	0.059	<0.030
Potassium (K)-Total	mg/L	-	-	4.79	1.21
Rubidium (Rb)-Total	mg/L	-	-	0.00175	0.00043
Selenium (Se)-Total	mg/L	-	0.05	<0.000050	<0.000050
Silicon (Si)-Total	mg/L	-	-	13.6	2.76
Silver (Ag)-Total	mg/L	-	-	<0.000010	<0.000010
Sodium (Na)-Total	mg/L	200	-	11.9	18.5
Strontium (Sr)-Total	mg/L	-	7	0.462	0.0809
Sulfur (S)-Total	mg/L	-	-	112	19.8
Tellurium (Te)-Total	mg/L	-	-	<0.00020	<0.00020
Thallium (Tl)-Total	mg/L	-	-	<0.000010	<0.000010
Thorium (Th)-Total	mg/L	-	-	<0.00010	<0.00010
Tin (Sn)-Total	mg/L	-	-	<0.00010	<0.00010

Federal Guidelines for Canadian Drinking Water Quality (JAN, 2020)

#1: GCDWQ - Aesthetic Objective/Other Value (Jan.2020)

#2: GCDWQ - Maximum Acceptable Concentrations (MACs-Jan.2020)

 Detection Limit for result exceeds Guide Limit. Assessment against Guide Limit cannot be made.

 Analytical result for this parameter exceeds Guide Limit listed on this report.

* Please refer to the Reference Information section for an explanation of any qualifiers noted.

Total Metals (WATER)

		ALS ID		L2495096-1	L2495096-2
		Sampled Date		26-AUG-20	26-AUG-20
		Sampled Time		08:25	08:35
		Sample ID		WHITEHEAD ELTON REGIONAL 1 - RAW	WHITEHEAD ELTON REGIONAL 2 - TREATED
Analyte	Unit	Guide Limit #1	Guide Limit #2		
Titanium (Ti)-Total	mg/L	-	-	<0.00030	<0.00030
Tungsten (W)-Total	mg/L	-	-	<0.00010	<0.00010
Uranium (U)-Total	mg/L	-	0.02	0.00756	0.00130
Vanadium (V)-Total	mg/L	-	-	<0.00050	<0.00050
Zinc (Zn)-Total	mg/L	5	-	0.0033	<0.0030
Zirconium (Zr)-Total	mg/L	-	-	<0.00020	<0.00020

Federal Guidelines for Canadian Drinking Water Quality (JAN, 2020)

#1: GCDWQ - Aesthetic Objective/Other Value (Jan.2020)

#2: GCDWQ - Maximum Acceptable Concentrations (MACs-Jan.2020)

Volatile Organic Compounds (WATER)

		ALS ID		L2495096-1
		Sampled Date		26-AUG-20
		Sampled Time		08:25
		Sample ID		WHITEHEAD ELTON REGIONAL 1 - RAW
Analyte	Unit	Guide Limit #1	Guide Limit #2	
Benzene	mg/L	-	0.005	<0.00050
1,1-dichloroethene	mg/L	-	0.014	<0.00050
Dichloromethane	mg/L	-	0.05	<0.00050
Ethylbenzene	mg/L	0.0016	0.14	<0.00050
MTBE	mg/L	0.015	-	<0.00050
Tetrachloroethene	mg/L	-	0.01	<0.00050
Toluene	mg/L	0.024	0.06	<0.00050
Trichloroethene	mg/L	-	0.005	<0.00050
o-Xylene	mg/L	-	-	<0.00050
m+p-Xylenes	mg/L	-	-	<0.00040
Xylenes (Total)	mg/L	0.02	0.09	<0.00064
Surrogate: 4-Bromofluorobenzene (SS)	%	-	-	93.1
Surrogate: 1,4-Difluorobenzene (SS) %		-	-	98.3

Federal Guidelines for Canadian Drinking Water Quality (JAN, 2020)

#1: GCDWQ - Aesthetic Objective/Other Value (Jan.2020)

#2: GCDWQ - Maximum Acceptable Concentrations (MACs-Jan.2020)

Detection Limit for result exceeds Guide Limit. Assessment against Guide Limit cannot be made.

Analytical result for this parameter exceeds Guide Limit listed on this report.

* Please refer to the Reference Information section for an explanation of any qualifiers noted.



Whitehead Elton Regional Water Co-op
ATTN: RALPH BERG
Whitehead Elton Regional - PWS
Box 107
Alexander MB R0K 0A0

Date Received: 16-DEC-21
Report Date: 22-DEC-21 08:01 (MT)
Version: FINAL

Client Phone: 204-729-6116

Certificate of Analysis

Lab Work Order #: L2673268

Project P.O. #: NOT SUBMITTED
Job Reference: ALEXANDER WATER TREATMENT PLANT
C of C Numbers:
Legal Site Desc:



Hua Wo
Chemistry Laboratory Manager

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ADDRESS: 1329 Niakwa Road East, Unit 12, Winnipeg, MB R2J 3T4 Canada | Phone: +1 204 255 9720 | Fax: +1 204 255 9721
ALS CANADA LTD Part of the ALS Group An ALS Limited Company

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2673268-1 WHITEHEAD ELTON REGIONAL WATER COOPERATIVE INC - RAW Sampled By: CLIENT on 15-DEC-21 @ 10:55 Matrix: WATER Single Metal in Water by ICPMS (Tot.) Total Metals in Water by CRC ICPMS Arsenic (As)-Total	0.00787		0.00010	mg/L	20-DEC-21	20-DEC-21	R5681820
L2673268-2 WHITEHEAD ELTON REGIONAL WATER COOPERATIVE INC - TREATED Sampled By: CLIENT on 15-DEC-21 @ 10:55 Matrix: WATER Single Metal in Water by ICPMS (Tot.) Total Metals in Water by CRC ICPMS Arsenic (As)-Total	0.00102		0.00010	mg/L	20-DEC-21	20-DEC-21	R5681820
L2673268-3 WHITEHEAD ELTON REGIONAL WATER COOPERATIVE INC-FORREST RES. Sampled By: CLIENT on 15-DEC-21 @ 10:55 Matrix: WATER Single Metal in Water by ICPMS (Tot.) Total Metals in Water by CRC ICPMS Arsenic (As)-Total	0.00068		0.00010	mg/L	20-DEC-21	20-DEC-21	R5681820

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

4) Water System Incidents and Corrective Actions

In June, a set of bacteriological samples were taken for all three systems that were too close to the prior set of bacteriological samples. This occurred because the first set of samples had to be redone since the lab was not going to be open to accept them in the time frame the samples needed due to a statutory holiday.

In November, a chlorine sample at the Forrest Reservoir was missed due to a sick operator and a miscommunication. This incident was immediately reported to the Drinking Water Officer as soon as it came to light.

5) Drinking Water Safety Orders, Warnings and Charges

In June, a maintenance advisory was given affecting one house in Elton due to a section of line being depressurized to complete a repair.

In September, a Boil Water Advisory was issued to Elton affecting a portion wards one and two due to a contractor damaging the main waterline.

6) Major Expenses Incurred

There were no major expenses incurred in 2021.

7) Future System Expansion

A major expansion to the Water Treatment Plant started in 2021 to meet increased demand in the system. The expansion is expected to be completed summer of 2022.

An upgrade to the river crossing in Grand Valley is to take place in 2022.

Appendix A

Appendix A contains all the bacterial test results for all 3 Public Water Systems.

Appendix B

Appendix B contains the 2021 Water Use Report that has to be sent to the Provincial Government and the Monitoring Well Graph Reports . The Monitoring Wells are checked periodically throughout the year. One well is located at the raw water supply wells and the second is located a quarter of a mile away. These Monitoring Wells are a daily snapshot on the health of the aquifer we draw our water from.

APPENDIX A

2021

BACTERIAL SAMPLE RESULTS

Bacteriological Test Results

Community Code	Collection Date	System	Location	Total Coliforms	E.Coli	Free Chlorine	Total Chlorine
248.70	13-Jan-21	Whitehead/Elton	Raw	0	0	0.00	0.00
248.70	13-Jan-21	Whitehead/Elton	Treated	0	0	0.92	1.03
248.70	13-Jan-21	Whitehead/Elton	Incoming	0	0	0.98	1.04
248.70	13-Jan-21	Whitehead/Elton	Outgoing	0	0	0.88	0.94
248.80	13-Jan-21	Whitehead Dist.	Firehall	0	0	0.94	1.07
248.80	13-Jan-21	Whitehead Dist.	Dungannon	0	0	1.11	1.18
63.50	13-Jan-21	Elton Dist.	PR #2	0	0	0.91	0.98
63.50	13-Jan-21	Elton Dist.	Elton Booster	0	0	0.92	1.00
248.70	27-Jan-21	Whitehead/Elton	Raw	0	0	0.00	0.00
248.70	27-Jan-21	Whitehead/Elton	Treated	0	0	0.81	0.86
248.70	27-Jan-21	Whitehead/Elton	Incoming	0	0	0.77	0.84
248.70	27-Jan-21	Whitehead/Elton	Outgoing	0	0	0.84	0.89
248.80	27-Jan-21	Whitehead Dist.	Firehall	0	0	0.78	0.87
248.80	27-Jan-21	Whitehead Dist.	Dungannon	0	0	0.82	0.90
63.50	27-Jan-21	Elton Dist.	PR #2	0	0	0.83	0.89
63.50	27-Jan-21	Elton Dist.	Elton Booster	0	0	0.84	0.93
248.70	11-Feb-21	Whitehead/Elton	Raw	0	0	0.00	0.00
248.70	11-Feb-21	Whitehead/Elton	Treated	0	0	0.92	0.99
248.70	11-Feb-21	Whitehead/Elton	Incoming	0	0	1.09	1.15
248.70	11-Feb-21	Whitehead/Elton	Outgoing	0	0	0.79	0.86
248.80	16-Feb-21	Whitehead Dist.	Firehall	0	0	0.87	1.03
248.80	16-Feb-21	Whitehead Dist.	Dungannon	0	0	0.78	0.91
63.50	16-Feb-21	Elton Dist.	PR #2	0	0	0.98	1.03
63.50	11-Feb-21	Elton Dist.	Elton Booster	0	0	0.71	0.79
248.70	24-Feb-21	Whitehead/Elton	Raw	0	0	0.00	0.00
248.70	24-Feb-21	Whitehead/Elton	Treated	0	0	0.87	0.97
248.70	24-Feb-21	Whitehead/Elton	Incoming	0	0	0.90	1.03
248.70	24-Feb-21	Whitehead/Elton	Outgoing	0	0	0.89	0.96
248.80	24-Feb-21	Whitehead Dist.	Firehall	0	0	0.84	0.97
248.80	24-Feb-21	Whitehead Dist.	Dungannon	0	0	0.86	0.92
63.50	24-Feb-21	Elton Dist.	PR #2	0	0	0.99	1.08
63.50	24-Feb-21	Elton Dist.	Elton Booster	0	0	0.95	0.99
248.70	11-Mar-21	Whitehead/Elton	Raw	0	0	0.00	0.00
248.70	11-Mar-21	Whitehead/Elton	Treated	0	0	0.86	0.94
248.70	11-Mar-21	Whitehead/Elton	Incoming	0	0	0.68	0.77
248.70	11-Mar-21	Whitehead/Elton	Outgoing	0	0	0.72	0.77
248.80	11-Mar-21	Whitehead Dist.	Firehall	0	0	0.86	0.94
248.80	11-Mar-21	Whitehead Dist.	Dungannon	0	0	0.91	0.97
63.50	11-Mar-21	Elton Dist.	PR #2	0	0	0.72	0.77
63.50	11-Mar-21	Elton Dist.	Elton Booster	0	0	0.77	0.85
248.70	24-Mar-21	Whitehead/Elton	Raw	0	0	0.00	0.00
248.70	24-Mar-21	Whitehead/Elton	Treated	0	0	0.83	0.91
248.70	24-Mar-21	Whitehead/Elton	Incoming	0	0	0.93	0.96
248.70	24-Mar-21	Whitehead/Elton	Outgoing	0	0	0.84	0.91
248.80	24-Mar-21	Whitehead Dist.	Firehall	0	0	0.84	0.90
248.80	24-Mar-21	Whitehead Dist.	Dungannon	0	0	0.97	1.02

Bacteriological Test Results

Community Code	Collection Date	System	Location	Total Coliforms	E.Coli	Free Chlorine	Total Chlorine
63.50	24-Mar-21	Elton Dist.	PR #2	0	0	0.72	0.79
63.50	24-Mar-21	Elton Dist.	Elton Booster	0	0	0.69	0.80
248.70	7-Apr-21	Whitehead/Elton	Raw	0	0	0.00	0.00
248.70	7-Apr-21	Whitehead/Elton	Treated	0	0	0.84	0.97
248.70	7-Apr-21	Whitehead/Elton	Incoming	0	0	0.86	0.98
248.70	7-Apr-21	Whitehead/Elton	Outgoing	0	0	0.81	0.87
248.80	7-Apr-21	Whitehead Dist.	Firehall	0	0	0.84	0.96
248.80	7-Apr-21	Whitehead Dist.	Dungannon	0	0	0.85	0.93
63.50	7-Apr-21	Elton Dist.	PR #2	0	0	0.79	0.84
63.50	7-Apr-21	Elton Dist.	Elton Booster	0	0	0.87	0.98
248.70	21-Apr-21	Whitehead/Elton	Raw	0	0	0.00	0.00
248.70	21-Apr-21	Whitehead/Elton	Treated	0	0	0.82	0.91
248.70	21-Apr-21	Whitehead/Elton	Incoming	0	0	0.84	0.95
248.70	21-Apr-21	Whitehead/Elton	Outgoing	0	0	0.83	0.92
248.80	21-Apr-21	Whitehead Dist.	Firehall	0	0	0.85	0.94
248.80	21-Apr-21	Whitehead Dist.	Dungannon	0	0	0.87	0.94
63.50	21-Apr-21	Elton Dist.	PR #2	0	0	0.81	0.87
63.50	21-Apr-21	Elton Dist.	Elton Booster	0	0	0.83	0.96
248.70	5-May-21	Whitehead/Elton	Raw	0	0	0.00	0.00
248.70	5-May-21	Whitehead/Elton	Treated	0	0	0.88	0.96
248.70	5-May-21	Whitehead/Elton	Incoming	0	0	0.76	0.82
248.70	5-May-21	Whitehead/Elton	Outgoing	0	0	0.81	0.86
248.80	5-May-21	Whitehead Dist.	Firehall	0	0	0.82	0.94
248.80	5-May-21	Whitehead Dist.	Dungannon	0	0	0.77	0.84
63.50	5-May-21	Elton Dist.	PR #2	0	0	0.87	0.92
63.50	5-May-21	Elton Dist.	Elton Booster	0	0	0.83	0.88
248.70	19-May-21	Whitehead/Elton	Raw	0	0	0.00	0.00
248.70	19-May-21	Whitehead/Elton	Treated	0	0	0.73	0.81
248.70	19-May-21	Whitehead/Elton	Incoming	0	0	0.77	0.86
248.70	19-May-21	Whitehead/Elton	Outgoing	0	0	0.80	0.86
248.80	19-May-21	Whitehead Dist.	Firehall	0	0	0.74	0.83
248.80	19-May-21	Whitehead Dist.	Dungannon	0	0	0.80	0.88
63.50	19-May-21	Elton Dist.	PR #2	0	0	0.75	0.78
63.50	19-May-21	Elton Dist.	Elton Booster	0	0	0.72	0.78
248.70	2-Jun-21	Whitehead/Elton	Raw	0	0	0.00	0.00
248.70	2-Jun-21	Whitehead/Elton	Treated	0	0	0.60	0.71
248.70	2-Jun-21	Whitehead/Elton	Incoming	0	0	0.64	0.72
248.70	2-Jun-21	Whitehead/Elton	Outgoing	0	0	0.63	0.72
248.80	2-Jun-21	Whitehead Dist.	Firehall	0	0	0.57	0.65
248.80	2-Jun-21	Whitehead Dist.	Dungannon	0	0	0.58	0.63
63.50	2-Jun-21	Elton Dist.	PR #2	0	0	0.66	0.72
63.50	2-Jun-21	Elton Dist.	Elton Office	0	0	0.67	0.73
248.70	16-Jun-21	Whitehead/Elton	Raw	0	0	0.00	0.00
248.70	16-Jun-21	Whitehead/Elton	Treated	0	0	0.78	0.88
248.70	16-Jun-21	Whitehead/Elton	Incoming	0	0	1.19	1.45
248.70	16-Jun-21	Whitehead/Elton	Outgoing	0	0	1.02	1.15

Bacteriological Test Results

Community Code	Collection Date	System	Location	Total Coliforms	E.Coli	Free Chlorine	Total Chlorine
248.80	16-Jun-21	Whitehead Dist.	Firehall	0	0	0.93	1.04
248.80	16-Jun-21	Whitehead Dist.	Dungannon	0	0	1.04	1.18
63.50	16-Jun-21	Elton Dist.	PR #3	0	0	0.89	1.02
63.50	16-Jun-21	Elton Dist.	Elton Office	0	0	0.78	0.88
248.70	5-Jul-21	Whitehead/Elton	Raw	0	0	0.00	0.00
248.70	5-Jul-21	Whitehead/Elton	Treated	0	0	0.70	0.81
248.70	5-Jul-21	Whitehead/Elton	Incoming	0	0	0.69	0.78
248.70	5-Jul-21	Whitehead/Elton	Outgoing	0	0	0.69	0.79
248.80	5-Jul-21	Whitehead Dist.	Firehall	0	0	0.74	0.78
248.80	5-Jul-21	Whitehead Dist.	Dungannon	0	0	0.65	0.76
63.50	5-Jul-21	Elton Dist.	PR #2	0	0	0.68	0.76
63.50	5-Jul-21	Elton Dist.	Elton Office	0	0	0.70	0.78
248.70	14-Jul-21	Whitehead/Elton	Raw	0	0	0.00	0.00
248.70	14-Jul-21	Whitehead/Elton	Treated	0	0	0.72	0.86
248.70	14-Jul-21	Whitehead/Elton	Incoming	0	0	0.72	0.80
248.70	14-Jul-21	Whitehead/Elton	Outgoing	0	0	0.75	0.82
248.80	14-Jul-21	Whitehead Dist.	Firehall	0	0	0.72	0.78
248.80	14-Jul-21	Whitehead Dist.	Dungannon	0	0	0.81	0.85
63.50	14-Jul-21	Elton Dist.	PR #2	0	0	0.69	0.80
63.50	14-Jul-21	Elton Dist.	Elton Office	0	0	0.88	0.96
248.70	28-Jul-21	Whitehead/Elton	Raw	0	0	0.00	0.00
248.70	28-Jul-21	Whitehead/Elton	Treated	0	0	1.21	1.38
248.70	28-Jul-21	Whitehead/Elton	Incoming	0	0	0.70	0.79
248.70	28-Jul-21	Whitehead/Elton	Outgoing	0	0	0.63	0.71
248.80	28-Jul-21	Whitehead Dist.	Firehall	0	0	1.01	1.10
248.80	28-Jul-21	Whitehead Dist.	Dungannon	0	0	1.01	1.09
63.50	28-Jul-21	Elton Dist.	PR #2	0	0	0.59	0.67
63.50	28-Jul-21	Elton Dist.	Elton Office	0	0	0.66	0.74
248.70	11-Aug-21	Whitehead/Elton	Raw	0	0	0.00	0.00
248.70	11-Aug-21	Whitehead/Elton	Treated	0	0	0.86	0.94
248.70	11-Aug-21	Whitehead/Elton	Incoming	0	0	0.85	0.91
248.70	11-Aug-21	Whitehead/Elton	Outgoing	0	0	0.82	0.91
248.80	11-Aug-21	Whitehead Dist.	Firehall	0	0	0.79	0.91
248.80	11-Aug-21	Whitehead Dist.	Dungannon	0	0	0.82	0.85
63.50	11-Aug-21	Elton Dist.	PR #2	0	0	0.84	0.92
63.50	11-Aug-21	Elton Dist.	Elton Office	0	0	0.83	0.89
248.70	25-Aug-21	Whitehead/Elton	Raw	0	0	0.00	0.00
248.70	25-Aug-21	Whitehead/Elton	Treated	0	0	0.65	0.75
248.70	25-Aug-21	Whitehead/Elton	Incoming	0	0	0.74	0.81
248.70	25-Aug-21	Whitehead/Elton	Outgoing	0	0	0.82	0.86
248.80	25-Aug-21	Whitehead Dist.	Firehall	0	0	0.64	0.71
248.80	25-Aug-21	Whitehead Dist.	Dungannon	0	0	0.66	0.73
63.50	25-Aug-21	Elton Dist.	PR #2	0	0	0.89	1.00
63.50	25-Aug-21	Elton Dist.	Elton Booster	0	0	0.67	0.68
248.70	8-Sep-21	Whitehead/Elton	Raw	0	0	0.00	0.00
248.70	8-Sep-21	Whitehead/Elton	Treated	0	0	0.69	0.78

Bacteriological Test Results

Community Code	Collection Date	System	Location	Total Coliforms	E.Coli	Free Chlorine	Total Chlorine
248.70	8-Sep-21	Whitehead/Elton	Incoming	0	0	0.71	0.83
248.70	8-Sep-21	Whitehead/Elton	Outgoing	0	0	0.78	0.83
248.80	8-Sep-21	Whitehead Dist.	Firehall	0	0	0.72	0.78
248.80	8-Sep-21	Whitehead Dist.	Dungannon	0	0	0.73	0.79
63.50	8-Sep-21	Elton Dist.	PR #2	0	0	0.73	0.78
63.50	8-Sep-21	Elton Dist.	Elton Booster	0	0	0.74	0.77
248.70	22-Sep-21	Whitehead/Elton	Raw	0	0	0.00	0.00
248.70	22-Sep-21	Whitehead/Elton	Treated	0	0	0.83	0.94
248.70	22-Sep-21	Whitehead/Elton	Incoming	0	0	0.74	0.80
248.70	22-Sep-21	Whitehead/Elton	Outgoing	0	0	0.73	0.82
248.80	22-Sep-21	Whitehead Dist.	Firehall	0	0	0.76	0.79
248.80	22-Sep-21	Whitehead Dist.	Dungannon	0	0	0.83	0.89
63.50	22-Sep-21	Elton Dist.	PR #2	0	0	0.78	0.83
63.50	22-Sep-21	Elton Dist.	Elton Office	0	0	0.82	0.85
248.70	6-Oct-21	Whitehead/Elton	Raw	0	0	0.00	0.00
248.70	6-Oct-21	Whitehead/Elton	Treated	0	0	0.72	0.82
248.70	6-Oct-21	Whitehead/Elton	Incoming	0	0	0.72	0.75
248.70	6-Oct-21	Whitehead/Elton	Outgoing	0	0	0.70	0.75
248.80	6-Oct-21	Whitehead Dist.	Firehall	0	0	0.69	0.75
248.80	6-Oct-21	Whitehead Dist.	Dungannon	0	0	0.72	0.76
63.50	6-Oct-21	Elton Dist.	PR #2	0	0	0.64	0.69
63.50	6-Oct-21	Elton Dist.	Elton Booster	0	0	0.69	0.74
248.70	20-Oct-21	Whitehead/Elton	Raw	0	0	0.00	0.00
248.70	20-Oct-21	Whitehead/Elton	Treated	0	0	0.78	0.92
248.70	20-Oct-21	Whitehead/Elton	Incoming	0	0	0.72	0.74
248.70	20-Oct-21	Whitehead/Elton	Outgoing	0	0	0.69	0.73
248.80	20-Oct-21	Whitehead Dist.	Firehall	0	0	0.72	0.76
248.80	20-Oct-21	Whitehead Dist.	Dungannon	0	0	0.70	0.74
63.50	20-Oct-21	Elton Dist.	PR #2	0	0	0.73	0.77
63.50	20-Oct-21	Elton Dist.	Elton Booster	0	0	0.68	0.71
248.70	3-Nov-21	Whitehead/Elton	Raw	0	0	0.00	0.00
248.70	3-Nov-21	Whitehead/Elton	Treated	0	0	1.01	1.16
248.70	3-Nov-21	Whitehead/Elton	Incoming	0	0	0.83	0.88
248.70	3-Nov-21	Whitehead/Elton	Outgoing	0	0	0.86	0.91
248.80	3-Nov-21	Whitehead Dist.	Firehall	0	0	0.96	1.04
248.80	3-Nov-21	Whitehead Dist.	Dungannon	0	0	0.92	0.98
63.50	3-Nov-21	Elton Dist.	PR #2	0	0	0.83	0.87
63.50	3-Nov-21	Elton Dist.	Elton Booster	0	0	0.86	0.90
248.70	17-Nov-21	Whitehead/Elton	Raw	0	0	0.00	0.00
248.70	17-Nov-21	Whitehead/Elton	Treated	0	0	0.86	0.93
248.70	17-Nov-21	Whitehead/Elton	Incoming	0	0	0.91	0.96
248.70	17-Nov-21	Whitehead/Elton	Outgoing	0	0	0.92	0.99
248.80	17-Nov-21	Whitehead Dist.	Firehall	0	0	0.88	0.93
248.80	17-Nov-21	Whitehead Dist.	Dungannon	0	0	0.90	0.94
63.50	17-Nov-21	Elton Dist.	PR #2	0	0	0.90	0.96
63.50	17-Nov-21	Elton Dist.	Elton Booster	0	0	0.89	0.93

Bacteriological Test Results

Community Code	Collection Date	System	Location	Total Coliforms	E.Coli	Free Chlorine	Total Chlorine
248.70	1-Dec-21	Whitehead/Elton	Raw	0	0	0.00	0.00
248.70	1-Dec-21	Whitehead/Elton	Treated	0	0	0.83	0.91
248.70	1-Dec-21	Whitehead/Elton	Incoming	0	0	0.89	0.93
248.70	1-Dec-21	Whitehead/Elton	Outgoing	0	0	0.94	0.95
248.80	1-Dec-21	Whitehead Dist.	Firehall	0	0	0.85	0.94
248.80	1-Dec-21	Whitehead Dist.	Dungannon	0	0	0.94	1.02
63.50	1-Dec-21	Elton Dist.	PR #2	0	0	0.82	0.85
63.50	1-Dec-21	Elton Dist.	Elton Booster	0	0	0.83	0.87
248.70	15-Dec-21	Whitehead/Elton	Raw	0	0	0.00	0.00
248.70	15-Dec-21	Whitehead/Elton	Treated	0	0	0.88	0.97
248.70	15-Dec-21	Whitehead/Elton	Incoming	0	0	0.85	0.90
248.70	15-Dec-21	Whitehead/Elton	Outgoing	0	0	0.84	0.88
248.80	15-Dec-21	Whitehead Dist.	Firehall	0	0	0.87	0.92
248.80	15-Dec-21	Whitehead Dist.	Dungannon	0	0	0.89	0.94
63.50	15-Dec-21	Elton Dist.	PR #2	0	0	0.82	0.85
63.50	15-Dec-21	Elton Dist.	Elton Booster	0	0	0.83	0.87
248.70	29-Dec-21	Whitehead/Elton	Raw	0	0	0.00	0.00
248.70	29-Dec-21	Whitehead/Elton	Treated	0	0	0.93	1.01
248.70	29-Dec-21	Whitehead/Elton	Incoming	0	0	1.10	1.20
248.70	29-Dec-21	Whitehead/Elton	Outgoing	0	0	0.89	0.94
248.80	29-Dec-21	Whitehead Dist.	Firehall	0	0	0.94	0.98
248.80	29-Dec-21	Whitehead Dist.	Dungannon	0	0	0.98	1.06
63.50	29-Dec-21	Elton Dist.	PR #2	0	0	0.77	0.80
63.50	29-Dec-21	Elton Dist.	Elton Booster	0	0	0.76	0.79

APPENDIX B

2021 Water Use Report

Monitoring Well Graph Report

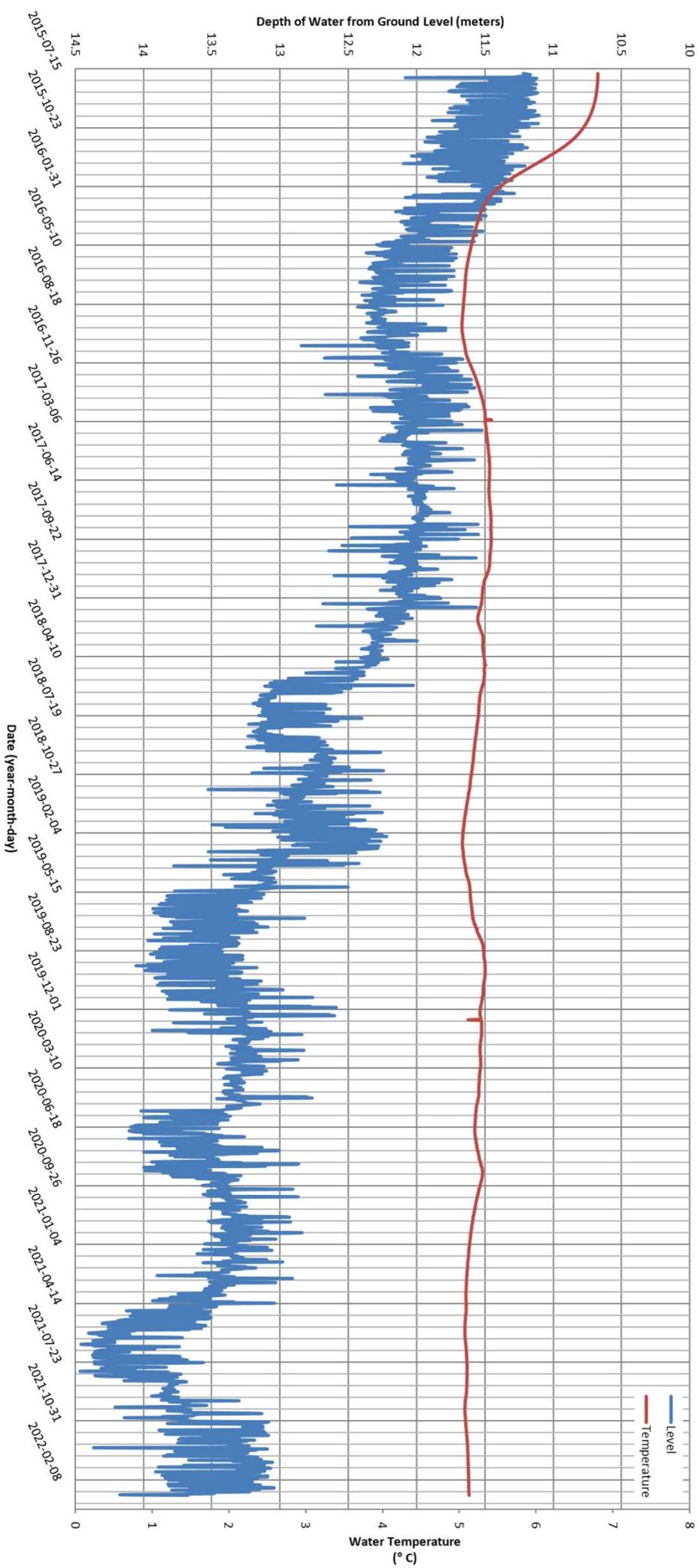
Annual Water Use Report for 2021

Pursuant to *The Water Rights Act*

LICENSEE'S NAME: Whitehead Elton Regional Water Co-operative Inc.						LICENCE NO. PWS-11-487		
POST OFFICE ADDRESS General Delivery, Forrest Mb. R0K 0W0						PHONE NO. 204 728 7834		
SOURCE OF WATER SUPPLY (CHECK ONE)						<input checked="" type="checkbox"/> WELL		
						<input type="checkbox"/> SURFACE WATER _____ <small>(Name of River, Creek, etc.)</small>		
LOCATION OF PUMP (OR WELL):								
QUARTER	SECTION	TOWNSHIP	RANGE	OR OTHER (SPECIFY)				
SE	21	10	21	W1				
DESIGN PUMPING RATE: LITRES PER SECOND <u>22.7</u> OR OTHER (SPECIFY) _____								
NOTE 1: QUANTITIES OF WATER IN TABLE BELOW EXPRESSED IN (CHECK ONE)								
<input type="checkbox"/> LITRES <input type="checkbox"/> DECAMETRES								
<input checked="" type="checkbox"/> OTHER (SPECIFY): <u>Cubic Meters</u>								
METER READING DECEMBER 31/20 <u>20</u> 1097781								
DAY OF MONTH	JANUARY		FEBRUARY		MARCH		APRIL	
	METER READING	DAILY CONSUMPTION	METER READING	DAILY CONSUMPTION	METER READING	DAILY CONSUMPTION	METER READING	DAILY CONSUMPTION
1	1098547	766	1118509	719	1136801	551	1156160	566
2	1099193	646	1119166	657	1137489	688	1156807	647
3	1099841	648	1119880	714	1138137	648	1157417	610
4	1100418	577	1120523	643	1138794	657	1158057	640
5	1101140	722	1121132	609	1139466	672	1158734	677
6	1101778	638	1121768	636	1140172	706	1159430	696
7	1102390	612	1122415	647	1140871	699	1160214	784
8	1103015	625	1123008	593	1141466	595	1161029	815
9	1103636	621	1123683	675	1142124	658	1161783	754
10	1104260	624	1124329	646	1142766	642	1162435	652
11	1104959	699	1124944	615	1143358	592	1163204	769
12	1105640	681	1125559	615	1143989	631	1163774	570
13	1106264	624	1126266	707	1144573	584	1164465	691
14	1107016	752	1126835	569	1145202	629	1165124	659
15	1107587	571	1127527	692	1145862	660	1165898	774
16	1108225	638	1128177	650	1146489	627	1166638	740
17	1108923	698	1128816	639	1147068	579	1167314	676
18	1109595	672	1129492	676	1147678	610	1167990	676
19	1110205	610	1130154	662	1148249	571	1168575	585
20	1110836	631	1130762	608	1148933	684	1169265	690
21	1111457	621	1131419	657	1149553	620	1169965	700
22	1112099	642	1132128	709	1150168	615	1170639	674
23	1112786	687	1132799	671	1150779	611	1171315	676
24	1113447	661	1133515	716	1151363	584	1172006	691
25	1114005	558	1134066	551	1151954	591	1172652	646
26	1114635	630	1134771	705	1152554	600	1173311	659
27	1115264	629	1135472	701	1153218	664	1173953	642
28	1115872	608	1136250	778	1153820	602	1174789	836
29	1116523	651	-	-	1154389	569	1175551	762
30	1117164	641	-	-	1155012	623	1176448	897
31	1117790	626	-	-	1155594	582	-	-
TOTAL	20009	20009	18460	18460	19344	19344	20,854	20,854
NOTE2:/ LICENSEE MUST COMPLETE "ANNUAL WATER USE REPORT" FOR EACH CALENDAR YEAR AND FORWARD THE REPORT TO THE WATER LICENSING SECTION AT THE ABOVE ADDRESS NOT LATER THAN FEB. 1 OF THE FOLLOWING YEAR.								

DAY OF MONTH	MAY		JUNE		JULY		AUGUST	
	METER READING	DAILY CONSUMPTION						
1	1177091	643	1206756	1,123	1239400	1260	1269208	887
2	1177965	874	1207961	1,205	1240357	957	1269988	780
3	1178678	713	1209308	1,347	1241325	968	1270915	927
4	1179477	799	1210573	1,265	1242487	1162	1271815	900
5	1180231	754	1211725	1,152	1243508	1021	1272659	844
6	1181103	872	1212947	1,222	1244580	1072	1273522	863
7	1181923	820	1214024	1,077	1245569	989	1274429	907
8	1182776	853	1215493	1,469	1246773	1204	1275396	967
9	1183642	866	1216634	1,141	1247958	1185	1276473	1077
10	1184393	751	1217648	1,014	1249116	1158	1277163	690
11	1185516	1123	1218650	1,002	1250080	964	1277890	727
12	1186614	1098	1219291	641	1251065	985	1278682	792
13	1187723	1109	1219917	626	1252115	1050	1279544	862
14	1188916	1193	1220968	1,051	1253094	979	1280568	1024
15	1189863	947	1222431	1,463	1254018	924	1281487	919
16	1191105	1242	1223673	1,242	1254948	930	1282306	819
17	1192332	1227	1224823	1,150	1255968	1020	1283270	964
18	1193788	1456	1225978	1,155	1256812	844	1284053	783
19	1194827	1039	1227018	1,040	1257589	777	1284701	648
20	1195885	1058	1228038	1,020	1258237	648	1285464	763
21	1196625	740	1228838	800	1258854	617	1286139	675
22	1197475	850	1229801	963	1259627	773	1286822	683
23	1198097	622	1231191	1,390	1260393	766	1287353	531
24	1198714	617	1232169	978	1261397	1004	1287967	614
25	1199655	941	1233489	1,320	1262136	739	1288716	749
26	1200506	851	1234423	934	1263034	898	1289488	772
27	1201570	1064	1235285	862	1264015	981	1290319	831
28	1202540	970	1236008	723	1265005	990	1291058	739
29	1203511	971	1237121	1,113	1265987	982	1291604	546
30	1204642	1131	1238140	1,019	1267091	1104	1292321	717
31	1205633	991	-	-	1268321	1230	1293094	773
TOTAL	29185	29185	32,507	32,507	30181	30181	24773	24773
DAY OF MONTH	SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	METER READING	DAILY CONSUMPTION						
1	1293910	816	1315466	612	1335747	664	1356313	617
2	1294633	723	1316249	783	1336777	1,030	1356904	591
3	1295300	667	1316889	640	1337308	531	1357528	624
4	1296102	802	1317436	547	1337956	648	1358239	711
5	1296745	643	1318166	730	1338698	742	1358830	591
6	1297404	659	1318842	676	1339269	571	1359463	633
7	1298094	690	1319527	685	1339894	625	1360186	723
8	1298758	664	1320191	664	1340580	686	1360862	676
9	1299469	711	1320891	700	1341282	702	1361448	586
10	1300265	796	1321513	622	1341952	670	1362080	632
11	1301161	896	1322092	579	1342657	705	1362728	648
12	1301819	658	1322798	706	1343339	682	1363442	714
13	1302415	596	1323382	584	1344282	943	1364228	786
14	1303305	890	1323953	571	1344906	624	1364925	697
15	1304047	742	1324559	606	1345553	647	1365592	667
16	1304696	649	1325248	689	1346038	485	1366273	681
17	1305434	738	1325870	622	1346810	772	1366903	630
18	1306057	623	1326465	595	1347358	548	1367554	651
19	1306654	597	1327099	634	1347974	616	1368147	593
20	1307401	747	1327515	416	1348579	605	1368856	709
21	1308171	770	1328473	958	1349164	585	1369503	647
22	1308848	677	1329053	580	1349857	693	1370135	632
23	1309552	704	1329694	641	1350480	623	1370789	654
24	1310244	692	1330390	696	1351072	592	1371396	607
25	1310925	681	1330988	598	1351882	810	1371991	595
26	1311541	616	1331750	762	1352650	768	1372898	907
27	1312282	741	1332480	730	1353398	748	1373252	354
28	1313069	787	1333161	681	1354132	734	1373982	730
29	1313922	853	1333831	670	1355086	954	1374540	558
30	1314854	932	1334465	634	1355696	610	1375262	722
31	-	-	1335083	618	-	-	1375770	508
TOTAL	21,760	21,760	20229	20229	20,613	20,613	20074	20074

Whitehead/Elton Well Monitoring Reading (North of PTH 1)



Whitehead/Elton Well Monitoring Reading (South of PTH 1)

