

C.O.C.: ---

REPORT No. B18-20632

Report To:

Hamlet of Pangnirtung

P.O. Box 253,
Pangnirtung Nunavut X0A 0R0 Canada

Attention: SAO -

Caduceon Environmental Laboratories

2378 Holly Lane
Ottawa Ontario K1V 7P1
Tel: 613-526-0123
Fax: 613-526-1244

DATE RECEIVED: 16-Jul-18

JOB/PROJECT NO.: Waste Water

DATE REPORTED: 24-Jul-18

P.O. NUMBER:

SAMPLE MATRIX: Waste Water

WATERWORKS NO.

			Client I.D.		Pam 2 Influent	Pam 3 Effluent		
			Sample I.D.		B18-20632-1	B18-20632-2		
			Date Collected		10-Jul-18	10-Jul-18		
Parameter	Units	R.L.	Reference Method	Date/Site Analyzed				
Hardness (as CaCO ₃)	mg/L	1	SM 3120	17-Jul-18/O	56	27		
Alkalinity(CaCO ₃) to pH4.5	mg/L	5	SM 2320B	17-Jul-18/O	336	52		
pH @25°C	pH Units		SM 4500H	17-Jul-18/O	7.48	7.38		
Conductivity @25°C	µmho/cm	1	SM 2510B	17-Jul-18/O	1100	579		
TDS(ion sum calc.)	mg/L	1	Calc.	18-Jul-18/O	474	335		
Total Suspended Solids	mg/L	3	SM 2540D	17-Jul-18/O	320	< 3		
Turbidity	NTU	0.1	SM 2130	16-Jul-18/O	238	0.5		
Chloride	mg/L	0.5	SM4110C	18-Jul-18/O	52.9	57.3		
Nitrite (N)	mg/L	0.1	SM4110C	18-Jul-18/O	< 0.1	< 0.1		
Nitrate (N)	mg/L	0.1	SM4110C	18-Jul-18/O	< 0.1	19.1		
Sulphate	mg/L	1	SM4110C	18-Jul-18/O	5	35		
Aluminum	mg/L	0.01	SM 3120	17-Jul-18/O	0.86	0.02		
Arsenic	mg/L	0.0005	EPA 200.8	23-Jul-18/O	0.0007	< 0.0005		
Barium	mg/L	0.001	SM 3120	17-Jul-18/O	0.027	0.001		
Beryllium	mg/L	0.002	SM 3120	17-Jul-18/O	< 0.002	< 0.002		
Bismuth	mg/L	0.02	SM 3120	17-Jul-18/O	< 0.02	< 0.02		
Boron	mg/L	0.005	SM 3120	17-Jul-18/O	0.214	0.215		
Cadmium	mg/L	0.005	SM 3120	17-Jul-18/O	< 0.005	< 0.005		
Calcium	mg/L	0.02	SM 3120	17-Jul-18/O	14.8	6.25		
Chromium	mg/L	0.002	SM 3120	17-Jul-18/O	0.003	< 0.002		
Cobalt	mg/L	0.005	SM 3120	17-Jul-18/O	< 0.005	< 0.005		
Copper	mg/L	0.002	SM 3120	17-Jul-18/O	0.200	0.104		
Iron	mg/L	0.005	SM 3120	17-Jul-18/O	1.81	0.078		
Lead	mg/L	0.02	SM 3120	17-Jul-18/O	< 0.02	< 0.02		
Lithium	mg/L	0.01	SM 3120	17-Jul-18/O	< 0.01	< 0.01		
Magnesium	mg/L	0.02	SM 3120	17-Jul-18/O	4.51	2.65		
Manganese	mg/L	0.001	SM 3120	17-Jul-18/O	0.059	0.007		

NOTE: All bacteria parameters passed acceptable holding times upon arrival at Lab.



R.L. = Reporting Limit

Test methods may be modified from specified reference method unless indicated by an *

Site Analyzed=K-Kingston,W-Windsor,O-Ottawa,R-Richmond Hill,B-Barrie

Greg Clarkin , BSc., C. Chem
Lab Manager - Ottawa District

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			Sample I.D.		B18-20632-1	B18-20632-2		
			Date Collected		10-Jul-18	10-Jul-18		
Parameter	Units	R.L.	Reference Method	Date/Site Analyzed				
Mercury	mg/L	0.00002	SM 3112 B	18-Jul-18/O	0.00009	< 0.00002		
Molybdenum	mg/L	0.01	SM 3120	17-Jul-18/O	< 0.01	0.01		
Nickel	mg/L	0.01	SM 3120	17-Jul-18/O	0.01	< 0.01		
Silicon	mg/L	0.01	SM 3120	17-Jul-18/O	1.79	2.00		
Silver	mg/L	0.005	SM 3120	17-Jul-18/O	< 0.005	< 0.005		
Sodium	mg/L	0.2	SM 3120	17-Jul-18/O	47.7	90.7		
Zinc	mg/L	0.005	SM 3120	17-Jul-18/O	0.307	0.114		
Ammonia (N)-Total	mg/L	0.01	MOEE 3364	18-Jul-18/O	89.7	< 0.01		
Total Kjeldahl Nitrogen	mg/L	0.1	E3199A.1	18-Jul-18/K	119	1.7		
o-Phosphate (P)	mg/L	0.01	MOEE 3366	18-Jul-18/O	10.5	11.6		
Phosphorus-Total	mg/L	0.01	E3199A.1	18-Jul-18/K	13.1	12.5		
Phenolics	mg/L	0.001	MOEE 3179	19-Jul-18/K	0.439	0.003		
BOD	mg/L	3	SM 5210B	16-Jul-18/O	331	< 3		
COD	mg/L	5	SM 5220D	17-Jul-18/O	800	35		
Dissolved Organic Carbon	mg/L	0.2	EPA 415.1	17-Jul-18/O	122	11.8		
Total Organic Carbon	mg/L	0.2	EPA 415.1	17-Jul-18/O	138	12.7		
Oil & Grease-Total	mg/L	1.0	SM 5520	19-Jul-18/K	61.2	2.7		
Total Coliform	cfu/100mL	1	MOE E3371	16-Jul-18/O	79000000	< 10		
E coli	cfu/100mL	1	MOE E3371	16-Jul-18/O	920000	< 10		
Fecal Strep.	cfu/100mL	1	MOE E3371	16-Jul-18/O	36000	< 10		
Fecal Coliform	cfu/100mL	1	MOE E3371	16-Jul-18/O	840000	< 10		
Anion Sum	meq/L		Calc.	18-Jul-18/O	8.59	4.75		
Cation Sum	meq/L		Calc.	18-Jul-18/O	10.2	5.17		
% Difference	%		Calc.	18-Jul-18/O	8.64	4.26		
Ion Ratio	AS/CS		Calc.	18-Jul-18/O	0.841	0.918		
Sodium Adsorption Ratio	-		Calc.	18-Jul-18/O	2.79	7.66		
Conductivity (calc.)	µmho/cm		Calc.	18-Jul-18/O	1000	559		

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			Sample I.D.	B18-20632-1	B18-20632-2		
			Date Collected	10-Jul-18	10-Jul-18		
Parameter	Units	R.L.	Reference Method	Date/Site Analyzed			
TDS(calc.)/EC(actual)	-		Calc.	18-Jul-18/O	0.431	0.578	
EC(calc.)/EC(actual)	-		Calc.	18-Jul-18/O	0.912	0.966	
Langelier Index(25°C)	S.I.		Calc.	18-Jul-18/O	-0.286	-1.66	

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