

RESULTS OF LABORATORY ANALYSIS

PROJECT Hamlet of Igloodik		LICENCE NUMBER N444-0571		LOCATION Igloodik NWT.	
DATE SAMPLED Aug 7/85		DATE RECEIVED Aug 12, 1985		DATE COMPLETED Nov 26 '85	
STATION NUMBER 5711		571-2		571-4	
LABORATORY NUMBER 42396		42397		42398	
ANALYSIS REQUIRED		✓		✓	
pH (units)		✓ 7.3	✓ 7.4		
Conductivity (umho/cm)		✓ 290	✓ 660		
Dissolved Oxygen					
Turbidity (NTU)		✓ 0.5	✓ 0.6		
Colour (colour U.)		✓ 5	✓ 5		
Suspended Solids		✓ <5	✓ <5		
TDS, Residue		✓ 160	✓ 350		
Calcium		✓ 25	✓ 36		
Magnesium		✓ 8.6	✓ 12		
Tot. Hardness (CaCO ₃)		✓ 97	✓ 140		
Tot. Alkalinity (CaCO ₃)		✓ 97	✓ 150		
Sodium		✓ 23.3	✓ 76.8		
Potassium		✓ 1.0	✓ 6.0		
Chloride		✓ 32	✓ 99		
Sulphate		✓ 8.0	✓ 33		
Total Coliform (count)					
Fecal Coli. (100 ml)					
Fecal Strep. (ml)					
Std. Plate Cnt (cnt/ml)					
BOD ₅					
COD					
Carbon. IC					
Carbon. TOC					
Ammonia Nitrogen (as N)					
Nitrate + Nitrite (as N)					
Total Kjeldahl N					
Phosphorus O-P (as P)					
Phosphorus Tot (P)					
Silica Reac. (as SiO ₂)					
Total Cyanide					
Available Cyanide					
Sulphide					
Oil & Grease					
Phenols					
Arsenic	T (ug/L)	✓ <1.0	✓ <1.0	✓ 1.4	
	D (ug/L)				
Cadmium	T (ug/L)	✓ 0.2	✓ 0.2		
	D (ug/L)			✓ 0.3	
Copper	T (ug/L)	✓ <0.5	✓ <0.5		
	D (ug/L)			✓ 5.4	
Iron	T (ug/L)	✓ 78.4	✓ 60.5		
	D (ug/L)			✓ 33.9	
Lead	T (ug/L)	✓ <0.5	✓ <0.5	✓ <0.5	
	D (ug/L)				
Mercury	T (ug/L)	✓ 0.15	✓ 0.15	✓ 0.03	
	D (ug/L)				
Nickel	T (ug/L)	✓ <10.	✓ 12.2	✓ <10.*	
	D (ug/L)			✓ <15.*	
Zinc	T (ug/L)	✓ <15.	✓ <15.	✓ <15.*	
	D (ug/L)			✓ <15.	
Chromium	T (ug/L)	✓ 0.2	✓ 0.2	✓ 0.3	
	D (ug/L)				
Manganese	T	✓ 1.7	✓ 2.1	✓ 19.6†	
	D				

Results are expressed in ug/L, except as indicated. T and D refer to total and dissolved solids respectively.

* ANALYSIS DONE ON UNFILTERED, UNPRESERVED SAMPLE

FIELD SAMPLING AND DATA

PROJECT Hamlet of Igloodik		LICENCE NO. N464-0571		LOCATION Water Supply s. Dump				
DATE SAMPLED Aug 7/85		SAMPLED BY Bannon						
ANALYSIS	SAMPLE VOLUME	PRESERVATIVE	STATION NUMBER					
			571-1	571-2	571-4			
			BOTTLE NUMBER					
MISC. & ARSENIC	1 LITRE	NONE	✓	✓				
HEAVY METALS	500 ML	2 ML 1:1 HNO ₃	✓	✓	✓ pres. ✓ not pres.			
CYANIDE	500 ML	About 6 pellets NaOH to pH 12						
MERCURY	250 ML	2 ML 1:1 HNO ₃ + 2 ML 5% K ₂ Cr ₂ O ₇	✓	✓	✓			
NUTRIENTS	250 ML	NONE						
BACTERIA	500 ML	NONE						
OIL AND GREASE	1 LITRE (GLASS)	4 ML 1:1 H ₂ SO ₄						
Time of Sampling			1035	1035	1045			
Air Temperature								
Water Temperature approx.			8°C	8°C				
Rate of Flow					2 pools			
Ice Thickness								
Depth of Sampling			surface	surface	surface			
pH								
Conductivity								
Dissolved Oxygen								
priority			med	med	med.			

571-1 South Lake - Water supply source - middle of lake.

571-2 - Reservoir from shoreline

571-4 - runoff from dump about half way down to sea - about 200 meters below dump - pools with algae.

