



Town of The Pas - Water Plant
ATTN: RYAN LAGACE
Town of The Pas
Box 870
The Pas MB R9A 1K8

Date Received: 07-OCT-14
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Certificate of Analysis

Lab Work Order #: L1529052
Project P.O. #: 11490
Job Reference: THE PAS PWS 226.00
C of C Numbers:
Legal Site Desc:

Craig Riddell
Account 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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ANALYTICAL REPORT

Physical Tests (WATER)

Analyte	Unit	ALS ID		THE PAS 1 - RAW	THE PAS 2 - TREATED
		Sampled Date	Sampled Time		
		Guide Limit #1	Guide Limit #2		
Colour, True	CU	15	-	9.1	<5.0
Conductivity	umhos/cm	-	-	483	488
Hardness (as CaCO3)	mg/L	-	-	193	173
Langelier Index (4 C)	No Unit	-	-	0.73	0.46
Langelier Index (60 C)	No Unit	-	-	1.5	1.2
pH	pH units	6.5-8.5	-	8.54	8.41
Total Dissolved Solids	mg/L	500	-	275	279
Transmittance, UV (254 nm)	% T	-	-	70.5	88.7
Turbidity	NTU	-	-	74.0	0.22

Federal Guidelines for Canadian Drinking Water Quality (AUG, 2012)

#1: GCDWQ - Aesthetic Objective

#2: GCDWQ - Maximum Acceptable Concentrations (MACs)

Anions and Nutrients (WATER)

Analyte	Unit	ALS ID		THE PAS 1 - RAW	THE PAS 2 - TREATED
		Sampled Date	Sampled Time		
		Guide Limit #1	Guide Limit #2		
Alkalinity, Total (as CaCO3)	mg/L	-	-	160	130
Ammonia, Total (as N)	mg/L	-	-	<0.010	<0.010
Bicarbonate (HCO3)	mg/L	-	-	183	153
Bromide (Br)	mg/L	-	-	<0.10	<0.10
Carbonate (CO3)	mg/L	-	-	<12	<12
Chloride	mg/L	250	-	9.91	13.7
Fluoride	mg/L	-	1.5	0.13	0.82
Hydroxide (OH)	mg/L	-	-	<6.8	<6.8
Nitrate-N	mg/L	-	10	0.0460	0.0495
Nitrite-N	mg/L	-	1	<0.0010	<0.0010
Sulfate	mg/L	500	-	67.8	84.6

Federal Guidelines for Canadian Drinking Water Quality (AUG, 2012)

#1: GCDWQ - Aesthetic Objective

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Organic / Inorganic Carbon (WATER)

Analyte	Unit	ALS ID		THE PAS 1 - RAW	THE PAS 2 - TREATED
		Sampled Date	Sampled Time		
		Guide Limit #1	Guide Limit #2		
Dissolved Organic Carbon	mg/L	-	-	6.4	5.0
Total Organic Carbon	mg/L	-	-	6.8	5.1

Federal Guidelines for Canadian Drinking Water Quality (AUG, 2012)

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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.

ANALYTICAL REPORT

Total Metals (WATER)

Analyte	Unit	ALS ID		L1529052-1	L1529052-2
		Sampled Date	Sampled Time	06-OCT-14 13:00	06-OCT-14 13:00
		Sample ID		THE PAS 1 - RAW	THE PAS 2 - TREATED
		Guide Limit #1	Guide Limit #2		
Aluminum (Al)-Total	mg/L	0.1	-	2.43	0.0339
Antimony (Sb)-Total	mg/L	-	0.006	0.00024	0.00020
Arsenic (As)-Total	mg/L	-	0.01	0.00224	0.00041
Barium (Ba)-Total	mg/L	-	1	0.103	0.0625
Beryllium (Be)-Total	mg/L	-	-	<0.00020	<0.00020
Bismuth (Bi)-Total	mg/L	-	-	<0.00020	<0.00020
Boron (B)-Total	mg/L	-	5	0.034	0.027
Cadmium (Cd)-Total	mg/L	-	0.005	0.000053	<0.000010
Calcium (Ca)-Total	mg/L	-	-	45.1	40.5
Cesium (Cs)-Total	mg/L	-	-	0.00045	<0.00010
Chromium (Cr)-Total	mg/L	-	0.05	0.0039	<0.0010
Cobalt (Co)-Total	mg/L	-	-	0.00163	<0.00020
Copper (Cu)-Total	mg/L	1	-	0.00811	0.00260
Iron (Fe)-Total	mg/L	0.3	-	3.44	<0.10
Lead (Pb)-Total	mg/L	-	0.01	0.00197	0.000099
Lithium (Li)-Total	mg/L	-	-	0.0142	0.0096
Magnesium (Mg)-Total	mg/L	-	-	19.5	17.5
Manganese (Mn)-Total	mg/L	0.05	-	0.237	0.0148
Molybdenum (Mo)-Total	mg/L	-	-	0.00129	0.00121
Nickel (Ni)-Total	mg/L	-	-	0.0052	<0.0020
Phosphorus (P)-Total	mg/L	-	-	0.10	<0.10
Potassium (K)-Total	mg/L	-	-	3.69	2.98
Rubidium (Rb)-Total	mg/L	-	-	0.00646	0.00101
Selenium (Se)-Total	mg/L	-	0.01	<0.0010	<0.0010
Silicon (Si)-Total	mg/L	-	-	6.68	1.38
Silver (Ag)-Total	mg/L	-	-	<0.00010	<0.00010
Sodium (Na)-Total	mg/L	200	-	21.8	20.9
Strontium (Sr)-Total	mg/L	-	-	0.312	0.280
Tellurium (Te)-Total	mg/L	-	-	<0.00020	<0.00020
Thallium (Tl)-Total	mg/L	-	-	<0.00010	<0.00010
Thorium (Th)-Total	mg/L	-	-	0.00064	<0.00010
Tin (Sn)-Total	mg/L	-	-	<0.00020	<0.00020
Titanium (Ti)-Total	mg/L	-	-	0.0658	<0.00050

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		Guide Limit #1	Guide Limit #2	THE PAS 1 - RAW	THE PAS 2 - TREATED
Tungsten (W)-Total	mg/L	-	-	<0.00010	<0.00010
Uranium (U)-Total	mg/L	-	0.02	0.00108	0.00041
Vanadium (V)-Total	mg/L	-	-	0.00697	0.00031
Zinc (Zn)-Total	mg/L	5	-	0.0223	<0.0020
Zirconium (Zr)-Total	mg/L	-	-	0.00103	<0.00040

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