



**2007  
NWB1LUP0008  
ANNUAL REPORT**

**LUPIN MINE  
NUNAVUT, CANADA**

February 2008

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### DIGITAL ATTACHMENTS:

1. 2007 Spill Contingency Plan
2. 2007 Abandonment and Restoration Plan
3. BGC - Geotechnical Investigation Report

## **INTRODUCTION**

This report is submitted to fulfill requirements under Part B, Item 5 of Water License NWB1LUP0008 granted by the Nunavut Water Board pursuant to its authority under Article 13 of the *Agreement between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in Right of Canada*.

### **A. FRESH WATER INTAKE VOLUME: Station 925-01**

There was no fresh water intake at the Lupin Mine Site in 2007 while under care and maintenance.

### **B. TAILINGS EFFLUENT DISCHARGE: Station 925-10**

There was no tailings effluent discharge at the Lupin Mine Site in 2007 while under care and maintenance.

### **C. MINEWATER: Station 925-11**

There was no mine water pumped from the workings at the Lupin Mine Site in 2007 while under care and maintenance.

### **D. SEWAGE EFFLUENT: Station 925-14**

There was no sewage effluent intake at the Lupin Mine Site in 2007 while under care and maintenance.

## E. SURVEILLANCE NETWORK PROGRAM DATA

### Water Quality

The annual sample of freshwater was the only SNP sample required in 2007 since there was no tailings effluent discharge.

925-01 Freshwater intake Contwoyto Lake sample taken Sept 18 2007.

Parameter	Result	MDL	Units
Ca	0.9	0.5	mg/L
K	0.4	0.1	mg/L
Mg	0.5	0.1	mg/L
Na	<1	1	mg/L
Fe	0.005	0.005	mg/L
Mn	<0.001	0.001	mg/L
Ag	<0.005	0.005	mg/L
Al	<0.01	0.01	mg/L
B	<0.05	0.05	mg/L
Ba	<0.003	0.003	mg/L
Be	<0.002	0.002	mg/L
Cd	<0.001	0.001	mg/L
Co	<0.002	0.002	mg/L
Cr	<0.005	0.005	mg/L
Cu	<0.001	0.001	mg/L
Mo	<0.005	0.005	mg/L
Ni	<0.002	0.002	mg/L
Pb	<0.005	0.005	mg/L
Sn	<0.05	0.05	mg/L
Sr	0.005	0.002	mg/L
Ti	<0.001	0.001	mg/L
Tl	<0.05	0.05	mg/L
V	<0.001	0.001	mg/L
Zn	0.003	0.001	mg/L
Ammonia-N	<0.05	0.05	mg/L
Cyanide Total	<0.002	0.002	mg/L
Fecal Coliforms	<1	1	CFU/100ml
TSS	<3	3	mg/L
pH	6.8	0.1	pH
Conductivity	12.9	0.2	uS/cm

### Thermistor Readings

One set of thermistor data was taken from the Tailings Containment Area on Sept. 18 2007.

Date: Sept 18  
2007

Tip	TC1-6	TC1-3	TC1-7	D3D-1	DK-3	TC3-1	D4-1	D4-3	D4-4	D1A-002-4	D1A-N-002-5	D2-N-002-2
1	17.02	15.08					16.04	16.38	19.49	16.7		15.79
2	O.L	16.35					15.34	15.26	15.6	15.6		16.75
3	O.L	16.23					15.13	14.86	15.3	16.12		17.79
4	O.L	16.29					15.21	14.97	15.59	16.47		O.L
5	16.35	16.31					15.72	15.42	15.97	17.98		19
6	O.L	16.32					16.83	16.69	16.96	18.77		19.92
7	O.L	16.58					18.09	17.51	18.09	20.03		20.49
8	O.L	16.76					18.99	18.41	19.08	20.64		20.81
9	O.L	17.09					19.56	19.03	19.68	20.49		O.L
10	17.63	17.4					19.92	19.49	19.78	20.02		O.L
11	O.L	17.7					20.24	19.79	20.29			
12	18.2	18.01					20.46	19.84	20.54			
13	20.32	18.52					20.7	19.93	20.67			
14	21.53	20.33					20.88	19.96	20.73			
15	21.23	21.52					20.76	19.92	20.74			
16	21.05	27.68										

### F. MAINTENANCE WORK

Only routine maintenance was carried out at the site during 2007.

### G. LIST OF UNAUTHORIZED DISCHARGES

There were no unauthorized discharges during 2007 under Water Licence NWB1LUP0008.

### H. REVISIONS TO THE CONTINGENCY PLAN

A revision to the 2007 Contingency Plan, to reflect the change in status of the mine, operations and personnel, was completed. The 2007 Contingency Plan, was submitted to the Board on in December of 2007 along with the application for renewal of the water license. A digital copy of this revised plan is included with this report.

**I. REVISIONS TO THE ABANDONMENT AND RESTORATION PLAN**

The 2007 Abandonment and Restoration Plan was submitted to the water board in December 2007 along with the application for renewal of the water license. A digital copy of this revised plan is included with this report.

**J. SUMMARY OF ABANDONMENT AND RESTORATION ACTIVITIES**

There were no abandonment and restoration activities performed on site in 2007. However some monitoring of the tailings dam was cont

**K. ANY OTHER DETAILS ON WATER USE OR WASTE DISPOSAL REQUESTED BY THE BOARD BY NOVEMBER 1st OF THE YEAR BEING REPORTED**

There was no other details on water use or waste disposal requested by the board.

**L. OTHER CONSIDERATIONS**

There are no other considerations.