



Taiga Environmental Laboratory

4601-52nd Ave., Box 1500, Yellowknife, NT. X1A 2R3

Tel: (867)-669-2788 Fax: (867)-669-2718



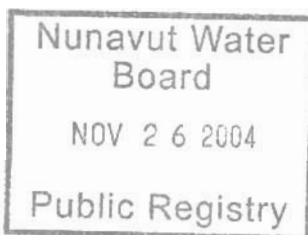
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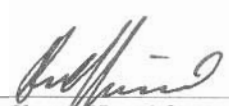
- CERTIFICATE OF ANALYSIS -

Client Sample ID: Lupin Sewage Effluent 925-14

Taiga Sample ID: 241605

Client Project:
Sample Type: sewage
Received Date: 15-Jul-04
Sampling Date: 14-Jul-04
Location: Lupin Mine
Report Status: FINAL



Approved By 
R. Shane Harnish
Quality Assurance Officer

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifer
Physicals						
Alkalinity	9.9	0.3	mg/L	16-Jul-04	SM2320:B	
Conductivity, Specific	1420	0.3	µS/cm	16-Jul-04	SM2510:B	
pH	7.05	0.05	pH units	16-Jul-04	SM4500-H:B	
Solids, Total Suspended	12	3	mg/L	20-Jul-04	SM2540:D	
Turbidity	4.14	0.05	NTU	19-Jul-04	SM2130:B	
Nutrients						
Ammonia as N	0.107	0.005	mg/L	22-Jul-04	SM4500-NH3:G	
Biological Oxygen Demand	3	2	mg/L	15-Jul-04	SM5210:B	
Nitrate as N	5.20	0.01	mg/L	21-Jul-04	SM4110:B	
Nitrite as N	< 0.01	0.01	mg/L	21-Jul-04	SM4110:B	
Major Ions						
Chloride	< 0.2	0.2	mg/L	21-Jul-04	SM4110:B	
Sulphate	93	1	mg/L	21-Jul-04	SM4110:B	





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Taiga Sample ID: 241605

Lead	0.1	0.1	µg/L	27-Jul-04	EPA200.8
Lithium	347	0.3	µg/L	27-Jul-04	EPA200.8
Manganese	192	0.1	µg/L	27-Jul-04	EPA200.8
Molybdenum	0.9	0.1	µg/L	27-Jul-04	EPA200.8
Nickel	13.3	0.1	µg/L	27-Jul-04	EPA200.8
Rubidium	17.7	0.1	µg/L	27-Jul-04	EPA200.8
Selenium	3	1	µg/L	27-Jul-04	EPA200.8
Silver	< 0.1	0.1	µg/L	27-Jul-04	EPA200.8
Strontium	1770	0.1	µg/L	27-Jul-04	EPA200.8
Thallium	0.4	0.1	µg/L	27-Jul-04	EPA200.8
Titanium	1.8	0.1	µg/L	27-Jul-04	EPA200.8
Uranium	< 0.1	0.1	µg/L	27-Jul-04	EPA200.8
Vanadium	< 0.1	0.1	µg/L	27-Jul-04	EPA200.8
Zinc	21	10	µg/L	27-Jul-04	EPA200.8



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- CERTIFICATE OF ANALYSIS -

Client Sample ID: Coffe Dam @ Cell 4

Taiga Sample ID: 241606

Client Project:

Sample Type: freshwater

Received Date: 15-Jul-04

Sampling Date: 14-Jul-04

Location: Lupin Mine

Report Status: FINAL

Approved By

R. Shane Harnish

Quality Assurance Officer

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifer
Physicals						
Alkalinity	1150	0.3	mg/L	20-Jul-04	SM2320:B	
Colour	5	5		26-Jul-04	SM2120:B	
Conductivity, Specific	674	0.3	µS/cm	20-Jul-04	SM2510:B	
pH	3.16	0.05	pH units	20-Jul-04	SM4500-H:B	
Solids, Total Suspended	8	3	mg/L	20-Jul-04	SM2540:D	
Turbidity	3.73	0.05	NTU	19-Jul-04	SM2130:B	
Nutrients						
Ammonia as N	1.31	0.005	mg/L	22-Jul-04	SM4500-NH3:G	
Nitrate as N	< 0.01	0.01	mg/L	21-Jul-04	SM4110:B	
Nitrite as N	< 0.01	0.01	mg/L	21-Jul-04	SM4110:B	
Major Ions						
Calcium	30.9	0.1	mg/L	26-Jul-04	SM4110:B	
Chloride	2.3	0.2	mg/L	21-Jul-04	SM4110:B	

Report Date: Thursday, August 26, 2004

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- CERTIFICATE OF ANALYSIS -

Client Sample ID: Coffe Dam @ Cell 4

Taiga Sample ID: 241606

Magnesium	11.9	0.1	mg/L	26-Jul-04	SM4110:B
Potassium	1.9	0.1	mg/L	26-Jul-04	SM4110:B
Sodium	2.4	0.1	mg/L	26-Jul-04	SM4110:B
Sulphate	217	1	mg/L	21-Jul-04	SM4110:B

Subcontracted Organics

Cyanide, Total	0.002	0.001	mg/L	19-Jul-04	SM4500-CN:-E
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Metals, Total

Aluminum	3110	30	µg/L	27-Jul-04	EPA200.8
Antimony	0.5	0.1	µg/L	27-Jul-04	EPA200.8
Arsenic	163	1	µg/L	21-Jul-04	SM3113:B
Barium	10.7	0.1	µg/L	27-Jul-04	EPA200.8
Beryllium	0.4	0.1	µg/L	27-Jul-04	EPA200.8
Cadmium	0.2	0.1	µg/L	27-Jul-04	EPA200.8
Cesium	0.5	0.1	µg/L	27-Jul-04	EPA200.8
Chromium	0.5	0.3	µg/L	27-Jul-04	EPA200.8
Cobalt	81.1	0.1	µg/L	27-Jul-04	EPA200.8
Copper	39.9	0.3	µg/L	27-Jul-04	EPA200.8
Iron	10300	50	µg/L	19-Jul-04	SM3111:B
Lead	8.5	0.1	µg/L	27-Jul-04	EPA200.8
Lithium	22.1	0.3	µg/L	27-Jul-04	EPA200.8
Manganese	1430	0.1	µg/L	27-Jul-04	EPA200.8



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Taiga Sample ID: 241606

Molybdenum	< 0.1	0.1	µg/L	27-Jul-04	EPA200.8
Nickel	116	0.1	µg/L	27-Jul-04	EPA200.8
Rubidium	5.8	0.1	µg/L	27-Jul-04	EPA200.8
Selenium	< 1	1	µg/L	27-Jul-04	EPA200.8
Silver	< 0.1	0.1	µg/L	27-Jul-04	EPA200.8
Strontium	123	0.1	µg/L	27-Jul-04	EPA200.8
Thallium	0.4	0.1	µg/L	27-Jul-04	EPA200.8
Titanium	2.5	0.1	µg/L	27-Jul-04	EPA200.8
Uranium	0.8	0.1	µg/L	27-Jul-04	EPA200.8
Vanadium	< 0.1	0.1	µg/L	27-Jul-04	EPA200.8
Zinc	155	10	µg/L	27-Jul-04	EPA200.8



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Taiga Sample ID: 241606

* Taiga analytical methods are based on the following standard analytical methods

SM - Standard Methods for the Examination of Water and Wastewater

EPA - United States Environmental Protection Agency



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INDUSTRIAL WATER USE INSPECTION REPORT

DATE: July 7, 2004 COMPANY REP.: Mike Tansey
LICENSEE: Lupin Mine / Echo Bay Mines Ltd. LICENCE #: NWB/LUP0008
New Kinross Gold

WATER SUPPLY

Source: Contwoyto Lake Quantity Used: 651,584 m³ Meter Rdg.: _____

Indicate: **A - Acceptable**

U - Unacceptable

N/A - Not Applicable

Intake Facilities A Storage Structures A Treatment Systems A Recycling NA
Flow Meas. Device A Conveyance Lines A Pumping Stations A Modifications NA

Comments: The UV water treatment system combined with a 10 micron filter unit appears to be well maintained. The filters are changed every 2 days and water use is recorded weekly + the yearly water use is calculated from that.

WASTE DISPOSAL

Tailings: Tailings Pond ☒ Natural Lake ☒ Underground ☒
Sewage: Sewage Treat. System ☐ Tailings Pond ☒ Natural Water Body ☒
Continuous Discharge ☐ Inter. Dischg. ☐

Solid Waste: Open Dump ☐ Landfill ☒ Burn & Bury ☒ Underground ☐

Indicate: **A - Acceptable**

U - Unacceptable

N/A - Not Applicable

Discharge Quality _____ Conveyance Lines _____ Disch. Meas. Dev. _____ Freeboard _____
Decant Structures _____ Pond Treatment _____ Dams, Dykes _____ Seepages _____
Dyke Inspections _____ Runoff Diversion _____ Erosion _____ Spills _____

Effluent Discharge Rate: _____ Samples Collected: _____

Comments: The 2nd lagoon was being decanted but the pH readings exceeded licensed guidelines so the decant was stopped. The lagoon has > 1m of freeboard. The pH reading July 7th, 2004 was 9.84. The lagoon will be decanted when the pH is acceptable.

GENERAL CONDITIONS

Indicate: **A - Acceptable**

U - Unacceptable

N/A - Not Applicable

Ore & Waste Rock Stockpiles _____ Records & Reporting A Surv. Net. Prog. _____
Geotechnical Inspection _____ Posting, Signage A Contingency Plan A
Restoration Activities A New Construction NA Fuel Storage U
Mine Water Discharge A Chemical Storage NA Annual Report A

Comments: Mine water is now discharged to the tailings. The TCA appears to be well monitored and maintained with the next decant from pond 2 scheduled to occur in 2005. Freeboard is not an issue. Covering of tailings with ester material has started.

Violations of Act or Licence: Leaky oil drums need to be removed and the spills cleaned up at the tank farm. Sewage effluent should not be discharged until it is within licensed guidelines. Otherwise no violations of the Act or Licence were observed.

General Comments: The containment berm at the main tank farm needs to be built up on the runway side as a low spot would likely result in the release of spilled fuel out of the berm. (The) Two of the day tanks were leaking fuel and fuel had collected inside the berm. The leaks need to be fixed + contaminated soil removed.

Page 2 attached ☐ Yes ☒ No

Declarations Mgr.
Licensee Representative's Title

SCOTT STEWART
Inspector's Name

Mike Tansey
Licensee Representative's Signature

Scott Stewart
Inspector's Signature