

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
WATER RESOURCES DIVISION, YELLOWKNIFE, NORTHWEST TERRITORIES

RESULTS OF LABORATORY ANALYSIS

LICENCE/PROJECT Hemlet of Cape Lind	LICENCE NUMBER N/A	LOCATION Cape Lind, N.W.T.
DATE SAMPLED Sept 12, 1988	DATE RECEIVED Sept 12, 1988	DATE COMPLETED Nov 2/88

STATION NUMBER	CD1	CD2	CD3	CD4	CD5	BLANK
LABORATORY NUMBER	880934	880935	880936	880937	880938	880939
ANALYSIS REQUIRED	✓	✓	✓	✓	✓	✓
pH (units)	✓ 6.1	✓ 6.7		✓ 6.2		
Conductivity (umho/cm)	✓ 35.	✓ 49.		✓ 33.		
Dissolved Oxygen						
Turbidity (NTU)	✓ .84	✓ .52		✓ .33		
Colour (colour U.)	✓ 1.5	✓ 5		✓ 1.5		
Suspended Solids	✓ 1.2.	✓ 1.2.		✓ 1.2.		
TDS, Residue	✓ 19.	✓ 23.		✓ 21.		
Calcium	✓ 1.8	✓ 4.0		✓ 1.8		
Magnesium	✓ 0.61	✓ 0.99		✓ 0.62		
Tot. Hardness (CaCO ₃)	✓ 6.5	✓ 15		✓ 7.3		
Tot. Alkalinity (CaCO ₃)	✓ 6.0	✓ 13.		✓ 5.3		
Sodium	✓ 3.0	✓ 3.6		✓ 3.0		
Potassium	✓ 0.4	✓ 0.7		✓ 0.3		
Chloride	✓ 5.7	✓ 4.7		✓ 5.7		
Sulphate	✓ 1.5	✓ 3.6		✓ 2.0		
Total Coliform (count/100)						
Fecal Coli.						
Fecal Strep. (ml)						
Std. Plate Cnt (cnt/ml)						
BOD ₅						
COD						
Carbon, IC						
Carbon, TOC						
Ammonia Nitrogen (as N)						
Nitrate + Nitrite (as N)	✓ 2.02	✓ 2.02		✓ 2.02		
Total Kjeldahl N						
Phosphorus O-P (as P)						
Phosphorus Tot (P)	✓ <0.005	✓ 0.014		✓ <0.005		
Silica Reac. (as SiO ₂)						
Total Cyanide						
Available Cyanide						
Sulphide						
Oil & Grease						
Phenols						
Arsenic	T (ug/L) ✓ 11	✓ 11			✓ 11	
	D (ug/L)					
Cadmium	T (ug/L) ✓ 0.1	✓ 0.1	✓ 0.8	✓ 0.4	✓ 0.3	0.1
	D (ug/L)					
Copper	T (ug/L) ✓ 2.3	✓ 1.1	✓ 53.2	✓ 3.7	✓ 5.8	40.5
	D (ug/L)					
Iron	T (ug/L) ✓ 6	✓ 11	✓ 1260	✓ 11	✓ 97	✓ 11
	D (ug/L)					
Lead	T (ug/L) ✓ 2.3	✓ 1.9	✓ 13.7	✓ 6.3	✓ 2.7	✓ 1.0
	D (ug/L)					
Mercury	T (ug/L) ✓ >4.	✓ <0.2		✓ 4.02		✓ 1.07
	D (ug/L)					
Nickel	T (ug/L) ✓ 41	✓ 41	✓ 43	✓ 1	✓ 3	✓ 1
	D (ug/L)					
Vanadium	T (ug/L) ✓ 482	✓ 5.6	✓ 160	✓ 16	✓ 19	6.2
	D (ug/L)					
Chromium	T (ug/L) ✓ 1.	✓ 11	✓ 2	✓ 1	✓ 3	✓ 1
	D (ug/L)					

Results are expressed in ug/L, except as indicated. T and D refer to Total and Dissolved metals respectively.

FIELD SAMPLING AND DATA

LICENSEE/PROJECT <i>Hamlet of Cape Dorset</i>		LICENCE NO. <i>N/A</i>		LOCATION <i>Cape Dorset, N.W.T.</i>				
DATE SAMPLED <i>September 1, 1988</i>		SAMPLED BY <i>Sessiman</i>						
ANALYSIS	SAMPLE VOLUME	PRESERVATIVE	STATION NUMBER					
			CD 1	CD 2	CD 3	CD 4	CD 5	BLANK
			BOTTLE NUMBER					
MISC. & ARSENIC	1 LITRE	NONE	CD 1	CD 2		CD 4		
HEAVY METALS	2-125 ml 500 ML	2 ML 1:1 HNO ₃	CD 3	CD 5				
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			10	1031	1115	1335	1030	
Air Temperature			10°C				8°C	
Water Temperature			8°C	10°C	9°C	9°C	10°C	
Rate of Flow			—	—	5 L/min	—	20 L/min	
Ice Thickness								
Depth of Sampling			Surface	below surface	Surface	below surface	Surface	
pH								
Conductivity								
Dissolved Oxygen								

CD 1 — Freshwater Pumphouse

CD 2 — Dead Dog Lake (Airstrip Lake)

CD 3 — Sewage Drainage

CD 4 — Tee Lake

CD 5 — Dump (old) Drainage

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