



Office of Drinking Water
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Certificate of Analysis

Lab Work Order #: L1092095
Project P.O. #: 28564
Job Reference: PORTAGE LA PRAIRIE REGIONAL PWS 171.00
C of C Numbers:
Legal Site Desc:

Paul Nicolas

Paul Nicolas
Account Manager

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ANALYTICAL REPORT

Physical Tests (WATER)

		ALS ID		L1092095-1	L1092095-2
		Sampled Date		05-DEC-11	05-DEC-11
		Sampled Time		14:00	14:00
		Sample ID		PORTAGE LA PRAIRIE 1 RAW	PORTAGE LA PRAIRIE 2 TREATED
Analyte	Unit	Guide Limit #1	Guide Limit #2		
Colour, True	CU	15	-	19.8	<5.0
Conductivity	umhos/cm	-	-	1010	810
Langelier Index (4 C)	No Unit	-	-	1.2	0.16
Langelier Index (60 C)	No Unit	-	-	2.0	0.92
pH	pH units	6.5-8.5	-	8.46	8.25
Total Dissolved Solids	mg/L	500	-	756	578
Turbidity	NTU	-	-	40.0	0.11

Federal Guidelines for Canadian Drinking Water Quality (JUN, 2008)

#1: GCDWQ - Aesthetic Objective

#2: GCDWQ - Maximum and Interim Maximum Acceptable Concentrations

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ANALYTICAL REPORT

Anions and Nutrients (WATER)

		ALS ID		L1092095-1	L1092095-2
		Sampled Date		05-DEC-11	05-DEC-11
		Sampled Time		14:00	14:00
		Sample ID		PORTAGE LA	PORTAGE LA
Analyte	Unit	Guide Limit #1	Guide Limit #2	PRAIRIE 1 RAW	PRAIRIE 2 TREATED
Alkalinity, Total (as CaCO3)	mg/L	-	-	355	87.0
Ammonia as N	mg/L	-	-	0.101	0.019
Bicarbonate (HCO3)	mg/L	-	-	407	106
Bromate	ug/L	-	10		<0.40
Carbonate (CO3)	mg/L	-	-	9.36	<0.60
Chloride	mg/L	250	-	33.6	38.6
Fluoride	mg/L	-	1.5	0.102	0.426
Hardness (as CaCO3)	mg/L	-	-	500	239
Hydroxide (OH)	mg/L	-	-	<0.40	<0.40
Ion Balance	%	-	-	98.9	97.5
Nitrate and Nitrite as N	mg/L	-	10	0.363 0.461	0.464
Nitrate-N	mg/L	-	10	0.457	0.464
Nitrite-N	mg/L	-	1	0.0043	<0.0010
Total Kjeldahl Nitrogen	mg/L	-	-	1.33	0.58
Orthophosphate-Dissolved (as P)	mg/L	-	-	0.074	
Phosphorus (P)-Total Dissolved	mg/L	-	-	0.104	
Phosphorus (P)-Total Reactive	mg/L	-	-	0.116	
Phosphorus (P)-Total	mg/L	-	-	0.202	
Phosphorus (P)-Total Inorganic	mg/L	-	-	0.181	
Phosphorus (P)-Total Acid-Hydrolyzable	mg/L	-	-	0.065	
Phosphorus (P)-Total Particulate	mg/L	-	-	0.098	
TDS (Calculated)	mg/L	500	-	824	588
Sulfate	mg/L	500	-	313	311
Anion Sum	me/L	-	-	14.5	9.36
Cation Sum	me/L	-	-	14.3	9.12
Cation - Anion Balance	%	-	-	-0.5	-1.3

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Organic / Inorganic Carbon (WATER)

		ALS ID		L1092095-1	L1092095-2
		Sampled Date		05-DEC-11	05-DEC-11
		Sampled Time		14:00	14:00
		Sample ID		PORTAGE LA PRAIRIE 1 RAW	PORTAGE LA PRAIRIE 2 TREATED
Analyte	Unit	Guide Limit #1	Guide Limit #2		
Dissolved Inorganic Carbon	mg/L	-	-	75.7	
Dissolved Organic Carbon	mg/L	-	-	12.1	
Total Carbon	mg/L	-	-	93.4	26.1
Total Dissolved Carbon	mg/L	-	-	87.8	
Total Inorganic Carbon	mg/L	-	-	81.0	18.3
Total Organic Carbon	mg/L	-	-	12.4	7.8

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ANALYTICAL REPORT

Total Metals (WATER)

		ALS ID		L1092095-1	L1092095-2
		Sampled Date		05-DEC-11	05-DEC-11
		Sampled Time		14:00	14:00
		Sample ID		PORTAGE LA	PORTAGE LA
Analyte	Unit	Guide Limit #1	Guide Limit #2	PRAIRIE 1 RAW	PRAIRIE 2 TREATED
Aluminum (Al)-Total	mg/L	0.1	-	0.796	0.0097
Antimony (Sb)-Total	mg/L	-	0.006	0.00026	0.00022
Arsenic (As)-Total	mg/L	-	0.01	0.00547	0.00101
Barium (Ba)-Total	mg/L	-	1	0.104	0.0758
Beryllium (Be)-Total	mg/L	-	-	<0.00020	<0.00020
Bismuth (Bi)-Total	mg/L	-	-	<0.00020	<0.00020
Boron (B)-Total	mg/L	-	5	0.137	0.056
Cadmium (Cd)-Total	mg/L	-	0.005	0.000045	0.000012
Calcium (Ca)-Total	mg/L	-	-	97.4	51.0
Cesium (Cs)-Total	mg/L	-	-	0.00013	<0.00010
Chromium (Cr)-Total	mg/L	-	0.05	0.0013	<0.0010
Cobalt (Co)-Total	mg/L	-	-	0.00084	<0.00020
Copper (Cu)-Total	mg/L	1	-	0.00263	0.00227
Iron (Fe)-Total	mg/L	0.3	-	1.38	<0.10
Lead (Pb)-Total	mg/L	-	0.01	0.000845	<0.000090
Lithium (Li)-Total	mg/L	-	-	0.0787	0.0768
Magnesium (Mg)-Total	mg/L	-	-	66.3	27.2
Manganese (Mn)-Total	mg/L	0.05	-	0.115	<0.00030
Molybdenum (Mo)-Total	mg/L	-	-	0.00342	0.00320
Nickel (Ni)-Total	mg/L	-	-	0.0047	<0.0020
Phosphorus (P)-Total	mg/L	-	-	<0.20	0.47
Potassium (K)-Total	mg/L	-	-	13.6	13.7
Rubidium (Rb)-Total	mg/L	-	-	0.00304	0.00253
Selenium (Se)-Total	mg/L	-	0.01	<0.0010	<0.0010
Silicon (Si)-Total	mg/L	-	-	8.73	3.68
Silver (Ag)-Total	mg/L	-	-	<0.00010	<0.00010
Sodium (Na)-Total	mg/L	200	-	91.0	91.6
Strontium (Sr)-Total	mg/L	-	-	0.401	0.202
Tellurium (Te)-Total	mg/L	-	-	<0.00020	<0.00020
Thallium (Tl)-Total	mg/L	-	-	<0.00010	<0.00010
Thorium (Th)-Total	mg/L	-	-	0.00031	<0.00010
Tin (Sn)-Total	mg/L	-	-	<0.00020	<0.00020
Titanium (Ti)-Total	mg/L	-	-	0.0235	0.00141

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Total Metals (WATER)

		ALS ID		L1092095-1	L1092095-2
		Sampled Date		05-DEC-11	05-DEC-11
		Sampled Time		14:00	14:00
		Sample ID		PORTAGE LA	PORTAGE LA
				PRAIRIE 1 RAW	PRAIRIE 2 TREATED
Analyte	Unit	Guide Limit #1	Guide Limit #2		
Tungsten (W)-Total	mg/L	-	-	<0.0010	<0.0010
Uranium (U)-Total	mg/L	-	0.02	0.00494	0.00027
Vanadium (V)-Total	mg/L	-	-	0.00426	0.00085
Zinc (Zn)-Total	mg/L	5	-	0.0060	<0.0050
Zirconium (Zr)-Total	mg/L	-	-	0.00082	<0.00040

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ANALYTICAL REPORT

Dissolved Metals (WATER)

		ALS ID		L1092095-1
		Sampled Date		05-DEC-11
		Sampled Time		14:00
		Sample ID		PORTAGE LA PRAIRIE 1 RAW
Analyte	Unit	Guide Limit #1	Guide Limit #2	
Aluminum (Al)-Dissolved	mg/L	0.1	-	<0.0020
Antimony (Sb)-Dissolved	mg/L	-	0.006	<0.00020
Arsenic (As)-Dissolved	mg/L	-	0.01	0.00465
Barium (Ba)-Dissolved	mg/L	-	1	0.0885
Beryllium (Be)-Dissolved	mg/L	-	-	<0.00020
Bismuth (Bi)-Dissolved	mg/L	-	-	<0.00020
Boron (B)-Dissolved	mg/L	-	5	0.127
Cadmium (Cd)-Dissolved	mg/L	-	0.005	0.000011
Calcium (Ca)-Dissolved	mg/L	-	-	92.5
Cesium (Cs)-Dissolved	mg/L	-	-	<0.00010
Chromium (Cr)-Dissolved	mg/L	-	0.05	<0.0020
Cobalt (Co)-Dissolved	mg/L	-	-	0.00029
Copper (Cu)-Dissolved	mg/L	1	-	0.00166
Iron (Fe)-Dissolved	mg/L	0.3	-	<0.10
Lead (Pb)-Dissolved	mg/L	-	0.01	<0.000090
Lithium (Li)-Dissolved	mg/L	-	-	0.0785
Magnesium (Mg)-Dissolved	mg/L	-	-	65.3
Manganese (Mn)-Dissolved	mg/L	0.05	-	0.0321
Molybdenum (Mo)-Dissolved	mg/L	-	-	0.00386
Nickel (Ni)-Dissolved	mg/L	-	-	0.0038
Phosphorus (P)-Dissolved	mg/L	-	-	<0.10
Potassium (K)-Dissolved	mg/L	-	-	12.7
Rubidium (Rb)-Dissolved	mg/L	-	-	0.00192
Selenium (Se)-Dissolved	mg/L	-	0.01	0.0012
Silicon (Si)-Dissolved	mg/L	-	-	6.74
Silver (Ag)-Dissolved	mg/L	-	-	<0.00010
Sodium (Na)-Dissolved	mg/L	200	-	92.1
Strontium (Sr)-Dissolved	mg/L	-	-	0.395
Tellurium (Te)-Dissolved	mg/L	-	-	<0.00020
Thallium (Tl)-Dissolved	mg/L	-	-	<0.00010
Thorium (Th)-Dissolved	mg/L	-	-	<0.00010
Tin (Sn)-Dissolved	mg/L	-	-	<0.00020
Titanium (Ti)-Dissolved	mg/L	-	-	0.00165

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Dissolved Metals (WATER)

		ALS ID		L1092095-1
		Sampled Date		05-DEC-11
		Sampled Time		14:00
		Sample ID		PORTAGE LA PRAIRIE 1 RAW
Analyte	Unit	Guide Limit #1	Guide Limit #2	
Tungsten (W)-Dissolved	mg/L	-	-	<0.00020
Uranium (U)-Dissolved	mg/L	-	0.02	0.00380
Vanadium (V)-Dissolved	mg/L	-	-	0.00367
Zinc (Zn)-Dissolved	mg/L	5	-	<0.0020
Zirconium (Zr)-Dissolved	mg/L	-	-	<0.00040

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Trihalomethanes (WATER)

		ALS ID		L1092095-4
		Sampled Date		05-DEC-11
		Sampled Time		14:30
		Sample ID		PORTAGE LA PRAIRIE DIST END HYDRO OFFICE
Analyte	Unit	Guide Limit #1	Guide Limit #2	
Bromodichloromethane	mg/L	-	-	0.0408
Bromoform	mg/L	-	-	0.00071
Chlorodibromomethane	mg/L	-	-	0.0153
Chloroform	mg/L	-	-	0.0690
Total THMs	mg/L	-	0.1	0.126
Surrogate: Toluene-d8 (SURR)	%	-	-	111.4

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Haloacetic Acids (WATER)

		ALS ID		L1092095-2	L1092095-3	L1092095-4
		Sampled Date		05-DEC-11	05-DEC-11	05-DEC-11
		Sampled Time		14:00	14:30	14:30
		Sample ID		PORTAGE LA PRAIRIE 2 TREATED	PORTAGE LA PRAIRIE 3 DIST MID HOSPITAL	PORTAGE LA PRAIRIE DIST END HYDRO OFFICE
Analyte	Unit	Guide Limit #1	Guide Limit #2			
Dibromoacetic Acid	mg/L	-	-	0.0027	<0.0010	0.0029
Dichloroacetic Acid	mg/L	-	-	0.0216	0.0044	0.0328
Total Haloacetic Acids 5	mg/L	-	0.08	0.0416	0.0181	0.0591
Monobromoacetic Acid	mg/L	-	-	<0.0010	<0.0010	<0.0010
Monochloroacetic Acid	mg/L	-	-	<0.0050	<0.0050	<0.0050
Trichloroacetic Acid	mg/L	-	-	0.0173	0.0137	0.0233

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Radiological Parameters (WATER)

		ALS ID	L1092095-1	
		Sampled Date	05-DEC-11	
		Sampled Time	14:00	
		Sample ID		
		PORTAGE LA PRAIRIE 1 RAW		
Analyte	Unit	Guide Limit #1	Guide Limit #2	
Bromine	ppm	-	-	0.200
Iodine	ppm	-	-	0.060

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Reference Information

Methods Listed (if applicable):

ALS Test Code	Matrix	Test Description	Method Reference**
ALK-TOT-WP	Water	Alkalinity	APHA 2320B
<p>Alkalinity of water is a measure of its acid neutralizing capacity. Alkalinity is imparted by bicarbonate, carbonate and hydroxide components of water. It is determined by titration with a standard solution of strong mineral acid to the successive HCO₃⁻ and H₂CO₃ endpoints indicated electrometrically.</p>			
BROMATE-ONT-DW-WT	Water	Bromate in Water by LC/MS-MS	LC/MS-MS
WS/WT HOLDING TIME 28DAYS			
C-TC,TIC,TOC-WP	Water	Carbons	APHA 5310 B-INSTRUMENTAL
<p>This method is applicable to the analysis of ground water, wastewater, and surface water samples. The form detected depends upon sample pretreatment: Unfiltered sample = TC, 0.45um filtered = TDC. Samples are injected into a combustion tube containing an oxidation catalyst. The carrier gas containing the combustion product from the combustion tube flows through an inorganic carbon reactor vessel and is then sent through a halogen scrubber into a sample cell set in a non-dispersive infrared gas analyzer (NDIR) where carbon dioxide is detected. For total inorganic carbon and dissolved inorganic carbon, the sample is injected into an IC reactor vessel where only the IC component is decomposed to become carbon dioxide.</p> <p>The peak area generated by the NDIR indicates the TC/TDC or TIC/DIC as applicable. The total organic carbon content of the sample is calculated by subtracting the TIC from the TC. TOC = TC-TIC, DOC = TDC-DIC, Particulate = Total - Dissolved.</p>			
C-TDC,DIC,DOC-WP	Water	Carbons Dissolved	APHA 5310 B-INSTRUMENTAL
<p>This method is applicable to the analysis of ground water, wastewater, and surface water samples. The form detected depends upon sample pretreatment: Unfiltered sample = TC, 0.45um filtered = TDC. Samples are injected into a combustion tube containing an oxidation catalyst. The carrier gas containing the combustion product from the combustion tube flows through an inorganic carbon reactor vessel and is then sent through a halogen scrubber into a sample cell set in a non-dispersive infrared gas analyzer (NDIR) where carbon dioxide is detected. For total inorganic carbon and dissolved inorganic carbon, the sample is injected into an IC reactor vessel where only the IC component is decomposed to become carbon dioxide.</p> <p>The peak area generated by the NDIR indicates the TC/TDC or TIC/DIC as applicable. The total organic carbon content of the sample is calculated by subtracting the TIC from the TC. TOC = TC-TIC, DOC = TDC-DIC, Particulate = Total - Dissolved.</p>			
CL-L-IC-WP	Water	Chloride	EPA 300.1 IC
<p>This analysis is carried out using procedures adapted from EPA Method 300.1 "Determination of Inorganic Anions in Drinking Water by Ion Chromatography".</p>			
COLOUR-TRUE-WP	Water	Colour, True	APHA 2120C
<p>True colour in water is analyzed by discrete analyzer using the platinum-cobalt colourimetric method. Colour is pH dependant; unless otherwise indicated, reported colour results pertain to the pH of the sample as received to within +/- 1 pH unit.</p>			
EC-WP	Water	Conductivity	APHA 2510B
<p>Conductivity of an aqueous solution refers to its ability to carry an electric current. Conductance of a solution is measured between two spatially fixed and chemically inert electrodes.</p>			
ETL-LANGELIER-4-WP	Water	Langelier Index 4C	Calculated
ETL-LANGELIER-60-WP	Water	Langelier Index 60C	Calculated
F-L-IC-WP	Water	Fluoride	EPA 300.1 IC
<p>This analysis is carried out using procedures adapted from EPA Method 300.1 "Determination of Inorganic Anions in Drinking Water by Ion Chromatography".</p>			
HAA-WP	Water	Haloacetic Acids	EPA 552.2
<p>HAA concentration is determined using liquid-liquid extraction, capillary column, GC/electron capture techniques.</p>			
HAA5-SUM-CALC-WP	Water	Total Haloacetic Acids 5 (HAA5)	CALCULATION
<p>Total Haloacetic Acids 5 (HAA5) represents the sum of monobromoacetic acid, monochloroacetic acid, dibromoacetic acid, dichloroacetic acid and trichloroacetic acid. For the purpose of calculation, results less than the detection limit (DL) are treated as zero.</p>			
IONBALANCE-OP04-WP	Water	Ion Balance Calculation	APHA 1030E
MET-D-L-MS-WP	Water	Dissolved Metals by ICP-MS	U.S. EPA 200.8-DL

Reference Information

Methods Listed (if applicable):

ALS Test Code	Matrix	Test Description	Method Reference**
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Dissolved Metals by ICP-MS: This analysis is carried out using sample preparation procedures adapted from Standard Methods for the Examination of Water and Wastewater method 3030B for filtration through a 0.45 um filter and analytical procedures adapted from U.S EPA Method 200.8 for analysis of metals by inductively coupled-mass spectrometry.

MET-T-L-MS-WP	Water	Total Metals by ICP-MS	U.S. EPA 200.8-TL
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Total Metals by ICP-MS: This analysis is carried out using sample preparation procedures adapted from Standard Methods for the examination of Water and Wastewater Method 3030E and analytical procedures adapted from U.S EPA Method 200.8 for analysis of metals by inductively coupled-mass spectrometry.

N-TOTKJ-WP	Water	Total Kjeldahl Nitrogen	Quickchem method 10-107-06-2-E Lachat
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Samples are digested with a sulphuric acid solution, cooled, diluted with water, and analyzed for ammonia. Total Kjeldahl nitrogen is the sum of free-ammonia and organic nitrogen compounds which are converted to ammonium sulphate through this digestion process. Analysis is performed by Flow Injection

Analysis (FIA). The pH of the digested sample is raised to a known, basic pH by neutralization with a concentrated buffer solution. This neutralization converts the ammonium cation to ammonia. The ammonia produced is heated with salicylate and hypochlorite to produce blue colour which is proportional to the ammonia concentration.

N2N3-COL-WP	Water	Nitrate + Nitrite	APHA4500;2005/LACHAT;1997,1999
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The sample is passed through a column containing cadmium granules coated with copper sulphate, reducing nitrate to nitrite. The resulting nitrites plus those originally present in the sample are reacted with sulfanilamide (an organic amine) to form the diazonium salt which is coupled in an acidic solution with N-(1-naphthyl)-ethylenediamine dihydrochloride, to form azo dye. The azo dye intensity is measured by a colorimeter at 520 nm. The Omnion software compares the sample peak areas to a calibration curve and reports the concentration of nitrate-nitrite in the sample as nitrogen.

Reference: APHA, AWWA, WPCF, Standard Methods for the Examination of Water and Wastewaters, 20th Edition, Washington, 1998. Method 4500-NO3-l

NH3-COL-WP	Water	Ammonia by colour	APHA 4500 NH3 F
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Ammonia in water samples forms indophenol when reacted with hypochlorite and phenol. The intensity is amplified by the addition of sodium nitroprusside and measured colourmetrically.

NO2+NO3-CALC-L-WP	Water	Nitrate+Nitrite	CALCULATION
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NO2-L-IC-WP	Water	Nitrite as N	EPA 300.1 IC
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NO3-L-IC-WP	Water	Nitrate as N	EPA 300.1 IC
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P-T-COL-WP	Water	Phosphorus, Total	APHA 4500 P PHOSPHORUS
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This analysis is carried out using procedures adapted from APHA Method 4500-P "Phosphorus". Total Phosphorous is determined colourmetrically after persulphate digestion of the sample.

P-TAH-CALC-WP	Water	Phosphorus Total Acid-Hydrolyzable	APHA 4500 P CALC-AHP
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P-TD-COL-WP	Water	Phosphorus, Total Dissolved	APHA 4500 P PHOSPHORUS
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This analysis is carried out using procedures adapted from APHA Method 4500-P "Phosphorus". Total Dissolved Phosphorous is determined colourmetrically after persulphate digestion of a sample that has been lab or field filtered through a 0.45 micron membrane filter.

P-TINORG-COL-WP	Water	Phosphorus, Total Inorganic	APHA 4500 P PHOSPHORUS
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This analysis is carried out using procedures adapted from APHA Method 4500-P "Phosphorus". Total Inorganic Phosphorus is determined colourmetrically after sample has undergone H2SO4 hydrolysis

P-TPART-CALC-WP	Water	Phosphorus Total ParticulateCalculated	APHA 4500 P CALC PART
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P-TR-COL-WP	Water	Phosphorus, Total Reactive in Water	APHA 4500 P PHOSPHORUS
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This analysis is carried out using procedures adapted from APHA Method 4500-P "Phosphorus". Total Reactive Phosphorus is determined colourmetrically.

PH-WP	Water	pH	APHA 4500H
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The pH of a sample is the determination of the activity of the hydrogen ions by potentiometric measurement using a standard hydrogen electrode and a reference electrode.

Reference Information

Methods Listed (if applicable):

ALS Test Code	Matrix	Test Description	Method Reference**
PO4-DO-COL-WP	Water	Phosphate Ortho Dissolved in Water	APHA 4500 P PHOSPHORUS
This analysis is carried out using procedures adapted from APHA Method 4500-P "Phosphorus". Dissolved Orthophosphate is determined colourimetrically on a sample that has been lab or field filtered through a 0.45 micron membrane filter.			
RAD-BR,I-BE	Water	Bromine and Iodine by Neutron Activation	ALPHA SPEC
SO4-IC-WP	Water	Sulfate	EPA 300.1 IC
This analysis is carried out using procedures adapted from EPA Method 300.1 "Determination of Inorganic Anions in Drinking Water by Ion Chromatography".			
SOLIDS-TDS-WP	Water	Total Dissolved Solids	APHA 2540C
The residue remaining in a prepared casserole after passing the sample through a 1.2 um Whatman GF/C glass microfibre filter and drying at 180 degrees C. Samples may be dried at 105 degrees C if the client specifically requests this drying temperature.			
THM-PRES-WP	Water	THM preserved	EPA 8260C / EPA 5030C (PRES)
THM concentration is determined using purge and trap techniques.			
THM-SUM-CALC-WP	Water	Total Trihalomethanes (THMs)	CALCULATION
Total Trihalomethanes (THMs) represents the sum of bromodichloromethane, bromoform, chlorodibromomethane and chloroform. For the purpose of calculation, results less than the detection limit (DL) are treated as zero.			
TURBIDITY-WP	Water	Turbidity	APHA 2130B (modified)
Turbidity in aqueous matrices is determined by the nephelometric method.			

**ALS test methods may incorporate modifications from specified reference methods to improve performance.

Chain of Custody Numbers:

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location
WT	ALS ENVIRONMENTAL - WATERLOO, ONTARIO, CANADA
BE	Bequerel Laboratories Inc. - Mississauga, Ontario, Canada
WP	ALS ENVIRONMENTAL - WINNIPEG, MANITOBA, CANADA

GLOSSARY OF REPORT TERMS

Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates are listed there.

mg/kg - milligrams per kilogram based on dry weight of sample

mg/kg wwt - milligrams per kilogram based on wet weight of sample

mg/kg lwt - milligrams per kilogram based on lipid-adjusted weight

mg/L - unit of concentration based on volume, parts per million.

< - Less than.

D.L. - The reporting limit.

N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.

Application of guidelines is provided "as is" without warranty of any kind, either expressed or implied, including, but not limited to fitness for a particular purpose, or non-infringement. ALS assumes no responsibility for errors or omissions in the information.



Quality Control Report

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Client: Office of Drinking Water
 25 Tupper Street N
 Portage La Prairie MB R1N 3K1

Contact: Jack Cronk

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
ALK-TOT-WP		Water						
Batch R2297788								
WG1400528-3 CVS								
Alkalinity, Total (as CaCO3)			102.9		%		85-115	06-DEC-11
WG1400528-4 DUP		L1092095-1						
Alkalinity, Total (as CaCO3)		355	354		mg/L	0.057	25	06-DEC-11
Bicarbonate (HCO3)		407	405		mg/L	0.48	25	06-DEC-11
Carbonate (CO3)		9.36	10.2		mg/L	8.7	25	06-DEC-11
Hydroxide (OH)		<0.40	<0.40	RPD-NA	mg/L	N/A	25	06-DEC-11
WG1400528-5 DUP		L1092140-1						
Alkalinity, Total (as CaCO3)		308	308		mg/L	0.0	25	06-DEC-11
Bicarbonate (HCO3)		360	359		mg/L	0.26	25	06-DEC-11
Carbonate (CO3)		4.98	5.43		mg/L	8.8	25	06-DEC-11
Hydroxide (OH)		<0.40	<0.40	RPD-NA	mg/L	N/A	25	06-DEC-11
WG1400528-6 DUP		L1092199-1						
Alkalinity, Total (as CaCO3)		399	399		mg/L	0.046	25	06-DEC-11
Bicarbonate (HCO3)		457	456		mg/L	0.31	25	06-DEC-11
Carbonate (CO3)		11.3	11.9		mg/L	5.1	25	06-DEC-11
Hydroxide (OH)		<0.40	<0.40	RPD-NA	mg/L	N/A	25	06-DEC-11
BROMATE-ONT-DW-WT		Water						
Batch R2299338								
WG1401875-2 CVS								
Bromate			95.5		%		75-125	09-DEC-11
WG1401875-3 DUP		L1092095-2						
Bromate		<0.40	<0.40	RPD-NA	ug/L	N/A	25	09-DEC-11
WG1401875-1 MB								
Bromate			<0.40		ug/L		0.4	09-DEC-11
C-TC,TIC,TOC-WP		Water						
Batch R2300522								
WG1403487-2 CVS								
Total Carbon			98.8		%		80-120	12-DEC-11
Total Inorganic Carbon			97.3		%		80-120	12-DEC-11
Total Organic Carbon			100.2		%		80-120	12-DEC-11
WG1403487-3 DUP		L1091701-9						
Total Carbon		27.9	27.8		mg/L	0.50	20	12-DEC-11
Total Inorganic Carbon		22.2	22.1		mg/L	0.046	20	12-DEC-11
Total Organic Carbon		5.8	5.6		mg/L	2.2	20	12-DEC-11
WG1403487-1 MB								



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Client: Office of Drinking Water
 25 Tupper Street N
 Portage La Prairie MB R1N 3K1

Contact: Jack Cronk

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
C-TC,TIC,TOC-WP	Water							
Batch	R2300522							
WG1403487-1 MB								
Total Carbon			<1.0		mg/L		1	12-DEC-11
Total Inorganic Carbon			<1.0		mg/L		1	12-DEC-11
Total Organic Carbon			<1.0		mg/L		1	12-DEC-11
C-TDC,DIC,DOC-WP	Water							
Batch	R2300522							
WG1403487-2 CVS								
Total Dissolved Carbon			100.3		%		80-120	12-DEC-11
Dissolved Inorganic Carbon			98.5		%		80-120	12-DEC-11
Dissolved Organic Carbon			102.1		%		80-120	12-DEC-11
WG1403482-2 DUP		L1092095-1						
Total Dissolved Carbon		87.8	87.6		mg/L	0.17	20	12-DEC-11
Dissolved Inorganic Carbon		75.7	75.8		mg/L	0.17	20	12-DEC-11
Dissolved Organic Carbon		12.1	11.8		mg/L	2.3	20	12-DEC-11
CL-L-IC-WP	Water							
Batch	R2299076							
WG1401693-2 LCS								
Chloride			99.4		%		85-115	07-DEC-11
WG1401693-1 MB								
Chloride			<0.20		mg/L		0.2	07-DEC-11
COLOUR-TRUE-WP	Water							
Batch	R2298071							
WG1400878-3 DUP		L1092095-1						
Colour, True		19.8	20.9		CU	5.4	20	07-DEC-11
WG1400878-4 DUP		L1092143-1						
Colour, True		21.6	20.7		CU	4.2	20	07-DEC-11
WG1400878-5 DUP		L1092548-4						
Colour, True		34.2	34.6		CU	1.3	20	07-DEC-11
WG1400878-6 DUP		L1092548-10						
Colour, True		79.2	85.0		CU	7.0	20	07-DEC-11
WG1400878-2 LCS								
Colour, True			97.7		%		85-115	07-DEC-11
WG1400878-1 MB								
Colour, True			<5.0		CU		5	07-DEC-11
EC-WP	Water							



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Client: Office of Drinking Water
 25 Tupper Street N
 Portage La Prairie MB R1N 3K1
 Contact: Jack Cronk

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
EC-WP		Water						
Batch	R2297788							
WG1400528-1	CVS							
Conductivity			97.1		%		90-110	06-DEC-11
WG1400528-4	DUP	L1092095-1						
Conductivity		1010	1010		umhos/cm	0.020	10	06-DEC-11
WG1400528-5	DUP	L1092140-1						
Conductivity		971	973		umhos/cm	0.18	10	06-DEC-11
WG1400528-6	DUP	L1092199-1						
Conductivity		988	994		umhos/cm	0.57	10	06-DEC-11
F-L-IC-WP		Water						
Batch	R2299076							
WG1401693-2	LCS							
Fluoride			101.9		%		85-115	07-DEC-11
WG1401693-1	MB							
Fluoride			<0.020		mg/L		0.02	07-DEC-11
HAA-WP		Water						
Batch	R2300093							
WG1402413-3	CVS							
Monobromoacetic Acid			87.0		%		50-130	07-DEC-11
Monochloroacetic Acid			97.7		%		50-130	07-DEC-11
Dibromoacetic Acid			96.5		%		50-130	07-DEC-11
Dichloroacetic Acid			93.5		%		50-130	07-DEC-11
Trichloroacetic Acid			95.8		%		50-130	07-DEC-11
WG1402413-4	CVS							
Monobromoacetic Acid			99.5		%		50-130	07-DEC-11
Monochloroacetic Acid			95.6		%		50-130	07-DEC-11
Dibromoacetic Acid			102.7		%		50-130	07-DEC-11
Dichloroacetic Acid			101.6		%		50-130	07-DEC-11
Trichloroacetic Acid			98.4		%		50-130	07-DEC-11
WG1402413-5	DUP	L1090926-1						
Monobromoacetic Acid		<0.0010	<0.0010	RPD-NA	mg/L	N/A	40	07-DEC-11
Monochloroacetic Acid		0.0078	0.0083		mg/L	6.4	40	07-DEC-11
Dibromoacetic Acid		<0.0010	<0.0010	RPD-NA	mg/L	N/A	40	07-DEC-11
Dichloroacetic Acid		0.0767	0.0807		mg/L	5.1	40	07-DEC-11
Trichloroacetic Acid		0.0458	0.0471		mg/L	2.9	40	07-DEC-11
WG1402413-6	DUP	L1090926-3						
Monobromoacetic Acid		<0.0010	<0.0010	RPD-NA	mg/L	N/A	40	07-DEC-11



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Client: Office of Drinking Water
 25 Tupper Street N
 Portage La Prairie MB R1N 3K1

Contact: Jack Cronk

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
HAA-WP		Water						
Batch	R2300093							
WG1402413-6 DUP		L1090926-3						
Monochloroacetic Acid		0.0079	0.0074		mg/L	6.4	40	07-DEC-11
Dibromoacetic Acid		<0.0010	<0.0010	RPD-NA	mg/L	N/A	40	07-DEC-11
Dichloroacetic Acid		0.0726	0.0743		mg/L	2.3	40	07-DEC-11
Trichloroacetic Acid		0.0486	0.0500		mg/L	2.7	40	07-DEC-11
WG1402413-1 MB			<0.0010		mg/L		0.001	07-DEC-11
Monochloroacetic Acid			<0.0050		mg/L		0.005	07-DEC-11
Dibromoacetic Acid			<0.0010		mg/L		0.001	07-DEC-11
Dichloroacetic Acid			<0.0010		mg/L		0.001	07-DEC-11
Trichloroacetic Acid			<0.0010		mg/L		0.001	07-DEC-11
WG1402413-2 MB			<0.0010		mg/L		0.001	07-DEC-11
Monochloroacetic Acid			<0.0050		mg/L		0.005	07-DEC-11
Dibromoacetic Acid			<0.0010		mg/L		0.001	07-DEC-11
Dichloroacetic Acid			<0.0010		mg/L		0.001	07-DEC-11
Trichloroacetic Acid			<0.0010		mg/L		0.001	07-DEC-11
MET-D-L-MS-WP		Water						
Batch	R2297781							
WG1400494-4 DUP		WG1400494-3						
Aluminum (Al)-Dissolved		<0.0020	<0.0020	RPD-NA	mg/L	N/A	20	07-DEC-11
Antimony (Sb)-Dissolved		0.00020	0.00021		mg/L	5.3	20	07-DEC-11
Barium (Ba)-Dissolved		0.223	0.225		mg/L	1.3	20	07-DEC-11
Beryllium (Be)-Dissolved		<0.00020	<0.00020	RPD-NA	mg/L	N/A	20	07-DEC-11
Bismuth (Bi)-Dissolved		<0.00020	<0.00020	RPD-NA	mg/L	N/A	20	07-DEC-11
Boron (B)-Dissolved		0.065	0.067		mg/L	2.5	20	07-DEC-11
Cadmium (Cd)-Dissolved		<0.000010	<0.000010	RPD-NA	mg/L	N/A	20	07-DEC-11
Calcium (Ca)-Dissolved		84.6	86.7		mg/L	2.5	20	07-DEC-11
Cesium (Cs)-Dissolved		<0.00010	<0.00010	RPD-NA	mg/L	N/A	20	07-DEC-11
Cobalt (Co)-Dissolved		0.00031	0.00029		mg/L	7.0	20	07-DEC-11
Copper (Cu)-Dissolved		0.0123	0.0120		mg/L	2.6	20	07-DEC-11
Iron (Fe)-Dissolved		<0.10	<0.10	RPD-NA	mg/L	N/A	20	07-DEC-11
Lead (Pb)-Dissolved		<0.000090	<0.000090	RPD-NA	mg/L	N/A	20	07-DEC-11
Lithium (Li)-Dissolved		0.0254	0.0266		mg/L	4.7	20	07-DEC-11
Magnesium (Mg)-Dissolved		36.6	34.9					



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Client: Office of Drinking Water
 25 Tupper Street N
 Portage La Prairie MB R1N 3K1
 Contact: Jack Cronk

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-D-L-MS-WP		Water						
Batch	R2297781							
WG1400494-4	DUP	WG1400494-3						
Magnesium (Mg)-Dissolved		36.6	34.9		mg/L	4.7	20	07-DEC-11
Manganese (Mn)-Dissolved		0.208	0.205		mg/L	1.4	20	07-DEC-11
Molybdenum (Mo)-Dissolved		0.00247	0.00253		mg/L	2.4	20	07-DEC-11
Nickel (Ni)-Dissolved		0.0017	0.0015		mg/L	11	20	07-DEC-11
Phosphorus (P)-Dissolved		<0.10	<0.10	RPD-NA	mg/L	N/A	20	07-DEC-11
Potassium (K)-Dissolved		3.16	3.07		mg/L	2.7	20	07-DEC-11
Rubidium (Rb)-Dissolved		0.00145	0.00153		mg/L	5.3	20	07-DEC-11
Selenium (Se)-Dissolved		0.0027	0.0028		mg/L	4.5	20	07-DEC-11
Silicon (Si)-Dissolved		10.5	11.0		mg/L	4.6	20	07-DEC-11
Silver (Ag)-Dissolved		<0.00010	<0.00010	RPD-NA	mg/L	N/A	20	07-DEC-11
Sodium (Na)-Dissolved		16.3	16.3		mg/L	0.078	20	07-DEC-11
Tellurium (Te)-Dissolved		<0.00020	<0.00020	RPD-NA	mg/L	N/A	20	07-DEC-11
Thallium (Tl)-Dissolved		<0.00010	<0.00010	RPD-NA	mg/L	N/A	20	07-DEC-11
Thorium (Th)-Dissolved		<0.00010	<0.00010	RPD-NA	mg/L	N/A	25	07-DEC-11
Tin (Sn)-Dissolved		<0.00020	<0.00020	RPD-NA	mg/L	N/A	20	07-DEC-11
Titanium (Ti)-Dissolved		0.00180	0.00170		mg/L	5.7	20	07-DEC-11
Tungsten (W)-Dissolved		<0.00020	<0.00020	RPD-NA	mg/L	N/A	20	07-DEC-11
Uranium (U)-Dissolved		0.00757	0.00769		mg/L	1.5	20	07-DEC-11
Zinc (Zn)-Dissolved		0.0091	0.0093		mg/L	2.3	20	07-DEC-11
Zirconium (Zr)-Dissolved		<0.00040	<0.00040	RPD-NA	mg/L	N/A	20	07-DEC-11
WG1400494-2	LCS							
Aluminum (Al)-Dissolved			104.6		%		80-120	06-DEC-11
Antimony (Sb)-Dissolved			99.6		%		80-120	06-DEC-11
Barium (Ba)-Dissolved			101.7		%		80-120	06-DEC-11
Beryllium (Be)-Dissolved			94.5		%		80-120	06-DEC-11
Bismuth (Bi)-Dissolved			98.4		%		80-120	06-DEC-11
Boron (B)-Dissolved			106.5		%		80-120	06-DEC-11
Cadmium (Cd)-Dissolved			103.0		%		80-120	06-DEC-11
Calcium (Ca)-Dissolved			98.7		%		80-120	06-DEC-11
Cesium (Cs)-Dissolved			96.1		%		80-120	06-DEC-11
Cobalt (Co)-Dissolved			99.9		%		80-120	06-DEC-11
Copper (Cu)-Dissolved			98.6		%		80-120	06-DEC-11
Iron (Fe)-Dissolved			99.5		%		80-120	06-DEC-11



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Client: Office of Drinking Water
 25 Tupper Street N
 Portage La Prairie MB R1N 3K1

Contact: Jack Cronk

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-D-L-MS-WP		Water						
Batch	R2297781							
WG1400494-2 LCS								
Lead (Pb)-Dissolved			100.1		%		80-120	06-DEC-11
Lithium (Li)-Dissolved			99.3		%		80-120	06-DEC-11
Magnesium (Mg)-Dissolved			101.5		%		80-120	06-DEC-11
Manganese (Mn)-Dissolved			95.3		%		80-120	06-DEC-11
Molybdenum (Mo)-Dissolved			103.2		%		80-120	06-DEC-11
Nickel (Ni)-Dissolved			103.0		%		80-120	06-DEC-11
Phosphorus (P)-Dissolved			99.8		%		80-120	06-DEC-11
Potassium (K)-Dissolved			97.7		%		80-120	06-DEC-11
Rubidium (Rb)-Dissolved			101.7		%		80-120	06-DEC-11
Selenium (Se)-Dissolved			99.8		%		80-120	06-DEC-11
Silicon (Si)-Dissolved			101.3		%		80-120	06-DEC-11
Silver (Ag)-Dissolved			97.1		%		80-120	06-DEC-11
Sodium (Na)-Dissolved			102.2		%		80-120	06-DEC-11
Tellurium (Te)-Dissolved			107.2		%		80-120	06-DEC-11
Thallium (Tl)-Dissolved			99.8		%		80-120	06-DEC-11
Thorium (Th)-Dissolved			96.1		%		80-120	06-DEC-11
Tin (Sn)-Dissolved			106.5		%		80-120	06-DEC-11
Titanium (Ti)-Dissolved			102.5		%		80-120	06-DEC-11
Tungsten (W)-Dissolved			99.3		%		80-120	06-DEC-11
Uranium (U)-Dissolved			94.4		%		80-120	06-DEC-11
Zinc (Zn)-Dissolved			96.7		%		80-120	06-DEC-11
Zirconium (Zr)-Dissolved			102.1		%		80-120	06-DEC-11
WG1400494-1 MB								
Aluminum (Al)-Dissolved			<0.0020		mg/L		0.002	06-DEC-11
Antimony (Sb)-Dissolved			<0.00020		mg/L		0.0002	06-DEC-11
Barium (Ba)-Dissolved			<0.00020		mg/L		0.0002	06-DEC-11
Beryllium (Be)-Dissolved			<0.00020		mg/L		0.0002	06-DEC-11
Bismuth (Bi)-Dissolved			<0.00020		mg/L		0.0002	06-DEC-11
Boron (B)-Dissolved			<0.010		mg/L		0.01	06-DEC-11
Cadmium (Cd)-Dissolved			<0.000010		mg/L		0.00001	06-DEC-11
Calcium (Ca)-Dissolved			<0.050		mg/L		0.05	06-DEC-11
Cesium (Cs)-Dissolved			<0.00010		mg/L		0.0001	06-DEC-11
Cobalt (Co)-Dissolved			<0.00020		mg/L		0.0002	06-DEC-11
Copper (Cu)-Dissolved			<0.00020		mg/L		0.0002	06-DEC-11



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Client: Office of Drinking Water
 25 Tupper Street N
 Portage La Prairie MB R1N 3K1

Contact: Jack Cronk

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-D-L-MS-WP		Water						
Batch R2297781								
WG1400494-1 MB								
Iron (Fe)-Dissolved			<0.10		mg/L		0.1	06-DEC-11
Lead (Pb)-Dissolved			<0.000090		mg/L		0.00009	06-DEC-11
Lithium (Li)-Dissolved			<0.0020		mg/L		0.002	06-DEC-11
Magnesium (Mg)-Dissolved			<0.010		mg/L		0.01	06-DEC-11
Manganese (Mn)-Dissolved			<0.00010		mg/L		0.0001	06-DEC-11
Molybdenum (Mo)-Dissolved			<0.00010		mg/L		0.0001	06-DEC-11
Nickel (Ni)-Dissolved			<0.0010		mg/L		0.001	06-DEC-11
Phosphorus (P)-Dissolved			<0.10		mg/L		0.1	06-DEC-11
Potassium (K)-Dissolved			<0.020		mg/L		0.02	06-DEC-11
Rubidium (Rb)-Dissolved			<0.00020		mg/L		0.0002	06-DEC-11
Selenium (Se)-Dissolved			<0.0010		mg/L		0.001	06-DEC-11
Silicon (Si)-Dissolved			<0.050		mg/L		0.05	06-DEC-11
Silver (Ag)-Dissolved			<0.00010		mg/L		0.0001	06-DEC-11
Sodium (Na)-Dissolved			<0.020		mg/L		0.02	06-DEC-11
Tellurium (Te)-Dissolved			<0.00020		mg/L		0.0002	06-DEC-11
Thallium (Tl)-Dissolved			<0.00010		mg/L		0.0001	06-DEC-11
Thorium (Th)-Dissolved			<0.00010		mg/L		0.0001	06-DEC-11
Tin (Sn)-Dissolved			<0.00020		mg/L		0.0002	06-DEC-11
Titanium (Ti)-Dissolved			<0.00020		mg/L		0.0002	06-DEC-11
Tungsten (W)-Dissolved			<0.00020		mg/L		0.0002	06-DEC-11
Uranium (U)-Dissolved			<0.00010		mg/L		0.0001	06-DEC-11
Zinc (Zn)-Dissolved			<0.0020		mg/L		0.002	06-DEC-11
Zirconium (Zr)-Dissolved			<0.00040		mg/L		0.0004	06-DEC-11

MET-T-L-MS-WP		Water						
Batch R2298418								
WG1400579-4 DUP								
		WG1400579-3						
Aluminum (Al)-Total		0.0077	0.0078		mg/L	0.47	20	07-DEC-11
Antimony (Sb)-Total		<0.00020	<0.00020	RPD-NA	mg/L	N/A	20	07-DEC-11
Arsenic (As)-Total		0.00238	0.00237		mg/L	0.42	20	07-DEC-11
Barium (Ba)-Total		0.0132	0.0133		mg/L	0.93	20	07-DEC-11
Beryllium (Be)-Total		<0.00020	<0.00020	RPD-NA	mg/L	N/A	20	07-DEC-11
Bismuth (Bi)-Total		<0.00020	<0.00020	RPD-NA	mg/L	N/A	20	07-DEC-11
Boron (B)-Total		0.495	0.500		mg/L	1.2	20	07-DEC-11



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Client: Office of Drinking Water
 25 Tupper Street N
 Portage La Prairie MB R1N 3K1

Contact: Jack Cronk

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-T-L-MS-WP		Water						
Batch	R2298418							
WG1400579-4	DUP	WG1400579-3						
Cadmium (Cd)-Total		<0.000010	<0.000010	RPD-NA	mg/L	N/A	20	07-DEC-11
Calcium (Ca)-Total		125	121		mg/L	3.2	20	07-DEC-11
Cesium (Cs)-Total		<0.00010	<0.00010	RPD-NA	mg/L	N/A	20	07-DEC-11
Chromium (Cr)-Total		<0.0010	<0.0010	RPD-NA	mg/L	N/A	20	07-DEC-11
Cobalt (Co)-Total		0.00027	0.00026		mg/L	3.4	20	07-DEC-11
Copper (Cu)-Total		0.00028	0.00029		mg/L	4.9	20	07-DEC-11
Iron (Fe)-Total		0.18	0.16		mg/L	8.3	20	07-DEC-11
Lead (Pb)-Total		0.000129	0.000132		mg/L	2.3	20	07-DEC-11
Lithium (Li)-Total		0.138	0.145		mg/L	4.7	20	07-DEC-11
Magnesium (Mg)-Total		93.4	94.0		mg/L	0.57	20	07-DEC-11
Manganese (Mn)-Total		0.0191	0.0181		mg/L	5.6	20	07-DEC-11
Molybdenum (Mo)-Total		0.00165	0.00167		mg/L	0.96	20	07-DEC-11
Nickel (Ni)-Total		<0.0020	<0.0020	RPD-NA	mg/L	N/A	20	07-DEC-11
Phosphorus (P)-Total		<0.20	<0.20	RPD-NA	mg/L	N/A	20	07-DEC-11
Potassium (K)-Total		16.5	16.3		mg/L	1.2	20	07-DEC-11
Rubidium (Rb)-Total		0.00519	0.00544		mg/L	4.7	20	07-DEC-11
Selenium (Se)-Total		0.0021	0.0022		mg/L	1.1	20	07-DEC-11
Silicon (Si)-Total		7.26	6.91		mg/L	4.9	20	07-DEC-11
Silver (Ag)-Total		<0.00010	<0.00010	RPD-NA	mg/L	N/A	20	07-DEC-11
Sodium (Na)-Total		163	152		mg/L	6.9	20	07-DEC-11
Strontium (Sr)-Total		1.06	1.11		mg/L	4.4	20	07-DEC-11
Tellurium (Te)-Total		<0.00020	<0.00020	RPD-NA	mg/L	N/A	20	07-DEC-11
Thallium (Tl)-Total		<0.00010	<0.00010	RPD-NA	mg/L	N/A	20	07-DEC-11
Thorium (Th)-Total		<0.00010	<0.00010	RPD-NA	mg/L	N/A	25	07-DEC-11
Tin (Sn)-Total		<0.00020	<0.00020	RPD-NA	mg/L	N/A	20	07-DEC-11
Titanium (Ti)-Total		0.00201	0.00232		mg/L	14	20	07-DEC-11
Tungsten (W)-Total		<0.0010	<0.0010	RPD-NA	mg/L	N/A	20	07-DEC-11
Uranium (U)-Total		0.00626	0.00592		mg/L	5.5	20	07-DEC-11
Vanadium (V)-Total		0.00023	<0.00020	RPD-NA	mg/L	N/A	20	07-DEC-11
Zinc (Zn)-Total		<0.0050	<0.0050	RPD-NA	mg/L	N/A	20	07-DEC-11
Zirconium (Zr)-Total		<0.00040	<0.00040	RPD-NA	mg/L	N/A	20	07-DEC-11
WG1400579-6	DUP	WG1400579-5						
Aluminum (Al)-Total		0.796	0.927		mg/L	15	20	07-DEC-11



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Client: Office of Drinking Water
 25 Tupper Street N
 Portage La Prairie MB R1N 3K1

Contact: Jack Cronk

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-T-L-MS-WP		Water						
Batch	R2298418							
WG1400579-6	DUP	WG1400579-5						
Antimony (Sb)-Total		0.00026	0.00025		mg/L	5.2	20	07-DEC-11
Arsenic (As)-Total		0.00513	0.00549		mg/L	6.8	20	07-DEC-11
Barium (Ba)-Total		0.104	0.102		mg/L	1.3	20	07-DEC-11
Beryllium (Be)-Total		<0.00020	<0.00020	RPD-NA	mg/L	N/A	20	07-DEC-11
Bismuth (Bi)-Total		<0.00020	<0.00020	RPD-NA	mg/L	N/A	20	07-DEC-11
Boron (B)-Total		0.137	0.137		mg/L	0.26	20	07-DEC-11
Cadmium (Cd)-Total		0.000045	0.000042		mg/L	6.9	20	07-DEC-11
Calcium (Ca)-Total		97.4	91.2		mg/L	6.6	20	07-DEC-11
Cesium (Cs)-Total		0.00013	0.00014		mg/L	7.5	20	07-DEC-11
Chromium (Cr)-Total		0.0013	0.0015		mg/L	13	20	07-DEC-11
Cobalt (Co)-Total		0.00084	0.00095		mg/L	12	20	07-DEC-11
Copper (Cu)-Total		0.00263	0.00298		mg/L	12	20	07-DEC-11
Iron (Fe)-Total		1.38	1.55		mg/L	12	20	07-DEC-11
Lead (Pb)-Total		0.000845	0.000862		mg/L	2.0	20	07-DEC-11
Lithium (Li)-Total		0.0787	0.0814		mg/L	3.4	20	07-DEC-11
Magnesium (Mg)-Total		66.3	63.8		mg/L	3.8	20	07-DEC-11
Manganese (Mn)-Total		0.115	0.123		mg/L	6.8	20	07-DEC-11
Molybdenum (Mo)-Total		0.00342	0.00351		mg/L	2.7	20	07-DEC-11
Nickel (Ni)-Total		0.0047	0.0054		mg/L	12	20	07-DEC-11
Phosphorus (P)-Total		<0.20	<0.20	RPD-NA	mg/L	N/A	20	07-DEC-11
Potassium (K)-Total		13.6	13.2		mg/L	3.3	20	07-DEC-11
Rubidium (Rb)-Total		0.00304	0.00324		mg/L	6.4	20	07-DEC-11
Selenium (Se)-Total		<0.0010	<0.0010	RPD-NA	mg/L	N/A	20	07-DEC-11
Silicon (Si)-Total		8.73	8.71		mg/L	0.19	20	07-DEC-11
Silver (Ag)-Total		<0.00010	<0.00010	RPD-NA	mg/L	N/A	20	07-DEC-11
Sodium (Na)-Total		91.0	87.1		mg/L	4.5	20	07-DEC-11
Strontium (Sr)-Total		0.377	0.401		mg/L	6.2	20	07-DEC-11
Tellurium (Te)-Total		<0.00020	<0.00020	RPD-NA	mg/L	N/A	20	07-DEC-11
Thallium (Tl)-Total		<0.00010	<0.00010	RPD-NA	mg/L	N/A	20	07-DEC-11
Thorium (Th)-Total		0.00031	0.00032		mg/L	2.8	25	07-DEC-11
Tin (Sn)-Total		<0.00020	<0.00020	RPD-NA	mg/L	N/A	20	07-DEC-11
Titanium (Ti)-Total		0.0235	0.0256		mg/L	8.7	20	07-DEC-11
Tungsten (W)-Total		<0.0010	<0.0010		mg/L			07-DEC-11



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 25 Tupper Street N
 Portage La Prairie MB R1N 3K1

Contact: Jack Cronk

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-T-L-MS-WP								
	Water							
Batch	R2298418							
WG1400579-6	DUP	WG1400579-5						
Tungsten (W)-Total		<0.0010	<0.0010	RPD-NA	mg/L	N/A	20	07-DEC-11
Uranium (U)-Total		0.00494	0.00480		mg/L	2.8	20	07-DEC-11
Vanadium (V)-Total		0.00454	0.00487		mg/L	7.0	20	07-DEC-11
Zinc (Zn)-Total		0.0060	0.0061		mg/L	2.6	20	07-DEC-11
Zirconium (Zr)-Total		0.00082	0.00084		mg/L	2.1	20	07-DEC-11
WG1400579-2	LCS							
Aluminum (Al)-Total			96.6		%		80-120	07-DEC-11
Antimony (Sb)-Total			102.4		%		80-120	07-DEC-11
Arsenic (As)-Total			98.4		%		80-120	07-DEC-11
Barium (Ba)-Total			101.5		%		80-120	07-DEC-11
Beryllium (Be)-Total			101.6		%		80-120	07-DEC-11
Bismuth (Bi)-Total			101.9		%		80-120	07-DEC-11
Boron (B)-Total			99.7		%		80-120	07-DEC-11
Cadmium (Cd)-Total			104.1		%		80-120	07-DEC-11
Calcium (Ca)-Total			102.9		%		80-120	07-DEC-11
Cesium (Cs)-Total			96.9		%		80-120	07-DEC-11
Chromium (Cr)-Total			99.5		%		80-120	07-DEC-11
Cobalt (Co)-Total			97.3		%		80-120	07-DEC-11
Copper (Cu)-Total			98.7		%		80-120	07-DEC-11
Iron (Fe)-Total			97.1		%		80-120	07-DEC-11
Lead (Pb)-Total			101.6		%		80-120	07-DEC-11
Lithium (Li)-Total			98.6		%		80-120	07-DEC-11
Magnesium (Mg)-Total			98.8		%		80-120	07-DEC-11
Manganese (Mn)-Total			97.3		%		80-120	07-DEC-11
Molybdenum (Mo)-Total			106.0		%		80-120	07-DEC-11
Nickel (Ni)-Total			99.98		%		80-120	07-DEC-11
Phosphorus (P)-Total			98.4		%		80-120	07-DEC-11
Potassium (K)-Total			102.4		%		80-120	07-DEC-11
Rubidium (Rb)-Total			105.7		%		80-120	07-DEC-11
Selenium (Se)-Total			97.4		%		80-120	07-DEC-11
Silicon (Si)-Total			106.6		%		80-120	07-DEC-11
Silver (Ag)-Total			99.6		%		80-120	07-DEC-11
Sodium (Na)-Total			102.9		%		80-120	07-DEC-11



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Contact: Jack Cronk

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-T-L-MS-WP		Water						
Batch	R2298418							
WG1400579-2 LCS								
Strontium (Sr)-Total			108.1		%		80-120	07-DEC-11
Tellurium (Te)-Total			106.8		%		80-120	07-DEC-11
Thallium (Tl)-Total			100.7		%		80-120	07-DEC-11
Thorium (Th)-Total			99.8		%		70-130	07-DEC-11
Tin (Sn)-Total			106.2		%		80-120	07-DEC-11
Titanium (Ti)-Total			99.5		%		80-120	07-DEC-11
Tungsten (W)-Total			98.7		%		80-120	07-DEC-11
Uranium (U)-Total			98.0		%		80-120	07-DEC-11
Vanadium (V)-Total			98.6		%		80-120	07-DEC-11
Zinc (Zn)-Total			95.7		%		80-120	07-DEC-11
Zirconium (Zr)-Total			103.6		%		80-120	07-DEC-11
WG1400579-1 MB								
Aluminum (Al)-Total			<0.0050		mg/L		0.005	07-DEC-11
Antimony (Sb)-Total			<0.00020		mg/L		0.0002	07-DEC-11
Arsenic (As)-Total			<0.00020		mg/L		0.0002	07-DEC-11
Barium (Ba)-Total			<0.00020		mg/L		0.0002	07-DEC-11
Beryllium (Be)-Total			<0.00020		mg/L		0.0002	07-DEC-11
Bismuth (Bi)-Total			<0.00020		mg/L		0.0002	07-DEC-11
Boron (B)-Total			<0.010		mg/L		0.01	07-DEC-11
Cadmium (Cd)-Total			<0.000010		mg/L		0.00001	07-DEC-11
Calcium (Ca)-Total			<0.10		mg/L		0.1	07-DEC-11
Cesium (Cs)-Total			<0.00010		mg/L		0.0001	07-DEC-11
Chromium (Cr)-Total			<0.0010		mg/L		0.001	07-DEC-11
Cobalt (Co)-Total			<0.00020		mg/L		0.0002	07-DEC-11
Copper (Cu)-Total			<0.00020		mg/L		0.0002	07-DEC-11
Iron (Fe)-Total			<0.10		mg/L		0.1	07-DEC-11
Lead (Pb)-Total			<0.000090		mg/L		0.00009	07-DEC-11
Lithium (Li)-Total			<0.0020		mg/L		0.002	07-DEC-11
Magnesium (Mg)-Total			<0.010		mg/L		0.01	07-DEC-11
Manganese (Mn)-Total			<0.00030		mg/L		0.0003	07-DEC-11
Molybdenum (Mo)-Total			<0.00020		mg/L		0.0002	07-DEC-11
Nickel (Ni)-Total			<0.0020		mg/L		0.002	07-DEC-11
Phosphorus (P)-Total			<0.20		mg/L		0.2	07-DEC-11
Potassium (K)-Total			<0.020		mg/L		0.02	07-DEC-11



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Client: Office of Drinking Water
 25 Tupper Street N
 Portage La Prairie MB R1N 3K1

Contact: Jack Cronk

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-T-L-MS-WP		Water						
Batch	R2298418							
WG1400579-1 MB								
Rubidium (Rb)-Total			<0.00020		mg/L		0.0002	07-DEC-11
Selenium (Se)-Total			<0.0010		mg/L		0.001	07-DEC-11
Silicon (Si)-Total			<0.050		mg/L		0.05	07-DEC-11
Silver (Ag)-Total			<0.00010		mg/L		0.0001	07-DEC-11
Sodium (Na)-Total			<0.030		mg/L		0.03	07-DEC-11
Strontium (Sr)-Total			<0.00010		mg/L		0.0001	07-DEC-11
Tellurium (Te)-Total			<0.00020		mg/L		0.0002	07-DEC-11
Thallium (Tl)-Total			<0.00010		mg/L		0.0001	07-DEC-11
Thorium (Th)-Total			<0.00010		mg/L		0.0001	07-DEC-11
Tin (Sn)-Total			<0.00020		mg/L		0.0002	07-DEC-11
Titanium (Ti)-Total			<0.00020		mg/L		0.0002	07-DEC-11
Tungsten (W)-Total			<0.0010		mg/L		0.001	07-DEC-11
Uranium (U)-Total			<0.00010		mg/L		0.0001	07-DEC-11
Vanadium (V)-Total			<0.00020		mg/L		0.0002	07-DEC-11
Zinc (Zn)-Total			<0.0050		mg/L		0.005	07-DEC-11
Zirconium (Zr)-Total			<0.00040		mg/L		0.0004	07-DEC-11
N-TOTKJ-WP		Water						
Batch	R2299320							
WG1402168-1 CVS								
Total Kjeldahl Nitrogen			96.1		%		90-110	09-DEC-11
WG1400556-4 DUP	L1092095-1							
Total Kjeldahl Nitrogen	1.33	1.32			mg/L	1.0	20	09-DEC-11
WG1400556-7 DUP	L1092119-2							
Total Kjeldahl Nitrogen	1.20	1.25			mg/L	3.7	20	09-DEC-11
WG1400556-2 LCS								
Total Kjeldahl Nitrogen			101.9		%		75-125	09-DEC-11
WG1400556-1 MB								
Total Kjeldahl Nitrogen			<0.20		mg/L		0.2	09-DEC-11
WG1400556-5 MB								
Total Kjeldahl Nitrogen			<0.20		mg/L		0.2	09-DEC-11
WG1400556-3 MS	L1092095-1							
Total Kjeldahl Nitrogen			N/A	MS-B	%		-	09-DEC-11
WG1400556-6 MS	L1092119-2							
Total Kjeldahl Nitrogen			N/A	MS-B	%		-	09-DEC-11
N2N3-COL-WP		Water						



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Client: Office of Drinking Water
 25 Tupper Street N
 Portage La Prairie MB R1N 3K1
 Contact: Jack Cronk

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
N2N3-COL-WP								
	Water							
Batch	R2298581							
WG1401412-3	DUP	L1089451-1						
Nitrate and Nitrite as N		<0.050	<0.050	RPD-NA	mg/L	N/A	20	07-DEC-11
WG1401412-2	LCS							
Nitrate and Nitrite as N			103.6		%		85-115	07-DEC-11
WG1401412-1	MB							
Nitrate and Nitrite as N			<0.050		mg/L		0.05	07-DEC-11
WG1401412-4	MS	L1089451-1						
Nitrate and Nitrite as N			114.0		%		75-125	07-DEC-11
NH3-COL-WP								
	Water							
Batch	R2301722							
WG1404770-3	DUP	L1092824-1						
Ammonia as N		0.414	0.411		mg/L	0.80	20	14-DEC-11
WG1404770-5	DUP	L1092989-1						
Ammonia as N		37.1	37.8		mg/L	2.0	20	14-DEC-11
WG1404770-7	DUP	L1093887-1						
Ammonia as N		29.0	28.5		mg/L	1.8	20	14-DEC-11
WG1404770-2	LCS							
Ammonia as N			100.1		%		85-115	14-DEC-11
WG1404770-1	MB							
Ammonia as N			<0.010		mg/L		0.01	14-DEC-11
WG1404770-4	MS	L1092095-2						
Ammonia as N			102.2		%		75-125	14-DEC-11
WG1404770-6	MS	L1092718-1						
Ammonia as N			102.2		%		75-125	14-DEC-11
WG1404770-8	MS	L1093888-4						
Ammonia as N			101.0		%		75-125	14-DEC-11
NO2-L-IC-WP								
	Water							
Batch	R2299076							
WG1401693-2	LCS							
Nitrite-N			99.0		%		85-115	07-DEC-11
WG1401693-1	MB							
Nitrite-N			<0.0010		mg/L		0.001	07-DEC-11
NO3-L-IC-WP								
	Water							
Batch	R2299076							
WG1401693-2	LCS							
Nitrate-N			100.5		%		85-115	07-DEC-11
WG1401693-1	MB							



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Client: Office of Drinking Water
 25 Tupper Street N
 Portage La Prairie MB R1N 3K1

Contact: Jack Cronk

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
NO3-L-IC-WP								
	Water							
Batch	R2299076							
WG1401693-1	MB							
Nitrate-N			<0.0050		mg/L		0.005	07-DEC-11
P-T-COL-WP								
	Water							
Batch	R2298419							
WG1400362-3	DUP	L1092218-6						
Phosphorus (P)-Total		5.02	5.06		mg/L	0.79	20	07-DEC-11
WG1400362-2	LCS							
Phosphorus (P)-Total			102.0		%		80-120	07-DEC-11
WG1400362-1	MB							
Phosphorus (P)-Total			<0.010		mg/L		0.01	07-DEC-11
WG1400362-4	MS	L1092095-1						
Phosphorus (P)-Total			93.8		%		70-130	07-DEC-11
P-TD-COL-WP								
	Water							
Batch	R2298419							
WG1400361-3	DUP	L1092143-1						
Phosphorus (P)-Total Dissolved		0.165	0.163		mg/L	1.2	20	07-DEC-11
WG1400361-2	LCS							
Phosphorus (P)-Total Dissolved			99.1		%		80-120	07-DEC-11
WG1400361-1	MB							
Phosphorus (P)-Total Dissolved			<0.010		mg/L		0.01	07-DEC-11
WG1400361-4	MS	L1092095-1						
Phosphorus (P)-Total Dissolved			89.6		%		70-130	07-DEC-11
P-TINORG-COL-WP								
	Water							
Batch	R2299045							
WG1401320-3	DUP	L1092095-1						
Phosphorus (P)-Total Inorganic		0.181	0.188		mg/L	3.8	20	08-DEC-11
WG1401320-2	LCS							
Phosphorus (P)-Total Inorganic			99.4		%		80-120	08-DEC-11
WG1401320-1	MB							
Phosphorus (P)-Total Inorganic			<0.010		mg/L		0.01	08-DEC-11
WG1401320-4	MS	L1092700-1						
Phosphorus (P)-Total Inorganic			99.0		%		70-130	08-DEC-11
P-TR-COL-WP								
	Water							



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Client: Office of Drinking Water
 25 Tupper Street N
 Portage La Prairie MB R1N 3K1

Contact: Jack Cronk

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
P-TR-COL-WP		Water						
Batch R2297564								
WG1399885-3	DUP	L1090317-1						
Phosphorus (P)-Total Reactive		0.011	0.012		mg/L	0.012	0.02	06-DEC-11
WG1399885-2	LCS							
Phosphorus (P)-Total Reactive			93.5		%		80-120	06-DEC-11
WG1399885-1	MB							
Phosphorus (P)-Total Reactive			<0.010		mg/L		0.01	06-DEC-11
WG1399885-4	MS	L1090317-2						
Phosphorus (P)-Total Reactive			103.0		%		70-130	06-DEC-11
PH-WP		Water						
Batch R2297788								
WG1400528-4	DUP	L1092095-1						
pH		8.46	8.47	J	pH units	0.01	0.2	06-DEC-11
WG1400528-5	DUP	L1092140-1						
pH		8.38	8.40	J	pH units	0.01	0.2	06-DEC-11
WG1400528-6	DUP	L1092199-1						
pH		8.47	8.48	J	pH units	0.01	0.2	06-DEC-11
WG1400528-2	LCS							
pH			7.42		pH units		7.3-7.5	06-DEC-11
PO4-DO-COL-WP		Water						
Batch R2297564								
WG1400251-2	DUP	L1092095-1						
Orthophosphate-Dissolved (as P)		0.074	0.075		mg/L	0.54	20	06-DEC-11
WG1400251-1	MB							
Orthophosphate-Dissolved (as P)			<0.010		mg/L		0.01	06-DEC-11
WG1400251-3	MS	L1092095-1						
Orthophosphate-Dissolved (as P)			119.6		%		70-130	06-DEC-11
SO4-IC-WP		Water						
Batch R2299076								
WG1401693-3	DUP	L1092740-4						
Sulfate		45.0	45.0		mg/L	0.021	20	07-DEC-11
WG1401693-2	LCS							
Sulfate			101.2		%		85-115	07-DEC-11
WG1401693-1	MB							
Sulfate			<0.50		mg/L		0.5	07-DEC-11
WG1401693-4	MS	L1092740-4						
Sulfate			96.9		%		75-125	07-DEC-11
SOLIDS-TDS-WP		Water						



Quality Control Report

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 25 Tupper Street N
 Portage La Prairie MB R1N 3K1
 Contact: Jack Cronk

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
SOLIDS-TDS-WP		Water						
Batch	R2299262							
WG1401445-2	CVS							
Total Dissolved Solids			99.2		%		85-115	08-DEC-11
WG1401445-4	DUP	L1093287-1						
Total Dissolved Solids		1710	1660		mg/L	3.0	20	08-DEC-11
WG1401445-1	MB							
Total Dissolved Solids			<5.0		mg/L		5	08-DEC-11
THM-PRES-WP		Water						
Batch	R2301281							
WG1404247-2	CVS							
Bromodichloromethane			98.5		%		70-130	13-DEC-11
Bromoform			99.3		%		70-130	13-DEC-11
Chloroform			103.1		%		70-130	13-DEC-11
Chlorodibromomethane			102.6		%		70-130	13-DEC-11
WG1404247-3	DUP	L1092718-3						
Bromodichloromethane		0.0159	0.0156		mg/L	2.1	30	14-DEC-11
Bromoform		<0.00050	0.00050	RPD-NA	mg/L	N/A	30	14-DEC-11
Chloroform		0.0238	0.0241		mg/L	1.3	30	14-DEC-11
Chlorodibromomethane		0.00672	0.00714		mg/L	6.0	30	14-DEC-11
WG1404247-1	MB							
Bromodichloromethane			<0.00050		mg/L		0.0005	13-DEC-11
Bromoform			<0.00050		mg/L		0.0005	13-DEC-11
Chloroform			<0.00050		mg/L		0.0005	13-DEC-11
Chlorodibromomethane			<0.00050		mg/L		0.0005	13-DEC-11
Surrogate: Toluene-d8 (SURR)			98.6		%		50-150	13-DEC-11
TURBIDITY-WP		Water						
Batch	R2297813							
WG1400563-3	DUP	L1092095-1						
Turbidity		40.0	41.0		NTU	2.5	15	06-DEC-11
WG1400563-2	LCS							
Turbidity			101.0		%		85-115	06-DEC-11
WG1400563-1	MB							
Turbidity			<0.10		NTU		0.1	06-DEC-11

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Legend:

Limit ALS Control Limit (Data Quality Objectives)
DUP Duplicate
RPD Relative Percent Difference
N/A Not Available
LCS Laboratory Control Sample
SRM Standard Reference Material
MS Matrix Spike
MSD Matrix Spike Duplicate
ADE Average Desorption Efficiency
MB Method Blank
IRM Internal Reference Material
CRM Certified Reference Material
CCV Continuing Calibration Verification
CVS Calibration Verification Standard
LCSD Laboratory Control Sample Duplicate

Sample Parameter Qualifier Definitions:

Qualifier	Description
DLA	Detection Limit Adjusted For required dilution
J	Duplicate results and limits are expressed in terms of absolute difference.
MS-B	Matrix Spike recovery could not be accurately calculated due to high analyte background in sample.
RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.

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Portage La Prairie MB R1N 3K1
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Hold Time Exceedances:

ALS Product Description	Sample ID	Sampling Date	Date Processed	Rec. HT	Actual HT	Units	Qualifier
Physical Tests							
pH							
	1	05-DEC-11 14:00	06-DEC-11 08:21	0.25	18	hours	EHTR-FM
	2	05-DEC-11 14:00	06-DEC-11 08:21	0.25	18	hours	EHTR-FM

Legend & Qualifier Definitions:

EHTR-FM: Exceeded ALS recommended hold time prior to sample receipt. Field Measurement recommended.
EHTR: Exceeded ALS recommended hold time prior to sample receipt.
EHTL: Exceeded ALS recommended hold time prior to analysis. Sample was received less than 24 hours prior to expiry.
EHT: Exceeded ALS recommended hold time prior to analysis.
Rec. HT: ALS recommended hold time (see units).

Notes*:
Where actual sampling date is not provided to ALS, the date (& time) of receipt is used for calculation purposes.
Where actual sampling time is not provided to ALS, the earlier of 12 noon on the sampling date or the time (& date) of receipt is used for calculation purposes. Samples for L1092095 were received on 06-DEC-11 08:30.

ALS recommended hold times may vary by province. They are assigned to meet known provincial and/or federal government requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by the US EPA, APHA Standard Methods, or Environment Canada (where available). For more information, please contact ALS.

The ALS Quality Control Report is provided to ALS clients upon request. ALS includes comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against pre-determined data quality objectives to provide confidence in the accuracy of associated test results.

Please note that this report may contain QC results from anonymous Sample Duplicates and Matrix Spikes that do not originate from this Work Order.

L1092095



Manitoba Water Stewardship
Office of Drinking Water
1007 Century Street, Winnipeg, Manitoba,
Canada R3H 0W4

Form
www.alsglobal.com

ALS Laboratory Group
1329 Niakwa Rd E, Winnipeg, MB R2J 3T4
(204) 255-9740 or 1-800-607-7555

Report to:		Additional Copy of Report sent to:				Service Requested:							
Contact:	John Cronk	Contact:	Office of Drinking Water			<input checked="" type="checkbox"/> Regular Service							
Address:	25 Tupper Street N. Portage la Prairie MB R1N 3K1	Address:	1007 Century St. Winnipeg MB R3H 0W4			<input type="checkbox"/> Other:							
Phone:	204-239-3186	Phone:	204-945-6279			Analysis Request							
Email:	john.cronk@gov.mb.ca	ALS Contact:		Paul Nicolas									
Account:	W10477	Report Type: ODW - UTIL		Client / Project Information:									
Agency Code: 382	Project: DWQ-A												
Lab Work Order #		Operation Name:		PORTAGE LA PRAIRIE REGIONAL - PWS									
		Operation Code (com code):		171.00									
		Operation Id:		28564									
		Sampled by:		john cronk									
Lab Sample #	Sample Number (YYMMII9999)	Station Number (MB99XXD999)	Sample Identification	Date (dd-mmm-yy)	Time (hh:mm)	Sample Matrix	Sample Type	MBCON-072D-WP	MBCON-698-WP-Bromide	MBCON-697-WP-Bromate *	MBCON-693-WP-HAA	MBCON-692-WP-THM	Number of Containers
PK 84 8.5	1112JC0018	MB05MJD191	Portage la prairie 1 - Raw	05-Dec-11	2:00 PM	6	1	X	X				5
	1112JC0019	MB05MJD192	Portage la prairie 2 - Treated	05-Dec-11	2:00 PM	10	1	X		X	X		8
	1112JC0020	MB05MJD193	Portage la prairie 3 - Distribution (mid)	05-Dec-11	2:30	9	1				X		3
	1112JC0021	MB05MJD193	Portage la prairie 3 - Distribution (end)	05-Dec-11	2:30	9	1				X	X	6
			(distribution mid - hospital)										
			(distribution end - hydro office)										
			(see attached)										
Special Instructions / Hazardous Details				Sample Matrix :		6-Raw Water, 9-Distributed Water, 10-Treated Water							
				Sample Type:		1-Grab Sample, 33-Resample, 3-Duplicate Sample, 22-Field Blank							
Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY.													
By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the adjacent worksheet.													
Relinquished By:	John Cronk	Date & Time:	dec 5 - 4 PM	Received By:		Date & Time:		Sample Condition (lab use only)					
Relinquished By:		Date & Time:		Received By:		Date & Time:	0830	Temperature	Samples Received in Good Condition? Y / N (if no provided details)				

Bromate - ONT-DW-WP