

KINROSS

Gold Corporation

2005 ANNUAL REPORT LUPIN OPERATIONS



Submitted under

**WATER LICENCE NWB1LUP0008
NUNAVUT WATER BOARD**

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INDEX

	PAGE
INTRODUCTION	1
A. INTAKE VOLUME; Station 925-01	2
B. TREATED TAILINGS EFFLUENT; Station 925-10	2
C. MINewater; Station 925-11	2
D. SEWAGE EFFLUENT; Station 925-14	3
E. SURVEILLANCE NETWORK PROGRAM DATA	3
F. MAINTENANCE WORK	3
G. LIST OF UNAUTHORIZED DISCHARGES	4
H. REVISIONS TO THE CONTINGENCY PLAN	4
I. REVISIONS TO THE ABANDONMENT AND RESTORATION PLAN	4
J. SUMMARY OF ABANDONMENT AND RESTORATION WORK COMPLETED DURING THE YEAR AND ANTICIPATED WORK FOR 2005	5
K. ANY OTHER DETAILS ON WATER USE OR WASTE DISPOSAL REQUESTED BY THE BOARD BY NOVEMBER 1st OF THE YEAR BEING REPORTED	8
L. OTHER CONSIDERATIONS	9
APPENDIX A	Figures, Tables, Ground Temperature Graphs and Photos
APPENDIX B	1 - Norwest Labs QC Reports for Aug 4 and Sept 22, 2004 2 - INAC 925-14 Analysis, July 14, 2004 3 - 2005 Norwest Labs Ltd. Analytical Results and QC Data 4 - 2005 Bioassay Results and QC Data

APPENDIX A

FIGURE 1	LUPIN MINE - TAILINGS AREA 2005
TABLE 1.....	2005 PUMPING REPORT
TABLE 2.....	2005 SNP WATER QUALITY ANALYSES
TABLE 3.....	2005 DAILY DISCHARGE FLOW VOLUMES
TABLE 4.....	2005 WATER QUALITY AT SNP 925-01 AND 925-14
GRAPHS 1 & 2	DAM 1A AND DAM 2 TEMPERATURE PROFILES
GRAPH 3, 4 & 5	DAM 4 TEMPERATURE PROFILES
GRAPHS 6, 7 & 11	CELL 1 TEMPERATURE PROFILES
GRAPH 8.....	CELL 3 TEMPERATURE PROFILE
GRAPH 9.....	K DAM TEMPERATURE PROFILE
GRAPH 10.....	DAM 3D TEMPERATURE PROFILE
PHOTO 1	CELL 5, JUNE 25, 2005
PHOTO 2	CELL 5, JULY 14, 2005
PHOTO 3	CELL 5 FROM AIR, SEPT. 6, 2005
PHOTO 4	CELL 5 COVER PLACEMENT, JUNE 29, 2005
PHOTO 5	CELL 3 FROM AIR, JULY 16, 2005

INTRODUCTION

This report is submitted to fulfil requirements under Part B, Item 5 of Water Licence 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*.

The Annual Report for 2005 contains the following information that is required under Part B, Items 5(a) through (k).

- a) the monthly and annual quantity in cubic metres of water pumped from Contwoyto Lake at Station 925-01;
- b) the monthly and annual quantities in cubic metres of treated tailings effluent discharged at Station 925-10
- c) the monthly and annual quantity in cubic metres of minewater discharged at Station 925-11;
- d) the monthly and annual quantity in cubic metres of treated sewage effluent discharged at Station 925-14;
- e) tabular summaries of all data generated under the Surveillance Network Program;
- f) a summary of modifications and/or major maintenance work carried out on the water supply and the waste disposal facilities including all associated structures;
- g) a list of unauthorized discharges and follow-up action taken;
- h) revisions to the Contingency Plan;
- i) revisions to the Abandonment and Restoration Plan;
- j) a summary of any abandonment and restoration work completed during the year and an outline of any work anticipated for the next year; and
- k) any other details on water use or waste disposal requested by the Board by November 1st of the year being reported.

A. FRESH WATER INTAKE VOLUME: Station 925-01

The quantity of fresh water pumped on a monthly basis from Contwoyto Lake is shown in Table No.1, 2005 Pumping Report (Appendix A). The yearly total was 345,572 m³ as determined by flowmeter. Of this volume, 278,110 m³ was used for industrial purposes with the remaining 57,991 m³ being used as potable water.

While the mine and mill were operational, the volume of water obtained from Contwoyto Lake was measured through a main raw water flowmeter, located in the mill. The raw water that is sent to the potable water system for UV treatment is metered, as well as excess raw water that was sent to the TCA. As of the end of October 2005, the tailings line to the TCA was decommissioned. All excess raw water is now directed to the sewage pond. This excess water is a result of the minimum volume capacity of the lake pumps, the need for continued flow in the raw water supply pipeline and maintenance of the fire protection water level within the mill raw water tank.

As reported in Section J, a major program was continued during the summer of 2005 to cover exposed tails in the TCA with esker material obtained from the nearby Fingers Lake esker. In order to suppress dust on the haul roads, approximately 4,929 cubic metres of water was drawn from End Lake, which is located in the southeast corner of the TCA, and placed on the haul roads by use of a water truck.

B. TAILINGS EFFLUENT DISCHARGE: Station 925-10

Discharge of tailings effluent from Pond 2 (station 925-10) took place from July 15 to August 11, 2005. Effluent release was carried out utilizing the syphons at Dam 1A and monitored using a Polysonics HYDRA SX30 DFD Flowmeter, which is calibrated annually. Flow monitoring indicated a total release of 1,681,590 m³ for the period in 2005. During July, the total release was measured to be 1,006,681 m³ with an average daily flow of 62,918 m³/day; August release was 674,909 m³ with an average daily flow of 61,355 m³/day. Table 3 provides a daily record of the flow volumes through each of the syphons.

The Pond No.1 syphons on J Dam were operated from June 27 to July 14, 2005, and from August 14 to 28, 2005. Approximately 858,776 m³ of water was transferred to Pond No.2. There was no requirement for treatment in 2005.

Initial water level surveys were carried out on June 23, 2005. Pond 1 water elevation was 484.9 metres, and Pond 2 water elevation was 481.9 metres. Another water level survey was done on September 28th, well after the completion of discharge over Dam 1A and water transfer between ponds. Pond 1 elevation was 483.1 metres, and Pond 2 elevation was 481.9 metres. The elevation of Pond 2 provides over 3 metres of freeboard on the lowest elevation dam within Pond No.2.

C. MINEWATER: Station 925-11

The monthly and annual quantity of water pumped from the mine is included in Pumping Report, Table 1. From January through October 2005, all minewater was directed to the TCA via the tailings line. At the end of October, the mine pumps were shut down and the tailings line was decommissioned. No pumping of mine water occurred in November and December 2005. The total quantity of water pumped from underground in 2005 was 7,653 m³.

D. SEWAGE EFFLUENT: Station 925-14

The monthly and annual quantity of sewage effluent discharged to the environment from the second sewage lake at Station 925-14 is listed in the Pumping Report, Table No.1. Total flow for the seasonal discharge was approximately 263,508 m³, between July 1 and September 3, 2005. The discharge volume is calculated from an ultrasonic flow meter on the single 8" syphon line. In April, 2005, the lower sewage lake was treated with quicklime, as has been the practice for several years. The contents of two 1.4 tonne bags of quicklime were spread on the ice for natural mixing during spring melt. All licence parameters were maintained within limits during the period of discharge.

E. SURVEILLANCE NETWORK PROGRAM DATA

Tabular summaries of data required under the Surveillance Network Program annexed to Water Licence NWB1LUP0008 are presented in Tables 1, 2, 3, and 4. Table No.1 summarizes the water use, waste disposal volumes and the monthly ore milled, recorded in dry tonnes. Table No. 2 presents the water sample analysis results from samples taken at SNP stations in 2005. Table No. 3 presents the daily flow volumes at the siphon discharge points 925-10 (tailings effluent) and 925-14 (sewage). Table No.4 summarizes the water quality data collected at SNP stations 925-01 (freshwater intake) and 925-14 (sewage discharge).

The annual sample of freshwater was obtained at the pump house on September 13, 2005.

Located in Appendix B are copies of the 2005 analytical reports and QC data for the analysis of reference materials, requested of Norwest labs under the SNP QA/QC plan.

F. MAINTENANCE WORK

Only routine maintenance work was carried out on the water supply and sewage disposal facilities in 2005.

Other maintenance items completed were as follows:

- All recommended maintenance work was completed as specified in the 2005 Geotechnical Inspection of the Tailings Containment Perimeter Embankments carried out by BGC Engineering Inc. There are currently no other outstanding issues with

respect to the 2005 or previous geotechnical inspections.

G. LIST OF UNAUTHORIZED DISCHARGES

There were no unauthorized discharges during 2005 under Water Licence NWB1LUP0008.

H. REVISIONS TO THE CONTINGENCY PLAN

A revision to the 2004 Contingency Plan, to reflect the change in status of the mine, operations and personnel, was requested by the board. The 2005 Contingency Plan, reflecting the reduced manpower and operations of care and maintenance, was submitted to the Board on July 27, 2005. This plan was approved on March 2, 2006, contingent on the clarification of 10 items to be addressed as an addendum to the 2005 Annual Report. To ensure completeness of the Plan document, a 2006 Lupin Spill Contingency Plan has been submitted to the Board for approval on March 31, 2006. The clarifications requested in the 2005 Plan have been incorporated in the 2006 Plan.

I. REVISIONS TO THE ABANDONMENT AND RESTORATION PLAN

The 2004 Abandonment and Restoration Plan was submitted to the Board for approval on February 28, 2005. As reclamation activities in the tailings area were much further advanced than at the mine site, a separate “2005 Abandonment and Restoration Plan, Lupin Tailings Containment Area” was submitted to the board for approval in June 2005, in conjunction with an application for a Type B water licence. The board requested and received comments on the Plan from interveners by October 31, 2005. Kinross is presently addressing the comments and is preparing for a technical meeting to be held early in the second quarter 2006.

J. SUMMARY OF ABANDONMENT AND RESTORATION ACTIVITIES

2005 Abandonment and Restoration Activities

Tailings Cover Program

Reclamation activities in the TCA during 2005 saw a major portion of Cell 5 and another portion of Cell 3 covered by a minimum of 1.0 metre of esker gravel. The work was carried out between June 23 and September 28, 2005, with a total area covered of approximately 383,001 square metres. The esker material is an effective cover medium that serves to eliminate wind dispersal of dry tailings, protects against contact with exposed tails by fauna, and the embedded moisture layer prevents oxidation of the underlying tails and provides support for plant growth. Examples of the tailings cover activity undertaken in 2005 can be seen in Photos 1 through 5. Figure 1 shows the extent of the covered cells in the TCA at the end of 2005. Approximately 250,000 square metres of exposed tailings remain to be covered.

This work was scheduled to be completed during the summer of 2006; however, due to the premature shutdown of the winter road, Lupin did not receive enough fuel to carry out the program in 2006. As such, this program is delayed until 2007.

Environmental Site Assessment

Phase 1 and Phase 2 Environmental Site Assessments of the Lupin mine site were conducted during July 2005 by Morrow Environmental (a member of SNC-Lavalin Group). The Phase 1 ESA was conducted to identify areas of potential environmental concern (APECs) and associated potential contaminants of concern (PCOCs) at the Site. The Phase 2 ESA was completed to assess PCOC's in each APEC identified in the Phase 1 ESA. Fieldwork associated with the Phase 2 ESA was completed between July 13 and July 27, 2005. The Phase 2 ESA investigation included:

- drilling of nine boreholes and hand augering of one borehole;
- excavation and soil sampling from fifty-nine test pits;
- installation of nine monitoring wells in boreholes;
- installation of ten monitoring wells in test pits;
- collection of fifteen surface soil samples by Morrow;
- monitoring of water levels and water sampling of all the monitoring wells, as well as the groundwater sump present in the powerhouse;
- rising head conductivity tests in four of the monitoring wells;
- collection of surface water samples from ten of the thirteen groundwater seeps, plus one background sample from a creek located north of the site;
- collection of ten road surface soil samples by Kinross personnel in September 2005; and
- collection of twenty background transect surface soil samples by Kinross personnel in September, 2005.

The following summarizes the findings of the ESA completed for the Lupin mine site:

- baseline conditions in the area of the mine are fairly well established due to mineral exploration data;
- Contwoyto Lake is the primary aquatic receiving environment in the area of the mine (i.e., contains fish) however, numerous secondary water bodies exist in the area of the mine, which freeze to the bottom each year (i.e., no fish);
- the area climate is semi-arid subarctic with four months of the year having average temperatures above freezing (i.e., considerations regarding groundwater movement and presence of permafrost);
- historic humidity cell testing determined that the development rock had no ARD potential, however this finding was offset by mixed results from historic shake flask and meteoric water testing;
- sixty-one areas of potential environmental concern were identified that had the potential for metals, hydrocarbon, glycol, cyanide, nitrogen, and/or salt based contamination;
- the areas of potential concern were assessed via ten boreholes, nineteen monitoring wells, fifty-nine test pits, forty-five surface sample locations, and eleven surface water

- sampling stations;
- numerous soil and groundwater samples were submitted for a variety of analysis intended to characterize the potential contaminants ;
 - the Phase 2 ESA determined that the primary contaminants of concern are arsenic and hydrocarbons that are characterized by total metals and PHC F1 and F2 analysis respectively;
 - secondary contaminants do exist, however, they are localized and coincide with the primary contaminants (the exception to this is cyanide and/or nitrate in soil at Cold Storage #3);
 - localized areas of ARD exist however, the direct measurement data set (i.e. seep sampling) needs to be enlarged to facilitate trend analysis;
 - neutral pH leaching of arsenic is widespread with the greatest concentrations existing at or downgradient of areas with hydrocarbon contamination, potentially as a result of changes in the soil geochemistry;
 - although neutral leaching and localized ARD is indicated, the metal loading is low in relation to what is allowed under the current Water Board license;
 - due to the low arsenic loading, it is unlikely that a measurable effect will exist in Contwoyto Lake;
 - 40,000 m³ (bank) of hydrocarbon impacted soil is estimated to exist in twelve locations plus an additional 800 m³ of cyanide and/or nitrate containing soil and 2,000 m³ of soil with traces of ore fines;
 - arsenic concentrations in the development rock pad beneath the site are elevated in relation to federal reference criteria and background concentrations.

Saturated Granular Zone Cover

In 2005, additional information was collected in support of the "Saturated Granular Zone Cover" program for tails reclamation. Monitoring of pore water quality and the saturation status of the esker cover in Cell 1 continued from the previous 2 years. This information is presented in a separate submission to the board, in response to intervener comments on the "2005 Abandonment and Restoration Plan, Lupin Tailings Containment Area" document.

Ground Temperature Monitoring

Collection of data from thermistor strings that were installed in 1995 (esker cover of Cells No.1 and in Dam 4), in 2000 (Dam 1a and Dam 2), and in 2004 (K Dam, Cell 3B, Dam 3D and Cell 1 near Dam 3D) continued through 2005. The thermistors installed in the Fingers Lake esker and in Cell 3 near Dam 6 were lost during 2005. A review of the containment dam temperature data was completed during data review of the 2005 Geotechnical Inspection of the TCA, carried out by BGC Engineering Inc. The information to date indicates that subzero temperatures continue to be maintained at depth with no indications of warming.

At Dam 1a, Graph 1 indicates that foundation temperatures continue to decrease over time. The active layer from the surface of the dam appears to be between 2.5 and 3 metres (with the exception of anomalous data from 2001, which indicated nearly a 4 metre active layer).

At the Dam 2 locations it was noted that the foundation zone appears to be cooling over the longer term with the downstream station being noticeably cooler than the upstream (Graph No.2). This is possibly due to the warming influence of the upstream water, although the same phenomenon is not evident in the Dam 1a data. The active layer of the dam section remains at about 2-2.5m below the crest of the dam. The temperature information demonstrates that the core of the dam remains frozen and that the foundation of the dam is maintained below freezing year round.

Temperature monitoring in Dam 4 began with installation of 4 thermistors in 1995. These strings were all installed along the downstream crest; one at each abutment and one in each of the “low” points of the foundation. Thermistor D-2 was damaged in 2003 and no longer functions. The data indicates an active layer of approximately 2 to 3 metres at the downstream crest, as shown in Graphs 3, 4 and 5. The profiles in the appendix are single date graphs for 1997-2005, using a date (October/November) that coincides with what are typically the warmest temperatures at a 2-3 metre depth, whereas the temperatures closer to surface are normally beginning to cool at this time.

It must be noted that the indicated active layer of the dams is not necessarily a true representation of the active surface layer as most thermistors that are currently in use on the dams have been installed near one of the crest slopes, not through the centre line of the dam. Therefore, there is some influence upon the active layer measured due to the slope of the dam (widening with vertical depth). This allows some warming to the dam crest (where the thermistor is located) from the slope side of the dam indicating a deeper active layer penetration than if the thermistor string was installed at the centre line. The temperature profile graphs for Dam 1a and Dam 2 (see Graphs 1 and 2) illustrate this further with the upstream thermistors (with a 1:2.5 embankment slope) indicating a slightly shallower active layer than the downstream thermistors (with a 1:1.5 embankment slope).

Temperature monitoring in Cell No.1 has been ongoing since installation of the original thermistor strings in 1995, when the cell was covered with 1 metre of esker gravel. String TC1-3, at the north east end of the cell near Dam 3C, is the only remaining active thermistor from that group. Graph No.6 shows the temperature profile at TC1-3 for the months of October or November during the years of monitoring. October is usually the month when the active layer has penetrated the deepest and significant cooling has begun at surface. There is still some warming that occurs further at depth, however the temperatures at these locations remain below 0°C year round. Temperature readings below the 1.25-metre depth are consistently below the freezing point. Two other thermistors are installed in Cell 1: the test pad thermistor installed in 2003 and located about 75 metres northwest of the TC1-3 thermistor, and thermistor TC1-7, installed in 2004 at the south end of the cell near Dam 3D. Graphs 7 and 11 show the temperature profiles for these thermistors since installation. The test pad thermistor, installed through 1 metre of esker cover placed in 1995, shows that sub-zero temperatures persist below 1.5 metres depth.

The temperature profiles for the thermistors installed in 2004 can be seen in Graphs 8 to 11.

- Thermistor DK-3 is located on the upstream crest of K Dam, on the northwest side of Cell 3. Initial thaw depth is indicated to be between 3 and 4 metres.
- Thermistor TC3-1 is located in the esker covered (1-metre thick) portion of Cell 3, about 115 metres to the southwest of DK-3 and about 50 metres from K Dam. Thaw depth is indicated at between 1.25 and 1.5 metres below surface, consistent with the other thermistors that are installed in esker-covered tails.
- Thermistor D3D-1 is installed in the upstream crest of Dam 3D, on the southwest edge of Cell 1. Thaw depth in this location appears to be just below 2.0 metres.
- Thermistor TC1-7 is installed approximately 60 metres north of D3D-1, inside the esker-covered (1-metre thick) Cell 1. Again, thaw depth is indicated to be just above the 1.5 metre depth.

Planned Abandonment and Restoration Activities: 2006

- Continue to monitor all active thermistor strings installed in the esker cover of Cells 1 and 3, as well as Dams 1A, 2, 3D, 4 and K to add to the database of information regarding the characteristics of the active thaw zone in constructed dams and covered tailings.
- Due to a lack of fuel on site resulting from the premature closure of the 2006 winter road, the program to cover the remaining exposed tailings in the TCA will be delayed until 2007. The remainders of Cells 3 and 5, including the area bounded by N Dam, will be covered with 1.0 metre of esker gravel. Approximately 250,000 square metres of exposed tails remain to be covered.

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

A request was received from the Board on October 27, 2005 for additional information to be included in this annual report.

- *Discharge from Station 925-14 began on June 26, 2004. Results for a sample obtained on June 29, 2004 are included in the summary table, Table No.2. The metals data for this Station are not found in the Lab Report included within the appendix. The lab report providing the results and the Quality Control information for the sample obtained on June 29, 2004 is required.*

Unfortunately, a metals analysis request for this sample was mistakenly left off the laboratory analysis request form. As such, a metals analysis was not included with the other laboratory results. Kinross regrets this error. I am at a loss to explain how metals data was included in the summary table, as I can find no record of a metals analysis being performed for the June 29 sample. The INAC water inspector took a sample from the sewage pond on July 14, 2004. The results of this sample are presented in

Appendix B as additional information. All parameters were within licence limits.

- *Quality Control data for samples obtained on August 4, 2004 and September 22, 2004 are required to be submitted to complete the Annual Report.*

The Norwest Labs Quality Control data for Lot No. 334332 (Sept 22, 2004) and Lot No. 324234 (Aug 4, 2004) are attached in Appendix B.

- *Under the approved Quality Assurance/Quality Control Plan for Licence NWB1LUP0008, a replicate sample is to be provided and analyzed for each data set, along with a field sample blank for verification of lab data and sampling consistency. These should be provided with the Report.*

Because of the low number (5) of samples taken during 2004, replicate and field blank samples were neglected. This error in sampling standards of practice will be rectified for future sampling programs.

- *Under Item J of the Annual Report, a plan to carry out a Phase 2 environmental site assessment was identified as an activity for 2005. As per Part B, Item 5(k) of Licence NWB1LUP0008, the NWB requests that a summary of the findings from the study be submitted with the 2005 Annual Report as part of the reclamation activities conducted during 2005.*

A summary of the findings from the 2005 Environmental Site Assessment are presented in section J of this report.

L. OTHER CONSIDERATIONS

- **Echo Bay Mines Amalgamation**

As of January 1, 2006, Echo Bay Mines Ltd. was completely amalgamated into Kinross Gold Corporation. As such, any reference in the water licence to Echo Bay Mines Ltd. shall now apply to Kinross Gold Corporation.

- **Request to Dispose of Contaminated Soils Underground**

The mined-out workings at the Lupin Mine have been repositories for development waste rock since mining began in 1982, and for mill tailings (paste backfill) since 1995. Approximately 30% of the mill tailings produced since 1995, over 1.7 million tonnes, have been placed in open stopes as backfill to facilitate mining activities and to conserve the capacity of the Tailings Containment Area (TCA). As stated in the Lupin reclamation plans submitted to the Nunavut Water Board, the remediation strategy for surface soils containing residual hydrocarbons or elevated concentrations of metals is either direct burial in the TCA or disposal within the mined-out workings.

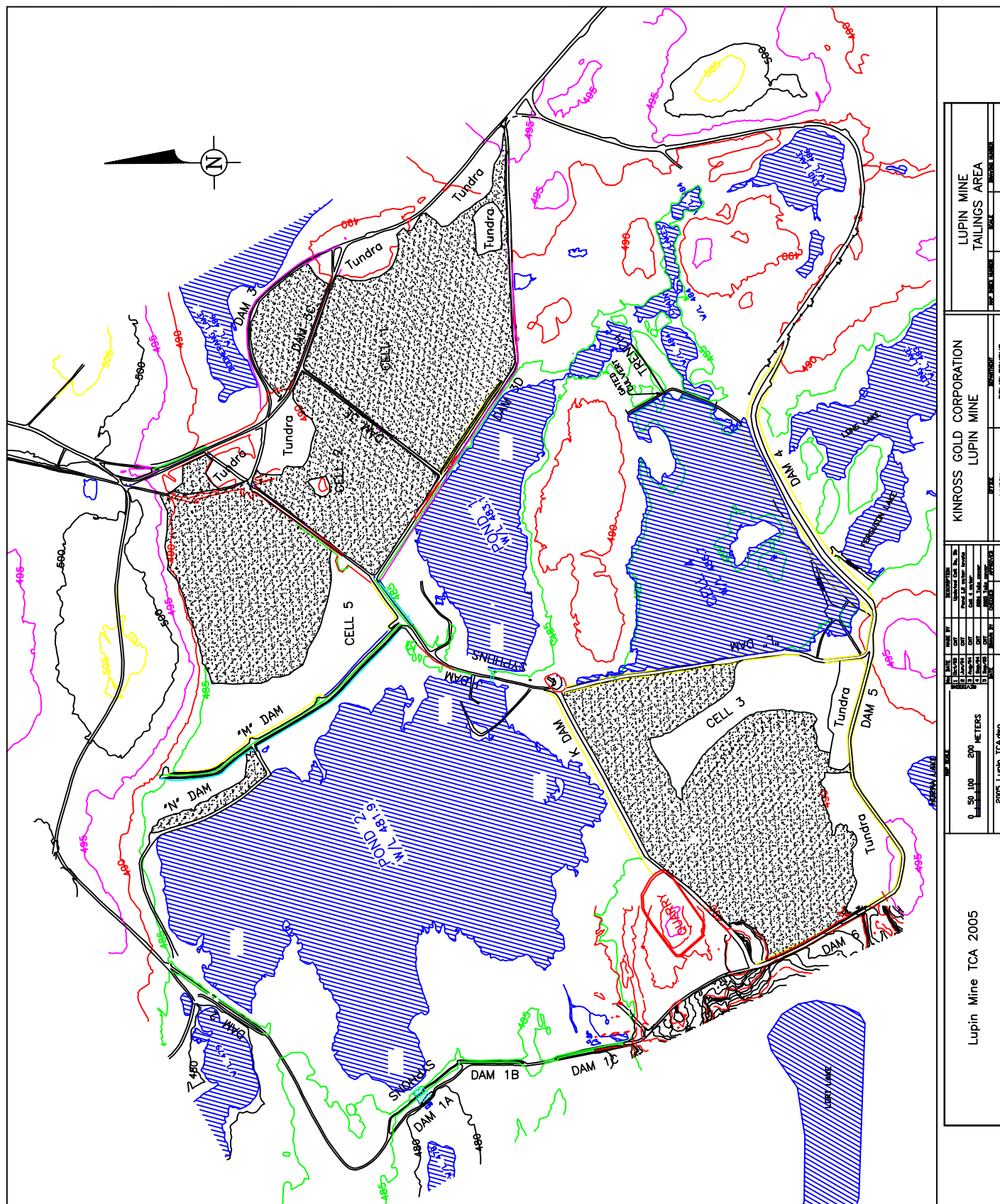
Restoration of the exposed tailings cells in the TCA will be completed in 2007 and the TCA will no longer be available for disposal purposes. As such, the preferred disposal method for contaminated surface soils at this point is to place these materials underground. There are a number of open stopes accessible from surface, either directly or by the development of short drop raises, which will provide suitable repositories for the waste soils. The stopes are located within the permafrost zone and are isolated from underground access.

Consistent with the accepted practice of disposing waste rock and tailings underground, Lupin requests formal written approval from the Board for the underground disposal of surface soils containing residual hydrocarbons and/or elevated concentrations of metals. All disposal locations will be capped with at least 1 metre of clean esker sand or non-PAG waste rock. The original surface till cover, removed prior to mining the crown pillars and stockpiled nearby, will be used as the final cover and contoured to suit the topography.

APPENDIX A

**FIGURES
TABLES
GROUND TEMPERATURE GRAPHS
PHOTOS**

2005 ANNUAL REPORT
Lupin, Nunavut





LUPIN GOLD MINE, Nunavut

WATER LICENCE NWB1LUP0008

2005
PUMPING REPORT
(CUBIC METERS)

TABLE NO.1

FRESHWATER FROM CONTWOYT LAKE

WASTE DISCHARGED TO TAILINGS POND

(METERED)

(CALCULATED)

MONTH	TOTAL m3	PROCESS m3	POTABLE m3	CUM. POTABLE m3	TOTAL m3	SOLUTION m3	SOLIDS m3	ORE MILLED tonnes	BACKFILL SOLIDS m3	MINEWATER TO TAILS m3	RAW WATER TO SEWAGE m3	SEWAGE DISCHARGE m3
January-05	62,268	56,353	5,915	5,915	58,373	45,822	12,551	37,751	0	1,816	0	0
February-05	57,806	52,406	5,400	11,315	32,984	31,743	1,241	3,733	0	2,570	0	0
March-05	60,953	55,163	5,790	17,104	33,790	33,790	0	0	0	1,365	0	0
April-05	51,157	45,536	5,621	22,726	45,536	45,536	0	0	0	887	0	0
May-05	33,039	28,687	4,352	27,077	28,687	28,687	0	0	0	88	0	0
June-05	16,568	10,736	5,832	32,910	10,736	10,736	0	0	0	55	0	0
July-05	17,877	12,469	5,408	38,317	12,469	12,469	0	0	0	117	0	137,822
August-05	10,293	4,207	6,086	44,403	4,371	4,371	0	0	0	164	0	119,372
September-05	9,460	4,374	5,086	49,489	4,466	4,466	0	0	0	92	0	6,314
October-05	11,009	8,179	2,830	52,319	8,179	8,179	0	0	0	499	0	0
November-05	7,492	0	2,849	55,168	0	0	0	0	0	0	4,643	0
December-05	7,651	0	2,824	57,991	0	0	0	0	0	0	4,827	0
TOTAL (m³)	345,572	278,110	57,991		239,591	225,799	13,792	41,484	0	7,653	9,470	263,508

Table 2

July 2005 SNP Sampling Report - Water Quality Results

*D-Daily *W-Weekly *M-Monthly				Routine Analysis			Total CN (mg/l)	Total As (mg/l)	Total Metals (mg/l)						NH4-N (mg/l)	T-Alk (mg/l)	Hard. (mg/l)
Log No.	Date	Sampling Station		pH	uS/cm Cond.	TSS			Cd	Cu	Hg	Ni	Pb	Zn			
M 51028	29-Jun-05	925-14		7.80		18	---	0.0138	<0.00001	0.003	<0.0001	0.0092	0.0008	0.015	<0.05	15	137
W 51033	5-Jul-05	925-22		6.68	13	2	0.006	0.0018	0.00003	0.001	<0.0001	0.0010	0.0014	0.005	<0.05	5	4
W 51034	5-Jul-05	925-24		6.47	18	3	0.008	0.0013	0.00001	<0.001	<0.0001	0.0009	0.0006	0.004	<0.05	<5	5
W 51035	5-Jul-05	925-25		6.58	241	3	0.020	0.0016	0.00003	0.001	<0.0001	0.0012	0.0017	0.006	<0.05	6	75
M 51044	13-Jul-05	925-14		7.86	617	<2	---	0.0134	<0.00001	0.003	<0.0001	0.0047	0.0002	0.007	0.06	18	152
W 51045	15-Jul-05	925-10		6.69	878	20	0.046	0.0110	0.00009	0.014	<0.0001	0.0899	0.0004	0.232	2.03	6	210
D 51046	16-Jul-05	925-10		6.66	876	3	0.046	0.0087	0.00011	0.014	<0.0001	0.0891	0.0004	0.235	---	5	240
D 51047	17-Jul-05	925-10		6.67	875	<2	0.048	0.0076	0.09000	0.014	<0.0001	0.0920	0.0003	0.244	---	5	212
D 51048	18-Jul-05	925-10		6.64	877	<2	0.044	0.0074	0.00011	0.014	<0.0001	0.0919	0.0005	0.242	---	6	220
D 51056	19-Jul-05	925-10		6.64	801	<2	0.044	0.0086	0.00010	0.015	<0.0001	0.0918	0.0003	0.246	---	<5	221
W 51057	19-Jul-05	925-20		5.76	720	<2	0.026	0.0039	0.00031	0.003	<0.0001	0.1180	<0.0001	0.221	1.01	<5	201
W 51058	19-Jul-05	925-21		6.73	11	<3	0.002	0.0009	<0.00001	<0.001	<0.0001	<0.0005	0.0001	0.002	<0.05	<5	<0.9
W 51059	19-Jul-05	925-22-1		6.73	41	5	0.002	0.0018	0.00002	0.001	<0.0001	0.0036	0.0002	0.006	0.32	<5	8
W 51060	19-Jul-05	925-22-2		6.74	40	3	0.002	0.0016	0.00001	0.001	<0.0001	0.0040	0.0002	0.006	<0.05	<5	7
W 51061	19-Jul-05	925-22-3		6.74	40	<3	0.002	0.0016	<0.00001	0.001	<0.0001	0.0040	0.0001	0.006	<0.05	<5	10
W 51062	19-Jul-05	925-24		6.76	12	3	0.002	0.0010	<0.00001	<0.001	<0.0001	0.0010	0.0001	0.004	0.07	<5	3
W 51063	19-Jul-05	925-25		6.72	11	4	0.002	0.0012	<0.00001	<0.001	<0.0001	0.0011	0.0002	0.002	<0.05	<5	3
W 51065	20-Jul-05	925-10		6.28	819	<2	0.040	0.0096	0.00009	0.015	<0.0001	0.0953	0.0004	0.263	1.94	<5	214
D 51066	21-Jul-05	925-10		6.55	839	2	0.042	0.0116	0.00009	0.014	<0.0001	0.0980	0.0004	0.266	---	7	217
D 51067	22-Jul-05	925-10		6.48	840	<2	0.042	0.0102	0.00011	0.014	<0.0001	0.0974	0.0004	0.262	---	<5	217
D 51068	23-Jul-05	925-10		6.44	839	3	0.042	0.0100	0.00010	0.014	<0.0001	0.1010	0.0003	0.261	---	7	214
D 51069	24-Jul-05	925-10		6.41	837	<2	0.038	0.0089	0.00012	0.014	<0.0001	0.0964	0.0003	0.251	---	7	218
D 51070	25-Jul-05	925-10		6.36	840	<2	0.036	0.0088	0.00010	0.014	<0.0001	0.0986	0.0003	0.252	---	5	215
D 51071	26-Jul-05	925-10		6.36	839	<2	0.036	0.0088	0.00010	0.014	<0.0001	0.0990	0.0003	0.259	---	6	219
W 51072	26-Jul-05	925-20		6.54	152	<2	0.006	0.0010	0.00004	0.001	<0.0001	0.0163	0.0001	0.035	0.19	<5	36.9
W 51073	26-Jul-05	925-21		6.63	10	<2	0.002	0.0004	<0.00001	0.001	<0.0001	0.0005	<0.0001	<0.0001	<0.05	<5	2
W 51074	26-Jul-05	925-22-1		6.33	270	<2	0.010	0.0014	0.00010	0.002	<0.0001	0.0326	0.0004	0.070	0.34	<5	67
W 51075	26-Jul-05	925-22-2		6.32	267	<2	0.020	0.0014	0.00008	0.002	<0.0001	0.0321	0.0005	0.068	0.34	6	65
W 51076	26-Jul-05	925-22-3		6.34	250	<2	0.020	0.0014	0.00008	0.002	<0.0001	0.0310	0.0003	0.066	0.32	<5	61
W 51077	26-Jul-05	925-24		6.48	155	<2	0.004	0.0018	0.00006	0.002	<0.0001	0.0162	0.0007	0.034	0.11	<5	37.7
W 51078	26-Jul-05	925-25		6.67	25	<2	0.002	0.0015	0.00003	0.002	<0.0001	0.0022	0.0009	0.015	<0.05	<5	7
M 51079	27-Jul-05	925-14		7.62	845	<2	---	0.0139	<0.00001	0.004	<0.0001	0.0122	0.0003	0.009	<0.05	23	203
W 51080	27-Jul-05	925-10		6.39	847	<2	0.040	0.0146	0.00010	0.015	<0.0001	0.0955	0.0005	0.251	1.88	<5	216
D 51082	28-Jul-05	925-10		6.40	810	3	0.040	0.0082	0.00011	0.013	<0.0001	0.0965	0.0002	0.254	---	<5	212
D 51083	29-Jul-05	925-10		6.30	809	<3	0.040	0.0087	0.00010	0.014	<0.0001	0.0988	0.0003	0.266	---	<5	220
D 51084	30-Jul-05	925-10		6.26	812	<2	0.044	0.0096	0.00013	0.014	<0.0001	0.0989	0.0004	0.259	---	<5	216
D 51085	31-Jul-05	925-10		6.22	818	<2	0.044	0.0089	0.00012	0.077	<0.0001	0.0959	0.0024	0.296	---	<5	216

*D-Daily *W-Weekly *M-Monthly				Nutrient Analysis							
Log No.	Date	Sampling Station		Total Nitrate-N	Total Nitrite-N	TK-N	Total Ortho-P	Total Phosph.	Total O&G	F-col #/100mL	BOD ₅
M 51028	29-Jun-05	925-14		0.96	<0.005	1.7	0.02	0.2	no sheen	**	4.7
M 51044	13-Jul-05	925-14		0.86	<0.005	0.47	0.02	0.1	no sheen	1	<4
M 51079	27-Jul-05	925-14		1.23	<0.005	0.53	0.02	<0.1	no sheen	<1	<4

** Sample 8°C on arrival. Not tested.

Table 2 (cont'd)

August 2005 SNP Sampling Report - Water Quality Results

*D-Daily *W-Weekly *M-Monthly				Routine Analysis			Total CN (mg/l)	Total As (mg/l)	Total Metals (mg/l)						NH4-N (mg/l)	T-Alk (mg/l)	Hard. (mg/l)
Log No.	Date	Sampling Station		pH	uS/cm Cond.	TSS			Cd	Cu	Hg	Ni	Pb	Zn			
D	51086	1-Aug-05	925-10	6.18	819	<2	0.040	0.0109	0.00012	0.014	<0.0001	0.1000	0.0004	0.265	---	<5	211
D	51087	2-Aug-05	925-10	6.14	812	<3	0.040	0.0118	0.00011	0.014	<0.0001	0.0994	0.0040	0.260	---	<5	210
W	51088	2-Aug-05	925-20	5.48	797	<3	0.022	0.0032	0.00024	0.006	<0.0001	0.1140	<0.0001	0.258	1.18	<5	210
W	51089	2-Aug-05	925-21	6.63	11	<3	0.002	0.0020	0.00001	<0.001	<0.0001	0.0005	0.0001	<0.001	<0.05	<5	2
W	51090	2-Aug-05	925-22-1	6.11	387	<3	0.020	0.0020	0.00014	0.002	<0.0001	0.0495	0.0006	0.114	0.54	<5	95
W	51091	2-Aug-05	925-22-2	6.16	390	<3	0.020	0.0017	0.00013	0.002	<0.0001	0.0482	0.0004	0.109	0.53	<5	97
W	51092	2-Aug-05	925-22-3	6.18	392	<3	0.022	0.0018	0.00012	0.002	<0.0001	0.0503	0.0002	0.190	0.54	<5	97
W	51093	2-Aug-05	925-24	6.62	67	<3	0.004	0.0011	0.00003	<0.001	<0.0001	0.0061	0.0006	0.015	<0.05	<5	17
W	51094	2-Aug-05	925-25	6.67	25	<3	0.002	0.0011	0.00003	<0.001	<0.0001	0.0019	0.0007	0.009	<0.05	5	7
W	51095	3-Aug-05	925-10	6.07	827	<3	0.036	0.0096	0.00016	0.015	<0.0001	0.1010	0.0004	0.279	1.81	<5	208
D	51096	4-Aug-05	925-10	5.99	872	<3	0.038	0.0090	0.00010	0.014	<0.0001	0.0997	0.0003	0.255	---	<5	222
D	51097	5-Aug-05	925-10	5.95	874	<2	0.036	0.0092	0.00011	0.014	<0.0001	0.0986	0.0003	0.251	---	<5	217
D	51098	6-Aug-05	925-10	5.91	881	<2	0.034	0.0098	0.00011	0.014	<0.0001	0.1000	0.0004	0.255	---	<5	221
D	51099	7-Aug-05	925-10	5.87	880	<3	0.032	0.0095	0.00011	0.014	<0.0001	0.1000	0.0003	0.262	---	<5	221
D	51100	8-Aug-05	925-10	5.75	866	<2	0.030	0.0111	0.00012	0.014	<0.0001	0.0970	0.0004	0.251	---	<5	217
D	51101	9-Aug-05	925-10	5.71	865	<3	0.028	0.0100	0.00013	0.014	<0.0001	0.0982	0.0004	0.259	---	<5	217
W	51102	9-Aug-05	925-20	5.26	750	<2	0.010	0.0037	0.00021	0.008	<0.0001	0.1000	0.0001	0.230	0.97	<5	190
W	51103	9-Aug-05	925-21	6.50	12	<2	0.002	0.0009	0.00001	<0.001	<0.0001	0.0006	<0.0001	0.002	<0.05	6	5
W	51104	9-Aug-05	925-22-1	5.94	444	2	0.010	0.0036	0.00013	0.002	0.0001	0.0568	0.0003	0.134	0.58	<5	110
W	51105	9-Aug-05	925-22-2	6.00	416	4	0.008	0.0017	0.00012	0.002	<0.0001	0.0492	0.0003	0.119	0.54	<5	100
W	51106	9-Aug-05	925-22-3	5.98	428	<2	0.010	0.0018	0.00012	0.002	<0.0001	0.0526	0.0003	0.126	0.53	<5	100
W	51107	9-Aug-05	925-24	6.39	160	<2	0.004	0.0014	0.00005	0.001	<0.0001	0.0158	0.0006	0.039	0.16	<5	38
W	51108	9-Aug-05	925-25	6.51	60	<2	0.002	0.0012	0.00030	<0.001	<0.0001	0.0053	0.0005	0.018	<0.05	<5	15
W	51109	10-Aug-05	925-10	5.66	863	<2	0.028	0.0100	0.00014	0.016	<0.0001	0.0980	0.0004	0.271	1.67	<5	217
D	51110	11-Aug-05	925-10	5.90	880	<2	0.028	0.0091	0.00014	0.0481	<0.0001	0.0969	0.0004	0.259	---	<5	209
Discharge ceased on Aug 11, 2005																	
W	51123	16-Aug-05	925-20	5.43	456	<3	0.022	0.0024	0.00015	0.006	<0.0001	0.0634	<0.0001	0.129	0.36	<5	110
W	51124	16-Aug-05	925-21	6.90	12	<3	0.002	0.0006	<0.00001	<0.001	<0.0001	0.0006	<0.0001	0.001	<0.05	<5	4
W	51125	16-Aug-05	925-22-1	6.42	217	<2	0.004	0.0012	0.00005	0.002	<0.0001	0.0236	0.0001	0.052	0.21	<5	50
W	51126	16-Aug-05	925-22-2	6.46	218	<3	0.004	0.0015	0.00006	0.002	<0.0001	0.0247	0.0004	0.055	0.22	<5	52
W	51127	16-Aug-05	925-22-3	6.48	218	<2	0.004	0.0012	0.00005	0.002	<0.0001	0.0246	0.0020	0.055	0.22	<5	50
W	51128	16-Aug-05	925-24	6.38	275	<3	0.010	0.0011	0.00006	0.001	<0.0001	0.0289	0.0002	0.065	0.3	<5	64
W	51129	16-Aug-05	925-25	6.83	53	<2	0.002	0.0010	0.00002	<0.001	<0.0001	0.0044	0.0004	0.014	<0.05	<5	10
W	51137	23-Aug-05	925-20	5.70	237		0.010	0.0048	0.00009	0.005	<0.0001	0.0455	0.0002	0.078	0.1	<5	63
W	51138	23-Aug-05	925-21	6.60	11		0.002	0.0006	<0.00001	<0.001	<0.0001	0.0006	<0.0001	<0.001	<0.05	<5	2
W	51139	23-Aug-05	925-22	6.50	47		0.002	0.0011	0.00001	0.001	<0.0001	0.0051	<0.0001	0.009	<0.05	<5	10
W	51140	23-Aug-05	925-24	6.21	219		0.010	0.0010	0.00006	0.001	<0.0001	0.0224	<0.0001	0.045	0.21	<5	53
W	51141	23-Aug-05	925-25	6.45	114		0.004	0.0012	0.00003	<0.001	<0.0001	0.0113	0.0002	0.023	0.1	<5	27
M	51150	30-Aug-05	925-14	7.36	979	2	---	0.0144	<0.00001	0.003	<0.0001	0.0105	<0.0001	0.005	<0.05	25	218

*D-Daily *W-Weekly *M-Monthly				Nutrient Analysis							
Log No.	Date	Sampling Station		Total Nitrate-N	Total Nitrite-N	TK-N	Total Ortho-P	Total Phosph.	Total O&G	F-col #/100mL	BOD ₅

M	51150	30-Aug-05	925-14	0.84	<0.005	1.2	0.01	0.2	no sheen	1	<4
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Table 3

July 2005 Discharge Flow Monitoring from Pond #2

Date	SYPHON 1						SYPHON 2						DAILY	TOTAL
	Flow usgpm	Flow m3/min	Flow m3/hr	hours flow	Flow m3/day	Cum. Total Flow (m3)	Flow usgpm	Flow m3/min	Flow m3/hr	hours flow	Flow m3/day	Cum. Total Flow (m3)	Cum. Total Flow (m3)	Cum. Total Flow (m3)
15-Jul-05	5580	Syphon started at 1100 hrs					6060	Syphon started at 1400 hrs						
16-Jul-05	5580	21.12	1267	20	25,344	25,344	6060	22.94	1376	18	24,772	24,772	50,117	50,117
17-Jul-05	5740	21.42	1285	24	30,849	56,194	5780	22.41	1344	24	32,266	57,039	63,116	113,232
18-Jul-05	5940	22.10	1326	24	31,830	88,024	6080	22.45	1347	24	32,321	89,360	64,151	177,384
19-Jul-05	5650	21.93	1316	24	31,585	119,609	5860	22.60	1356	24	32,539	121,899	64,124	241,508
20-Jul-05	5650	21.39	1283	24	30,795	150,404	5820	22.10	1326	24	31,830	153,729	62,625	304,133
21-Jul-05	5630	21.35	1281	24	30,740	181,145	5450	21.33	1280	24	30,713	184,442	61,453	365,587
22-Jul-05	5160	20.42	1225	24	29,405	210,550	5050	19.87	1192	24	28,615	213,057	58,020	423,606
23-Jul-05	5660	20.48	1229	24	29,487	240,036	5740	20.42	1225	24	29,405	242,462	58,892	482,498
24-Jul-05	5730	21.56	1293	24	31,040	271,076	5590	21.44	1287	24	30,877	273,338	61,917	544,415
25-Jul-05	5640	21.52	1291	24	30,986	302,062	5510	21.01	1260	24	30,250	303,588	61,235	605,650
26-Jul-05	6320	22.63	1358	24	32,593	334,656	6410	22.56	1354	24	32,484	336,073	65,078	670,728
27-Jul-05	6230	23.75	1425	24	34,201	368,857	6290	24.03	1442	24	34,610	370,683	68,812	739,540
28-Jul-05	6180	23.49	1409	24	33,820	402,677	6150	23.54	1413	24	33,902	404,584	67,721	807,261
29-Jul-05	6135	23.31	1398	24	33,561	436,238	6125	23.23	1394	24	33,452	438,036	67,013	874,274
30-Jul-05	6069	23.10	1386	24	33,258	469,496	5974	22.90	1374	24	32,972	471,009	66,231	940,505
31-Jul-05	6010	22.86	1372	24	32,918	502,414	6230	23.10	1386	24	33,258	504,267	66,176	1,006,681
Average	5818	22.03	1322		31,401		5893	22.24	1335		31,517		62,918	

July 2005 Sewage Discharge from Sewage Pond						
Date	Flow usgpm	Flow m3/min	Flow m3/hr	hours of flow	Flow m3/day	Cum. Monthly Flow (m3)
1-Jul-05	964	Syphon started at 0700 hrs				
2-Jul-05	940	3.60	216	24	5189	5,189
3-Jul-05	973	3.62	217	24	5213	10,402
4-Jul-05	0	1.84	110	24	2652	13,054
5-Jul-05	998	1.89	113	0	0	13,054
6-Jul-05	1021	3.82	229	24	5502	18,556
7-Jul-05	960	3.75	225	24	5399	23,955
8-Jul-05	976	3.66	220	24	5276	29,231
9-Jul-05	960	3.66	220	24	5276	34,507
10-Jul-05	934	3.58	215	24	5162	39,668
11-Jul-05	985	3.63	218	24	5230	44,898
12-Jul-05	952	3.67	220	24	5279	50,177
13-Jul-05	965	3.63	218	24	5224	55,401
14-Jul-05	950	3.62	217	24	5219	60,620
15-Jul-05	470	2.69	161	24	3870	64,489
16-Jul-05	440	1.72	103	24	2480	66,969
17-Jul-05	440	1.67	100	24	2398	69,367
18-Jul-05	950	2.63	158	24	3788	73,155
19-Jul-05	920	3.54	212	24	5096	78,252
20-Jul-05	930	3.50	210	24	5042	83,293
21-Jul-05	920	3.50	210	24	5042	88,335
22-Jul-05	940	3.52	211	24	5069	93,404
23-Jul-05	930	3.54	212	24	5096	98,500
24-Jul-05	900	3.46	208	24	4987	103,487
25-Jul-05	910	3.43	206	24	4933	108,420
26-Jul-05	900	3.43	206	24	4933	113,352
27-Jul-05	850	3.31	199	24	4769	118,121
28-Jul-05	920	3.35	201	24	4824	122,945
29-Jul-05	942	3.52	211	24	5074	128,019
30-Jul-05	890	3.47	208	24	4993	133,012
31-Jul-05	875	3.34	200	24	4810	137,822
Average	861	3.25	195		4594	

Table 3 (cont'd)

August 2005 Discharge Flow Monitoring from Pond #2

Date	SYPHON 1						SYPHON 2						DAILY	TOTAL
	Flow usgpm	Flow m3/min	Flow m3/hr	hours flow	Flow m3/day	Cum. Total Flow (m3)	Flow usgpm	Flow m3/min	Flow m3/hr	hours flow	Flow m3/day	Cum. Total Flow (m3)	Cum. Total Flow (m3)	Cum. Total Flow (m3)
1-Aug-05	6015	22.76	1365	24	32,771	535,185	6040	23.22	1393	24	33,438	537,705	66,209	1,072,890
2-Aug-05	6090	22.91	1375	24	32,989	568,173	5850	22.50	1350	24	32,403	570,108	65,391	1,138,281
3-Aug-05	6010	22.90	1374	24	32,975	601,148	5660	21.78	1307	24	31,367	601,475	64,342	1,202,623
4-Aug-05	6100	22.92	1375	24	33,002	634,150	5850	21.78	1307	24	31,367	632,842	64,369	1,266,993
5-Aug-05	5697	22.33	1340	24	32,149	666,300	5890	22.22	1333	24	31,994	664,836	64,143	1,331,136
6-Aug-05	5690	21.55	1293	24	31,032	697,332	5630	21.80	1308	24	31,394	696,231	62,426	1,393,562
7-Aug-05	5480	21.14	1268	24	30,441	727,772	5440	20.95	1257	24	30,168	726,399	60,609	1,454,171
8-Aug-05	5365	20.52	1231	24	29,555	757,327	4850	19.47	1168	24	28,042	754,441	57,597	1,511,768
9-Aug-05	5450	20.47	1228	24	29,473	786,800	4600	17.88	1073	24	25,753	780,194	55,226	1,566,995
10-Aug-05	5480	20.69	1241	24	29,787	816,587	5270	18.68	1121	24	26,898	807,092	56,684	1,623,679
11-Aug-05	5350	20.50	1230	24	29,514	846,101	5150	19.72	1183	24	28,397	835,489	57,911	1,681,590
Syphon stopped at 0800 hours							Syphon stopped at 0800 hours							
Average	5702	21.70	1302		31,244		5475	20.91				691,529	61,355	

August 2005 Sewage Discharge from Sewage Pond						
Date	Flow usgpm	Flow m3/min	Flow m3/hr	hours of flow	Flow m3/day	Cum. Monthly Flow (m3)
1-Aug-05	865	3.29	198	24	4742	4,742
2-Aug-05	845	3.24	194	24	4660	9,402
3-Aug-05	830	3.17	190	24	4565	13,967
4-Aug-05	850	3.18	191	24	4578	18,545
5-Aug-05	810	3.14	188	24	4524	23,069
6-Aug-05	840	3.12	187	24	4497	27,565
7-Aug-05	812	3.13	188	24	4502	32,068
8-Aug-05	810	3.07	184	24	4420	36,488
9-Aug-05	765	2.98	179	24	4292	40,780
10-Aug-05	785	2.93	176	24	4224	45,004
11-Aug-05	790	2.98	179	24	4292	49,296
12-Aug-05	780	2.97	178	24	4279	53,575
13-Aug-05	760	2.91	175	24	4197	57,772
14-Aug-05	740	2.84	170	24	4088	61,860
15-Aug-05	730	2.78	167	24	4006	65,866
16-Aug-05	720	2.74	165	24	3952	69,817
17-Aug-05	720	2.73	164	24	3924	73,741
18-Aug-05	710	2.71	162	24	3897	77,638
19-Aug-05	700	2.67	160	24	3843	81,481
20-Aug-05	680	2.61	157	24	3761	85,242
21-Aug-05	660	2.54	152	24	3652	88,894
22-Aug-05	660	2.50	150	24	3597	92,491
23-Aug-05	650	2.48	149	24	3570	96,061
24-Aug-05	610	2.38	143	24	3434	99,495
25-Aug-05	620	2.33	140	24	3352	102,847
26-Aug-05	605	2.32	139	24	3338	106,185
27-Aug-05	594	2.27	136	24	3268	109,453
28-Aug-05	478	2.03	122	24	2921	112,374
29-Aug-05	450	1.76	105	24	2529	114,903
30-Aug-05	393	1.60	96	24	2297	117,200
31-Aug-05	404	1.51	90	24	2172	119,372
Average	699	2.67	160		3851	

Sept 2005 Sewage Discharge from Sewage Pond					
Date	Flow usgpm	Flow m3/min	Flow m3/hr	Flow m3/day	Cum. Monthly Flow (m3)
1-Sep-05	389	1.50	90	2161	2,161
2-Sep-05	380	1.46	87	2096	4,257
3-Sep-05	375	1.43	86	2058	6,314
Syphon shut down 0800 hours Sept 3, 2005					
Average	381	1.46	88	2105	



LUPIN GOLD MINE, Nunavut

WATER LICENCE NWB1LUP0008

TABLE 4

2005 ANNUAL REPORT

2005 WATER QUALITY DATA (Freshwater, sewage)

- all units are in mg/L except pH which is unitless and where otherwise indicated.

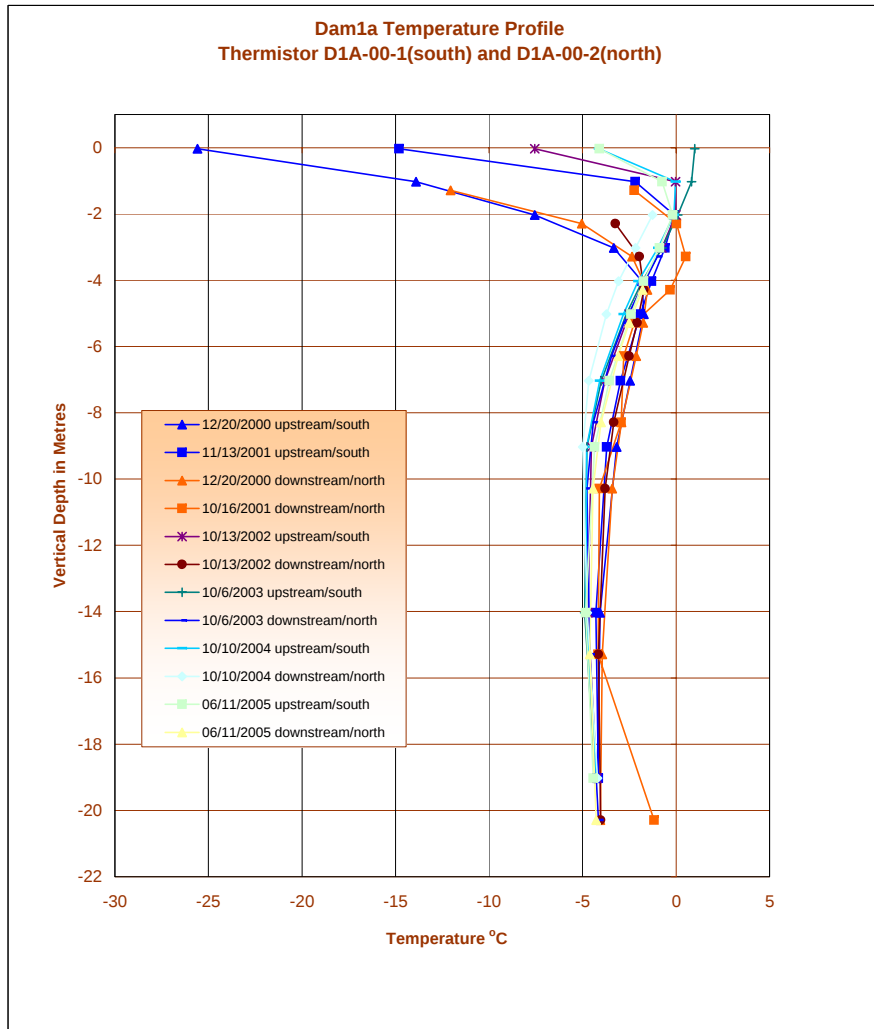
*D-Daily *W-Weekly *M-Monthly				Routine Analysis			Total CN (mg/l)	Total As (mg/l)	Total Metals (mg/l)					
Log No.	Date	Sampling Station		pH	uS/cm Cond.	TSS			Cd	Cu	Hg	Ni	Pb	Zn
M 51028	29-Jun-05	925-14		7.80		18	---	0.0138	<0.00001	0.003	<0.0001	0.0092	0.0008	0.015
M 51044	13-Jul-05	925-14		7.86	617	<2	---	0.0134	<0.00001	0.003	<0.0001	0.0047	0.0002	0.007
M 51079	27-Jul-05	925-14		7.62	845	<2	---	0.0139	<0.00001	0.004	<0.0001	0.0122	0.0003	0.009
M 51150	30-Aug-05	925-14		7.36	979	2	---	0.0144	<0.00001	0.003	<0.0001	0.0105	<0.0001	0.005
A 51160	13-Sep-05	925-01		6.70	14	2	---	0.0008	0.00001	0.001	<0.0001	0.0008	0.0004	0.004

*D-Daily *W-Weekly *M-Monthly				Nutrient Analysis								NH4-N (mg/l)	T-Alk (mg/l)	Hard. (mg/l)
Log No.	Date	Sampling Station		Total Nitrate-N	Total Nitrite-N	TK-N	Total Ortho-P	Total Phosph.	Total O&G	F-col #/100mL	BOD ₅			
M 51028	29-Jun-05	925-14		0.96	<0.005	1.7	0.02	0.2	no sheen	**	4.7	<0.05	15	137
M 51044	13-Jul-05	925-14		0.86	<0.005	0.47	0.02	0.1	no sheen	1	<4	0.06	18	152
M 51079	27-Jul-05	925-14		1.23	<0.005	0.53	0.02	<0.1	no sheen	<1	<4	<0.05	23	203
M 51150	30-Aug-05	925-14		0.84	<0.005	1.2	0.01	0.2	no sheen	1	<4	<0.05	25	218
A 51160	13-Sep-05	925-01		0.03	<0.005					<1			5	4

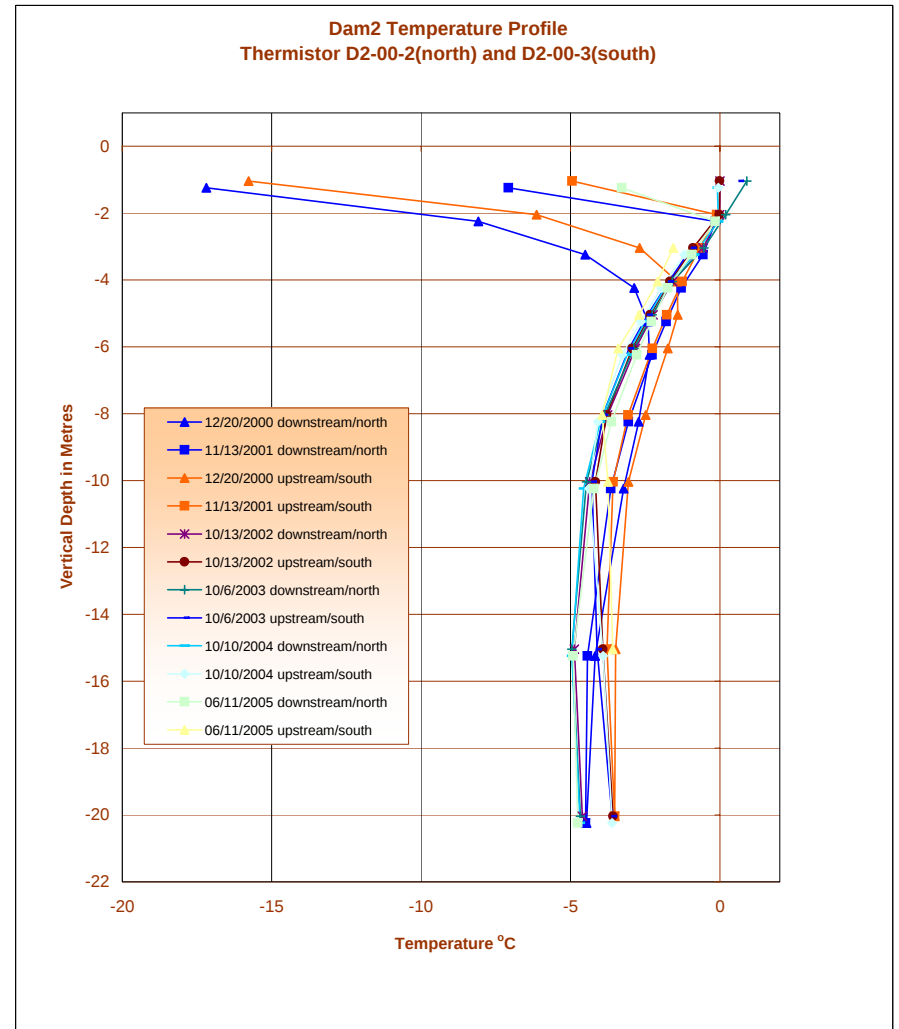
Sample from 925-01 (Freshwater pumphouse) is annual freshwater sample.

** Sample 8°C on arrival at lab. Not tested.

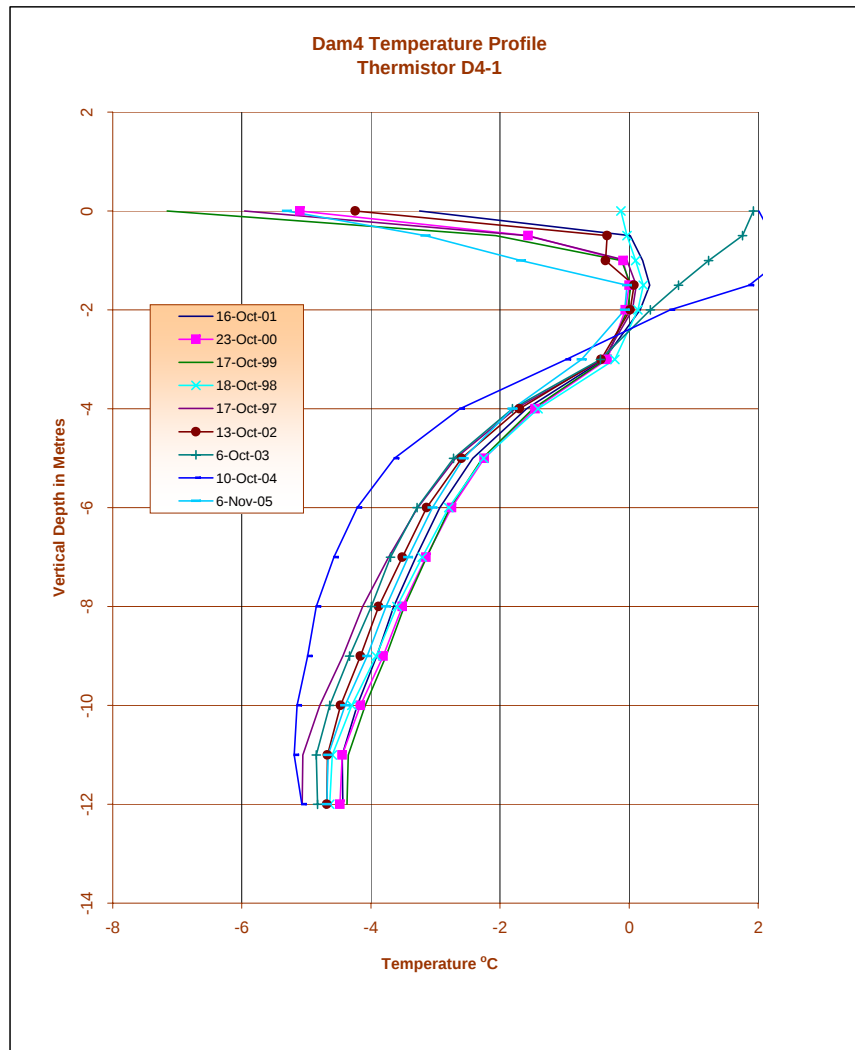
Graph No.1



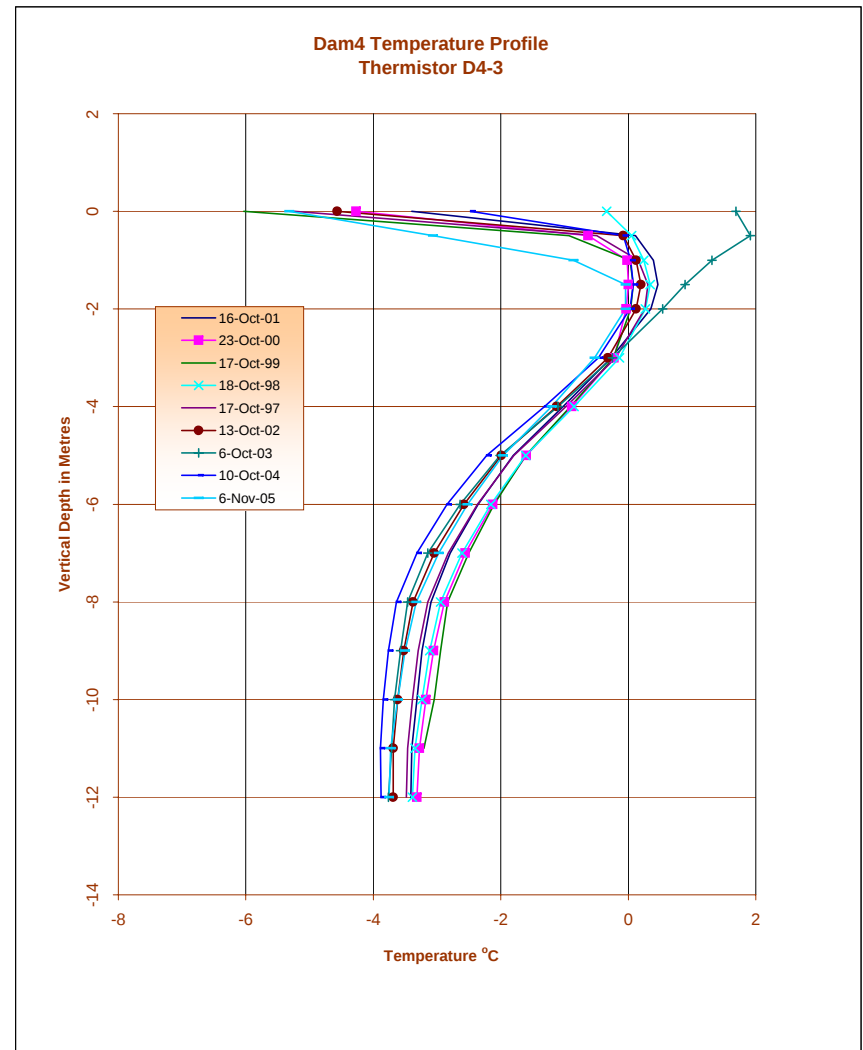
Graph No.2



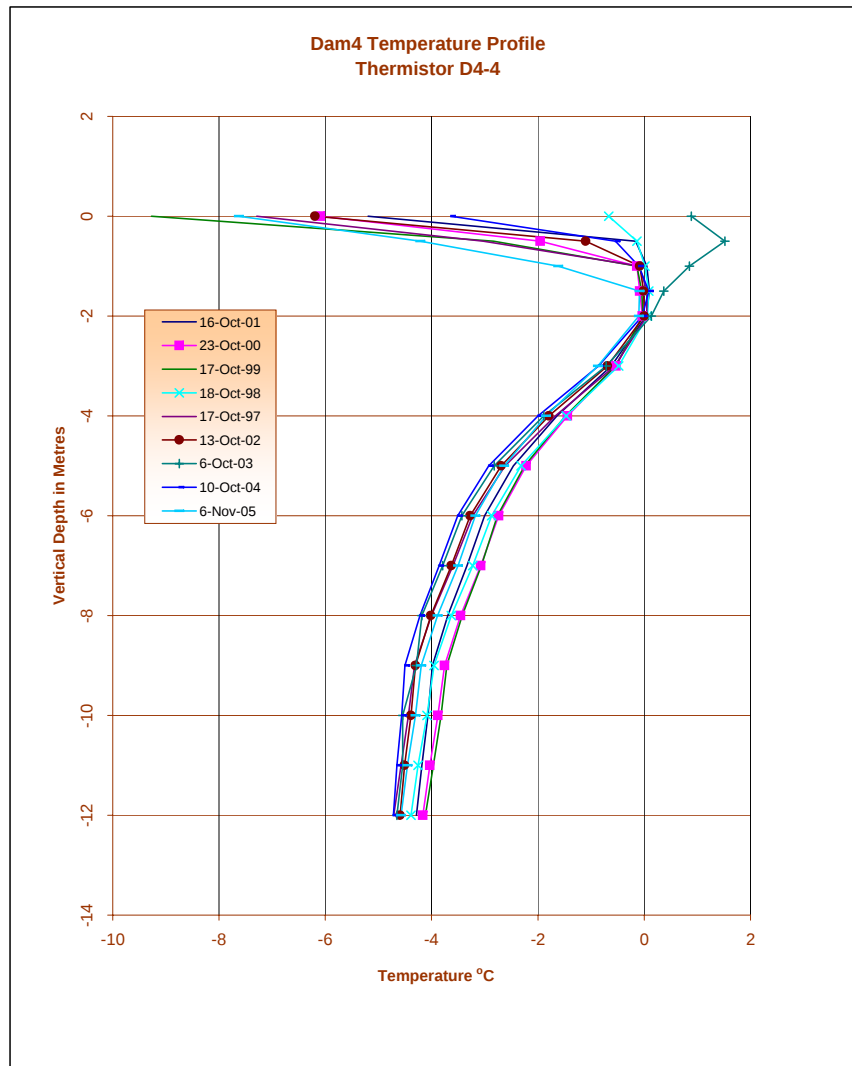
Graph No.3



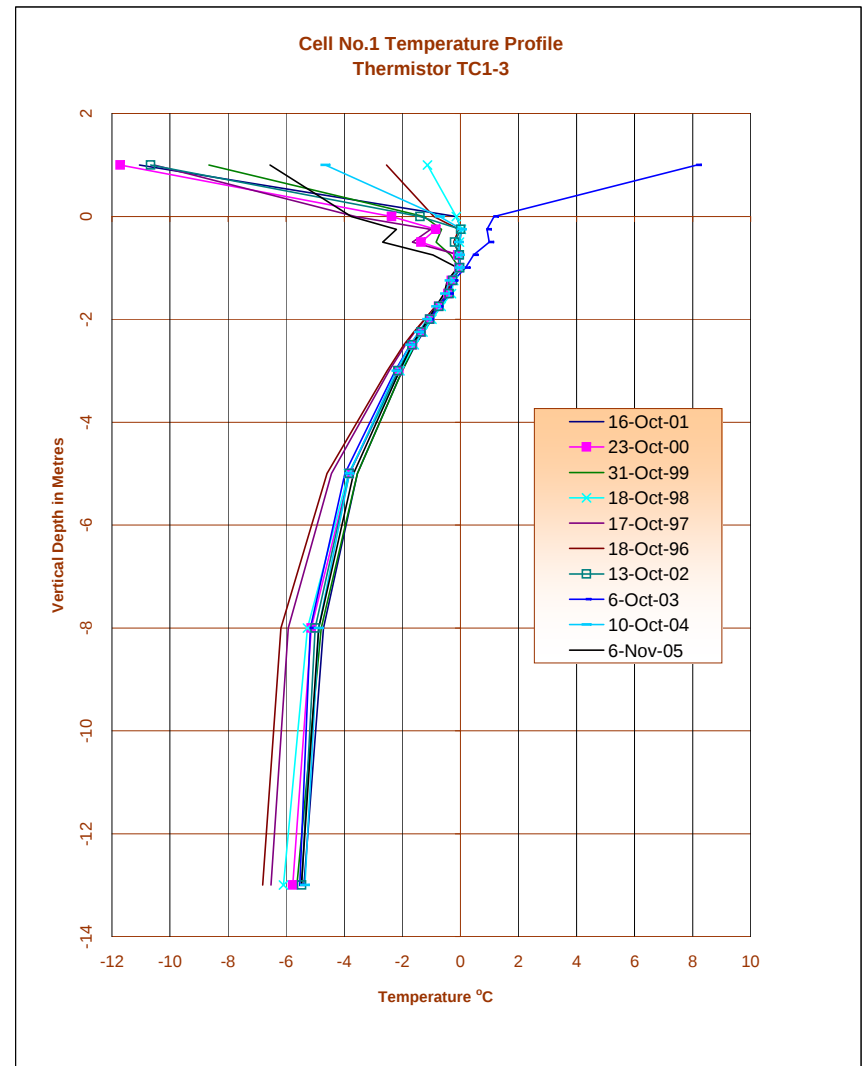
Graph No.4



Graph No.5

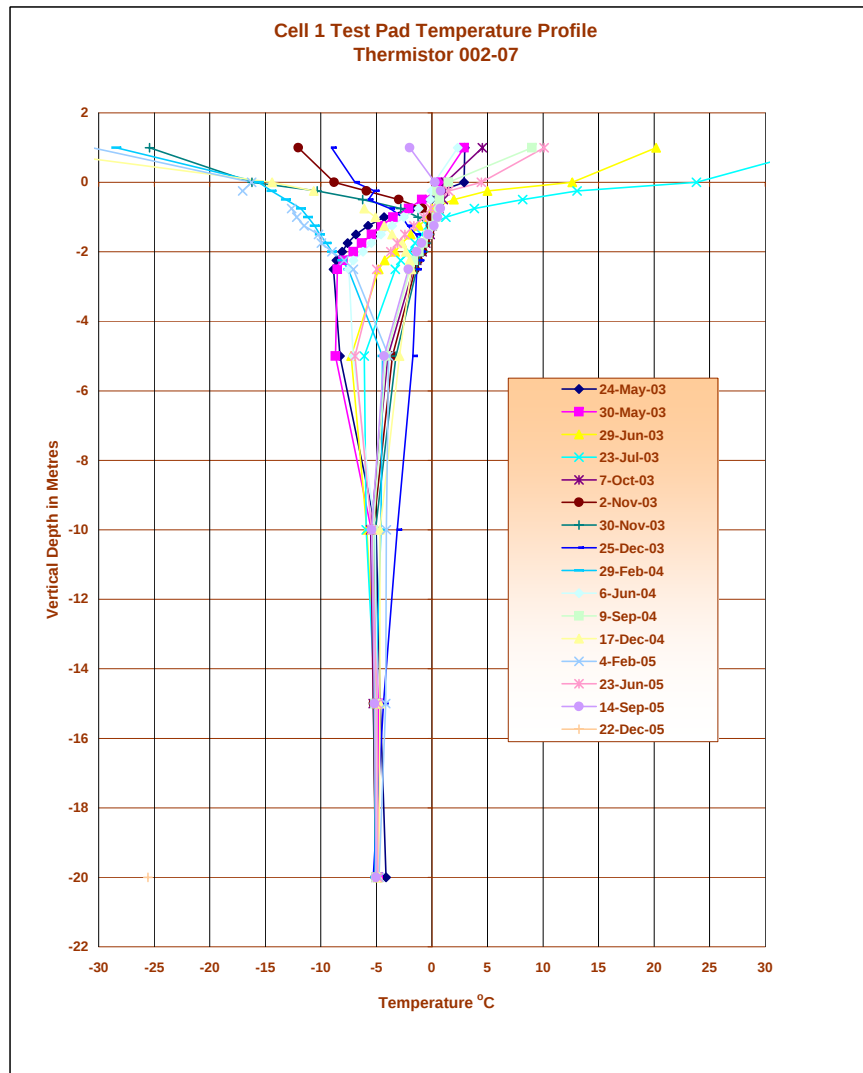


Graph No.6

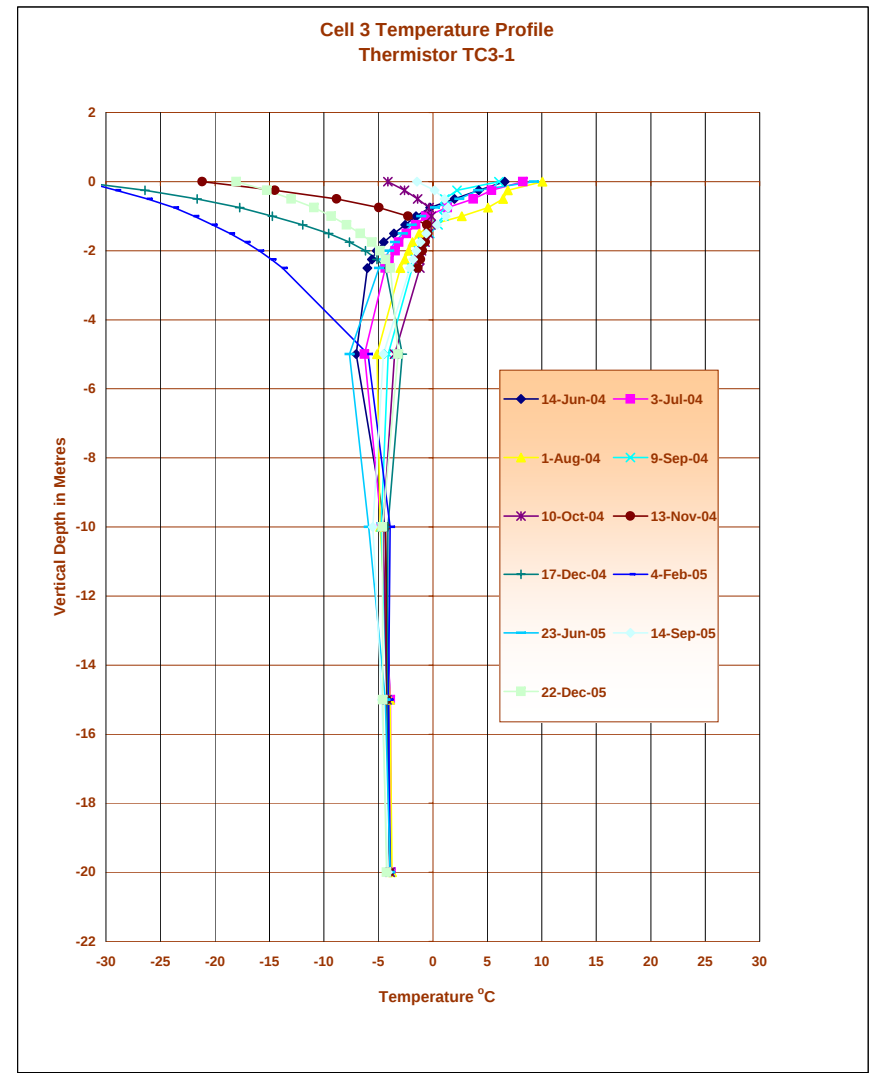


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Lupin Operations, Nunavut

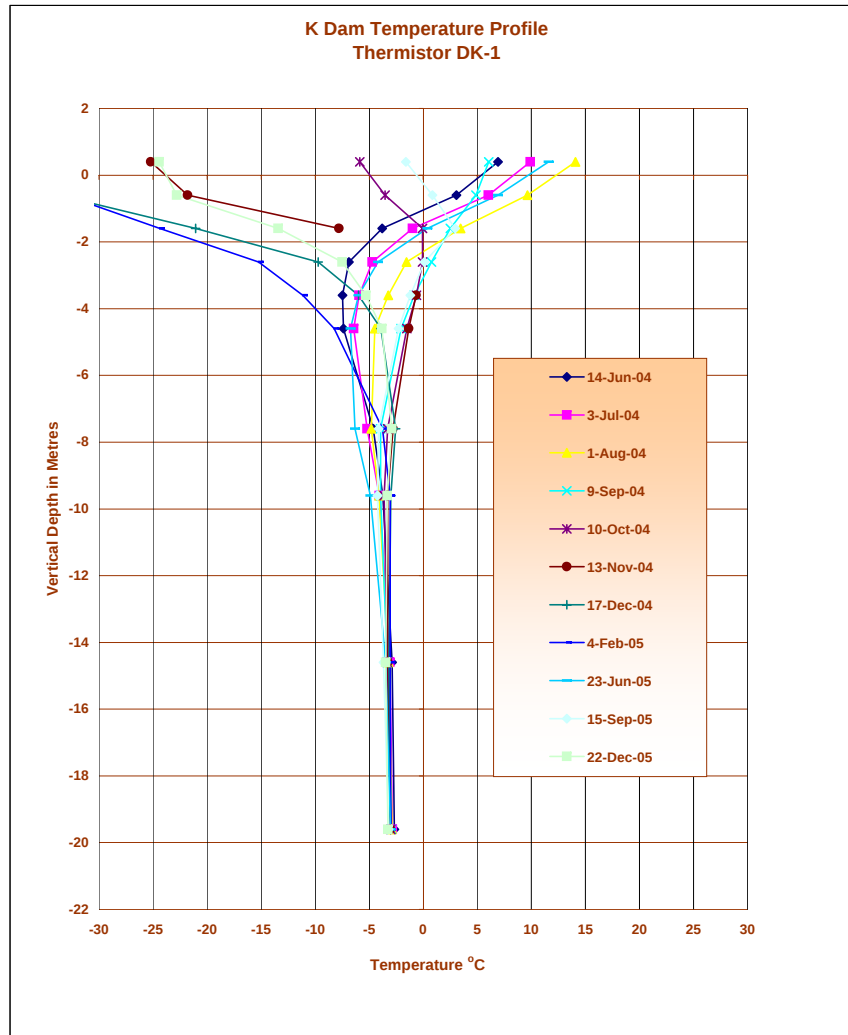
Graph No.7



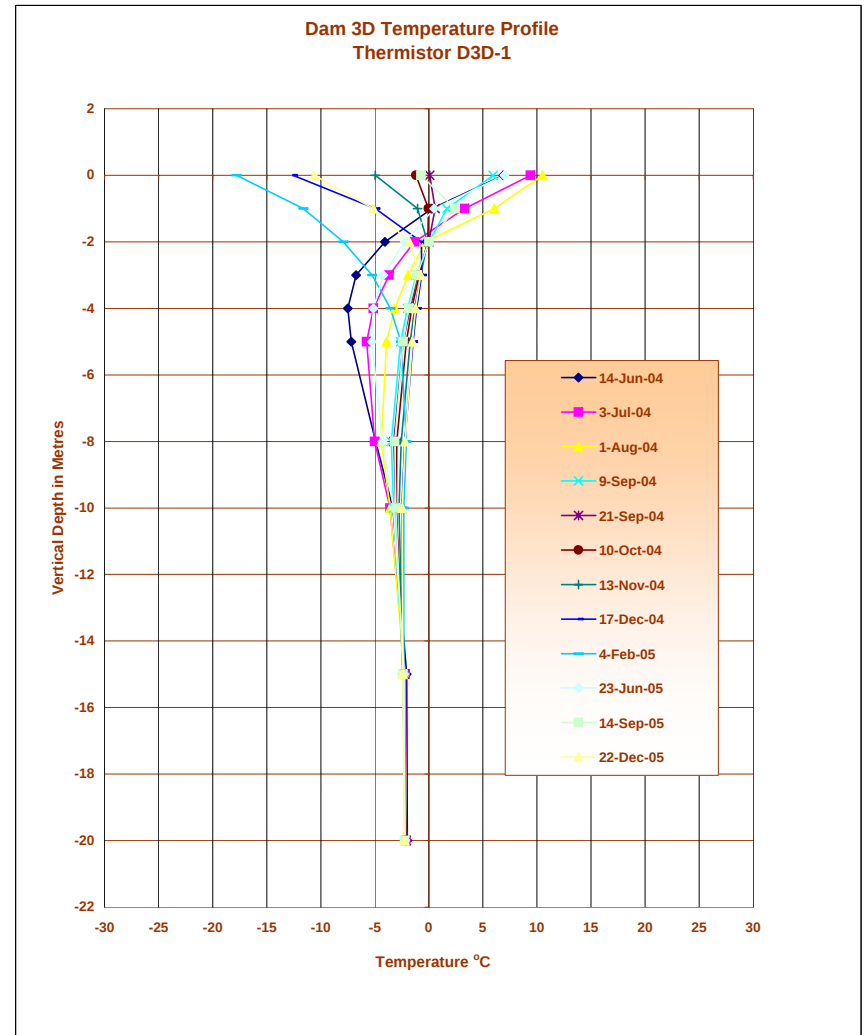
Graph No.8



Graph No.9



Graph No.10



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Graph No.11

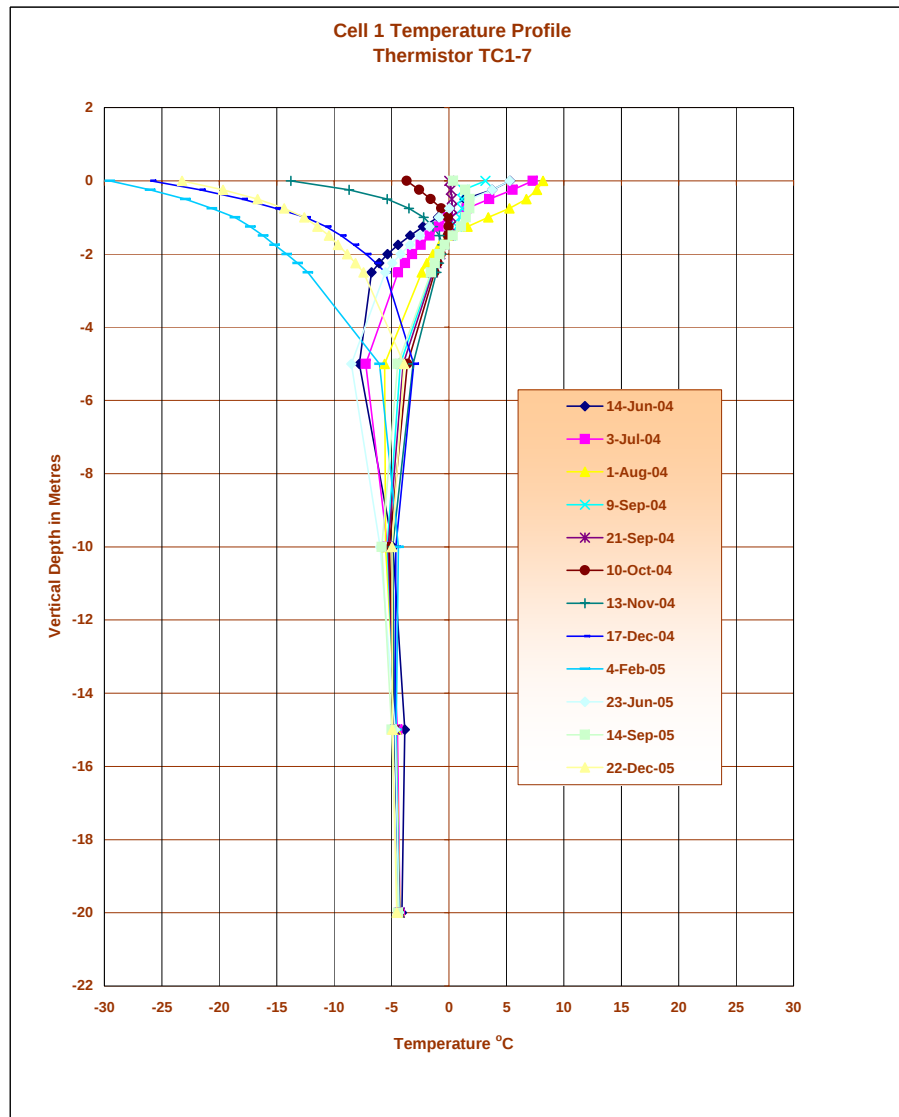




Photo 1 – Cell 5, prior to cover. Looking southwest. June 25, 2005



Photo 2 – Cell 5, cover being placed. Looking southwest. July 14, 2005.



Photo 3 – Cell 5 from air, looking northwest. September 6, 2005.



Photo 4 – Cell 5. Equipment placing esker cover. June 29, 2005.



Photo 5 – Cell 3 from air, looking northeast. July 16, 2005, showing the area covered in 2004. The full extent of the Cell 3 cover, as of Sept 28, 2005, can be seen in Figure 1.

APPENDIX B

1 - Norwest Labs QC Reports for Aug 4 and Sept 22, 2004

2 - INAC (Taiga Environmental Laboratory) 925-14 Analysis, July 14, 2004

3 - Norwest Labs Ltd. Analytical and QC Reports 2005

4 - 2005 Bioassay Results and QC Data



Analytical Report

Norwest Labs
7217 Roper Road
Edmonton, AB. T6B 3J4
Phone: (780) 438-5522
Fax: (780) 438-0396

Bill to: Echo Bay Mines Ltd.
Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J2T2
Attn: Michael Tansey
Sampled By: M. Tansey
Company: Echo Bay Mines

Project
ID: Requisition No. L48906
Name:
Location:
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 324234
Control Number:
Date Received: Aug 04, 2004
Date Reported: Aug 12, 2004
Report Number: 579709

Page: 1 of 4

NWL Number 324234-1
Sample Date Aug 04, 2004
Sample Description 40028 / 925-14
Matrix Water - General

Analyte		Units	Results	Results	Results	Detection Limit
Aggregate Organic Constituents						
Biochemical Oxygen Demand	5 Day	mg/L	<4			4
Inorganic Nonmetallic Parameters						
Ammonium - N		mg/L	0.17			0.05
Kjeldahl Nitrogen	Total	mg/L	1.14			0.05
Phosphorus	Total	mg/L	0.14			0.05
Orthophosphate-P	Dissolved	mg/L	<0.05			0.05
Metals Total						
Calcium	Total	mg/L	126			0.2
Iron	Total	mg/L	0.2			0.1
Magnesium	Total	mg/L	11.4			0.1
Manganese	Total	mg/L	0.251			0.005
Potassium	Total	mg/L	8.7			0.4
Silicon	Total	mg/L	0.17			0.05
Sodium	Total	mg/L	154			0.4
Sulphur	Total	mg/L	34.9			0.05
Aluminum	Total	mg/L	0.069			0.005
Antimony	Total	mg/L	0.0005			0.0002
Arsenic	Total	mg/L	0.0118			0.0002
Barium	Total	mg/L	0.038			0.001
Beryllium	Total	mg/L	<0.0001			0.0001
Bismuth	Total	mg/L	<0.0005			0.0005
Boron	Total	mg/L	0.057			0.002
Cadmium	Total	mg/L	0.00009			0.00001
Chromium	Total	mg/L	<0.0005			0.0005
Cobalt	Total	mg/L	0.0094			0.0001
Copper	Total	mg/L	0.005			0.001
Lead	Total	mg/L	0.0003			0.0001
Lithium	Total	mg/L	0.499			0.001
Molybdenum	Total	mg/L	0.002			0.001
Nickel	Total	mg/L	0.0193			0.0005
Selenium	Total	mg/L	<0.0002			0.0002
Silver	Total	mg/L	0.0002			0.0001
Strontium	Total	mg/L	2.55			0.001
Thallium	Total	mg/L	<0.00005			0.00005
Tin	Total	mg/L	<0.001			0.001



Analytical Report

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Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J2T2
Attn: Michael Tansey
Sampled By: M. Tansey
Company: Echo Bay Mines

Project
ID: Requisition No. L48906
Name:
Location:
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 324234
Control Number:
Date Received: Aug 04, 2004
Date Reported: Aug 12, 2004
Report Number: 579709

Page: 2 of 4

NWL Number 324234-1
Sample Date Aug 04, 2004
Sample Description 40028 / 925-14
Matrix Water - General

Analyte		Units	Results	Results	Detection Limit
Metals Total - Continued					
Titanium	Total	mg/L	0.0033		0.0005
Uranium	Total	mg/L	<0.0005		0.0005
Vanadium	Total	mg/L	<0.0001		0.0001
Zinc	Total	mg/L	0.056		0.001
Zirconium	Total	mg/L	<0.001		0.001
Microbiological Analysis					
Total Coliforms	Membrane Filtration	CFU/100 mL	100		1
Fecal Coliforms	Membrane Filtration	CFU/100 mL	24		1
Physical and Aggregate Properties					
Solids	Total Suspended	mg/L	<2		1
Routine Water					
pH	Water	pH	7.2		
Electrical Conductivity		µS/cm at 25 C	1580		1
Calcium	Dissolved	mg/L	124		0.2
Magnesium	Dissolved	mg/L	11.4		0.1
Nitrate - N		mg/L	5.6		0.1
Nitrite - N		mg/L	<0.05		0.05
Hydroxide		mg/L	<5		5
Carbonate		mg/L	<6		6
Bicarbonate		mg/L	17		5
P-Alkalinity	as CaCO3	mg/L	<5		5
T-Alkalinity	as CaCO3	mg/L	14		5
Hardness	Dissolved as CaCO3	mg/L	358		

Approved by:

Randy Neumann, BSc
Vice President, Environmental



Methodology and Notes

Norwest Labs
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Sampled By: M. Tansey
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Page: 3 of 4

Method of Analysis:

MethodName	Reference	Method	Date Analysis Started	Location
Alkalinity, pH, and EC in water	APHA	* Conductivity - Laboratory Method, 2510 B	5-Aug-04	Norwest Labs Edmonton
Alkalinity, pH, and EC in water	APHA	* Titration Method, 2320 B	5-Aug-04	Norwest Labs Edmonton
Ammonium-N in Water	APHA	* Automated Phenate Method, 4500-NH3 G	11-Aug-04	Norwest Labs Edmonton
Anions (Routine) by Ion Chromatography	APHA	Ion Chromatography with Chemical Suppression of Eluent Cond., 4110 B	6-Aug-04	Norwest Labs Edmonton
BOD in water	APHA	* 5 Day, 5210 B	6-Aug-04	Norwest Labs Surrey
Fecal Coliforms - MF	APHA	Fecal Coliform Membrane Filter Procedure, 9222 D	6-Aug-04	Norwest Labs Calgary
Kjeldahl Nitrogen & Phosphorus (Total) in Water	Alberta Research Council	* Nitrogen, Total Kjeldahl, 07021 626	5-Aug-04	Norwest Labs Edmonton
Kjeldahl Nitrogen & Phosphorus (Total) in Water	APHA	* Automated Ascorbic Acid Reduction Method, 4500-P F	5-Aug-04	Norwest Labs Edmonton
Metals ICP-MS (Total) in water	US EPA	* Determination of Trace Elements in Waters and Wastes by ICP-MS, 200.8	5-Aug-04	Norwest Labs Edmonton
Metals Trace (Dissolved) in water	APHA	* Inductively Coupled Plasma (ICP) Method, 3120 B	5-Aug-04	Norwest Labs Edmonton
Metals Trace (Total) in water	APHA	* Inductively Coupled Plasma (ICP) Method, 3120 B	5-Aug-04	Norwest Labs Edmonton
Orthophosphate-P in Water	APHA	* Automated Ascorbic Acid Reduction Method, 4500-P F	11-Aug-04	Norwest Labs Edmonton
pH in water	APHA	* Electrometric Method, 4500-H+ B	12-Aug-04	Norwest Labs Surrey
Solids Suspended (Total, Fixed and Volatile)	APHA	* Total Suspended Solids Dried at 103-105°C, 2540 D	9-Aug-04	Norwest Labs Surrey
Total Coliforms - MF	APHA	Standard Total Coliform Membrane Filter Procedure, 9222 B	6-Aug-04	Norwest Labs Calgary

* Norwest method(s) is based on reference method

References:

Alberta Research Council	Methods Manual for Chemical Analysis of Water and Wastes
APHA	Standard Methods for the Examination of Water and Wastewater
US EPA	US Environmental Protection Agency Test Methods

Comments:

Please direct any inquiries regarding this report to our Client Services group.
Results relate only to samples as submitted

The test report shall not be reproduced except in full, without the written approval of the laboratory



Methodology and Notes

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Page: 4 of 4



Quality Control

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Date Received: Aug 04, 2004
Date Reported: Feb 27, 2006
Report Number: 820752

Page: 3 of 14

Aggregate Organic Constituents

Blanks	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Biochemical Oxygen Demand	mq/L	<4	0	-2	2	✓
Material Used:	BOD - Blank					
Date Acquired:	Aug 06, 2004					
Acquired By:	Maria Gaborni					
Replicates	Units	Replicate1	Replicate2	% RSD Criteria	Absolute Criteria	Passed QC
Biochemical Oxygen Demand	mq/L	54	54	30	8	✓
Material Used:	Surrey - Int. Duplicate 1					
Date Acquired:	Aug 06, 2004					
Acquired By:	Maria Gaborni					
Control Sample	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Biochemical Oxygen Demand	mq/L	174	180	129	231	✓
Material Used:	BOD - G/GA					
Date Acquired:	Aug 06, 2004					
Acquired By:	Maria Gaborni					



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Page: 4 of 14

Inorganic Nonmetallic Parameters

Blanks	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Ammonium - N	mq/L	<0.05	0.00	-0.08	0.08	✓
Kjeldahl Nitrogen	mq/L	<0.05	0.00	-0.05	0.05	✓
Phosphorus	mq/L	<0.05	0.0	-0.1	0.1	✓
Orthophosphate-P	mq/L	<0.05	0.00	-0.05	0.05	✓
Material Used:	Edmonton Method Blank					
Date Acquired:	Aug 11, 2004					
Acquired By:	Andrew Jong					
Replicates	Units	Replicate1	Replicate2	% RSD Criteria	Absolute Criteria	Passed QC
Ammonium - N	mq/L	20.6	20.6	9.99	0.10	✓
Kjeldahl Nitrogen	mg/L	17.3	16.7	9.99	0.30	✓
Phosphorus	mq/L	3.52	3.39	10.0	0.1	✓
Orthophosphate-P	mg/L	1.5	1.5	9.99	0.05	✓
Material Used:	Edmonton Duplicate					
Date Acquired:	Aug 11, 2004					
Acquired By:						
Control Sample	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Ammonium - N	mq/L	2.93	2.99	2.59	3.39	✓
Kjeldahl Nitrogen	mq/L	15.2	15.25	11.65	18.85	✓
Phosphorus	mq/L	8.32	8.0	7.2	8.8	✓
Material Used:	Water High					
Date Acquired:	Aug 05, 2004					
Acquired By:						
Ammonium - N	mq/L	0.78	0.79	0.66	0.91	✓
Kjeldahl Nitrogen	mq/L	3.07	3.00	2.41	3.59	✓
Phosphorus	mq/L	2.07	2.0	1.8	2.2	✓
Orthophosphate-P	mq/L	0.41	0.40	0.34	0.45	✓
Material Used:	Water Low					
Date Acquired:	Aug 11, 2004					
Acquired By:	Andrew Jong					



Quality Control

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Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: M. Tansey
Company: Echo Bay Mines

Project
ID: Requisition No. L48906
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NWL Lot ID: 324234
Control Number:
Date Received: Aug 04, 2004
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Page: 5 of 14

Metals Total

Blanks	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Calcium	mq/L	<0.2	0.0	0.0	0.1	✓
Iron	mq/L	<0.1	0.0	0.0	0.0	✓
Magnesium	mq/L	<0.1	0.0	0.0	0.0	✓
Manganese	mq/L	<0.005	0.000	-0.001	0.001	✓
Potassium	mq/L	<0.4	0.0	-0.1	0.1	✓
Silicon	mq/L	<0.05	0.02	-0.04	0.09	✓
Sodium	mq/L	<0.4	0.1	-0.2	0.3	✓
Sulfur	mq/L	<0.05	0.0	0.0	0.0	✓
Aluminum	uq/L	<5	0	-5	5	✓
Antimony	uq/L	<0.2	0.0	-0.2	0.2	✓
Arsenic	uq/L	<0.2	0.0	-0.2	0.2	✓
Barium	uq/L	<1	0	-1	1	✓
Beryllium	uq/L	<0.1	0.0	-0.1	0.1	✓
Bismuth	uq/L	<0.5	0.0	-0.5	0.5	✓
Boron	uq/L	<2	0	-2	2	✓
Cadmium	uq/L	<0.01	0.00	-0.01	0.01	✓
Chromium	uq/L	<0.5	0.0	-0.5	0.5	✓
Cobalt	uq/L	<0.1	0.0	-0.1	0.1	✓
Copper	uq/L	<1	0	-1	1	✓
Lead	uq/L	<0.1	0.0	-0.1	0.1	✓
Lithium	uq/L	<1	0	-1	1	✓
Molybdenum	uq/L	<1	0	-1	1	✓
Nickel	uq/L	<0.5	0.0	-0.5	0.5	✓
Selenium	uq/L	<0.2	0.0	-0.2	0.2	✓
Silver	uq/L	<0.1	0.0	-0.1	0.1	✓
Strontium	uq/L	<1	0	-1	1	✓
Thallium	uq/L	<0.05	0.00	-0.05	0.05	✓
Tin	uq/L	<1	0	-1	1	✓
Titanium	uq/L	<0.5	0.0	-0.5	0.5	✓
Uranium	uq/L	<0.5	0.0	-0.5	0.5	✓
Vanadium	uq/L	<0.1	0.0	-0.1	0.1	✓
Zinc	uq/L	<1	0	-1	1	✓
Zirconium	uq/L	<1	0	-1	1	✓

Material Used: Edmonton Method Blank
Date Acquired: Aug 05, 2004
Acquired By: Jesse Dang



Quality Control

Norwest Labs
7217 Roper Road NW
Edmonton, AB. T6B 3J4
Phone: (780) 438-5522
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T5J 2T2
Attn: Michael Tansey
Sampled By: M. Tansey
Company: Echo Bay Mines

Project
ID: Requisition No. L48906
Name:
Location:
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NWL Lot ID: 324234
Control Number:
Date Received: Aug 04, 2004
Date Reported: Feb 27, 2006
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Page: 6 of 14

Metals Total (Continued...)

Replicates	Units	Replicate1	Replicate2	% RSD Criteria	Absolute Criteria	Passed QC
Iron	mg/L	1.5	1.5	10.0	0.0	✓
Aluminum	ug/L	34	31	10	11	✓
Antimony	ug/L	<0.2	<0.2	10.0	0.4	✓
Arsenic	ug/L	0.9	0.8	10.0	0.4	✓
Barium	ug/L	66	68	10	2	✓
Beryllium	ug/L	<0.1	<0.1	10.0	0.2	✓
Bismuth	ug/L	<0.5	<0.5	10.0	1.1	✓
Boron	ug/L	7	6	10	4	✓
Cadmium	ug/L	0.01	0.01	9.99	0.02	✓
Chromium	ug/L	<0.5	<0.5	10.0	1.1	✓
Cobalt	ug/L	<0.1	<0.1	10.0	0.2	✓
Copper	ug/L	1	<1	10	2	✓
Lead	ug/L	<0.1	<0.1	10.0	0.2	✓
Lithium	ug/L	3	3	10	2	✓
Molybdenum	ug/L	<1	<1	10	2	✓
Nickel	ug/L	0.6	0.6	10.0	1.1	✓
Selenium	ug/L	<0.2	<0.2	10.0	0.4	✓
Silver	ug/L	0.2	0.2	10.0	0.2	✓
Strontium	ug/L	100	100	10	2	✓
Thallium	ug/L	<0.05	<0.05	9.99	0.11	✓
Tin	ug/L	<1	<1	10	2	✓
Titanium	ug/L	1.1	1.2	10.0	1.1	✓
Uranium	ug/L	0.7	0.7	10.0	1.1	✓
Vanadium	ug/L	0.3	0.3	10.0	0.2	✓
Zinc	ug/L	2	2	10	2	✓
Zirconium	ug/L	<1	<1	10	2	✓

Material Used: Edmonton Duplicate
Date Acquired: Aug 05, 2004
Acquired By: Jesse Dang



Quality Control

Norwest Labs
7217 Roper Road NW
Edmonton, AB. T6B 3J4
Phone: (780) 438-5522
Fax: (780) 438-0396

Bill to: Echo Bay Mines Ltd.
Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: M. Tansey
Company: Echo Bay Mines

Project
ID: Requisition No. L48906
Name:
Location:
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 324234
Control Number:
Date Received: Aug 04, 2004
Date Reported: Feb 27, 2006
Report Number: 820752

Page: 7 of 14

Metals Total (Continued...)

Control Sample	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Calcium	mq/L	49.0	49.6	45.6	53.7	✓
Iron	mq/L	2.0	2.0	1.8	2.2	✓
Magnesium	mq/L	19.8	20.3	18.6	22.0	✓
Manganese	mq/L	0.486	0.479	0.451	0.507	✓
Potassium	mq/L	47.5	47.8	43.5	52.1	✓
Silicon	mq/L	4.69	5.00	4.50	5.50	✓
Sodium	mq/L	47.7	49.1	44.4	53.8	✓
Sulfur	mq/L	9.35	9.7	8.7	10.6	✓
Aluminum	uq/L	364	322	273	371	✓
Antimony	uq/L	11.0	11.5	10.2	12.8	✓
Arsenic	uq/L	10.8	11.5	10.3	12.7	✓
Barium	uq/L	62	61	52	69	✓
Beryllium	uq/L	5.6	5.9	4.9	7.0	✓
Bismuth	uq/L	30.3	30.2	26.0	34.4	✓
Boron	uq/L	126	125	102	148	✓
Cadmium	uq/L	0.74	0.63	0.47	0.78	✓
Chromium	uq/L	33.0	31.8	27.5	36.2	✓
Cobalt	uq/L	6.5	6.4	5.4	7.5	✓
Copper	uq/L	62	63	55	70	✓
Lead	uq/L	6.5	6.2	5.4	7.0	✓
Lithium	uq/L	74	65	53	76	✓
Molybdenum	uq/L	60	61	53	69	✓
Nickel	uq/L	31.3	31.4	27.0	35.8	✓
Selenium	uq/L	10.1	11.0	9.7	12.3	✓
Silver	uq/L	6.4	6.2	5.5	7.0	✓
Strontium	uq/L	62	64	55	72	✓
Thallium	uq/L	3.18	3.14	2.56	3.72	✓
Tin	uq/L	58	59	52	66	✓
Titanium	uq/L	33.0	31.5	27.0	36.0	✓
Uranium	uq/L	31.2	30.8	26.9	34.7	✓
Vanadium	uq/L	6.6	6.5	5.4	7.6	✓
Zinc	uq/L	68	59	49	69	✓
Zirconium	uq/L	61	62	53	72	✓

Material Used: Edmonton Digestion Check
Date Acquired: Aug 05, 2004
Acquired By: Jesse Dang



Quality Control

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Bill to: Echo Bay Mines Ltd.
Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: M. Tansey
Company: Echo Bay Mines

Project
ID: Requisition No. L48906
Name:
Location:
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 324234
Control Number:
Date Received: Aug 04, 2004
Date Reported: Feb 27, 2006
Report Number: 820752

Page: 8 of 14

Metals Total (Continued...)

Control Sample	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Calcium	mq/L	245	253.0	232.0	274.0	✓
Iron	mq/L	9.6	9.7	9.1	10.3	✓
Magnesium	mq/L	95.2	102.0	91.9	112.1	✓
Manganese	mq/L	2.35	2.450	2.270	2.630	✓
Potassium	mq/L	248	253.0	225.6	280.5	✓
Silicon	mq/L	24.9	25.00	22.50	27.50	✓
Sodium	mq/L	253	251.0	221.0	281.0	✓
Sulfur	mq/L	48.9	50.0	46.3	53.7	✓
Material Used:	Metals High					
Date Acquired:	Aug 05, 2004					
Acquired By:						



Quality Control

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Fax: (780) 438-0396

Bill to: Echo Bay Mines Ltd.
Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: M. Tansey
Company: Echo Bay Mines

Project
ID: Requisition No. L48906
Name:
Location:
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 324234
Control Number:
Date Received: Aug 04, 2004
Date Reported: Feb 27, 2006
Report Number: 820752

Page: 9 of 14

Metals Total (Continued...)

Control Sample	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Calcium	mq/L	4.8	4.7	4.3	5.2	✓
Iron	mq/L	0.2	0.2	0.2	0.2	✓
Magnesium	mq/L	1.8	1.9	1.7	2.1	✓
Manganese	mq/L	0.048	0.048	0.043	0.052	✓
Potassium	mq/L	4.8	5.0	4.4	5.6	✓
Silicon	mq/L	0.47	0.50	0.45	0.55	✓
Sodium	mq/L	4.9	5.2	4.4	6.1	✓
Sulfur	mq/L	0.92	1.0	0.8	1.1	✓
Aluminum	uq/L	924	1000	850	1150	✓
Antimony	uq/L	39.9	40.0	34.0	46.0	✓
Arsenic	uq/L	39.2	40.0	34.0	46.0	✓
Barium	uq/L	196	200	170	230	✓
Beryllium	uq/L	18.9	20.0	17.0	23.0	✓
Bismuth	uq/L	99.1	100.0	85.0	115.0	✓
Boron	uq/L	375	400	340	460	✓
Cadmium	uq/L	2.08	2.00	1.70	2.30	✓
Chromium	uq/L	95.7	100.0	85.0	115.0	✓
Cobalt	uq/L	19.9	20.0	17.0	23.0	✓
Copper	uq/L	194	200	170	230	✓
Lead	uq/L	19.9	20.0	17.0	23.0	✓
Lithium	uq/L	185	200	170	230	✓
Molybdenum	uq/L	198	200	170	230	✓
Nickel	uq/L	98.1	100.0	85.0	115.0	✓
Selenium	uq/L	39.2	40.0	34.0	46.0	✓
Silver	uq/L	20.3	20.0	17.0	23.0	✓
Strontium	uq/L	191	200	170	230	✓
Thallium	uq/L	10.0	10.00	8.50	11.50	✓
Tin	uq/L	192	200	170	230	✓
Titanium	uq/L	96.0	100.0	85.0	115.0	✓
Uranium	uq/L	98.1	100.0	85.0	115.0	✓
Vanadium	uq/L	19.1	20.0	17.0	23.0	✓
Zinc	uq/L	198	200	170	230	✓
Zirconium	uq/L	197	200	170	230	✓

Material Used: Metals Low
Date Acquired: Aug 05, 2004
Acquired By: Jesse Dang



Quality Control

Norwest Labs
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Edmonton, AB. T6B 3J4
Phone: (780) 438-5522
Fax: (780) 438-0396

Bill to: Echo Bay Mines Ltd.
Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: M. Tansey
Company: Echo Bay Mines

Project
ID: Requisition No. L48906
Name:
Location:
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 324234
Control Number:
Date Received: Aug 04, 2004
Date Reported: Feb 27, 2006
Report Number: 820752

Page: 10 of 14

Metals Total (Continued...)

Control Sample	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Aluminum	uq/L	51	50	43	58	✓
Antimony	uq/L	1.9	2.0	1.7	2.3	✓
Arsenic	uq/L	2.0	2.0	1.7	2.3	✓
Barium	uq/L	10	10	9	12	✓
Beryllium	uq/L	0.9	1.0	0.9	1.2	✓
Bismuth	uq/L	5.0	5.0	4.3	5.8	✓
Boron	uq/L	20	20	17	23	✓
Cadmium	uq/L	0.11	0.10	0.09	0.12	✓
Chromium	uq/L	4.9	5.0	4.3	5.8	✓
Cobalt	uq/L	1.0	1.0	0.9	1.2	✓
Copper	uq/L	10	10	9	12	✓
Lead	uq/L	1.0	1.0	0.9	1.2	✓
Lithium	uq/L	10	10	9	12	✓
Molybdenum	uq/L	10	10	9	12	✓
Nickel	uq/L	5.3	5.0	4.3	5.8	✓
Selenium	uq/L	2.1	2.0	1.7	2.3	✓
Silver	uq/L	1.0	1.0	0.9	1.2	✓
Strontium	uq/L	10	10	9	12	✓
Thallium	uq/L	0.49	0.50	0.43	0.58	✓
Tin	uq/L	10	10	9	12	✓
Titanium	uq/L	5.0	5.0	4.3	5.8	✓
Uranium	uq/L	5.0	5.0	4.3	5.8	✓
Vanadium	uq/L	1.0	1.0	0.9	1.2	✓
Zinc	uq/L	10	10	9	12	✓
Zirconium	uq/L	10	10	9	12	✓

Material Used: Metals Trace
Date Acquired: Aug 05, 2004
Acquired By: Jesse Dang



Quality Control

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Bill to: Echo Bay Mines Ltd.
Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: M. Tansey
Company: Echo Bay Mines

Project
ID: Requisition No. L48906
Name:
Location:
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 324234
Control Number:
Date Received: Aug 04, 2004
Date Reported: Feb 27, 2006
Report Number: 820752

Page: 11 of 14

Routine Water

Blanks	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Calcium	mq/L	<0.2	0.0	-0.2	0.2	✓
Magnesium	mq/L	<0.1	0.0	-0.1	0.1	✓
Nitrate - N	mq/L	<0.1	0.00	-0.10	0.10	✓
Nitrite - N	mq/L	<0.05	0.000	-0.050	0.050	✓
Material Used:	Edmonton Method Blank					
Date Acquired:	Aug 05, 2004					
Acquired By:	Marc Dzura					
Replicates	Units	Replicate1	Replicate2	% RSD Criteria	Absolute Criteria	Passed QC
Calcium	mq/L	1600	1610	10.0	0.6	✓
Magnesium	mg/L	376	376	10.0	0.2	✓
Nitrate - N	mq/L	44.8	44.9	9.99	0.01	✓
Nitrite - N	mg/L	<0.2	<0.2	9.990	0.010	✓
Material Used:	Edmonton Duplicate					
Date Acquired:	Aug 05, 2004					
Acquired By:	Marc Dzura					
pH	pH	4.4	7.7	30.00	0.10	✓
Material Used:	Surrey - Int. Duplicate 1					
Date Acquired:	Aug 06, 2004					
Acquired By:	Maria Gaborni					



Quality Control

Norwest Labs
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Edmonton, AB. T6B 3J4
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Bill to: Echo Bay Mines Ltd.
Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: M. Tansey
Company: Echo Bay Mines

Project
ID: Requisition No. L48906
Name:
Location:
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 324234
Control Number:
Date Received: Aug 04, 2004
Date Reported: Feb 27, 2006
Report Number: 820752

Page: 12 of 14

Routine Water (Continued...)

Control Sample	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Calcium	mq/L	243	251.0	236.8	265.2	✓
Magnesium	mq/L	97.2	102.0	94.8	109.2	✓
Material Used:	Metals High					
Date Acquired:	Aug 05, 2004					
Acquired By:	Fernando Maglalan					
Calcium	mq/L	4.8	4.8	4.3	5.3	✓
Magnesium	mq/L	1.8	2.0	1.7	2.2	✓
Material Used:	Metals Low					
Date Acquired:	Aug 05, 2004					
Acquired By:	Fernando Maglalan					
pH		9.17	9.23	9.11	9.35	✓
Electrical Conductivity	dS/m at 25 C	2.68	2.730	2.611	2.849	✓
Nitrate - N	mq/L	10.2	10.00	9.61	10.39	✓
Nitrite - N	mq/L	10.2	10.000	9.562	10.438	✓
P-Alkalinity	mq/L	516	520	473	567	✓
T-Alkalinity	mq/L	1010	1005	972	1038	✓
Material Used:	Water High					
Date Acquired:	Aug 05, 2004					
Acquired By:	Amanda Mitchell					
pH		6.86	6.90	6.83	6.97	✓
Electrical Conductivity	dS/m at 25 C	0.073	0.076	0.070	0.081	✓
Nitrate - N	mq/L	0.5	0.50	0.44	0.56	✓
Nitrite - N	mq/L	0.51	0.495	0.437	0.553	✓
P-Alkalinity	mq/L	64	57	39	75	✓
T-Alkalinity	mq/L	128	128	119	137	✓
Material Used:	Water Low					
Date Acquired:	Aug 05, 2004					
Acquired By:	Amanda Mitchell					



Analytical Report

Norwest Labs
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Bill to: Echo Bay Mines Ltd.
Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J2T2
Attn: Michael Tansey
Sampled By: M.Tansey
Company: Echo Bay

Project
ID: Requisition No. L48906
Name:
Location:
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 334332
Control Number:
Date Received: Sep 23, 2004
Date Reported: Oct 01, 2004
Report Number: 598879

Page: 1 of 4

NWL Number 334332-1
Sample Date Sep 22, 2004
Sample Description 40050 / 925-14
Matrix Water - General

Analyte		Units	Results	Results	Results	Detection Limit
Aggregate Organic Constituents						
Biochemical Oxygen Demand	5 Day	mg/L	<4			4
Inorganic Nonmetallic Parameters						
Ammonium - N		mg/L	0.06			0.05
Kjeldahl Nitrogen	Total	mg/L	1.07			0.05
Phosphorus	Total	mg/L	0.14			0.05
Orthophosphate-P	Dissolved	mg/L	<0.05			0.05
Metals Total						
Calcium	Total	mg/L	159			0.2
Iron	Total	mg/L	0.3			0.1
Magnesium	Total	mg/L	14.8			0.1
Manganese	Total	mg/L	0.226			0.005
Potassium	Total	mg/L	11.0			0.4
Silicon	Total	mg/L	0.05			0.05
Sodium	Total	mg/L	194			0.4
Sulphur	Total	mg/L	44.9			0.05
Aluminum	Total	mg/L	0.050			0.005
Antimony	Total	mg/L	0.0005			0.0002
Arsenic	Total	mg/L	0.0096			0.0002
Barium	Total	mg/L	0.046			0.001
Beryllium	Total	mg/L	<0.0001			0.0001
Bismuth	Total	mg/L	<0.0005			0.0005
Boron	Total	mg/L	0.065			0.002
Cadmium	Total	mg/L	0.00009			0.00001
Chromium	Total	mg/L	<0.0005			0.0005
Cobalt	Total	mg/L	0.0057			0.0001
Copper	Total	mg/L	0.004			0.001
Lead	Total	mg/L	0.0002			0.0001
Lithium	Total	mg/L	0.678			0.001
Molybdenum	Total	mg/L	0.002			0.001
Nickel	Total	mg/L	0.0222			0.0005
Selenium	Total	mg/L	<0.0002			0.0002
Silver	Total	mg/L	<0.0001			0.0001
Strontium	Total	mg/L	3.17			0.001
Thallium	Total	mg/L	<0.00005			0.00005
Tin	Total	mg/L	<0.001			0.001



Analytical Report

Norwest Labs
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Bill to: Echo Bay Mines Ltd.
Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J2T2
Attn: Michael Tansey
Sampled By: M.Tansey
Company: Echo Bay

Project
ID: Requisition No. L48906
Name:
Location:
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 334332
Control Number:
Date Received: Sep 23, 2004
Date Reported: Oct 01, 2004
Report Number: 598879

Page: 2 of 4

NWL Number 334332-1
Sample Date Sep 22, 2004
Sample Description 40050 / 925-14
Matrix Water - General

Analyte		Units	Results	Results	Results	Detection Limit
Metals Total - Continued						
Titanium	Total	mg/L	0.0053			0.0005
Uranium	Total	mg/L	<0.0005			0.0005
Vanadium	Total	mg/L	0.0003			0.0001
Zinc	Total	mg/L	0.031			0.001
Zirconium	Total	mg/L	<0.001			0.001
Microbiological Analysis						
Total Coliforms	Membrane Filtration	CFU/100 mL	10			1
Fecal Coliforms	Membrane Filtration	CFU/100 mL	<1			1
Physical and Aggregate Properties						
Solids	Total Suspended	mg/L	<2			1
Routine Water						
pH	Water	pH	7.2			
Electrical Conductivity		µS/cm at 25 C	1970			1
Calcium	Dissolved	mg/L	151			0.2
Magnesium	Dissolved	mg/L	13.9			0.1
Nitrate - N		mg/L	6.2			0.1
Nitrite - N		mg/L	<0.2			0.05
Hydroxide		mg/L	<5			5
Carbonate		mg/L	<6			6
Bicarbonate		mg/L	18			5
P-Alkalinity	as CaCO3	mg/L	<5			5
T-Alkalinity	as CaCO3	mg/L	15			5
Hardness	Dissolved as CaCO3	mg/L	435			

Approved by:

Anthony Neumann, MSc
Laboratory Operations Manager



Methodology and Notes

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Fax: (780) 438-0396

Bill to: Echo Bay Mines Ltd.
Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J2T2
Attn: Michael Tansey
Sampled By: M. Tansey
Company: Echo Bay

Project
ID: Requisition No. L48906
Name:
Location:
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 334332
Control Number:
Date Received: Sep 23, 2004
Date Reported: Oct 01, 2004
Report Number: 598879

Page: 3 of 4

Method of Analysis:

MethodName	Reference	Method	Date Analysis Started	Location
Alkalinity, pH, and EC in water	APHA	* Conductivity - Laboratory Method, 2510 B	24-Sep-04	Norwest Labs Edmonton
Alkalinity, pH, and EC in water	APHA	* Titration Method, 2320 B	24-Sep-04	Norwest Labs Edmonton
Ammonium-N in Water	APHA	* Automated Phenate Method, 4500-NH3 G	1-Oct-04	Norwest Labs Edmonton
Anions (Routine) by Ion Chromatography	APHA	Ion Chromatography with Chemical Suppression of Eluent Cond., 4110 B	25-Sep-04	Norwest Labs Edmonton
BOD in water	APHA	* 5 Day, 5210 B	24-Sep-04	Norwest Labs Surrey
Fecal Coliforms - MF	APHA	Fecal Coliform Membrane Filter Procedure, 9222 D	24-Sep-04	Norwest Labs Calgary
Kjeldahl Nitrogen & Phosphorus (Total) in Water	Alberta Research Council	* Nitrogen, Total Kjeldahl, 07021 626	30-Sep-04	Norwest Labs Edmonton
Kjeldahl Nitrogen & Phosphorus (Total) in Water	APHA	* Automated Ascorbic Acid Reduction Method, 4500-P F	30-Sep-04	Norwest Labs Edmonton
Metals ICP-MS (Total) in water	US EPA	* Determination of Trace Elements in Waters and Wastes by ICP-MS, 200.8	24-Sep-04	Norwest Labs Edmonton
Metals Trace (Dissolved) in water	APHA	* Inductively Coupled Plasma (ICP) Method, 3120 B	25-Sep-04	Norwest Labs Edmonton
Metals Trace (Total) in water	APHA	* Inductively Coupled Plasma (ICP) Method, 3120 B	24-Sep-04	Norwest Labs Edmonton
Orthophosphate-P in Water	APHA	* Automated Ascorbic Acid Reduction Method, 4500-P F	30-Sep-04	Norwest Labs Edmonton
pH in water	APHA	* Electrometric Method, 4500-H+ B	27-Sep-04	Norwest Labs Surrey
Solids Suspended (Total, Fixed and Volatile)	APHA	* Total Suspended Solids Dried at 103-105°C, 2540 D	28-Sep-04	Norwest Labs Surrey
Total Coliforms - MF	APHA	Standard Total Coliform Membrane Filter Procedure, 9222 B	24-Sep-04	Norwest Labs Calgary

* Norwest method(s) is based on reference method

References:

Alberta Research Council	Methods Manual for Chemical Analysis of Water and Wastes
APHA	Standard Methods for the Examination of Water and Wastewater
US EPA	US Environmental Protection Agency Test Methods

Comments:

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Results relate only to samples as submitted

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Methodology and Notes

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Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J2T2
Attn: Michael Tansey
Sampled By: M.Tansey
Company: Echo Bay

Project
ID: Requisition No. L48906
Name:
Location:
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 334332
Control Number:
Date Received: Sep 23, 2004
Date Reported: Oct 01, 2004
Report Number: 598879

Page: 4 of 4

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Sampled By: M.Tansey
Company: Echo Bay

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Acct. Code:

NWL Lot ID: 334332
Control Number:
Date Received: Sep 23, 2004
Date Reported: Feb 27, 2006
Report Number: 820754

Page: 3 of 14

Aggregate Organic Constituents

Blanks	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Biochemical Oxygen Demand	mq/L	<4	0	-2	2	✓
Material Used:	BOD - Blank					
Date Acquired:	Sep 24, 2004					
Acquired By:	Maria Gaborni					
Replicates	Units	Replicate1	Replicate2	% RSD Criteria	Absolute Criteria	Passed QC
Biochemical Oxygen Demand	mq/L	690	660	30	8	✓
Material Used:	Surrey - Int. Duplicate 1					
Date Acquired:	Sep 24, 2004					
Acquired By:	Maria Gaborni					
Control Sample	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Biochemical Oxygen Demand	mq/L	162	180	129	231	✓
Material Used:	BOD - G/GA					
Date Acquired:	Sep 24, 2004					
Acquired By:	Maria Gaborni					



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Date Reported: Feb 27, 2006
Report Number: 820754

Page: 4 of 14

Inorganic Nonmetallic Parameters

Blanks	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Ammonium - N	mq/L	<0.05	0.00	-0.08	0.08	✓
Kjeldahl Nitrogen	mq/L	<0.05	0.00	-0.05	0.05	✓
Phosphorus	mq/L	<0.05	0.0	-0.1	0.1	✓
Orthophosphate-P	mq/L	<0.05	0.00	-0.05	0.05	✓

Material Used: Edmonton Method Blank
Date Acquired: Sep 30, 2004
Acquired By: Andrew Jong

Replicates	Units	Replicate1	Replicate2	% RSD Criteria	Absolute Criteria	Passed QC
Ammonium - N	mq/L	0.06	0.07	9.99	0.10	✓
Kjeldahl Nitrogen	mg/L	8.03	8.47	9.99	0.30	✓
Phosphorus	mq/L	0.07	0.06	10.0	0.1	✓
Orthophosphate-P	mg/L	1.3	1.3	9.99	0.05	✓

Material Used: Edmonton Duplicate
Date Acquired: Sep 30, 2004
Acquired By: Andrew Jong

Control Sample	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Ammonium - N	mq/L	3.01	2.99	2.59	3.39	✓
Kjeldahl Nitrogen	mq/L	15.0	15.25	11.65	18.85	✓
Phosphorus	mq/L	7.93	8.0	7.2	8.8	✓

Material Used: Water High
Date Acquired: Sep 29, 2004
Acquired By: Linda Li

Ammonium - N	mq/L	0.81	0.79	0.66	0.91	✓
Kjeldahl Nitrogen	mq/L	3.06	3.00	2.41	3.59	✓
Phosphorus	mq/L	2.03	2.0	1.8	2.2	✓
Orthophosphate-P	mq/L	0.40	0.41	0.36	0.47	✓

Material Used: Water Low
Date Acquired: Sep 30, 2004
Acquired By: Andrew Jong



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Control Number:
Date Received: Sep 23, 2004
Date Reported: Feb 27, 2006
Report Number: 820754

Page: 5 of 14

Metals Total

Blanks	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Calcium	mq/L	<0.2	0.0	0.0	0.1	✓
Iron	mq/L	<0.1	0.0	0.0	0.0	✓
Magnesium	mq/L	<0.1	0.0	0.0	0.0	✓
Manganese	mq/L	<0.005	0.000	-0.001	0.001	✓
Potassium	mq/L	<0.4	0.0	-0.1	0.1	✓
Silicon	mq/L	<0.05	0.02	-0.04	0.09	✓
Sodium	mq/L	<0.4	0.1	-0.2	0.3	✓
Sulfur	mq/L	<0.05	0.0	0.0	0.0	✓
Aluminum	uq/L	<5	0	-5	5	✓
Antimony	uq/L	<0.2	0.0	-0.2	0.2	✓
Arsenic	uq/L	<0.2	0.0	-0.2	0.2	✓
Barium	uq/L	<1	0	-1	1	✓
Beryllium	uq/L	<0.1	0.0	-0.1	0.1	✓
Bismuth	uq/L	<0.5	0.0	-0.5	0.5	✓
Boron	uq/L	<2	0	-2	2	✓
Cadmium	uq/L	<0.01	0.00	-0.01	0.01	✓
Chromium	uq/L	<0.5	0.0	-0.5	0.5	✓
Cobalt	uq/L	<0.1	0.0	-0.1	0.1	✓
Copper	uq/L	<1	0	-1	1	✓
Lead	uq/L	<0.1	0.0	-0.1	0.1	✓
Lithium	uq/L	<1	0	-1	1	✓
Molybdenum	uq/L	<1	0	-1	1	✓
Nickel	uq/L	<0.5	0.0	-0.5	0.5	✓
Selenium	uq/L	<0.2	0.0	-0.2	0.2	✓
Silver	uq/L	<0.1	0.0	-0.1	0.1	✓
Strontium	uq/L	<1	0	-1	1	✓
Thallium	uq/L	<0.05	0.00	-0.05	0.05	✓
Tin	uq/L	<1	0	-1	1	✓
Titanium	uq/L	<0.5	0.0	-0.5	0.5	✓
Uranium	uq/L	<0.5	0.0	-0.5	0.5	✓
Vanadium	uq/L	<0.1	0.0	-0.1	0.1	✓
Zinc	uq/L	<1	0	-1	1	✓
Zirconium	uq/L	<1	0	-1	1	✓

Material Used: Edmonton Method Blank
Date Acquired: Sep 23, 2004
Acquired By: Jesse Dang



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Sampled By: M.Tansey
Company: Echo Bay

Project
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Date Received: Sep 23, 2004
Date Reported: Feb 27, 2006
Report Number: 820754

Page: 6 of 14

Metals Total (Continued...)

Replicates	Units	Replicate1	Replicate2	% RSD Criteria	Absolute Criteria	Passed QC
Potassium	mq/L	<0.4	<0.4	10.0	1.2	✓
Aluminum	ug/L	<5	<5	10	11	✓
Antimony	ug/L	<0.2	<0.2	10.0	0.4	✓
Arsenic	ug/L	<0.2	<0.2	10.0	0.4	✓
Barium	ug/L	<1	<1	10	2	✓
Beryllium	ug/L	<0.1	<0.1	10.0	0.2	✓
Bismuth	ug/L	<0.5	<0.5	10.0	1.1	✓
Boron	ug/L	16	14	10	4	✓
Cadmium	ug/L	0.01	0.02	9.99	0.02	✓
Chromium	ug/L	<0.5	<0.5	10.0	1.1	✓
Cobalt	ug/L	<0.1	<0.1	10.0	0.2	✓
Copper	ug/L	<1	<1	10	2	✓
Lead	ug/L	<0.1	<0.1	10.0	0.2	✓
Lithium	ug/L	<1	<1	10	2	✓
Molybdenum	ug/L	<1	<1	10	2	✓
Nickel	ug/L	<0.5	<0.5	10.0	1.1	✓
Selenium	ug/L	<0.2	<0.2	10.0	0.4	✓
Silver	ug/L	<0.1	<0.1	10.0	0.2	✓
Strontium	ug/L	1	1	10	2	✓
Thallium	ug/L	<0.05	<0.05	9.99	0.11	✓
Tin	ug/L	3	<1	10	2	✓
Titanium	ug/L	<0.5	1.3	10.0	1.1	✓
Uranium	ug/L	<0.5	<0.5	10.0	1.1	✓
Vanadium	ug/L	0.1	0.1	10.0	0.2	✓
Zinc	ug/L	58	56	10	2	✓

Material Used: Edmonton Duplicate
Date Acquired: Sep 23, 2004
Acquired By: Jesse Dang



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Attn: Michael Tansey
Sampled By: M.Tansey
Company: Echo Bay

Project
ID: Requisition No. L48906
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NWL Lot ID: 334332
Control Number:
Date Received: Sep 23, 2004
Date Reported: Feb 27, 2006
Report Number: 820754

Page: 7 of 14

Metals Total (Continued...)

Control Sample	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Calcium	mq/L	49.4	49.6	45.6	53.7	✓
Iron	mq/L	2.0	2.0	1.8	2.2	✓
Magnesium	mq/L	20.1	20.3	18.6	22.0	✓
Manganese	mq/L	0.486	0.479	0.451	0.507	✓
Potassium	mq/L	48.0	47.8	43.5	52.1	✓
Silicon	mq/L	4.67	5.00	4.50	5.50	✓
Sodium	mq/L	48.6	49.1	44.4	53.8	✓
Sulfur	mq/L	9.23	9.7	8.7	10.6	✓
Aluminum	uq/L	336	322	273	371	✓
Antimony	uq/L	11.7	11.5	10.2	12.8	✓
Arsenic	uq/L	12.0	11.5	10.3	12.7	✓
Barium	uq/L	64	61	52	69	✓
Beryllium	uq/L	5.9	5.9	4.9	7.0	✓
Bismuth	uq/L	31.7	30.2	26.0	34.4	✓
Boron	uq/L	120	125	102	148	✓
Cadmium	uq/L	0.57	0.63	0.47	0.78	✓
Chromium	uq/L	31.6	31.8	27.5	36.2	✓
Cobalt	uq/L	6.4	6.4	5.4	7.5	✓
Copper	uq/L	62	63	55	70	✓
Lead	uq/L	6.3	6.2	5.4	7.0	✓
Lithium	uq/L	63	65	53	76	✓
Molybdenum	uq/L	62	61	53	69	✓
Nickel	uq/L	31.8	31.4	27.0	35.8	✓
Selenium	uq/L	11.3	11.0	9.7	12.3	✓
Silver	uq/L	6.8	6.2	5.5	7.0	✓
Strontium	uq/L	65	64	55	72	✓
Thallium	uq/L	3.14	3.14	2.56	3.72	✓
Tin	uq/L	61	59	52	66	✓
Titanium	uq/L	32.9	31.5	27.0	36.0	✓
Uranium	uq/L	30.9	30.8	26.9	34.7	✓
Vanadium	uq/L	6.6	6.5	5.4	7.6	✓
Zinc	uq/L	60	59	49	69	✓
Zirconium	uq/L	63	62	53	72	✓

Material Used: Edmonton Digestion Check
Date Acquired: Sep 23, 2004
Acquired By: Jesse Dang



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Sampled By: M.Tansey
Company: Echo Bay

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NWL Lot ID: 334332
Control Number:
Date Received: Sep 23, 2004
Date Reported: Feb 27, 2006
Report Number: 820754

Page: 8 of 14

Metals Total (Continued...)

Control Sample	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Calcium	mq/L	253	253.0	232.0	274.0	✓
Iron	mq/L	9.9	9.7	9.1	10.3	✓
Magnesium	mq/L	100	102.0	91.9	112.1	✓
Manganese	mq/L	2.46	2.450	2.270	2.630	✓
Potassium	mq/L	254	253.0	225.6	280.5	✓
Silicon	mq/L	24.4	25.00	22.50	27.50	✓
Sodium	mq/L	258	251.0	221.0	281.0	✓
Sulfur	mq/L	49.1	50.0	46.3	53.7	✓
Material Used:	Metals High					
Date Acquired:	Sep 23, 2004					
Acquired By:	Fernando Maglalaneg					



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Company: Echo Bay

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Date Reported: Feb 27, 2006
Report Number: 820754

Page: 9 of 14

Metals Total (Continued...)

Control Sample	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Calcium	mq/L	4.8	4.7	4.3	5.2	✓
Iron	mq/L	0.2	0.2	0.2	0.2	✓
Magnesium	mq/L	1.8	1.9	1.7	2.1	✓
Manganese	mq/L	0.049	0.048	0.043	0.052	✓
Potassium	mq/L	4.8	5.0	4.4	5.6	✓
Silicon	mq/L	0.46	0.50	0.45	0.55	✓
Sodium	mq/L	4.9	5.2	4.4	6.1	✓
Sulfur	mq/L	0.92	1.0	0.8	1.1	✓
Aluminum	uq/L	945	1000	850	1150	✓
Antimony	uq/L	40.4	40.0	34.0	46.0	✓
Arsenic	uq/L	39.0	40.0	34.0	46.0	✓
Barium	uq/L	197	200	170	230	✓
Beryllium	uq/L	20.3	20.0	17.0	23.0	✓
Bismuth	uq/L	100	100.0	85.0	115.0	✓
Boron	uq/L	395	400	340	460	✓
Cadmium	uq/L	2.18	2.00	1.70	2.30	✓
Chromium	uq/L	91.3	100.0	85.0	115.0	✓
Cobalt	uq/L	19.1	20.0	17.0	23.0	✓
Copper	uq/L	186	200	170	230	✓
Lead	uq/L	20.2	20.0	17.0	23.0	✓
Lithium	uq/L	199	200	170	230	✓
Molybdenum	uq/L	194	200	170	230	✓
Nickel	uq/L	94.9	100.0	85.0	115.0	✓
Selenium	uq/L	38.9	40.0	34.0	46.0	✓
Silver	uq/L	19.5	20.0	17.0	23.0	✓
Strontium	uq/L	196	200	170	230	✓
Thallium	uq/L	10.3	10.00	8.50	11.50	✓
Tin	uq/L	191	200	170	230	✓
Titanium	uq/L	94.6	100.0	85.0	115.0	✓
Uranium	uq/L	99.7	100.0	85.0	115.0	✓
Vanadium	uq/L	18.2	20.0	17.0	23.0	✓
Zinc	uq/L	196	200	170	230	✓
Zirconium	uq/L	192	200	170	230	✓

Material Used: Metals Low
Date Acquired: Sep 23, 2004
Acquired By: Jesse Dang



Quality Control

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Date Received: Sep 23, 2004
Date Reported: Feb 27, 2006
Report Number: 820754

Page: 10 of 14

Metals Total (Continued...)

Control Sample	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Aluminum	uq/L	52	50	43	58	✓
Antimony	uq/L	2.0	2.0	1.7	2.3	✓
Arsenic	uq/L	2.0	2.0	1.7	2.3	✓
Barium	uq/L	10	10	9	12	✓
Beryllium	uq/L	1.0	1.0	0.9	1.2	✓
Bismuth	uq/L	5.1	5.0	4.3	5.8	✓
Boron	uq/L	20	20	17	23	✓
Cadmium	uq/L	0.10	0.10	0.09	0.12	✓
Chromium	uq/L	5.0	5.0	4.3	5.8	✓
Cobalt	uq/L	1.0	1.0	0.9	1.2	✓
Copper	uq/L	10	10	9	12	✓
Lead	uq/L	1.0	1.0	0.9	1.2	✓
Lithium	uq/L	10	10	9	12	✓
Molybdenum	uq/L	10	10	9	12	✓
Nickel	uq/L	5.1	5.0	4.3	5.8	✓
Selenium	uq/L	2.1	2.0	1.7	2.3	✓
Silver	uq/L	1.0	1.0	0.9	1.2	✓
Strontium	uq/L	11	10	9	12	✓
Thallium	uq/L	0.49	0.50	0.43	0.58	✓
Tin	uq/L	10	10	9	12	✓
Titanium	uq/L	5.0	5.0	4.3	5.8	✓
Uranium	uq/L	5.3	5.0	4.3	5.8	✓
Vanadium	uq/L	1.0	1.0	0.9	1.2	✓
Zinc	uq/L	9	10	9	12	✓
Zirconium	uq/L	10	10	9	12	✓

Material Used: Metals Trace
Date Acquired: Sep 23, 2004
Acquired By: Jesse Dang

Physical and Aggregate Properties

Replicates	Units	Replicate1	Replicate2	% RSD Criteria	Absolute Criteria	Passed QC
Solids	mg/L	11	10	30	5	✓

Material Used: Surrey - Int. Duplicate 1
Date Acquired: Sep 28, 2004
Acquired By: Maria Gaborni

Control Sample	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Solids	mg/L	135	134	124	144	✓

Material Used: S1004 - SS
Date Acquired: Sep 28, 2004
Acquired By: Maria Gaborni

Material Used: Surrey - Int. Duplicate 1
Date Acquired: Sep 27, 2004
Acquired By: Maria Gaborni



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Attn: Michael Tansey
Sampled By: M.Tansey
Company: Echo Bay

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Control Number:
Date Received: Sep 23, 2004
Date Reported: Feb 27, 2006
Report Number: 820754

Page: 12 of 14

Routine Water (Continued...)

Control Sample	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Calcium	mq/L	254	251.0	236.8	265.2	✓
Magnesium	mq/L	98.0	102.0	94.8	109.2	✓
Material Used:	Metals High					
Date Acquired:	Sep 23, 2004					
Acquired By:	Jesse Dang					
Calcium	mg/L	4.9	4.8	4.3	5.3	✓
Magnesium	mg/L	1.8	2.0	1.7	2.2	✓
Material Used:	Metals Low					
Date Acquired:	Sep 23, 2004					
Acquired By:	Jesse Dang					
pH		9.21	9.23	9.11	9.35	✓
Electrical Conductivity	dS/m at 25 C	2.71	2.730	2.611	2.849	✓
Nitrate - N	mq/L	10.2	10.00	9.61	10.39	✓
Nitrite - N	mq/L	10.1	10.000	9.562	10.438	✓
P-Alkalinity	mq/L	521	520	473	567	✓
T-Alkalinity	mq/L	1020	1005	972	1038	✓
Material Used:	Water High					
Date Acquired:	Sep 24, 2004					
Acquired By:	Amanda Mitchell					
pH		6.87	6.90	6.83	6.97	✓
Electrical Conductivity	dS/m at 25 C	0.075	0.076	0.070	0.081	✓
Nitrate - N	mq/L	0.5	0.50	0.44	0.56	✓
Nitrite - N	mq/L	0.50	0.495	0.437	0.553	✓
P-Alkalinity	mq/L	62	57	39	75	✓
T-Alkalinity	mq/L	129	128	119	137	✓
Material Used:	Water Low					
Date Acquired:	Sep 24, 2004					
Acquired By:	Amanda Mitchell					

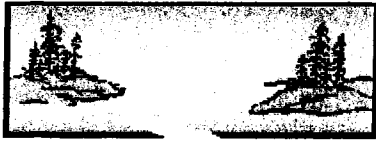
APPENDIX B

1 - Norwest Labs QC Reports for Aug 4 and Sept 22, 2004

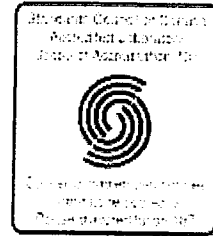
2 - INAC (Taiga Environmental Laboratory) 925-14 Analysis, July 14, 2004

3 - Norwest Labs Ltd. Analytical and QC Reports 2005

4 - 2005 Bioassay Results and QC Data



Taiga Environmental Laboratory
4601-52nd Ave., Box 1500, Yellowknife, NT. X1A 2R3
Tel: (867)-669-2788 Fax: (867)-669-2718



- 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

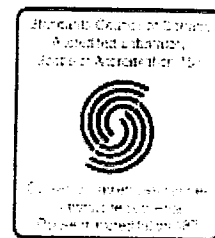
Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifer
<u>Physicals</u>						
Alkalinity	9.9	0.3	mg/L	16-Jul-04	SM2320:B	
Conductivity, Specific	1420	0.3	µS/cm	16-Jul-04	SM2510:B	
pH	7.05	0.05	pH units	16-Jul-04	SM4500-H:B	
Solids, Total Suspended	12	3	mg/L	20-Jul-04	SM2540:D	
Turbidity	4.14	0.05	NTU	19-Jul-04	SM2130:B	
<u>Nutrients</u>						
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	
<u>Major Ions</u>						
Chloride	< 0.2	0.2	mg/L	21-Jul-04	SM4110:B	
Sulphate	93	1	mg/L	21-Jul-04	SM4110:B	

Report Date: Thursday, August 26, 2004

Page 8 of 14



Taiga Environmental Laboratory
4601-52nd Ave., Box 1500, Yellowknife, NT. X1A 2R3
Tel: (867)-669-2788 Fax: (867)-669-2718



- CERTIFICATE OF ANALYSIS -

Client Sample ID: Lupin Sewage Effluent 925-14

Taiga Sample ID: 241605

Subcontracted Major Ions

Calcium	110	0.2	mg/L	25-Aug-04	SM3120:B
Magnesium	9.6	0.1	mg/L	25-Aug-04	SM3120:B
Potassium	7.56	0.05	mg/L	25-Aug-04	SM3120:B
Sodium	134	0.01	mg/L	25-Aug-04	SM3120:B

Microbiology

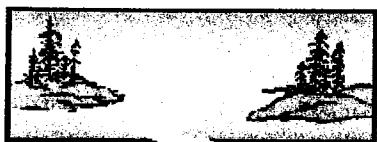
Coliforms, Fecal	10	1	CFU/100mL	15-Jul-04	SM9222:D
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Subcontracted Organics

Phenols	1.2	0.5	µg/L	27-Jul-04	SM5530:C
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Metals, Total

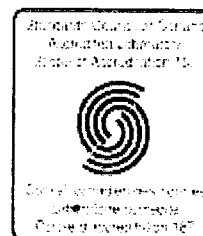
Aluminum	112	30	µg/L	27-Jul-04	EPA200.8
Antimony	0.9	0.1	µg/L	27-Jul-04	EPA200.8
Arsenic	11	1	µg/L	21-Jul-04	SM3113:B
Barium	30.3	0.1	µg/L	27-Jul-04	EPA200.8
Beryllium	< 0.1	0.1	µg/L	27-Jul-04	EPA200.8
Cadmium	< 0.1	0.1	µg/L	27-Jul-04	EPA200.8
Cesium	1.3	0.1	µg/L	27-Jul-04	EPA200.8
Chromium	< 0.3	0.3	µg/L	27-Jul-04	EPA200.8
Cobalt	8.4	0.1	µg/L	27-Jul-04	EPA200.8
Copper	8.1	0.3	µg/L	27-Jul-04	EPA200.8
Iron	225	50	µg/L	19-Jul-04	SM3111:B



Taiga Environmental Laboratory

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

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



- CERTIFICATE OF ANALYSIS -

Client Sample ID: Lupin Sewage Effluent 925-14

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

APPENDIX B

1 - Norwest Labs QC Reports for Aug 4 and Sept 22, 2004

2 - INAC (Taiga Environmental Laboratory) 925-14 Analysis, July 14, 2004

3 - Norwest Labs Ltd. Analytical and QC Reports 2005

4 - 2005 Bioassay Results and QC Data



Analytical Report

Norwest Labs
7217 Roper Road NW
Edmonton, AB. T6B 3J4
Phone: (780) 438-5522
Fax: (780) 438-0396

Bill to: Echo Bay Mines Ltd.
Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: M. Tansey/B. Lowe
Company:

Project
ID:
Name:
Location:
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 392192
Control Number:
Date Received: Jun 30, 2005
Date Reported: Jul 14, 2005
Report Number: 722010

Page: 13 of 28

		NWL Number	392192-16	392192-19	392192-24	
		Sample Date	Jun 29, 2005	Jun 29, 2005	Jun 29, 2005	
		Sample Description	51024 / Station 102	51026 / Station 102	51031 / Lower sewage lagoon	
		Matrix	Water - General	Water - General	Water - General	
Analyte		Units	Results	Results	Results	Detection Limit
Metals Total						
Iron	Total	mg/L	0.2	-	0.4	0.1
Manganese	Total	mg/L	0.864	-	0.177	0.005
Silicon	Total	mg/L	1.60	-	0.41	0.05
Sulfur	Total	mg/L	82.8	-	16.0	0.3
Mercury	Total	mg/L	<0.0001	-	<0.0001	0.0001
Mercury	Total	ug/L	-	0.05	-	0.02
Aluminum	Total	mg/L	0.243	-	0.153	0.005
Antimony	Total	mg/L	0.0046	-	0.0004	0.0002
Arsenic	Total	mg/L	0.0185	-	0.0138	0.0002
Barium	Total	mg/L	0.014	-	0.014	0.001
Beryllium	Total	mg/L	<0.0001	-	<0.0001	0.0001
Bismuth	Total	mg/L	<0.0005	-	<0.0005	0.0005
Boron	Total	mg/L	0.075	-	0.026	0.002
Cadmium	Total	mg/L	0.00013	-	<0.00001	0.00001
Chromium	Total	mg/L	<0.0005	-	<0.0005	0.0005
Cobalt	Total	mg/L	0.0426	-	0.0068	0.0001
Copper	Total	mg/L	0.015	-	0.003	0.001
Lead	Total	mg/L	0.0019	-	0.0008	0.0001
Lithium	Total	mg/L	0.020	-	0.136	0.001
Molybdenum	Total	mg/L	0.001	-	0.001	0.001
Nickel	Total	mg/L	0.0820	-	0.0092	0.0005
Selenium	Total	mg/L	<0.0002	-	<0.0002	0.0002
Silver	Total	mg/L	<0.0001	-	<0.0001	0.0001
Strontium	Total	mg/L	0.250	-	0.744	0.001
Thallium	Total	mg/L	<0.00005	-	<0.00005	0.00005
Tin	Total	mg/L	<0.001	-	<0.001	0.001
Titanium	Total	mg/L	0.0039	-	0.0052	0.0005
Uranium	Total	mg/L	<0.0005	-	<0.0005	0.0005
Vanadium	Total	mg/L	<0.0001	-	0.0004	0.0001
Zinc	Total	mg/L	0.211	-	0.015	0.001



Analytical Report

Norwest Labs
7217 Roper Road NW
Edmonton, AB. T6B 3J4
Phone: (780) 438-5522
Fax: (780) 438-0396

Bill to: Echo Bay Mines Ltd.
Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: M. Tansey/B. Lowe
Company:

Project
ID:
Name:
Location:
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 392192
Control Number:
Date Received: Jun 30, 2005
Date Reported: Jul 14, 2005
Report Number: 722010

Page: 14 of 28

NWL Number	392192-16	392192-17	392192-21
Sample Date	Jun 29, 2005	Jun 29, 2005	Jun 29, 2005
Sample Description	51024 / Station 102	51023 / Station 102	51028 / Lower sewage lagoon
Matrix	Water - General	Water - General	Water - General

Analyte	Units	Results	Results	Results	Detection Limit
Routine Water					
pH		-	6.00	7.14	
Electrical Conductivity	µS/cm at 25 C	-	732	-	1
Calcium	Dissolved mg/L	-	63.0	-	0.2
Magnesium	Dissolved mg/L	-	6.4	-	0.1
Chloride	Dissolved mg/L	44.6	-	-	0.4
Hydroxide	mg/L	-	<5	-	5
Carbonate	mg/L	-	9	-	6
Bicarbonate	mg/L	-	<5	-	5
P-Alkalinity	as CaCO3 mg/L	-	<5	-	5
T-Alkalinity	as CaCO3 mg/L	-	7	-	5
Hardness	Dissolved as CaCO3 mg/L	-	184	-	

NWL Number	392192-17	392192-21	392192-25
Sample Date	Jun 29, 2005	Jun 29, 2005	Jun 29, 2005
Sample Description	51023 / Station 102	51028 / Lower sewage lagoon	51032 / Lower sewage lagoon
Matrix	Water - General	Water - General	Water - General

Analyte	Units	Results	Results	Results	Detection Limit
Physical and Aggregate Properties					
Temperature of observed pH	°C	21.7	22.7	21.8	
Solids	Total Suspended mg/L	<2	18	4	1

NWL Number	392192-21
Sample Date	Jun 29, 2005
Sample Description	51028 / Lower sewage lagoon
Matrix	Water - General

Analyte	Units	Results	Results	Results	Detection Limit
Aggregate Organic Constituents					
Biochemical Oxygen Demand 5 Day	mg/L	4.7			4



Analytical Report

Norwest Labs
7217 Roper Road NW
Edmonton, AB. T6B 3J4
Phone: (780) 438-5522
Fax: (780) 438-0396

Bill to: Echo Bay Mines Ltd.
Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: M. Tansey/B. Lowe
Company:

Project
ID:
Name:
Location:
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 392192
Control Number:
Date Received: Jun 30, 2005
Date Reported: Jul 14, 2005
Report Number: 722010

Page: 15 of 28

NWL Number 392192-22
Sample Date Jun 29, 2005
Sample Description 51029 / Lower
sewage lagoon
Matrix Water - General

Analyte	Units	Results	Results	Results	Detection Limit
Inorganic Nonmetallic Parameters					
Ammonium - N	mg/L	<0.05			0.05
Kjeldahl Nitrogen	Total mg/L	1.70			0.05
Phosphorus	Total mg/L	0.2			0.1
Orthophosphate-P	Dissolved mg/L	0.02			0.01

NWL Number 392192-24
Sample Date Jun 29, 2005
Sample Description 51031 / Lower
sewage lagoon
Matrix Water - General

NWL Number 392192-25
Sample Date Jun 29, 2005
Sample Description 51032 / Lower
sewage lagoon
Matrix Water - General

Analyte	Units	Results	Results	Results	Detection Limit
Routine Water					
pH		-	7.80		
Calcium	Dissolved mg/L	-	46.6		0.2
Magnesium	Dissolved mg/L	-	4.9		0.1
Chloride	Dissolved mg/L	122	-		0.4
Nitrate - N	mg/L	-	0.96		0.01
Nitrite - N	mg/L	-	<0.005		0.005
Nitrate and Nitrite - N	mg/L	-	0.96		0.02
Hydroxide	mg/L	-	<5		5
Carbonate	mg/L	-	<6		6
Bicarbonate	mg/L	-	19		5
P-Alkalinity	as CaCO3 mg/L	-	<5		5
T-Alkalinity	as CaCO3 mg/L	-	15		5
Hardness	Dissolved as CaCO3 mg/L	-	137		

Approved by:

Anthony Neumann, MSc
Laboratory Operations Manager



Quality Control

Norwest Labs
7217 Roper Road NW
Edmonton, AB. T6B 3J4
Phone: (780) 438-5522
Fax: (780) 438-0396

Bill to: Echo Bay Mines Ltd.
Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: M. Tansey/B. Lowe
Company:

Project
ID:
Name:
Location:
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 392192
Control Number:
Date Received: Jun 30, 2005
Date Reported: Jul 14, 2005
Report Number: 722010

Page: 16 of 28

Inorganic Nonmetallic Parameters

Blanks	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Ammonium - N	mq/L	<0.05	0.00	-0.08	0.08	✓
Kjeldahl Nitrogen	mq/L	<0.05	0.00	-0.05	0.05	✓
Phosphorus	mq/L	<0.1	0.0	-0.1	0.1	✓
Orthophosphate-P	mq/L	<0.01	0.00	-0.05	0.05	✓
Cyanide	mq/L	<0.001	0.000	-0.001	0.001	✓

Material Used: Edmonton Method Blank
Date Acquired: Jul 07, 2005
Acquired By: Gordon Grensmann

Replicates	Units	Replicate1	Replicate2	% RSD Criteria	Absolute Criteria	Passed QC
Ammonium - N	mq/L	6.29	6.39	9.99	0.10	✓
Phosphorus	mg/L	7.4	7.4	10.0	0.2	✓
Orthophosphate-P	mq/L	1.86	1.76	9.99	0.05	✓

Material Used: Edmonton Duplicate
Date Acquired: Jul 05, 2005
Acquired By: Gordon Grensmann

Control Sample	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Ammonium - N	mg/L	2.98	2.99	2.59	3.39	✓
Kjeldahl Nitrogen	mg/L	15.7	15.25	11.65	18.85	✓
Phosphorus	mg/L	7.9	8.0	7.2	8.8	✓
Cyanide	mg/L	0.070	0.077	0.067	0.087	✓

Material Used: Water High
Date Acquired: Jul 07, 2005
Acquired By: Gordon Grensmann

Ammonium - N	mq/L	0.80	0.79	0.66	0.91	✓
Kjeldahl Nitrogen	mq/L	2.91	3.00	2.41	3.59	✓
Phosphorus	mq/L	1.9	2.0	1.8	2.2	✓
Orthophosphate-P	mq/L	0.39	0.41	0.36	0.47	✓
Cyanide	mq/L	0.015	0.016	0.013	0.018	✓

Material Used: Water Low
Date Acquired: Jul 07, 2005
Acquired By: Gordon Grensmann

Orthophosphate-P	mq/L	0.07	0.08	0.07	0.09	✓
------------------	------	------	------	------	------	---

Material Used: Water Trace
Date Acquired: Jul 05, 2005
Acquired By: Gordon Grensmann



Quality Control

Norwest Labs
7217 Roper Road NW
Edmonton, AB. T6B 3J4
Phone: (780) 438-5522
Fax: (780) 438-0396

Bill to: Echo Bay Mines Ltd.
Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: M. Tansey/B. Lowe
Company:

Project
ID:
Name:
Location:
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 392192
Control Number:
Date Received: Jun 30, 2005
Date Reported: Jul 14, 2005
Report Number: 722010

Page: 17 of 28

Metals Dissolved

Blanks	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Sulfur	mq/L	<0.3	0.0	-0.3	0.3	✓
Material Used:	Edmonton Method Blank					
Date Acquired:	Jul 04, 2005					
Acquired By:	Nicole Sehn					
Replicates	Units	Replicate1	Replicate2	% RSD Criteria	Absolute Criteria	Passed QC
Sulfur	mq/L	40.0	39.3	10.0	0.1	✓
Material Used:	Edmonton Duplicate					
Date Acquired:	Jul 04, 2005					
Acquired By:	Nicole Sehn					
Control Sample	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Sulfur	mq/L	46.9	50.0	45.0	55.0	✓
Material Used:	Metals High					
Date Acquired:	Jul 04, 2005					
Acquired By:	Nicole Sehn					
Sulfur	mq/L	1.0	1.0	0.9	1.2	✓
Material Used:	Metals Low					
Date Acquired:	Jul 04, 2005					
Acquired By:	Nicole Sehn					



Quality Control

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7217 Roper Road NW
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Fax: (780) 438-0396

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Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: M. Tansey/B. Lowe
Company:

Project
ID:
Name:
Location:
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 392192
Control Number:
Date Received: Jun 30, 2005
Date Reported: Jul 14, 2005
Report Number: 722010

Page: 18 of 28

Metals Total

Blanks	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Iron	mq/L	<0.1	0.0	0.0	0.0	✓
Manganese	mq/L	<0.005	0.000	-0.001	0.001	✓
Silicon	mq/L	<0.05	0.02	-0.04	0.09	✓
Sulfur	mq/L	<0.3	0.0	-0.3	0.3	✓
Mercury	mq/L	<0.0001	0.0000	0.0000	0.0000	✓
Aluminum	uq/L	<5	0	-5	5	✓
Antimony	uq/L	<0.2	0.0	-0.2	0.2	✓
Arsenic	uq/L	<0.2	0.0	-0.2	0.2	✓
Barium	uq/L	<1	0	-1	1	✓
Beryllium	uq/L	<0.1	0.0	-0.1	0.1	✓
Bismuth	uq/L	<0.5	0.0	-0.5	0.5	✓
Boron	uq/L	<2	0	-2	2	✓
Cadmium	uq/L	<0.01	0.00	-0.01	0.01	✓
Chromium	uq/L	<0.5	0.0	-0.5	0.5	✓
Cobalt	uq/L	<0.1	0.0	-0.1	0.1	✓
Copper	uq/L	<1	0	-1	1	✓
Lead	uq/L	<0.1	0.0	-0.1	0.1	✓
Lithium	uq/L	<1	0	-1	1	✓
Molybdenum	uq/L	<1	0	-1	1	✓
Nickel	uq/L	<0.5	0.0	-0.5	0.5	✓
Selenium	uq/L	<0.2	0.0	-0.2	0.2	✓
Silver	uq/L	<0.1	0.0	-0.1	0.1	✓
Strontium	uq/L	<1	0	-1	1	✓
Thallium	uq/L	<0.05	0.00	-0.05	0.05	✓
Tin	uq/L	<1	0	-1	1	✓
Titanium	uq/L	<0.5	0.0	-0.5	0.5	✓
Uranium	uq/L	<0.5	0.0	-0.5	0.5	✓
Vanadium	uq/L	<0.1	0.0	-0.1	0.1	✓
Zinc	uq/L	<1	0	-1	1	✓

Material Used: Edmonton Method Blank
Date Acquired: Jul 04, 2005
Acquired By: Linda Li
Mercury ug/L 0.04 0.000 0.000 0.000 ✓
Material Used: Metals Blank - water - total
Date Acquired: Jul 06, 2005
Acquired By: Marie England



Quality Control

Norwest Labs
7217 Roper Road NW
Edmonton, AB. T6B 3J4
Phone: (780) 438-5522
Fax: (780) 438-0396

Bill to: Echo Bay Mines Ltd.
Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: M. Tansey/B. Lowe
Company:

Project
ID:
Name:
Location:
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 392192
Control Number:
Date Received: Jun 30, 2005
Date Reported: Jul 14, 2005
Report Number: 722010

Page: 19 of 28

Metals Total (Continued...)

Replicates	Units	Replicate1	Replicate2	% RSD Criteria	Absolute Criteria	Passed QC
Iron	mq/L	<2	<2	15.0	0.2	✓
Manganese	mg/L	1.7	1.6	15.000	0.010	✓
Silicon	mq/L	7.2	6.8	15.00	0.10	✓
Sulfur	mq/L	250	240	15.0	0.1	✓
Mercury	mq/L	<0.0001	<0.0001	9.9900	0.0003	✓
Aluminum	uq/L	4230	4350	15	11	✓
Antimony	uq/L	6	7	15.0	0.4	✓
Arsenic	uq/L	58.2	59.1	15.0	0.4	✓
Barium	uq/L	270	300	15	2	✓
Beryllium	uq/L	<1	<1	15.0	0.2	✓
Bismuth	ug/L	<5	<5	15.0	1.1	✓
Boron	uq/L	480	500	15	4	✓
Cadmium	ug/L	1340	1370	15.00	0.02	✓
Chromium	uq/L	17100	18100	15.0	1.1	✓
Cobalt	ug/L	7	6	15.0	0.2	✓
Copper	uq/L	450	460	15	2	✓
Lead	ug/L	210	187	15.0	0.2	✓
Lithium	uq/L	4	4	15	2	✓
Molybdenum	uq/L	20	20	15	2	✓
Nickel	uq/L	23	24	15.0	1.1	✓
Selenium	uq/L	<2	2	15.0	0.4	✓
Silver	uq/L	<1	<1	15.0	0.2	✓
Strontium	uq/L	6920	7210	15	2	✓
Thallium	uq/L	<0.5	<0.5	15.00	0.11	✓
Tin	uq/L	50	50	15	2	✓
Titanium	ug/L	26	28	15.0	1.1	✓
Uranium	uq/L	<5	<5	15.0	1.1	✓
Vanadium	ug/L	0.4	0.4	15.0	0.2	✓
Zinc	uq/L	4590	4670	15	2	✓

Material Used: Edmonton Duplicate
Date Acquired: Jul 04, 2005
Acquired By: Linda Li

Mercury	uq/L	0.05	0.06	30.000	0.050	✓
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Material Used: Metals Int. Duplicate - water tot
Date Acquired: Jul 06, 2005
Acquired By: Marie England



Quality Control

Norwest Labs
7217 Roper Road NW
Edmonton, AB. T6B 3J4
Phone: (780) 438-5522
Fax: (780) 438-0396

Bill to: Echo Bay Mines Ltd.
Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: M. Tansey/B. Lowe
Company:

Project
ID:
Name:
Location:
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 392192
Control Number:
Date Received: Jun 30, 2005
Date Reported: Jul 14, 2005
Report Number: 722010

Page: 20 of 28

Metals Total (Continued...)

Control Sample	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Iron	mq/L	1.9	2.0	1.8	2.2	✓
Manganese	mq/L	0.485	0.500	0.450	0.550	✓
Silicon	mq/L	4.92	5.00	4.50	5.50	✓
Sulfur	mq/L	9.6	10.0	9.0	11.0	✓
Mercury	mq/L	0.0008	0.0008	0.0007	0.0010	✓
Aluminum	uq/L	334	322	273	371	✓
Antimony	uq/L	11.9	11.5	10.2	12.8	✓
Arsenic	uq/L	12.1	11.5	10.3	12.7	✓
Barium	uq/L	64	61	52	69	✓
Beryllium	uq/L	5.8	5.9	4.9	7.0	✓
Bismuth	uq/L	29.3	30.2	26.0	34.4	✓
Boron	uq/L	125	125	102	148	✓
Cadmium	uq/L	0.56	0.63	0.47	0.78	✓
Chromium	uq/L	32.7	31.8	27.5	36.2	✓
Cobalt	uq/L	6.6	6.4	5.4	7.5	✓
Copper	uq/L	64	63	55	70	✓
Lead	uq/L	6.2	6.2	5.4	7.0	✓
Lithium	uq/L	61	65	53	76	✓
Molybdenum	uq/L	64	61	53	69	✓
Nickel	uq/L	32.9	31.4	27.0	35.8	✓
Selenium	uq/L	11.3	11.0	9.7	12.3	✓
Silver	uq/L	6.3	6.2	5.5	7.0	✓
Strontium	uq/L	63	64	55	72	✓
Thallium	uq/L	3.13	3.14	2.56	3.72	✓
Tin	uq/L	61	59	52	66	✓
Titanium	uq/L	32.8	31.5	27.0	36.0	✓
Uranium	uq/L	30.2	30.8	26.9	34.7	✓
Vanadium	uq/L	6.3	6.5	5.4	7.6	✓
Zinc	uq/L	59	59	49	69	✓

Material Used: Edmonton Digestion Check

Date Acquired: Jul 04, 2005

Acquired By: Linda Li

Iron	mg/L	9.5	10.0	9.0	11.0	✓
Manganese	mg/L	2.34	2.500	2.250	2.750	✓
Silicon	mg/L	23.5	25.00	22.50	27.50	✓
Sulfur	mg/L	47.4	50.0	45.0	55.0	✓
Mercury	mg/L	0.0029	0.0031	0.0027	0.0035	✓

Material Used: Metals High

Date Acquired: Jul 05, 2005

Acquired By: Nicole Sehn



Quality Control

Norwest Labs
7217 Roper Road NW
Edmonton, AB. T6B 3J4
Phone: (780) 438-5522
Fax: (780) 438-0396

Bill to: Echo Bay Mines Ltd.
Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: M. Tansey/B. Lowe
Company:

Project
ID:
Name:
Location:
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 392192
Control Number:
Date Received: Jun 30, 2005
Date Reported: Jul 14, 2005
Report Number: 722010

Page: 21 of 28

Metals Total (Continued...)

Control Sample	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Iron	mq/L	0.2	0.2	0.2	0.2	✓
Manganese	mq/L	0.050	0.050	0.045	0.055	✓
Silicon	mq/L	0.52	0.50	0.45	0.55	✓
Sulfur	mq/L	1.0	1.0	0.9	1.2	✓
Mercury	mq/L	0.0008	0.0008	-0.0016	0.0032	✓
Aluminum	uq/L	977	1000	850	1150	✓
Antimony	uq/L	41.5	40.0	34.0	46.0	✓
Arsenic	uq/L	43.4	40.0	34.0	46.0	✓
Barium	uq/L	204	200	170	230	✓
Beryllium	uq/L	20.2	20.0	17.0	23.0	✓
Bismuth	uq/L	99.0	100.0	85.0	115.0	✓
Boron	uq/L	403	400	340	460	✓
Cadmium	uq/L	2.17	2.00	1.70	2.30	✓
Chromium	uq/L	99.2	100.0	85.0	115.0	✓
Cobalt	uq/L	21.7	20.0	17.0	23.0	✓
Copper	uq/L	208	200	170	230	✓
Lead	uq/L	20.7	20.0	17.0	23.0	✓
Lithium	uq/L	192	200	170	230	✓
Molybdenum	uq/L	202	200	170	230	✓
Nickel	uq/L	98.7	100.0	85.0	115.0	✓
Selenium	uq/L	42.9	40.0	34.0	46.0	✓
Silver	uq/L	21.6	20.0	17.0	23.0	✓
Strontium	uq/L	208	200	170	230	✓
Thallium	uq/L	10.4	10.00	8.50	11.50	✓
Tin	uq/L	198	200	170	230	✓
Titanium	uq/L	97.9	100.0	85.0	115.0	✓
Uranium	uq/L	101	100.0	85.0	115.0	✓
Vanadium	uq/L	20.3	20.0	17.0	23.0	✓
Zinc	uq/L	212	200	170	230	✓

Material Used: Metals Low
Date Acquired: Jul 04, 2005
Acquired By: Linda Li



Quality Control

Norwest Labs
7217 Roper Road NW
Edmonton, AB. T6B 3J4
Phone: (780) 438-5522
Fax: (780) 438-0396

Bill to: Echo Bay Mines Ltd.
Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: M. Tansey/B. Lowe
Company:

Project
ID:
Name:
Location:
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 392192
Control Number:
Date Received: Jun 30, 2005
Date Reported: Jul 14, 2005
Report Number: 722010

Page: 22 of 28

Metals Total (Continued...)

Control Sample	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Aluminum	uq/L	56	50	43	58	✓
Antimony	uq/L	2.2	2.0	1.7	2.3	✓
Arsenic	uq/L	2.1	2.0	1.7	2.3	✓
Barium	uq/L	10	10	9	12	✓
Beryllium	uq/L	1	1.0	0.9	1.2	✓
Bismuth	uq/L	5.0	5.0	4.3	5.8	✓
Boron	uq/L	22	20	17	23	✓
Cadmium	uq/L	0.10	0.10	0.09	0.12	✓
Chromium	uq/L	5.4	5.0	4.3	5.8	✓
Cobalt	uq/L	1.1	1.0	0.9	1.2	✓
Copper	uq/L	11	10	9	12	✓
Lead	uq/L	1.0	1.0	0.9	1.2	✓
Lithium	uq/L	10	10	9	12	✓
Molybdenum	uq/L	10	10	9	12	✓
Nickel	uq/L	5.3	5.0	4.3	5.8	✓
Selenium	uq/L	2.1	2.0	1.7	2.3	✓
Silver	uq/L	1.1	1.0	0.9	1.2	✓
Strontium	uq/L	11	10	9	12	✓
Thallium	uq/L	0.53	0.50	0.43	0.58	✓
Tin	uq/L	10	10	9	12	✓
Titanium	uq/L	5.5	5.0	4.3	5.8	✓
Uranium	uq/L	5.1	5.0	4.3	5.8	✓
Vanadium	uq/L	1.1	1.0	0.9	1.2	✓
Zinc	uq/L	10	10	9	12	✓
Material Used:	Metals Trace					
Date Acquired:	Jul 04, 2005					
Acquired By:	Linda Li					
Mercury	ug/L	12	14.000	11.000	17.000	✓
Material Used:	S0102 - Hg					
Date Acquired:	Jul 06, 2005					
Acquired By:	Marie England					



Quality Control

Norwest Labs
7217 Roper Road NW
Edmonton, AB. T6B 3J4
Phone: (780) 438-5522
Fax: (780) 438-0396

Bill to: Echo Bay Mines Ltd.
Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: M. Tansey/B. Lowe
Company:

Project
ID:
Name:
Location:
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 392192
Control Number:
Date Received: Jun 30, 2005
Date Reported: Jul 14, 2005
Report Number: 722010

Page: 23 of 28

Physical and Aggregate Properties

Replicates	Units	Replicate1	Replicate2	% RSD Criteria	Absolute Criteria	Passed QC
Solids	mg/L	61	56	10	15	✓
Material Used:	Edmonton Duplicate					
Date Acquired:	Jul 06, 2005					
Acquired By:	Christina Onyskiw					
Control Sample	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Solids	mg/L	203	200	180	220	✓
Material Used:	Water High					
Date Acquired:	Jul 06, 2005					
Acquired By:	Christina Onyskiw					
Solids	mg/L	21	20	18	22	✓
Material Used:	Water Low					
Date Acquired:	Jul 06, 2005					
Acquired By:	Christina Onyskiw					



Quality Control

Norwest Labs
7217 Roper Road NW
Edmonton, AB. T6B 3J4
Phone: (780) 438-5522
Fax: (780) 438-0396

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Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: M. Tansey/B. Lowe
Company:

Project
ID:
Name:
Location:
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 392192
Control Number:
Date Received: Jun 30, 2005
Date Reported: Jul 14, 2005
Report Number: 722010

Page: 24 of 28

Routine Water

Blanks	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Calcium	mq/L	<0.2	0.0	-0.2	0.2	✓
Magnesium	mq/L	<0.1	0.0	-0.1	0.1	✓
Sodium	mq/L	<0.4	0.0	-0.4	0.4	✓
Potassium	mq/L	<0.4	0.0	-0.4	0.4	✓
Iron	mq/L	<0.01	0.00	-0.01	0.01	✓
Manganese	mq/L	<0.005	0.000	-0.005	0.005	✓
Chloride	mq/L	0.4	0.0	-0.5	0.5	✓
Nitrate - N	mq/L	<0.01	0.00	-0.01	0.01	✓
Nitrite - N	mq/L	<0.005	0.000	-0.005	0.005	✓

Material Used: Edmonton Method Blank

Date Acquired: Jul 04, 2005

Acquired By: Jennifer Harrison

Replicates	Units	Replicate1	Replicate2	% RSD Criteria	Absolute Criteria	Passed QC
pH		8.01	7.97	9.99	0.10	✓
Electrical Conductivity	dS/m at 25 C	1.81	1.81	9.990	0.002	✓
Calcium	mq/L	79	78	10.0	0.6	✓
Magnesium	mg/L	6.3	6.2	10.0	0.7	✓
Sodium	mq/L	528	526	10.0	1.2	✓
Potassium	mg/L	9	9	10.0	1.2	✓
Iron	mq/L	0.55	0.54	9.99	0.05	✓
Manganese	mq/L	0.248	0.245	9.990	0.010	✓
Chloride	mq/L	38.5	39.3	10.0	0.5	✓
Nitrate - N	mq/L	0.72	0.72	9.99	0.01	✓
Nitrite - N	mq/L	0.05	0.05	9.990	0.010	✓
Hydroxide	mq/L	<5	<5	10		✓
Carbonate	mq/L	<6	<6	10		✓
Bicarbonate	mq/L	62	57	10		✓
P-Alkalinity	mg/L	<5	<5	10	5	✓
T-Alkalinity	mq/L	50	47	10	5	✓

Material Used: Edmonton Duplicate

Date Acquired: Jul 04, 2005

Acquired By: Alexandra Robert



Quality Control

Norwest Labs
7217 Roper Road NW
Edmonton, AB. T6B 3J4
Phone: (780) 438-5522
Fax: (780) 438-0396

Bill to: Echo Bay Mines Ltd.
Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: M. Tansey/B. Lowe
Company:

Project
ID:
Name:
Location:
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 392192
Control Number:
Date Received: Jun 30, 2005
Date Reported: Jul 14, 2005
Report Number: 722010

Page: 25 of 28

Routine Water (Continued...)

Control Sample	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Chloride	mq/L	2100	2087.0	1875.2	2298.8	✓
Material Used:	Chloride High					
Date Acquired:	Jul 06, 2005					
Acquired By:	Annva Hundal					
Calcium	mg/L	230	250.0	225.0	275.0	✓
Magnesium	mg/L	94.7	100.0	90.0	110.0	✓
Sodium	mg/L	244	250.0	225.0	275.0	✓
Potassium	mg/L	243	250.0	225.0	275.0	✓
Iron	mg/L	9.18	10.00	9.01	10.99	✓
Manganese	mg/L	2.29	2.500	2.260	2.740	✓
Material Used:	Metals High					
Date Acquired:	Jul 04, 2005					
Acquired By:	Nicole Sehn					
Calcium	mq/L	4.9	5.0	4.5	5.5	✓
Magnesium	mq/L	2.0	2.0	1.8	2.2	✓
Sodium	mq/L	4.8	5.0	4.5	5.5	✓
Potassium	mq/L	4.8	5.0	4.5	5.5	✓
Iron	mq/L	0.19	0.20	0.18	0.22	✓
Manganese	mq/L	0.049	0.050	0.045	0.055	✓
Material Used:	Metals Low					
Date Acquired:	Jul 04, 2005					
Acquired By:	Nicole Sehn					
pH		9.23	9.23	9.11	9.35	✓
Electrical Conductivity	dS/m at 25 C	2.68	2.730	2.611	2.849	✓
Chloride	mq/L	81.4	81.0	76.4	85.6	✓
Nitrate - N	mq/L	10.0	10.00	9.61	10.39	✓
Nitrite - N	mq/L	9.98	10.000	9.562	10.438	✓
P-Alkalinity	mq/L	504	507	415	599	✓
T-Alkalinity	mq/L	1030	1009	969	1049	✓
Material Used:	Water High					
Date Acquired:	Jul 04, 2005					
Acquired By:	Alexsandra Robert					



Quality Control

Norwest Labs
7217 Roper Road NW
Edmonton, AB. T6B 3J4
Phone: (780) 438-5522
Fax: (780) 438-0396

Bill to: Echo Bay Mines Ltd.
Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: M. Tansey/B. Lowe
Company:

Project
ID:
Name:
Location:
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 392192
Control Number:
Date Received: Jun 30, 2005
Date Reported: Jul 14, 2005
Report Number: 722010

Page: 26 of 28

Routine Water (Continued...)

Control Sample	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
pH		6.91	6.90	6.83	6.97	✓
Electrical Conductivity	dS/m at 25 C	0.077	0.076	0.070	0.081	✓
Chloride	mq/L	15.6	14.9	13.2	16.6	✓
Nitrate - N	mq/L	0.47	0.50	0.44	0.56	✓
Nitrite - N	mq/L	0.509	0.495	0.437	0.553	✓
P-Alkalinity	mq/L	54	54	20	88	✓
T-Alkalinity	mq/L	131	127	118	136	✓

Material Used: Water Low
Date Acquired: Jul 04, 2005
Acquired By: Aleksandra Robert



Analytical Report

Norwest Labs
7217 Roper Road NW
Edmonton, AB. T6B 3J4
Phone: (780) 438-5522
Fax: (780) 438-0396

Bill to: Echo Bay Mines Ltd.
Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: Steve Schlesak
Company: Kinross Gold Corporation

Project ID:
Name: Lupin Mine
Location: Nunavut
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 396502
Control Number:
Date Received: Jul 21, 2005
Date Reported: Aug 02, 2005
Report Number: 724749

Page: 1 of 27

		NWL Number	396502-1	396502-2	396502-3	
		Sample Date	Jul 15, 2005	Jul 16, 2005	Jul 17, 2005	
		Sample Description	925-10 / 51045	925-10 / 51046	925-10 / 51047	
		Matrix	Water - General	Water - General	Water - General	
Analyte		Units	Results	Results	Results	Detection Limit
Inorganic Nonmetallic Parameters						
Ammonium - N		mg/L	2.03	-	-	0.05
Cyanide	Strong Acid Dissociable	mg/L	0.046	0.046	0.048	0.002
Metals Total						
Iron	Total	mg/L	0.3	0.1	0.1	0.1
Manganese	Total	mg/L	0.941	0.948	0.937	0.005
Silicon	Total	mg/L	2.03	1.89	1.88	0.05
Sulfur	Total	mg/L	88.9	90.5	90.3	0.3
Mercury	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Mercury	Total	ug/L	<0.02	-	-	0.02
Aluminum	Total	mg/L	0.169	0.084	0.082	0.005
Antimony	Total	mg/L	<0.0002	<0.0002	<0.0002	0.0002
Arsenic	Total	mg/L	0.0110	0.0087	0.0076	0.0002
Barium	Total	mg/L	0.016	0.015	0.016	0.001
Beryllium	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Bismuth	Total	mg/L	<0.0005	<0.0005	<0.0005	0.0005
Boron	Total	mg/L	0.085	0.086	0.090	0.002
Cadmium	Total	mg/L	0.00009	0.00011	0.00011	0.00001
Chromium	Total	mg/L	<0.0005	<0.0005	<0.0005	0.0005
Cobalt	Total	mg/L	0.0462	0.0460	0.0475	0.0001
Copper	Total	mg/L	0.014	0.014	0.014	0.001
Lead	Total	mg/L	0.0004	0.0004	0.0003	0.0001
Lithium	Total	mg/L	0.026	0.026	0.028	0.001
Molybdenum	Total	mg/L	0.003	0.003	0.003	0.001
Nickel	Total	mg/L	0.0899	0.0891	0.0920	0.0005
Selenium	Total	mg/L	<0.0002	<0.0002	<0.0002	0.0002
Silver	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Strontium	Total	mg/L	0.310	0.308	0.322	0.001
Thallium	Total	mg/L	<0.00005	<0.00005	<0.00005	0.00005
Tin	Total	mg/L	<0.001	<0.001	<0.001	0.001
Titanium	Total	mg/L	0.0103	0.0050	0.0048	0.0005
Uranium	Total	mg/L	<0.0005	<0.0005	<0.0005	0.0005
Vanadium	Total	mg/L	0.0003	<0.0001	<0.0001	0.0001
Zinc	Total	mg/L	0.232	0.235	0.244	0.001
Physical and Aggregate Properties						
Temperature of observed pH		°C	20.8	20.7	20.6	



Analytical Report

Norwest Labs
7217 Roper Road NW
Edmonton, AB. T6B 3J4
Phone: (780) 438-5522
Fax: (780) 438-0396

Bill to: Echo Bay Mines Ltd.
Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: Steve Schlesak
Company: Kinross Gold Corporation

Project
ID:
Name: Lupin Mine
Location: Nunavut
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 396502
Control Number:
Date Received: Jul 21, 2005
Date Reported: Aug 02, 2005
Report Number: 724749

Page: 2 of 27

		NWL Number	396502-1	396502-2	396502-3	
		Sample Date	Jul 15, 2005	Jul 16, 2005	Jul 17, 2005	
		Sample Description	925-10 / 51045	925-10 / 51046	925-10 / 51047	
		Matrix	Water - General	Water - General	Water - General	
Analyte		Units	Results	Results	Results	Detection Limit
Physical and Aggregate Properties - Continued						
Solids	Total Suspended	mg/L	20	3	<2	1
Routine Water						
pH			6.69	6.66	6.67	
Electrical Conductivity		µS/cm at 25 C	878	876	875	1
Calcium	Dissolved	mg/L	71	82	73.0	0.2
Magnesium	Dissolved	mg/L	8	7.6	7.2	0.1
Sodium	Dissolved	mg/L	90	87	85.4	0.4
Potassium	Dissolved	mg/L	6	6	7.2	0.4
Iron	Dissolved	mg/L	<0.1	<0.1	<0.01	0.01
Manganese	Dissolved	mg/L	0.94	1.00	0.971	0.005
Chloride	Dissolved	mg/L	56.9	56.9	56.7	0.4
Nitrate - N		mg/L	7.96	7.74	7.40	0.01
Nitrite - N		mg/L	<0.1	<0.1	0.062	0.005
Nitrate and Nitrite - N		mg/L	7.96	7.74	7.46	0.02
Sulfate (SO4)	Dissolved	mg/L	300	300	300	0.9
Hydroxide		mg/L	<5	<5	<5	5
Carbonate		mg/L	7	6	6	6
Bicarbonate		mg/L	<5	<5	<5	5
P-Alkalinity	as CaCO3	mg/L	<5	<5	<5	5
T-Alkalinity	as CaCO3	mg/L	6	5	5	5
Total Dissolved Solids	Calculated	mg/L	530	540	533	1
Hardness	Dissolved as CaCO3	mg/L	210	240	212	
Ionic Balance	Dissolved	%	99	100	95	



Analytical Report

Norwest Labs
7217 Roper Road NW
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Phone: (780) 438-5522
Fax: (780) 438-0396

Bill to: Echo Bay Mines Ltd.
Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: Steve Schlesak
Company: Kinross Gold Corporation

Project
ID:
Name: Lupin Mine
Location: Nunavut
LSD:
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Page: 4 of 27

		NWL Number	396502-4	396502-5	396502-6	
		Sample Date	Jul 18, 2005	Jul 18, 2005	Jul 18, 2005	
		Sample Description	925-10 / 51048	Pad-N / 51049	Pad-S / 51050	
		Matrix	Water - General	Water - General	Water - General	
Analyte		Units	Results	Results	Results	Detection Limit
Routine Water - Continued						
pH			6.64	4.74	5.98	
Electrical Conductivity		µS/cm at 25 C	877	1550	1610	1
Calcium	Dissolved	mg/L	74	244	285	0.2
Magnesium	Dissolved	mg/L	9	50	63.1	0.1
Sodium	Dissolved	mg/L	89	13	19.1	0.4
Potassium	Dissolved	mg/L	10	21	23.9	0.4
Iron	Dissolved	mg/L	<0.1	<0.1	0.03	0.01
Manganese	Dissolved	mg/L	1.03	6.53	7.46	0.005
Chloride	Dissolved	mg/L	57.2	7.4	16.2	0.4
Nitrate - N		mg/L	7.73	7.01	0.93	0.01
Nitrite - N		mg/L	<0.1	<0.1	0.034	0.005
Nitrate and Nitrite - N		mg/L	7.73	7.01	0.97	0.02
Sulfate (SO4)	Dissolved	mg/L	300	846	989	0.9
Hydroxide		mg/L	<5	<5	<5	5
Carbonate		mg/L	7	<6	<6	6
Bicarbonate		mg/L	<5	<5	20	5
P-Alkalinity	as CaCO3	mg/L	<5	<5	<5	5
T-Alkalinity	as CaCO3	mg/L	6	<5	16	5
Total Dissolved Solids	Calculated	mg/L	540	1180	1410	1
Hardness	Dissolved as CaCO3	mg/L	220	820	971	
Ionic Balance	Dissolved	%	100	97	99	

		NWL Number	396502-10	396502-11	396502-12	
		Sample Date	Jul 18, 2005	Jul 18, 2005	Jul 19, 2005	
		Sample Description	WC1-7 / 51054	WC1-8 / 51055	925-10 / 51056	
		Matrix	Water - General	Water - General	Water - General	
Analyte		Units	Results	Results	Results	Detection Limit
Inorganic Nonmetallic Parameters						
Cyanide	Strong Acid Dissociable	mg/L	0.034	0.026	0.044	0.002
Metals Total						
Iron	Total	mg/L	14.8	12.8	0.1	0.1
Manganese	Total	mg/L	1.21	3.62	0.980	0.005
Silicon	Total	mg/L	12.0	14.4	1.92	0.05
Sulfur	Total	mg/L	45.6	113	91.8	0.3
Mercury	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Aluminum	Total	mg/L	5.90	4.24	0.085	0.005
Antimony	Total	mg/L	0.0003	0.0003	<0.0002	0.0002
Arsenic	Total	mg/L	1.34	1.32	0.0086	0.0002
Barium	Total	mg/L	0.043	0.040	0.016	0.001
Beryllium	Total	mg/L	0.0006	0.0005	<0.0001	0.0001
Bismuth	Total	mg/L	<0.0005	<0.0005	<0.0005	0.0005
Boron	Total	mg/L	0.009	0.024	0.090	0.002
Cadmium	Total	mg/L	0.00187	0.00235	0.00010	0.00001
Chromium	Total	mg/L	0.0220	0.0099	<0.0005	0.0005
Cobalt	Total	mg/L	0.186	0.432	0.0475	0.0001
Copper	Total	mg/L	0.120	0.083	0.015	0.001
Lead	Total	mg/L	0.0344	0.0287	0.0003	0.0001
Lithium	Total	mg/L	0.081	0.094	0.028	0.001
Molybdenum	Total	mg/L	<0.001	<0.001	0.003	0.001
Nickel	Total	mg/L	0.566	1.17	0.0918	0.0005
Selenium	Total	mg/L	0.0006	0.0007	<0.0002	0.0002
Silver	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Strontium	Total	mg/L	0.120	0.338	0.323	0.001
Thallium	Total	mg/L	0.00012	0.00010	<0.00005	0.00005
Tin	Total	mg/L	<0.001	<0.001	<0.001	0.001
Titanium	Total	mg/L	0.213	0.115	0.0054	0.0005
Uranium	Total	mg/L	0.0012	0.0005	<0.0005	0.0005
Vanadium	Total	mg/L	0.0121	0.0062	<0.0001	0.0001
Zinc	Total	mg/L	0.264	0.402	0.246	0.001
Physical and Aggregate Properties						
Temperature of observed pH		°C	21.4	22.8	18.7	
Solids	Total Suspended	mg/L	-	-	<2	1
Routine Water						



Analytical Report

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Bill to: Echo Bay Mines Ltd.
Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: Steve Schlesak
Company: Kinross Gold Corporation

Project
ID:
Name: Lupin Mine
Location: Nunavut
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 396502
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Report Number: 724749

Page: 8 of 27

		NWL Number	396502-10	396502-11	396502-12	
		Sample Date	Jul 18, 2005	Jul 18, 2005	Jul 19, 2005	
		Sample Description	WC1-7 / 51054	WC1-8 / 51055	925-10 / 51056	
		Matrix	Water - General	Water - General	Water - General	
Analyte		Units	Results	Results	Results	Detection Limit
Routine Water - Continued						
pH			4.55	4.44	6.64	
Electrical Conductivity		µS/cm at 25 C	301	740	801	1
Calcium	Dissolved	mg/L	31.5	85.0	76.0	0.2
Magnesium	Dissolved	mg/L	12.8	32.8	7.5	0.1
Sodium	Dissolved	mg/L	2.4	13.4	88.9	0.4
Potassium	Dissolved	mg/L	4.1	17.2	7.5	0.4
Iron	Dissolved	mg/L	0.05	0.10	<0.01	0.01
Manganese	Dissolved	mg/L	1.17	3.84	1.01	0.005
Chloride	Dissolved	mg/L	5.3	12.2	57.3	0.4
Nitrate - N		mg/L	0.19	0.51	7.41	0.01
Nitrite - N		mg/L	<0.005	<0.005	0.057	0.005
Nitrate and Nitrite - N		mg/L	0.19	0.51	7.46	0.02
Sulfate (SO4)	Dissolved	mg/L	145	375	306	0.9
Hydroxide		mg/L	<5	<5	<5	5
Carbonate		mg/L	<6	<6	<6	6
Bicarbonate		mg/L	<5	58	<5	5
P-Alkalinity	as CaCO3	mg/L	<5	<5	<5	5
T-Alkalinity	as CaCO3	mg/L	<5	48	<5	5
Total Dissolved Solids	Calculated	mg/L	201	565	543	1
Hardness	Dissolved as CaCO3	mg/L	131	348	221	
Ionic Balance	Dissolved	%	91	89	100	



Analytical Report

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9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: Steve Schlesak
Company: Kinross Gold Corporation

Project ID:
Name: Lupin Mine
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Page: 9 of 27

		NWL Number	396502-13	396502-14	396502-15	
		Sample Date	Jul 19, 2005	Jul 19, 2005	Jul 19, 2005	
		Sample Description	925-20 / 51057	925-21 / 51058	925-22-1 / 51059	
		Matrix	Water - General	Water - General	Water - General	
Analyte		Units	Results	Results	Results	Detection Limit
Inorganic Nonmetallic Parameters						
Ammonium - N		mg/L	1.01	<0.05	0.32	0.05
Cyanide	Strong Acid Dissociable	mg/L	0.026	0.002	0.002	0.002
Metals Total						
Iron	Total	mg/L	0.1	<0.1	0.1	0.1
Manganese	Total	mg/L	0.856	0.008	0.024	0.005
Silicon	Total	mg/L	1.64	0.10	0.18	0.05
Sulfur	Total	mg/L	82.3	0.8	3.4	0.3
Mercury	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Mercury	Total	ug/L	-	<0.02	-	0.02
Aluminum	Total	mg/L	0.090	0.022	0.038	0.005
Antimony	Total	mg/L	<0.0002	<0.0002	<0.0002	0.0002
Arsenic	Total	mg/L	0.0039	0.0009	0.0018	0.0002
Barium	Total	mg/L	0.049	0.002	0.005	0.001
Beryllium	Total	mg/L	0.0001	<0.0001	<0.0001	0.0001
Bismuth	Total	mg/L	<0.0005	<0.0005	<0.0005	0.0005
Boron	Total	mg/L	0.077	0.002	0.004	0.002
Cadmium	Total	mg/L	0.00031	<0.00001	0.00002	0.00001
Chromium	Total	mg/L	<0.0005	<0.0005	<0.0005	0.0005
Cobalt	Total	mg/L	0.0431	0.0002	0.0011	0.0001
Copper	Total	mg/L	0.003	<0.001	0.001	0.001
Lead	Total	mg/L	<0.0001	0.0001	0.0002	0.0001
Lithium	Total	mg/L	0.024	<0.001	0.002	0.001
Molybdenum	Total	mg/L	<0.001	<0.001	<0.001	0.001
Nickel	Total	mg/L	0.118	<0.0005	0.0036	0.0005
Selenium	Total	mg/L	<0.0002	<0.0002	<0.0002	0.0002
Silver	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Strontium	Total	mg/L	0.280	0.005	0.016	0.001
Thallium	Total	mg/L	<0.00005	<0.00005	<0.00005	0.00005
Tin	Total	mg/L	<0.001	<0.001	<0.001	0.001
Titanium	Total	mg/L	0.0042	<0.0005	0.0011	0.0005
Uranium	Total	mg/L	<0.0005	<0.0005	<0.0005	0.0005
Vanadium	Total	mg/L	<0.0001	<0.0001	0.0001	0.0001
Zinc	Total	mg/L	0.221	0.002	0.006	0.001
Physical and Aggregate Properties						
Temperature of observed pH		°C	18.7	19.3	20.4	



Analytical Report

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Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: Steve Schlesak
Company: Kinross Gold Corporation

Project
ID:
Name: Lupin Mine
Location: Nunavut
LSD:
P.O.:
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NWL Lot ID: 396502
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Report Number: 724749

Page: 10 of 27

		NWL Number	396502-13	396502-14	396502-15	
		Sample Date	Jul 19, 2005	Jul 19, 2005	Jul 19, 2005	
		Sample Description	925-20 / 51057	925-21 / 51058	925-22-1 / 51059	
		Matrix	Water - General	Water - General	Water - General	
Analyte		Units	Results	Results	Results	Detection Limit
Physical and Aggregate Properties - Continued						
Solids	Total Suspended	mg/L	<2	<3	5	1
Routine Water						
pH			5.76	6.73	6.73	
Electrical Conductivity		µS/cm at 25 C	720	11	41	1
Calcium	Dissolved	mg/L	67.0	<0.2	1.9	0.2
Magnesium	Dissolved	mg/L	8.2	0.1	0.7	0.1
Sodium	Dissolved	mg/L	78.8	0.5	2.9	0.4
Potassium	Dissolved	mg/L	6.5	<0.4	0.6	0.4
Iron	Dissolved	mg/L	0.05	0.03	0.04	0.01
Manganese	Dissolved	mg/L	0.900	<0.005	0.011	0.005
Chloride	Dissolved	mg/L	50.2	0.5	2.2	0.4
Nitrate - N		mg/L	6.38	<0.01	0.15	0.01
Nitrite - N		mg/L	<0.005	<0.005	<0.005	0.005
Nitrate and Nitrite - N		mg/L	6.38	<0.02	0.15	0.02
Sulfate (SO4)	Dissolved	mg/L	269	2	12	0.9
Hydroxide		mg/L	<5	<5	<5	5
Carbonate		mg/L	<6	<6	<6	6
Bicarbonate		mg/L	<5	<5	<5	5
P-Alkalinity	as CaCO3	mg/L	<5	<5	<5	5
T-Alkalinity	as CaCO3	mg/L	<5	<5	<5	5
Total Dissolved Solids	Calculated	mg/L	481	3	20	1
Hardness	Dissolved as CaCO3	mg/L	201	<0.9	8	
Ionic Balance	Dissolved	%	103	60	100	



Analytical Report

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9818 International Airport
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T5J 2T2
Attn: Michael Tansey
Sampled By: Steve Schlesak
Company: Kinross Gold Corporation

Project ID:
Name: Lupin Mine
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Report Number: 724749

Page: 11 of 27

		NWL Number	396502-16	396502-17	396502-18	
		Sample Date	Jul 19, 2005	Jul 19, 2005	Jul 19, 2005	
		Sample Description	925-22-2 / 51060	925-22-3 / 51061	925-24 / 51062	
		Matrix	Water - General	Water - General	Water - General	
Analyte		Units	Results	Results	Results	Detection Limit
Inorganic Nonmetallic Parameters						
Ammonium - N		mg/L	<0.05	<0.05	0.07	0.05
Cyanide	Strong Acid Dissociable	mg/L	0.002	0.002	0.002	0.002
Metals Total						
Iron	Total	mg/L	0.1	0.1	<0.1	0.1
Manganese	Total	mg/L	0.021	0.020	0.006	0.005
Silicon	Total	mg/L	0.16	0.14	0.09	0.05
Sulfur	Total	mg/L	3.3	3.3	0.5	0.3
Mercury	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Mercury	Total	ug/L	-	-	<0.02	0.02
Aluminum	Total	mg/L	0.028	0.025	0.026	0.005
Antimony	Total	mg/L	<0.0002	<0.0002	<0.0002	0.0002
Arsenic	Total	mg/L	0.0016	0.0016	0.0010	0.0002
Barium	Total	mg/L	0.005	0.005	0.002	0.001
Beryllium	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Bismuth	Total	mg/L	<0.0005	<0.0005	<0.0005	0.0005
Boron	Total	mg/L	0.016	0.008	0.004	0.002
Cadmium	Total	mg/L	0.00001	<0.00001	<0.00001	0.00001
Chromium	Total	mg/L	<0.0005	<0.0005	<0.0005	0.0005
Cobalt	Total	mg/L	0.001	0.0009	0.0002	0.0001
Copper	Total	mg/L	0.001	0.001	<0.001	0.001
Lead	Total	mg/L	0.0002	0.0001	0.0001	0.0001
Lithium	Total	mg/L	0.002	0.002	<0.001	0.001
Molybdenum	Total	mg/L	<0.001	<0.001	<0.001	0.001
Nickel	Total	mg/L	0.0040	0.0040	0.0010	0.0005
Selenium	Total	mg/L	<0.0002	<0.0002	<0.0002	0.0002
Silver	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Strontium	Total	mg/L	0.014	0.014	0.005	0.001
Thallium	Total	mg/L	<0.00005	<0.00005	<0.00005	0.00005
Tin	Total	mg/L	<0.001	<0.001	<0.001	0.001
Titanium	Total	mg/L	0.0006	<0.0005	<0.0005	0.0005
Uranium	Total	mg/L	<0.0005	<0.0005	<0.0005	0.0005
Vanadium	Total	mg/L	0.0001	0.0001	0.0001	0.0001
Zinc	Total	mg/L	0.006	0.006	0.004	0.001
Physical and Aggregate Properties						
Temperature of observed pH		°C	20.0	19.6	19.4	



Analytical Report

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Page: 12 of 27

		NWL Number	396502-16	396502-17	396502-18	
		Sample Date	Jul 19, 2005	Jul 19, 2005	Jul 19, 2005	
		Sample Description	925-22-2 / 51060	925-22-3 / 51061	925-24 / 51062	
		Matrix	Water - General	Water - General	Water - General	
Analyte		Units	Results	Results	Results	Detection Limit
Physical and Aggregate Properties - Continued						
Solids	Total Suspended	mg/L	3	<3	3	1
Routine Water						
pH			6.74	6.74	6.76	
Electrical Conductivity		µS/cm at 25 C	40	40	12	1
Calcium	Dissolved	mg/L	1.7	2.6	0.7	0.2
Magnesium	Dissolved	mg/L	0.7	0.9	0.4	0.1
Sodium	Dissolved	mg/L	2.7	2.5	<0.4	0.4
Potassium	Dissolved	mg/L	<0.4	<0.4	<0.4	0.4
Iron	Dissolved	mg/L	0.04	0.03	0.01	0.01
Manganese	Dissolved	mg/L	0.010	0.017	<0.005	0.005
Chloride	Dissolved	mg/L	2.1	1.8	0.8	0.4
Nitrate - N		mg/L	0.15	0.16	<0.01	0.01
Nitrite - N		mg/L	<0.005	<0.005	<0.005	0.005
Nitrate and Nitrite - N		mg/L	0.15	0.16	<0.02	0.02
Sulfate (SO4)	Dissolved	mg/L	12	11	2	0.9
Hydroxide		mg/L	<5	<5	<5	5
Carbonate		mg/L	<6	<6	<6	6
Bicarbonate		mg/L	<5	<5	<5	5
P-Alkalinity	as CaCO3	mg/L	<5	<5	<5	5
T-Alkalinity	as CaCO3	mg/L	<5	<5	<5	5
Total Dissolved Solids	Calculated	mg/L	19	19	4	1
Hardness	Dissolved as CaCO3	mg/L	7	10	3	
Ionic Balance	Dissolved	%	80	110	100	



Analytical Report

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T5J 2T2
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Project
ID:
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Page: 13 of 27

		NWL Number	396502-19	396502-20	396502-21	
		Sample Date	Jul 19, 2005	Jul 18, 2005	Jul 20, 2005	
		Sample Description	925-25 / 51063	WC3 / 51064	925-10 / 51065	
		Matrix	Water - General	Water - General	Water - General	
Analyte		Units	Results	Results	Results	Detection Limit
Inorganic Nonmetallic Parameters						
Ammonium - N		mg/L	<0.05	-	1.94	0.05
Cyanide	Strong Acid Dissociable	mg/L	0.002	0.024	0.040	0.002
Metals Total						
Iron	Total	mg/L	0.1	2.6	0.1	0.1
Manganese	Total	mg/L	0.006	2.93	0.947	0.005
Silicon	Total	mg/L	0.12	4.83	1.84	0.05
Sulfur	Total	mg/L	0.5	158	95.3	0.3
Mercury	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Mercury	Total	ug/L	-	-	<0.02	0.02
Aluminum	Total	mg/L	0.031	4.38	0.082	0.005
Antimony	Total	mg/L	<0.0002	<0.0002	0.0003	0.0002
Arsenic	Total	mg/L	0.0012	0.356	0.0096	0.0002
Barium	Total	mg/L	0.002	0.032	0.015	0.001
Beryllium	Total	mg/L	<0.0001	0.0012	<0.0001	0.0001
Bismuth	Total	mg/L	<0.0005	<0.0005	<0.0005	0.0005
Boron	Total	mg/L	0.003	0.020	0.099	0.002
Cadmium	Total	mg/L	<0.00001	0.00255	0.00009	0.00001
Chromium	Total	mg/L	<0.0005	0.0037	<0.0005	0.0005
Cobalt	Total	mg/L	0.0002	0.351	0.0494	0.0001
Copper	Total	mg/L	<0.001	0.214	0.015	0.001
Lead	Total	mg/L	0.0002	0.0068	0.0004	0.0001
Lithium	Total	mg/L	<0.001	0.078	0.030	0.001
Molybdenum	Total	mg/L	<0.001	<0.001	0.003	0.001
Nickel	Total	mg/L	0.0011	1.20	0.0953	0.0005
Selenium	Total	mg/L	<0.0002	0.0020	<0.0002	0.0002
Silver	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Strontium	Total	mg/L	0.005	0.263	0.309	0.001
Thallium	Total	mg/L	<0.00005	0.00017	<0.00005	0.00005
Tin	Total	mg/L	<0.001	<0.001	<0.001	0.001
Titanium	Total	mg/L	0.0007	0.0331	0.0044	0.0005
Uranium	Total	mg/L	<0.0005	0.0043	<0.0005	0.0005
Vanadium	Total	mg/L	0.0001	0.0015	<0.0001	0.0001
Zinc	Total	mg/L	0.002	0.355	0.263	0.001
Physical and Aggregate Properties						
Temperature of observed pH		°C	19.3	22.1	19.6	



Analytical Report

Norwest Labs
7217 Roper Road NW
Edmonton, AB. T6B 3J4
Phone: (780) 438-5522
Fax: (780) 438-0396

Bill to: Echo Bay Mines Ltd.
Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: Steve Schlesak
Company: Kinross Gold Corporation

Project ID:
Name: Lupin Mine
Location: Nunavut
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 396502
Control Number:
Date Received: Jul 21, 2005
Date Reported: Aug 02, 2005
Report Number: 724749

Page: 14 of 27

		NWL Number	396502-19	396502-20	396502-21	
		Sample Date	Jul 19, 2005	Jul 18, 2005	Jul 20, 2005	
		Sample Description	925-25 / 51063	WC3 / 51064	925-10 / 51065	
		Matrix	Water - General	Water - General	Water - General	
Analyte		Units	Results	Results	Results	Detection Limit
Physical and Aggregate Properties - Continued						
Solids	Total Suspended	mg/L	4	-	<2	1
Routine Water						
pH			6.72	4.11	6.28	
Electrical Conductivity		µS/cm at 25 C	11	872	819	1
Calcium	Dissolved	mg/L	0.6	94.6	73.6	0.2
Magnesium	Dissolved	mg/L	0.4	48.7	7.4	0.1
Sodium	Dissolved	mg/L	<0.4	9.2	86.3	0.4
Potassium	Dissolved	mg/L	<0.4	15.8	6.9	0.4
Iron	Dissolved	mg/L	<0.01	0.50	<0.01	0.01
Manganese	Dissolved	mg/L	<0.005	3.00	0.994	0.005
Chloride	Dissolved	mg/L	0.5	2.7	57.4	0.4
Nitrate - N		mg/L	<0.01	0.25	7.38	0.01
Nitrite - N		mg/L	<0.005	<0.005	<0.005	0.005
Nitrate and Nitrite - N		mg/L	<0.02	0.25	7.38	0.02
Sulfate (SO4)	Dissolved	mg/L	2	488	304	0.9
Hydroxide		mg/L	<5	<5	<5	5
Carbonate		mg/L	<6	<6	<6	6
Bicarbonate		mg/L	<5	20	<5	5
P-Alkalinity	as CaCO3	mg/L	<5	<5	<5	5
T-Alkalinity	as CaCO3	mg/L	<5	16	<5	5
Total Dissolved Solids	Calculated	mg/L	3	668	538	1
Hardness	Dissolved as CaCO3	mg/L	3	437	214	
Ionic Balance	Dissolved	%	100	92	99	

Approved by:

Anthony Neumann, MSc
Laboratory Operations Manager



Quality Control

Norwest Labs
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9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: Steve Schlesak
Company: Kinross Gold Corporation

Project
ID:
Name: Lupin Mine
Location: Nunavut
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 396502
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Date Received: Jul 21, 2005
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Page: 15 of 27

Inorganic Nonmetallic Parameters

Blanks	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Ammonium - N	mq/L	<0.05	0.00	-0.08	0.08	✓
Cyanide	mq/L	<0.001	0.000	-0.001	0.001	✓
Material Used:	Edmonton Method Blank					
Date Acquired:	Jul 27, 2005					
Acquired By:	Gordon Grensman					
Replicates	Units	Replicate1	Replicate2	% RSD Criteria	Absolute Criteria	Passed QC
Ammonium - N	mq/L	126	130	9.99	0.10	✓
Cyanide	mq/L	0.002	0.002	9.990	0.002	✓
Material Used:	Edmonton Duplicate					
Date Acquired:	Jul 27, 2005					
Acquired By:						
Control Sample	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Ammonium - N	mq/L	2.94	2.99	2.59	3.39	✓
Cyanide	mq/L	0.080	0.077	0.067	0.087	✓
Material Used:	Water High					
Date Acquired:	Jul 27, 2005					
Acquired By:	Gordon Grensman					
Ammonium - N	mq/L	0.80	0.79	0.66	0.91	✓
Cyanide	mq/L	0.016	0.016	0.013	0.018	✓
Material Used:	Water Low					
Date Acquired:	Jul 27, 2005					
Acquired By:	Gordon Grensman					



Quality Control

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Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: Steve Schlesak
Company: Kinross Gold Corporation

Project
ID:
Name: Lupin Mine
Location: Nunavut
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 396502
Control Number:
Date Received: Jul 21, 2005
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Report Number: 724749

Page: 16 of 27

Metals Dissolved

Blanks	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Sulfur	mq/L	<0.3	0.0	-0.3	0.3	✓
Material Used:	Edmonton Method Blank					
Date Acquired:	Jul 22, 2005					
Acquired By:	To Thong					
Replicates	Units	Replicate1	Replicate2	% RSD Criteria	Absolute Criteria	Passed QC
Sulfur	mq/L	92	90	10.0	0.1	✓
Material Used:	Edmonton Duplicate					
Date Acquired:	Jul 22, 2005					
Acquired By:	To Thong					
Control Sample	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Sulfur	mq/L	49.7	50.0	45.0	55.0	✓
Material Used:	Metals High					
Date Acquired:	Jul 22, 2005					
Acquired By:	To Thong					
Sulfur	mq/L	1.1	1.0	0.9	1.2	✓
Material Used:	Metals Low					
Date Acquired:	Jul 22, 2005					
Acquired By:	To Thong					



Quality Control

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Attn: Michael Tansey
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Company: Kinross Gold Corporation

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Report Number: 724749

Page: 17 of 27

Metals Total

Blanks	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Iron	mq/L	<0.1	0.0	0.0	0.0	✓
Manganese	mq/L	<0.005	0.000	-0.001	0.001	✓
Silicon	mq/L	<0.05	0.02	-0.04	0.09	✓
Sulfur	mq/L	<0.3	0.0	-0.3	0.3	✓
Mercury	mq/L	0.0001	0.0000	0.0000	0.0000	✓
Aluminum	ug/L	<5	0	-5	5	✓
Antimony	ug/L	<0.2	0.0	-0.2	0.2	✓
Arsenic	ug/L	<0.2	0.0	-0.2	0.2	✓
Barium	ug/L	<1	0	-1	1	✓
Beryllium	ug/L	<0.1	0.0	-0.1	0.1	✓
Bismuth	ug/L	<0.5	0.0	-0.5	0.5	✓
Boron	ug/L	<2	0	-2	2	✓
Cadmium	ug/L	<0.01	0.00	-0.01	0.01	✓
Chromium	ug/L	<0.5	0.0	-0.5	0.5	✓
Cobalt	ug/L	<0.1	0.0	-0.1	0.1	✓
Copper	ug/L	<1	0	-1	1	✓
Lead	ug/L	<0.1	0.0	-0.1	0.1	✓
Lithium	ug/L	<1	0	-1	1	✓
Molybdenum	ug/L	<1	0	-1	1	✓
Nickel	ug/L	<0.5	0.0	-0.5	0.5	✓
Selenium	ug/L	<0.2	0.0	-0.2	0.2	✓
Silver	ug/L	<0.1	0.0	-0.1	0.1	✓
Strontium	ug/L	<1	0	-1	1	✓
Thallium	ug/L	<0.05	0.00	-0.05	0.05	✓
Tin	ug/L	<1	0	-1	1	✓
Titanium	ug/L	<0.5	0.0	-0.5	0.5	✓
Uranium	ug/L	<0.5	0.0	-0.5	0.5	✓
Vanadium	ug/L	<0.1	0.0	-0.1	0.1	✓
Zinc	ug/L	<1	0	-1	1	✓
Material Used:	Edmonton Method Blank					
Date Acquired:	Jul 22, 2005					
Acquired By:	Fernando Maglalang					
Mercury	ug/L	<0.02	0.000	0.000	0.000	✓
Material Used:	Metals Blank - water - total					
Date Acquired:	Jul 28, 2005					
Acquired By:	Marie England					



Quality Control

Norwest Labs
7217 Roper Road NW
Edmonton, AB. T6B 3J4
Phone: (780) 438-5522
Fax: (780) 438-0396

Bill to: Echo Bay Mines Ltd.
Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: Steve Schlesak
Company: Kinross Gold Corporation

Project
ID:
Name: Lupin Mine
Location: Nunavut
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 396502
Control Number:
Date Received: Jul 21, 2005
Date Reported: Aug 02, 2005
Report Number: 724749

Page: 18 of 27

Metals Total (Continued...)

Replicates	Units	Replicate1	Replicate2	% RSD Criteria	Absolute Criteria	Passed QC
Iron	mq/L	0.8	0.8	15.0	0.2	✓
Manganese	mg/L	0.980	0.975	15.000	0.010	✓
Silicon	mq/L	6.79	6.78	15.00	0.10	✓
Sulfur	mq/L	91.8	92.6	15.0	0.1	✓
Mercury	mq/L	0.0001	0.0002	9.9900	0.0003	✓
Aluminum	uq/L	48	48	15	11	✓
Antimony	uq/L	0.6	0.7	15.0	0.4	✓
Arsenic	uq/L	877	862	15.0	0.4	✓
Barium	uq/L	26	25	15	2	✓
Beryllium	uq/L	1.6	1.6	15.0	0.2	✓
Bismuth	ug/L	<0.5	<0.5	15.0	1.1	✓
Boron	uq/L	41	40	15	4	✓
Cadmium	ug/L	3.07	3.09	15.00	0.02	✓
Chromium	uq/L	67.2	67.6	15.0	1.1	✓
Cobalt	ug/L	762	754	15.0	0.2	✓
Copper	uq/L	221	220	15	2	✓
Lead	ug/L	33.8	33.0	15.0	0.2	✓
Lithium	uq/L	4	4	15	2	✓
Molybdenum	uq/L	1	1	15	2	✓
Nickel	uq/L	2090	2070	15.0	1.1	✓
Selenium	uq/L	1.2	1.4	15.0	0.4	✓
Silver	uq/L	0.2	0.2	15.0	0.2	✓
Strontium	uq/L	91	91	15	2	✓
Thallium	uq/L	0.35	0.35	15.00	0.11	✓
Tin	uq/L	<1	<1	15	2	✓
Titanium	ug/L	907	891	15.0	1.1	✓
Uranium	uq/L	5.8	5.8	15.0	1.1	✓
Vanadium	ug/L	44.2	44.4	15.0	0.2	✓
Zinc	uq/L	645	644	15	2	✓

Material Used: Edmonton Duplicate

Date Acquired: Jul 21, 2005

Acquired By: Fernando Maglalang

Mercury	uq/L	<0.02	<0.02	30.000	0.050	✓
---------	------	-------	-------	--------	-------	---

Material Used: Metals Int. Duplicate - water tot

Date Acquired: Jul 28, 2005

Acquired By: Marie England



Quality Control

Norwest Labs
7217 Roper Road NW
Edmonton, AB. T6B 3J4
Phone: (780) 438-5522
Fax: (780) 438-0396

Bill to: Echo Bay Mines Ltd.
Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: Steve Schlesak
Company: Kinross Gold Corporation

Project
ID:
Name: Lupin Mine
Location: Nunavut
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 396502
Control Number:
Date Received: Jul 21, 2005
Date Reported: Aug 02, 2005
Report Number: 724749

Page: 19 of 27

Metals Total (Continued...)

Control Sample	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Iron	mq/L	2.0	2.0	1.8	2.2	✓
Manganese	mq/L	0.490	0.500	0.450	0.550	✓
Silicon	mq/L	5.11	5.00	4.50	5.50	✓
Sulfur	mq/L	9.7	10.0	9.0	11.0	✓
Mercury	mq/L	0.0007	0.0008	0.0007	0.0010	✓
Aluminum	uq/L	314	322	273	371	✓
Antimony	uq/L	12.1	11.5	10.2	12.8	✓
Arsenic	uq/L	12.2	11.5	10.3	12.7	✓
Barium	uq/L	63	61	52	69	✓
Beryllium	uq/L	5.9	5.9	4.9	7.0	✓
Bismuth	uq/L	31.2	30.2	26.0	34.4	✓
Boron	uq/L	124	125	102	148	✓
Cadmium	uq/L	0.67	0.63	0.47	0.78	✓
Chromium	uq/L	32.3	31.8	27.5	36.2	✓
Cobalt	uq/L	6.6	6.4	5.4	7.5	✓
Copper	uq/L	62	63	55	70	✓
Lead	uq/L	6.6	6.2	5.4	7.0	✓
Lithium	uq/L	62	65	53	76	✓
Molybdenum	uq/L	62	61	53	69	✓
Nickel	uq/L	31.2	31.4	27.0	35.8	✓
Selenium	uq/L	11.8	11.0	9.7	12.3	✓
Silver	uq/L	6.5	6.2	5.5	7.0	✓
Strontium	uq/L	63	64	55	72	✓
Thallium	uq/L	3.14	3.14	2.56	3.72	✓
Tin	uq/L	60	59	52	66	✓
Titanium	uq/L	31.7	31.5	27.0	36.0	✓
Uranium	uq/L	31.2	30.8	26.9	34.7	✓
Vanadium	uq/L	6.6	6.5	5.4	7.6	✓
Zinc	uq/L	61	59	49	69	✓

Material Used: Edmonton Digestion Check

Date Acquired: Jul 22, 2005

Acquired By: Fernando Maglalang

Iron	mg/L	9.6	10.0	9.0	11.0	✓
Manganese	mg/L	2.32	2.500	2.250	2.750	✓
Silicon	mg/L	24.3	25.00	22.50	27.50	✓
Sulfur	mg/L	49.1	50.0	45.0	55.0	✓
Mercury	mg/L	0.0031	0.0031	0.0027	0.0035	✓

Material Used: Metals High

Date Acquired: Jul 25, 2005

Acquired By: Nicole Sehn



Quality Control

Norwest Labs
7217 Roper Road NW
Edmonton, AB. T6B 3J4
Phone: (780) 438-5522
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Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: Steve Schlesak
Company: Kinross Gold Corporation

Project
ID:
Name: Lupin Mine
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Acct. Code:

NWL Lot ID: 396502
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Page: 20 of 27

Metals Total (Continued...)

Control Sample	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Iron	mq/L	0.2	0.2	0.2	0.2	✓
Manganese	mq/L	0.051	0.050	0.045	0.055	✓
Silicon	mq/L	0.53	0.50	0.45	0.55	✓
Sulfur	mq/L	0.9	1.0	0.9	1.2	✓
Mercury	mq/L	0.0008	0.0008	-0.0016	0.0032	✓
Aluminum	uq/L	1040	1000	850	1150	✓
Antimony	uq/L	40.3	40.0	34.0	46.0	✓
Arsenic	uq/L	42.5	40.0	34.0	46.0	✓
Barium	uq/L	200	200	170	230	✓
Beryllium	uq/L	19.3	20.0	17.0	23.0	✓
Bismuth	uq/L	97.9	100.0	85.0	115.0	✓
Boron	uq/L	389	400	340	460	✓
Cadmium	uq/L	2.07	2.00	1.70	2.30	✓
Chromium	uq/L	105	100.0	85.0	115.0	✓
Cobalt	uq/L	21.6	20.0	17.0	23.0	✓
Copper	uq/L	204	200	170	230	✓
Lead	uq/L	19.7	20.0	17.0	23.0	✓
Lithium	uq/L	182	200	170	230	✓
Molybdenum	uq/L	200	200	170	230	✓
Nickel	uq/L	104	100.0	85.0	115.0	✓
Selenium	uq/L	41.6	40.0	34.0	46.0	✓
Silver	uq/L	21.4	20.0	17.0	23.0	✓
Strontium	uq/L	203	200	170	230	✓
Thallium	uq/L	10.0	10.00	8.50	11.50	✓
Tin	uq/L	192	200	170	230	✓
Titanium	uq/L	103	100.0	85.0	115.0	✓
Uranium	uq/L	98.4	100.0	85.0	115.0	✓
Vanadium	uq/L	18.8	20.0	17.0	23.0	✓
Zinc	uq/L	211	200	170	230	✓

Material Used: Metals Low
Date Acquired: Jul 22, 2005
Acquired By: Fernando Maglalaneg



Quality Control

Norwest Labs
7217 Roper Road NW
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Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: Steve Schlesak
Company: Kinross Gold Corporation

Project
ID:
Name: Lupin Mine
Location: Nunavut
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 396502
Control Number:
Date Received: Jul 21, 2005
Date Reported: Aug 02, 2005
Report Number: 724749

Page: 21 of 27

Metals Total (Continued...)

Control Sample	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Aluminum	uq/L	55	50	43	58	✓
Antimony	uq/L	2.1	2.0	1.7	2.3	✓
Arsenic	uq/L	2.0	2.0	1.7	2.3	✓
Barium	uq/L	10	10	9	12	✓
Beryllium	uq/L	1.0	1.0	0.9	1.2	✓
Bismuth	uq/L	4.9	5.0	4.3	5.8	✓
Boron	uq/L	20	20	17	23	✓
Cadmium	uq/L	0.11	0.10	0.09	0.12	✓
Chromium	uq/L	5.3	5.0	4.3	5.8	✓
Cobalt	uq/L	1.1	1.0	0.9	1.2	✓
Copper	uq/L	11	10	9	12	✓
Lead	uq/L	1	1.0	0.9	1.2	✓
Lithium	uq/L	10	10	9	12	✓
Molybdenum	uq/L	10	10	9	12	✓
Nickel	uq/L	5.0	5.0	4.3	5.8	✓
Selenium	uq/L	2.2	2.0	1.7	2.3	✓
Silver	uq/L	1	1.0	0.9	1.2	✓
Strontium	uq/L	10	10	9	12	✓
Thallium	uq/L	0.52	0.50	0.43	0.58	✓
Tin	uq/L	10	10	9	12	✓
Titanium	uq/L	5.2	5.0	4.3	5.8	✓
Uranium	uq/L	5.1	5.0	4.3	5.8	✓
Vanadium	uq/L	1.0	1.0	0.9	1.2	✓
Zinc	uq/L	10	10	9	12	✓
Material Used:	Metals Trace					
Date Acquired:	Jul 22, 2005					
Acquired By:	Fernando Maglalang					
Mercury	ug/L	0.58	14.000	11.000	17.000	✓
Material Used:	S0102 - Hg					
Date Acquired:	Jul 28, 2005					
Acquired By:						



Quality Control

Norwest Labs
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Fax: (780) 438-0396

Bill to: Echo Bay Mines Ltd.
Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: Steve Schlesak
Company: Kinross Gold Corporation

Project
ID:
Name: Lupin Mine
Location: Nunavut
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 396502
Control Number:
Date Received: Jul 21, 2005
Date Reported: Aug 02, 2005
Report Number: 724749

Page: 22 of 27

Physical and Aggregate Properties

Replicates	Units	Replicate1	Replicate2	% RSD Criteria	Absolute Criteria	Passed QC
Solids	mg/L	117	117	10	15	✓
Material Used:	Edmonton Duplicate					
Date Acquired:	Jul 22, 2005					
Acquired By:	Christina Onyskiw					
Control Sample	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Solids	mg/L	197	200	180	220	✓
Material Used:	Water High					
Date Acquired:	Jul 22, 2005					
Acquired By:	Christina Onyskiw					
Solids	mg/L	20	20	18	22	✓
Material Used:	Water Low					
Date Acquired:	Jul 22, 2005					
Acquired By:	Christina Onyskiw					



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Project
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P.O.:
Acct. Code:

NWL Lot ID: 396502
Control Number:
Date Received: Jul 21, 2005
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Page: 23 of 27

Routine Water

Blanks	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Calcium	mq/L	<0.2	0.0	-0.2	0.2	✓
Magnesium	mq/L	<0.1	0.0	-0.1	0.1	✓
Sodium	mq/L	<0.4	0.0	-0.4	0.4	✓
Potassium	mq/L	<0.4	0.0	-0.4	0.4	✓
Iron	mq/L	<0.01	0.00	-0.01	0.01	✓
Manganese	mq/L	<0.005	0.000	-0.005	0.005	✓
Chloride	mq/L	<0.4	0.0	-0.5	0.5	✓
Nitrate - N	mq/L	<0.01	0.00	-0.01	0.01	✓
Nitrite - N	mq/L	<0.005	0.000	-0.005	0.005	✓

Material Used: Edmonton Method Blank

Date Acquired: Jul 22, 2005

Acquired By: Marc Dzura

Replicates	Units	Replicate1	Replicate2	% RSD Criteria	Absolute Criteria	Passed QC
pH		8.10	8.10	9.99	0.10	✓
Electrical Conductivity	dS/m at 25 C	40.3	40.3	9.990	0.002	✓
Calcium	mq/L	72	70	10.0	0.6	✓
Magnesium	mg/L	20	19	10.0	0.7	✓
Sodium	mq/L	8	8	10.0	1.2	✓
Potassium	mg/L	<4	<4	10.0	1.2	✓
Iron	mq/L	0.08	0.07	9.99	0.05	✓
Manganese	mq/L	0.71	0.67	9.990	0.010	✓
Chloride	mq/L	7.4	7.4	10.0	0.5	✓
Nitrate - N	mq/L	204	203	9.99	0.01	✓
Nitrite - N	mq/L	<0.05	<0.05	9.990	0.010	✓
Hydroxide	mq/L	<5	<5	10		✓
Carbonate	mq/L	7	9	10		✓
Bicarbonate	mq/L	153	152	10		✓
P-Alkalinity	mg/L	<5	<5	10	5	✓
T-Alkalinity	mq/L	6	8	10	5	✓

Material Used: Edmonton Duplicate

Date Acquired: Jul 22, 2005

Acquired By: Annva Hundal



Quality Control

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Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: Steve Schlesak
Company: Kinross Gold Corporation

Project
ID:
Name: Lupin Mine
Location: Nunavut
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 396502
Control Number:
Date Received: Jul 21, 2005
Date Reported: Aug 02, 2005
Report Number: 724749

Page: 24 of 27

Routine Water (Continued...)

Control Sample	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Chloride	mq/L	2130	2087.0	1875.2	2298.8	✓
Material Used:	Chloride High					
Date Acquired:	Jul 22, 2005					
Acquired By:	Wilailuk Somiit					
Calcium	mg/L	241	250.0	225.0	275.0	✓
Magnesium	mg/L	96.4	100.0	90.0	110.0	✓
Sodium	mg/L	248	250.0	225.0	275.0	✓
Potassium	mg/L	247	250.0	225.0	275.0	✓
Iron	mg/L	9.32	10.00	9.01	10.99	✓
Manganese	mg/L	2.38	2.500	2.260	2.740	✓
Material Used:	Metals High					
Date Acquired:	Jul 22, 2005					
Acquired By:	To Thong					
Calcium	mq/L	5.2	5.0	4.5	5.5	✓
Magnesium	mq/L	2.1	2.0	1.8	2.2	✓
Sodium	mq/L	5.2	5.0	4.5	5.5	✓
Potassium	mq/L	4.8	5.0	4.5	5.5	✓
Iron	mq/L	0.21	0.20	0.18	0.22	✓
Manganese	mq/L	0.051	0.050	0.045	0.055	✓
Material Used:	Metals Low					
Date Acquired:	Jul 21, 2005					
Acquired By:	Nicole Sehn					
pH		9.24	9.23	9.11	9.35	✓
Electrical Conductivity	dS/m at 25 C	2.82	2.730	2.611	2.849	✓
Chloride	mq/L	81.6	81.0	76.4	85.6	✓
Nitrate - N	mq/L	10.3	10.00	9.61	10.39	✓
Nitrite - N	mq/L	10.4	10.000	9.562	10.438	✓
P-Alkalinity	mq/L	492	507	415	599	✓
T-Alkalinity	mq/L	999	1009	969	1049	✓
Material Used:	Water High					
Date Acquired:	Jul 22, 2005					
Acquired By:	Annva Hundal					



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9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: Steve Schlesak
Company: Kinross Gold Corporation

Project
ID:
Name: Lupin Mine
Location: Nunavut
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NWL Lot ID: 396502
Control Number:
Date Received: Jul 21, 2005
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Report Number: 724749

Page: 25 of 27

Routine Water (Continued...)

Control Sample	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
pH		6.93	6.90	6.83	6.97	✓
Electrical Conductivity	dS/m at 25 C	0.079	0.076	0.070	0.081	✓
Chloride	mq/L	14.6	14.9	13.2	16.6	✓
Nitrate - N	mq/L	0.52	0.50	0.44	0.56	✓
Nitrite - N	mq/L	0.515	0.495	0.437	0.553	✓
P-Alkalinity	mq/L	66	54	20	88	✓
T-Alkalinity	mq/L	132	127	118	136	✓

Material Used: Water Low
Date Acquired: Jul 22, 2005
Acquired By: Annva Hundal



Analytical Report

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Edmonton, AB, Canada
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Attn: Michael Tansey
Sampled By: Steve Schlesak
Company: Kinross Gold Corporation

Project
ID:
Name: Lupin Mine
Location: Nunavut
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 398142
Control Number:
Date Received: Jul 28, 2005
Date Reported: Aug 09, 2005
Report Number: 727534

Page: 2 of 26

		NWL Number	398142-1	398142-2	398142-3	
		Sample Date	Jul 21, 2005	Jul 22, 2005	Jul 23, 2005	
		Sample Description	925-10 / 51066	925-10 / 51067	925-10 / 51068	
		Matrix	Water - General	Water - General	Water - General	
Analyte		Units	Results	Results	Results	Detection Limit
Routine Water - Continued						
pH			6.55	6.48	6.44	
Electrical Conductivity		µS/cm at 25 C	839	840	839	1
Calcium	Dissolved	mg/L	74.5	74.5	73.6	0.2
Magnesium	Dissolved	mg/L	7.4	7.4	7.4	0.1
Sodium	Dissolved	mg/L	84.8	84.7	84.2	0.4
Potassium	Dissolved	mg/L	7.2	7.3	7.2	0.4
Iron	Dissolved	mg/L	<0.01	<0.01	<0.01	0.01
Manganese	Dissolved	mg/L	0.990	0.991	0.986	0.005
Chloride	Dissolved	mg/L	57.0	57.8	57.4	0.4
Nitrate - N		mg/L	7.27	7.37	7.46	0.01
Nitrite - N		mg/L	0.054	0.054	0.054	0.005
Nitrate and Nitrite - N		mg/L	7.33	7.43	7.51	0.02
Sulfate (SO4)	Dissolved	mg/L	300	303	304	0.9
Hydroxide		mg/L	<5	<5	<5	5
Carbonate		mg/L	8	<6	8	6
Bicarbonate		mg/L	<5	<5	<5	5
P-Alkalinity	as CaCO3	mg/L	<5	<5	<5	5
T-Alkalinity	as CaCO3	mg/L	7	<5	7	5
Total Dissolved Solids	Calculated	mg/L	535	535	538	1
Hardness	Dissolved as CaCO3	mg/L	217	217	214	
Ionic Balance	Dissolved	%	95	97	93	

		NWL Number	398142-4	398142-5	398142-6	
		Sample Date	Jul 24, 2005	Jul 25, 2005	Jul 26, 2005	
		Sample Description	925-10 / 51069	925-10 / 51070	925-10 / 51071	
		Matrix	Water - General	Water - General	Water - General	
Analyte		Units	Results	Results	Results	Detection Limit
Inorganic Nonmetallic Parameters						
Cyanide	Strong Acid Dissociable	mg/L	0.038	0.036	0.036	0.002
Metals Total						
Iron	Total	mg/L	0.1	0.1	0.1	0.1
Manganese	Total	mg/L	1.01	0.998	0.991	0.005
Silicon	Total	mg/L	1.84	1.82	1.86	0.05
Sulfur	Total	mg/L	96.4	96.3	97.3	0.3
Mercury	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Aluminum	Total	mg/L	0.077	0.078	0.082	0.005
Antimony	Total	mg/L	<0.0002	<0.0002	<0.0002	0.0002
Arsenic	Total	mg/L	0.0089	0.0088	0.0088	0.0002
Barium	Total	mg/L	0.016	0.016	0.016	0.001
Beryllium	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Bismuth	Total	mg/L	<0.0005	<0.0005	<0.0005	0.0005
Boron	Total	mg/L	0.089	0.090	0.091	0.002
Cadmium	Total	mg/L	0.00012	0.00010	0.00010	0.00001
Chromium	Total	mg/L	<0.0005	<0.0005	<0.0005	0.0005
Cobalt	Total	mg/L	0.0469	0.0476	0.0485	0.0001
Copper	Total	mg/L	0.014	0.014	0.014	0.001
Lead	Total	mg/L	0.0003	0.0003	0.0003	0.0001
Lithium	Total	mg/L	0.029	0.029	0.030	0.001
Molybdenum	Total	mg/L	0.002	0.002	0.003	0.001
Nickel	Total	mg/L	0.0964	0.0986	0.0990	0.0005
Selenium	Total	mg/L	<0.0002	<0.0002	<0.0002	0.0002
Silver	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Strontium	Total	mg/L	0.292	0.296	0.304	0.001
Thallium	Total	mg/L	<0.00005	<0.00005	<0.00005	0.00005
Tin	Total	mg/L	<0.001	<0.001	<0.001	0.001
Titanium	Total	mg/L	0.0042	0.0043	0.0044	0.0005
Uranium	Total	mg/L	<0.0005	<0.0005	<0.0005	0.0005
Vanadium	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Zinc	Total	mg/L	0.251	0.252	0.259	0.001
Physical and Aggregate Properties						
Temperature of observed pH		°C	21.1	21.1	21.1	
Solids	Total Suspended	mg/L	<2	<2	<2	1
Routine Water						



Analytical Report

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Bill to: Echo Bay Mines Ltd.
Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: Steve Schlesak
Company: Kinross Gold Corporation

Project
ID:
Name: Lupin Mine
Location: Nunavut
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 398142
Control Number:
Date Received: Jul 28, 2005
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Report Number: 727534

Page: 4 of 26

		NWL Number	398142-4	398142-5	398142-6	
		Sample Date	Jul 24, 2005	Jul 25, 2005	Jul 26, 2005	
		Sample Description	925-10 / 51069	925-10 / 51070	925-10 / 51071	
		Matrix	Water - General	Water - General	Water - General	
Analyte		Units	Results	Results	Results	Detection Limit
Routine Water - Continued						
pH			6.41	6.36	6.36	
Electrical Conductivity		µS/cm at 25 C	837	840	839	1
Calcium	Dissolved	mg/L	75.0	73.8	75.2	0.2
Magnesium	Dissolved	mg/L	7.5	7.4	7.5	0.1
Sodium	Dissolved	mg/L	85.4	84.6	86.0	0.4
Potassium	Dissolved	mg/L	7.3	7.2	7.3	0.4
Iron	Dissolved	mg/L	<0.01	<0.01	0.03	0.01
Manganese	Dissolved	mg/L	1.00	0.991	1.01	0.005
Chloride	Dissolved	mg/L	57.3	57.1	56.6	0.4
Nitrate - N		mg/L	7.44	7.42	7.49	0.01
Nitrite - N		mg/L	0.055	0.054	0.058	0.005
Nitrate and Nitrite - N		mg/L	7.50	7.48	7.55	0.02
Sulfate (SO4)	Dissolved	mg/L	301	302	303	0.9
Hydroxide		mg/L	<5	<5	<5	5
Carbonate		mg/L	8	6	8	6
Bicarbonate		mg/L	<5	<5	<5	5
P-Alkalinity	as CaCO3	mg/L	<5	<5	<5	5
T-Alkalinity	as CaCO3	mg/L	7	5	6	5
Total Dissolved Solids	Calculated	mg/L	538	536	540	1
Hardness	Dissolved as CaCO3	mg/L	218	215	219	
Ionic Balance	Dissolved	%	95	95	96	



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Project
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Page: 5 of 26

		NWL Number	398142-7	398142-8	398142-9	
		Sample Date	Jul 26, 2005	Jul 26, 2005	Jul 26, 2005	
		Sample Description	925-20 / 51072	925-21 / 51073	925-22-1 / 51074	
		Matrix	Water - General	Water - General	Water - General	
Analyte		Units	Results	Results	Results	Detection Limit
Inorganic Nonmetallic Parameters						
Ammonium - N		mg/L	0.19	<0.05	0.34	0.05
Cyanide	Strong Acid Dissociable	mg/L	0.006	0.002	0.01	0.002
Metals Total						
Iron	Total	mg/L	<0.1	<0.1	<0.1	0.1
Manganese	Total	mg/L	0.137	<0.005	0.209	0.005
Silicon	Total	mg/L	0.27	0.05	0.44	0.05
Sulfur	Total	mg/L	15.1	0.7	28.6	0.3
Mercury	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Aluminum	Total	mg/L	0.032	0.018	0.034	0.005
Antimony	Total	mg/L	<0.0002	<0.0002	<0.0002	0.0002
Arsenic	Total	mg/L	0.0010	0.0004	0.0014	0.0002
Barium	Total	mg/L	0.008	0.002	0.015	0.001
Beryllium	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Bismuth	Total	mg/L	<0.0005	<0.0005	<0.0005	0.0005
Boron	Total	mg/L	0.015	0.002	0.026	0.002
Cadmium	Total	mg/L	0.00004	<0.00001	0.00010	0.00001
Chromium	Total	mg/L	<0.0005	<0.0005	<0.0005	0.0005
Cobalt	Total	mg/L	0.0063	<0.0001	0.0094	0.0001
Copper	Total	mg/L	0.001	0.001	0.002	0.001
Lead	Total	mg/L	0.0001	<0.0001	0.0004	0.0001
Lithium	Total	mg/L	0.005	<0.001	0.008	0.001
Molybdenum	Total	mg/L	<0.001	<0.001	<0.001	0.001
Nickel	Total	mg/L	0.0163	0.0005	0.0326	0.0005
Selenium	Total	mg/L	<0.0002	<0.0002	<0.0002	0.0002
Silver	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Strontium	Total	mg/L	0.046	0.004	0.087	0.001
Thallium	Total	mg/L	<0.00005	<0.00005	<0.00005	0.00005
Tin	Total	mg/L	<0.001	<0.001	<0.001	0.001
Titanium	Total	mg/L	0.0009	<0.0005	0.0015	0.0005
Uranium	Total	mg/L	<0.0005	<0.0005	<0.0005	0.0005
Vanadium	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Zinc	Total	mg/L	0.035	<0.001	0.070	0.001
Physical and Aggregate Properties						
Temperature of observed pH		°C	21.5	21.8	21.6	
Solids	Total Suspended	mg/L	<2	<2	<2	1



Analytical Report

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Company: Kinross Gold Corporation

Project
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Page: 6 of 26

		NWL Number	398142-7	398142-8	398142-9	
		Sample Date	Jul 26, 2005	Jul 26, 2005	Jul 26, 2005	
		Sample Description	925-20 / 51072	925-21 / 51073	925-22-1 / 51074	
		Matrix	Water - General	Water - General	Water - General	
Analyte		Units	Results	Results	Results	Detection Limit
Routine Water						
pH			6.54	6.63	6.33	
Electrical Conductivity		µS/cm at 25 C	152	10	270	1
Calcium	Dissolved	mg/L	11.9	0.3	22.1	0.2
Magnesium	Dissolved	mg/L	1.8	0.2	2.8	0.1
Sodium	Dissolved	mg/L	13.1	0.6	24.6	0.4
Potassium	Dissolved	mg/L	1.2	<0.4	2.3	0.4
Iron	Dissolved	mg/L	0.02	0.02	0.02	0.01
Manganese	Dissolved	mg/L	0.135	<0.005	0.209	0.005
Chloride	Dissolved	mg/L	9.7	0.4	17.2	0.4
Nitrate - N		mg/L	1.14	0.01	2.04	0.01
Nitrite - N		mg/L	<0.005	<0.005	<0.005	0.005
Nitrate and Nitrite - N		mg/L	1.14	<0.02	2.04	0.02
Sulfate (SO4)	Dissolved	mg/L	46.5	2	89.6	0.9
Hydroxide		mg/L	<5	<5	<5	5
Carbonate		mg/L	<6	<6	<6	6
Bicarbonate		mg/L	<5	<5	<5	5
P-Alkalinity	as CaCO3	mg/L	<5	<5	<5	5
T-Alkalinity	as CaCO3	mg/L	<5	<5	<5	5
Total Dissolved Solids	Calculated	mg/L	84	4	159	1
Hardness	Dissolved as CaCO3	mg/L	36.9	2	67	
Ionic Balance	Dissolved	%	100	100	100	



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Company: Kinross Gold Corporation

Project ID:
Name: Lupin Mine
Location: Nunavut
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 398142
Control Number:
Date Received: Jul 28, 2005
Date Reported: Aug 09, 2005
Report Number: 727534

Page: 7 of 26

		NWL Number	398142-10	398142-11	398142-12	
		Sample Date	Jul 26, 2005	Jul 26, 2005	Jul 26, 2005	
		Sample Description	925-22-2 / 51075	925-22-3 / 51076	925-24 / 51077	
		Matrix	Water - General	Water - General	Water - General	
Analyte		Units	Results	Results	Results	Detection Limit
Inorganic Nonmetallic Parameters						
Ammonium - N		mg/L	0.34	0.32	0.11	0.05
Cyanide	Strong Acid Dissociable	mg/L	0.02	0.02	0.004	0.002
Metals Total						
Iron	Total	mg/L	<0.1	<0.1	<0.1	0.1
Manganese	Total	mg/L	0.208	0.200	0.075	0.005
Silicon	Total	mg/L	0.51	0.44	0.25	0.05
Sulfur	Total	mg/L	28.2	25.9	15.9	0.3
Mercury	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Aluminum	Total	mg/L	0.034	0.037	0.030	0.005
Antimony	Total	mg/L	<0.0002	<0.0002	0.0010	0.0002
Arsenic	Total	mg/L	0.0014	0.0014	0.0018	0.0002
Barium	Total	mg/L	0.014	0.014	0.011	0.001
Beryllium	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Bismuth	Total	mg/L	<0.0005	<0.0005	<0.0005	0.0005
Boron	Total	mg/L	0.026	0.025	0.015	0.002
Cadmium	Total	mg/L	0.00008	0.00008	0.00006	0.00001
Chromium	Total	mg/L	<0.0005	<0.0005	<0.0005	0.0005
Cobalt	Total	mg/L	0.0093	0.0092	0.0035	0.0001
Copper	Total	mg/L	0.002	0.002	0.002	0.001
Lead	Total	mg/L	0.0005	0.0003	0.0007	0.0001
Lithium	Total	mg/L	0.008	0.008	0.005	0.001
Molybdenum	Total	mg/L	<0.001	<0.001	<0.001	0.001
Nickel	Total	mg/L	0.0321	0.0310	0.0162	0.0005
Selenium	Total	mg/L	<0.0002	<0.0002	<0.0002	0.0002
Silver	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Strontium	Total	mg/L	0.084	0.081	0.049	0.001
Thallium	Total	mg/L	<0.00005	<0.00005	<0.00005	0.00005
Tin	Total	mg/L	<0.001	<0.001	<0.001	0.001
Titanium	Total	mg/L	0.0016	0.0014	0.0014	0.0005
Uranium	Total	mg/L	<0.0005	<0.0005	<0.0005	0.0005
Vanadium	Total	mg/L	<0.0001	<0.0001	0.0001	0.0001
Zinc	Total	mg/L	0.068	0.066	0.034	0.001
Physical and Aggregate Properties						
Temperature of observed pH		°C	21.5	21.5	21.6	
Solids	Total Suspended	mg/L	<2	<2	<2	1



Analytical Report

Norwest Labs
7217 Roper Road NW
Edmonton, AB. T6B 3J4
Phone: (780) 438-5522
Fax: (780) 438-0396

Bill to: Echo Bay Mines Ltd.
Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: Steve Schlesak
Company: Kinross Gold Corporation

Project
ID:
Name: Lupin Mine
Location: Nunavut
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 398142
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Page: 8 of 26

		NWL Number	398142-10	398142-11	398142-12	
		Sample Date	Jul 26, 2005	Jul 26, 2005	Jul 26, 2005	
		Sample Description	925-22-2 / 51075	925-22-3 / 51076	925-24 / 51077	
		Matrix	Water - General	Water - General	Water - General	
Analyte		Units	Results	Results	Results	Detection Limit
Routine Water						
pH			6.32	6.34	6.48	
Electrical Conductivity		µS/cm at 25 C	267	250	155	1
Calcium	Dissolved	mg/L	21.7	20.2	12.0	0.2
Magnesium	Dissolved	mg/L	2.7	2.5	1.9	0.1
Sodium	Dissolved	mg/L	24.3	22.6	13.2	0.4
Potassium	Dissolved	mg/L	2.2	2.0	1.2	0.4
Iron	Dissolved	mg/L	0.02	0.01	0.02	0.01
Manganese	Dissolved	mg/L	0.208	0.196	0.073	0.005
Chloride	Dissolved	mg/L	16.9	15.7	9.1	0.4
Nitrate - N		mg/L	2.02	1.90	1.07	0.01
Nitrite - N		mg/L	<0.005	<0.005	<0.005	0.005
Nitrate and Nitrite - N		mg/L	2.02	1.90	1.07	0.02
Sulfate (SO4)	Dissolved	mg/L	89.4	81.3	49.5	0.9
Hydroxide		mg/L	<5	<5	<5	5
Carbonate		mg/L	7	<6	<6	6
Bicarbonate		mg/L	<5	<5	<5	5
P-Alkalinity	as CaCO3	mg/L	<5	<5	<5	5
T-Alkalinity	as CaCO3	mg/L	6	<5	<5	5
Total Dissolved Solids	Calculated	mg/L	161	145	87	1
Hardness	Dissolved as CaCO3	mg/L	65	61	37.7	
Ionic Balance	Dissolved	%	90	101	100	



Analytical Report

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7217 Roper Road NW
Edmonton, AB. T6B 3J4
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Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: Steve Schlesak
Company: Kinross Gold Corporation

Project
ID:
Name: Lupin Mine
Location: Nunavut
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NWL Lot ID: 398142
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Report Number: 727534

Page: 9 of 26

		NWL Number	398142-13	398142-14	398142-15	
		Sample Date	Jul 26, 2005	Jul 27, 2005	Jul 27, 2005	
		Sample Description	925-25 / 51078	925-14 / 51079	925-10 / 51080	
		Matrix	Water - General	Water - General	Water - General	
Analyte		Units	Results	Results	Results	Detection Limit
Inorganic Nonmetallic Parameters						
Ammonium - N		mg/L	<0.05	<0.05	1.88	0.05
Kjeldahl Nitrogen	Total	mg/L	-	0.53	-	0.05
Phosphorus	Total	mg/L	-	<0.1	-	0.1
Orthophosphate-P	Dissolved	mg/L	-	0.02	-	0.01
Cyanide	Strong Acid Dissociable	mg/L	0.002	-	0.040	0.002
Metals Total						
Iron	Total	mg/L	<0.1	0.3	0.2	0.1
Manganese	Total	mg/L	0.008	0.072	0.984	0.005
Silicon	Total	mg/L	0.11	0.25	1.86	0.05
Sulfur	Total	mg/L	1.9	22.4	95.5	0.3
Mercury	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Mercury	Total	ug/L	-	-	<0.02	0.02
Aluminum	Total	mg/L	0.026	0.049	0.128	0.005
Antimony	Total	mg/L	0.0016	0.001	<0.0002	0.0002
Arsenic	Total	mg/L	0.0015	0.0139	0.0146	0.0002
Barium	Total	mg/L	0.003	0.019	0.016	0.001
Beryllium	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Bismuth	Total	mg/L	<0.0005	<0.0005	<0.0005	0.0005
Boron	Total	mg/L	0.004	0.037	0.087	0.002
Cadmium	Total	mg/L	0.00003	<0.00001	0.00010	0.00001
Chromium	Total	mg/L	<0.0005	<0.0005	<0.0005	0.0005
Cobalt	Total	mg/L	0.0004	0.0038	0.0496	0.0001
Copper	Total	mg/L	0.002	0.004	0.015	0.001
Lead	Total	mg/L	0.0009	0.0003	0.0005	0.0001
Lithium	Total	mg/L	0.002	0.236	0.030	0.001
Molybdenum	Total	mg/L	<0.001	0.002	0.002	0.001
Nickel	Total	mg/L	0.0022	0.0122	0.0955	0.0005
Selenium	Total	mg/L	<0.0002	<0.0002	<0.0002	0.0002
Silver	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Strontium	Total	mg/L	0.009	1.18	0.304	0.001
Thallium	Total	mg/L	<0.00005	<0.00005	<0.00005	0.00005
Tin	Total	mg/L	<0.001	<0.001	<0.001	0.001
Titanium	Total	mg/L	0.0008	0.0018	0.0045	0.0005
Uranium	Total	mg/L	<0.0005	<0.0005	<0.0005	0.0005
Vanadium	Total	mg/L	<0.0001	0.0002	0.0001	0.0001



Analytical Report

Norwest Labs
7217 Roper Road NW
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Phone: (780) 438-5522
Fax: (780) 438-0396

Bill to: Echo Bay Mines Ltd.
Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: Steve Schlesak
Company: Kinross Gold Corporation

Project ID:
Name: Lupin Mine
Location: Nunavut
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 398142
Control Number:
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Page: 10 of 26

		NWL Number	398142-13	398142-14	398142-15	
		Sample Date	Jul 26, 2005	Jul 27, 2005	Jul 27, 2005	
		Sample Description	925-25 / 51078	925-14 / 51079	925-10 / 51080	
		Matrix	Water - General	Water - General	Water - General	
Analyte		Units	Results	Results	Results	Detection Limit
Metals Total - Continued						
Zinc	Total	mg/L	0.015	0.009	0.251	0.001
Physical and Aggregate Properties						
Temperature of observed pH		°C	21.7	22.0	22.4	
Solids	Total Suspended	mg/L	<2	<2	<2	1
Routine Water						
pH	@ 25 °C	pH	-	7.43	-	
pH			6.67	7.62	6.39	
Electrical Conductivity		µS/cm at 25 C	25	845	847	1
Calcium	Dissolved	mg/L	1.7	69.0	74.2	0.2
Magnesium	Dissolved	mg/L	0.6	7.4	7.5	0.1
Sodium	Dissolved	mg/L	1.6	79.8	85.4	0.4
Potassium	Dissolved	mg/L	<0.4	5.6	7.3	0.4
Iron	Dissolved	mg/L	0.01	0.23	<0.01	0.01
Manganese	Dissolved	mg/L	0.008	0.067	0.991	0.005
Chloride	Dissolved	mg/L	1.0	202	57.8	0.4
Nitrate - N		mg/L	0.10	1.23	7.45	0.01
Nitrite - N		mg/L	<0.005	<0.005	0.056	0.005
Nitrate and Nitrite - N		mg/L	0.10	1.23	7.50	0.02
Sulfate (SO4)	Dissolved	mg/L	5.9	73.3	303	0.9
Hydroxide		mg/L	<5	<5	<5	5
Carbonate		mg/L	<6	<6	<6	6
Bicarbonate		mg/L	<5	28	<5	5
P-Alkalinity	as CaCO3	mg/L	<5	<5	<5	5
T-Alkalinity	as CaCO3	mg/L	<5	23	<5	5
Total Dissolved Solids	Calculated	mg/L	11	451	537	1
Hardness	Dissolved as CaCO3	mg/L	7	203	216	
Ionic Balance	Dissolved	%	100	99	99	



Analytical Report

Norwest Labs
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Bill to: Echo Bay Mines Ltd.
Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: Steve Schlesak
Company: Kinross Gold Corporation

Project
ID:
Name: Lupin Mine
Location: Nunavut
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 398142
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Date Received: Jul 28, 2005
Date Reported: Aug 09, 2005
Report Number: 727534

Page: 11 of 26

NWL Number 398142-14
Sample Date Jul 27, 2005
Sample Description 925-14 / 51079
Matrix Water - General

Analyte	Units	Results	Results	Results	Detection Limit
Aggregate Organic Constituents					
Biochemical Oxygen Demand 5 Day	mg/L	<4			4
Microbiological Analysis					
Fecal Coliforms	Membrane Filtration	CFU/100 mL	<1		

Approved by:

Anthony Neumann, MSc
Laboratory Operations Manager



Quality Control

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7217 Roper Road NW
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T5J 2T2
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Date Reported: Aug 09, 2005
Report Number: 727534

Page: 12 of 26

Aggregate Organic Constituents

Blanks	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Biochemical Oxygen Demand	mq/L	<4	0	-4	4	✓
Material Used:	BOD - Blank					
Date Acquired:	Jul 29, 2005					
Acquired By:	Zahra Momen					
Replicates	Units	Replicate1	Replicate2	% RSD Criteria	Absolute Criteria	Passed QC
Biochemical Oxygen Demand	mq/L	<4	<4	30	8	✓
Material Used:	Surrey - Int. Duplicate 1					
Date Acquired:	Jul 29, 2005					
Acquired By:	Zahra Momen					
Control Sample	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Biochemical Oxygen Demand	mq/L	144	167	116	218	✓
Material Used:	BOD - G/GA					
Date Acquired:	Jul 29, 2005					
Acquired By:	Zahra Momen					

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9818 International Airport
Edmonton, AB, Canada
T5J 2T2
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NWL Lot ID: 398142
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Date Received: Jul 28, 2005
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Page: 13 of 26

Inorganic Nonmetallic Parameters

Blanks	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Ammonium - N	mq/L	<0.05	0.00	-0.08	0.08	✓
Kjeldahl Nitrogen	mq/L	<0.05	0.00	-0.05	0.05	✓
Phosphorus	mq/L	<0.1	0.0	-0.1	0.1	✓
Orthophosphate-P	mq/L	<0.01	0.00	-0.05	0.05	✓
Cyanide	mq/L	<0.001	0.000	-0.001	0.001	✓

Material Used: Edmonton Method Blank
Date Acquired: Aug 08, 2005
Acquired By: Gordon Grensman

Replicates	Units	Replicate1	Replicate2	% RSD Criteria	Absolute Criteria	Passed QC
Ammonium - N	mq/L	<0.05	<0.05	9.99	0.10	✓
Phosphorus	mg/L	2.1	2.2	10.0	0.2	✓
Orthophosphate-P	mq/L	0.93	0.89	9.99	0.05	✓

Material Used: Edmonton Duplicate
Date Acquired: Jul 29, 2005
Acquired By: Andrew Jong

Control Sample	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Ammonium - N	mg/L	3.00	2.99	2.59	3.39	✓
Kjeldahl Nitrogen	mg/L	14.8	15.25	11.65	18.85	✓
Phosphorus	mg/L	8.0	8.0	7.2	8.8	✓
Cyanide	mg/L	0.077	0.077	0.067	0.087	✓

Material Used: Water High
Date Acquired: Aug 08, 2005
Acquired By: Gordon Grensman

Ammonium - N	mq/L	0.80	0.79	0.66	0.91	✓
Kjeldahl Nitrogen	mq/L	3.33	3.00	2.41	3.59	✓
Phosphorus	mq/L	2.1	2.0	1.8	2.2	✓
Orthophosphate-P	mq/L	0.41	0.41	0.36	0.47	✓
Cyanide	mq/L	0.015	0.016	0.013	0.018	✓

Material Used: Water Low
Date Acquired: Aug 08, 2005
Acquired By: Gordon Grensman

Orthophosphate-P	mq/L	0.07	0.08	0.07	0.09	✓
------------------	------	------	------	------	------	---

Material Used: Water Trace
Date Acquired: Jul 29, 2005
Acquired By: Andrew Jong



Quality Control

Norwest Labs
7217 Roper Road NW
Edmonton, AB. T6B 3J4
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Bill to: Echo Bay Mines Ltd.
Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: Steve Schlesak
Company: Kinross Gold Corporation

Project
ID:
Name: Lupin Mine
Location: Nunavut
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 398142
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Report Number: 727534

Page: 14 of 26

Metals Dissolved

Blanks	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Sulfur	mq/L	<0.3	0.0	-0.3	0.3	✓
Material Used:	Edmonton Method Blank					
Date Acquired:	Jul 29, 2005					
Acquired By:	To Thong					
Replicates	Units	Replicate1	Replicate2	% RSD Criteria	Absolute Criteria	Passed QC
Sulfur	mq/L	16.5	16.4	10.0	0.1	✓
Material Used:	Edmonton Duplicate					
Date Acquired:	Jul 29, 2005					
Acquired By:	To Thong					
Control Sample	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Sulfur	mq/L	48.0	50.0	45.0	55.0	✓
Material Used:	Metals High					
Date Acquired:	Jul 29, 2005					
Acquired By:	To Thong					
Sulfur	mq/L	1	1.0	0.9	1.2	✓
Material Used:	Metals Low					
Date Acquired:	Jul 29, 2005					
Acquired By:	To Thong					

Material Used:	Edmonton Method Blank
Date Acquired:	Aug 03, 2005
Acquired By:	Linda Li
Mercury	ug/L
Material Used:	Metals Blank - water - total
Date Acquired:	Aug 08, 2005
Acquired By:	Kelly Restiaux



Quality Control

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T5J 2T2
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Page: 16 of 26

Metals Total (Continued...)

Replicates	Units	Replicate1	Replicate2	% RSD Criteria	Absolute Criteria	Passed QC
Iron	mq/L	0.1	0.1	15.0	0.2	✓
Manganese	mg/L	0.991	0.968	15.000	0.010	✓
Silicon	mq/L	1.86	1.81	15.00	0.10	✓
Sulfur	mq/L	97.3	94.8	15.0	0.1	✓
Mercury	mq/L	<0.0001	<0.0001	9.9900	0.0003	✓
Aluminum	uq/L	49	49	15	11	✓
Antimony	uq/L	1	1.1	15.0	0.4	✓
Arsenic	uq/L	4.3	4.3	15.0	0.4	✓
Barium	uq/L	2	2	15	2	✓
Beryllium	uq/L	<0.1	<0.1	15.0	0.2	✓
Bismuth	ug/L	<0.6	<0.6	15.0	1.1	✓
Boron	uq/L	86	86	15	4	✓
Cadmium	ug/L	<0.01	<0.01	15.00	0.02	✓
Chromium	uq/L	408	425	15.0	1.1	✓
Cobalt	ug/L	3.8	4.0	15.0	0.2	✓
Copper	uq/L	544	569	15	2	✓
Lead	ug/L	0.3	0.3	15.0	0.2	✓
Lithium	uq/L	95	95	15	2	✓
Molybdenum	uq/L	5	5	15	2	✓
Nickel	uq/L	29.4	30.2	15.0	1.1	✓
Selenium	uq/L	<0.2	<0.2	15.0	0.4	✓
Silver	uq/L	<0.1	<0.1	15.0	0.2	✓
Strontium	uq/L	1180	1190	15	2	✓
Thallium	uq/L	0.60	0.64	15.00	0.11	✓
Tin	uq/L	<1	<1	15	2	✓
Titanium	ug/L	13.6	12.8	15.0	1.1	✓
Uranium	uq/L	<0.6	<0.6	15.0	1.1	✓
Vanadium	ug/L	0.2	0.2	15.0	0.2	✓
Zinc	uq/L	9	10	15	2	✓

Material Used: Edmonton Duplicate
Date Acquired: Aug 03, 2005
Acquired By: Linda Li

Mercury	uq/L	<0.02	<0.02	30.000	0.050	✓
---------	------	-------	-------	--------	-------	---

Material Used: Metals Int. Duplicate - water tot
Date Acquired: Aug 08, 2005
Acquired By: Kelly Restiaux



Quality Control

Norwest Labs
7217 Roper Road NW
Edmonton, AB. T6B 3J4
Phone: (780) 438-5522
Fax: (780) 438-0396

Bill to: Echo Bay Mines Ltd.
Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: Steve Schlesak
Company: Kinross Gold Corporation

Project
ID:
Name: Lupin Mine
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Page: 17 of 26

Metals Total (Continued...)

Control Sample	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Iron	mq/L	2.0	2.0	1.8	2.2	✓
Manganese	mq/L	0.485	0.500	0.450	0.550	✓
Silicon	mq/L	4.97	5.00	4.50	5.50	✓
Sulfur	mq/L	9.8	10.0	9.0	11.0	✓
Mercury	mq/L	0.0008	0.0008	0.0007	0.0010	✓
Aluminum	uq/L	307	322	273	371	✓
Antimony	uq/L	12.0	11.5	10.2	12.8	✓
Arsenic	uq/L	11.9	11.5	10.3	12.7	✓
Barium	uq/L	62	61	52	69	✓
Beryllium	uq/L	6.0	5.9	4.9	7.0	✓
Bismuth	uq/L	32.0	30.2	26.0	34.4	✓
Boron	uq/L	127	125	102	148	✓
Cadmium	uq/L	0.60	0.63	0.47	0.78	✓
Chromium	uq/L	31.3	31.8	27.5	36.2	✓
Cobalt	uq/L	6.8	6.4	5.4	7.5	✓
Copper	uq/L	63	63	55	70	✓
Lead	uq/L	6.8	6.2	5.4	7.0	✓
Lithium	uq/L	62	65	53	76	✓
Molybdenum	uq/L	62	61	53	69	✓
Nickel	uq/L	30.8	31.4	27.0	35.8	✓
Selenium	uq/L	11.2	11.0	9.7	12.3	✓
Silver	uq/L	6.2	6.2	5.5	7.0	✓
Strontium	uq/L	68	64	55	72	✓
Thallium	uq/L	3.46	3.14	2.56	3.72	✓
Tin	uq/L	59	59	52	66	✓
Titanium	uq/L	35.8	31.5	27.0	36.0	✓
Uranium	uq/L	32.7	30.8	26.9	34.7	✓
Vanadium	uq/L	6.3	6.5	5.4	7.6	✓
Zinc	uq/L	63	59	49	69	✓

Material Used: Edmonton Digestion Check

Date Acquired: Aug 03, 2005

Acquired By: Linda Li

Iron	mg/L	9.8	10.0	9.0	11.0	✓
Manganese	mg/L	2.37	2.500	2.250	2.750	✓
Silicon	mg/L	24.3	25.00	22.50	27.50	✓
Sulfur	mg/L	48.6	50.0	45.0	55.0	✓
Mercury	mg/L	0.0031	0.0031	0.0027	0.0035	✓

Material Used: Metals High

Date Acquired: Jul 29, 2005

Acquired By: To Thong



Quality Control

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Phone: (780) 438-5522
Fax: (780) 438-0396

Bill to: Echo Bay Mines Ltd.
Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: Steve Schlesak
Company: Kinross Gold Corporation

Project
ID:
Name: Lupin Mine
Location: Nunavut
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 398142
Control Number:
Date Received: Jul 28, 2005
Date Reported: Aug 09, 2005
Report Number: 727534

Page: 18 of 26

Metals Total (Continued...)

Control Sample	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Iron	mq/L	0.2	0.2	0.2	0.2	✓
Manganese	mq/L	0.052	0.050	0.045	0.055	✓
Silicon	mq/L	0.53	0.50	0.45	0.55	✓
Sulfur	mq/L	1.0	1.0	0.9	1.2	✓
Mercury	mq/L	0.0008	0.0008	-0.0016	0.0032	✓
Aluminum	uq/L	963	1000	850	1150	✓
Antimony	uq/L	40.0	40.0	34.0	46.0	✓
Arsenic	uq/L	40.1	40.0	34.0	46.0	✓
Barium	uq/L	193	200	170	230	✓
Beryllium	uq/L	20.6	20.0	17.0	23.0	✓
Bismuth	uq/L	98.4	100.0	85.0	115.0	✓
Boron	uq/L	403	400	340	460	✓
Cadmium	uq/L	2.09	2.00	1.70	2.30	✓
Chromium	uq/L	95.8	100.0	85.0	115.0	✓
Cobalt	uq/L	19.8	20.0	17.0	23.0	✓
Copper	uq/L	189	200	170	230	✓
Lead	uq/L	20.6	20.0	17.0	23.0	✓
Lithium	uq/L	202	200	170	230	✓
Molybdenum	uq/L	188	200	170	230	✓
Nickel	uq/L	96.9	100.0	85.0	115.0	✓
Selenium	uq/L	39.7	40.0	34.0	46.0	✓
Silver	uq/L	20.8	20.0	17.0	23.0	✓
Strontium	uq/L	191	200	170	230	✓
Thallium	uq/L	10.4	10.00	8.50	11.50	✓
Tin	uq/L	183	200	170	230	✓
Titanium	uq/L	97.6	100.0	85.0	115.0	✓
Uranium	uq/L	98.1	100.0	85.0	115.0	✓
Vanadium	uq/L	18.3	20.0	17.0	23.0	✓
Zinc	uq/L	197	200	170	230	✓

Material Used: Metals Low
Date Acquired: Aug 03, 2005
Acquired By: Linda Li



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Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: Steve Schlesak
Company: Kinross Gold Corporation

Project
ID:
Name: Lupin Mine
Location: Nunavut
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 398142
Control Number:
Date Received: Jul 28, 2005
Date Reported: Aug 09, 2005
Report Number: 727534

Page: 19 of 26

Metals Total (Continued...)

Control Sample	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Aluminum	uq/L	54	50	43	58	✓
Antimony	uq/L	2.2	2.0	1.7	2.3	✓
Arsenic	uq/L	2.1	2.0	1.7	2.3	✓
Barium	uq/L	11	10	9	12	✓
Beryllium	uq/L	1.1	1.0	0.9	1.2	✓
Bismuth	uq/L	5.2	5.0	4.3	5.8	✓
Boron	uq/L	22	20	17	23	✓
Cadmium	uq/L	0.11	0.10	0.09	0.12	✓
Chromium	uq/L	5.2	5.0	4.3	5.8	✓
Cobalt	uq/L	1.0	1.0	0.9	1.2	✓
Copper	uq/L	10	10	9	12	✓
Lead	uq/L	1.1	1.0	0.9	1.2	✓
Lithium	uq/L	9	10	9	12	✓
Molybdenum	uq/L	10	10	9	12	✓
Nickel	uq/L	5.2	5.0	4.3	5.8	✓
Selenium	uq/L	2.1	2.0	1.7	2.3	✓
Silver	uq/L	1.0	1.0	0.9	1.2	✓
Strontium	uq/L	10	10	9	12	✓
Thallium	uq/L	0.54	0.50	0.43	0.58	✓
Tin	uq/L	9	10	9	12	✓
Titanium	uq/L	5.2	5.0	4.3	5.8	✓
Uranium	uq/L	5.4	5.0	4.3	5.8	✓
Vanadium	uq/L	1.1	1.0	0.9	1.2	✓
Zinc	uq/L	10	10	9	12	✓
Material Used:	Metals Trace					
Date Acquired:	Aug 03, 2005					
Acquired By:	Linda Li					
Mercury	ug/L	13	14.000	11.000	17.000	✓
Material Used:	S0102 - Hg					
Date Acquired:	Aug 08, 2005					
Acquired By:	Kelly Restiaux					



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Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: Steve Schlesak
Company: Kinross Gold Corporation

Project
ID:
Name: Lupin Mine
Location: Nunavut
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 398142
Control Number:
Date Received: Jul 28, 2005
Date Reported: Aug 09, 2005
Report Number: 727534

Page: 20 of 26

Physical and Aggregate Properties

Certified Reference Material		Units	Measured	Target	Lower Limit	Upper Limit	Passed QC
Solids		mq/L	394	500	260	440	✓
Material Used:		S2016 - Solid					
Date Acquired:		Aug 02, 2005					
Acquired By:		Vanessa Li					
Solids		mg/L	<2	0	-1	1	✓
Material Used:		Surrey Blank 2					
Date Acquired:		Aug 02, 2005					
Acquired By:		Vanessa Li					
Replicates		Units	Replicate1	Replicate2	% RSD Criteria	Absolute Criteria	Passed QC
Solids		mq/L	43	45	10	15	✓
Material Used:		Edmonton Duplicate					
Date Acquired:		Jul 29, 2005					
Acquired By:		Christina Onvskiw					
Solids		mq/L	8	7	30	5	✓
Material Used:		Surrey - Int. Duplicate 1					
Date Acquired:		Aug 02, 2005					
Acquired By:		Vanessa Li					
Control Sample		Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Solids		mq/L	200	200	180	220	✓
Material Used:		Water High					
Date Acquired:		Jul 29, 2005					
Acquired By:		Christina Onvskiw					
Solids		mq/L	20	20	18	22	✓
Material Used:		Water Low					
Date Acquired:		Jul 29, 2005					
Acquired By:		Christina Onvskiw					



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T5J 2T2
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Company: Kinross Gold Corporation

Project
ID:
Name: Lupin Mine
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LSD:
P.O.:
Acct. Code:

NWL Lot ID: 398142
Control Number:
Date Received: Jul 28, 2005
Date Reported: Aug 09, 2005
Report Number: 727534

Page: 21 of 26

Routine Water

Blanks	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Calcium	mq/L	<0.2	0.0	-0.2	0.2	✓
Magnesium	mq/L	<0.1	0.0	-0.1	0.1	✓
Sodium	mq/L	<0.4	0.0	-0.4	0.4	✓
Potassium	mq/L	<0.4	0.0	-0.4	0.4	✓
Iron	mq/L	<0.01	0.00	-0.01	0.01	✓
Manganese	mq/L	<0.005	0.000	-0.005	0.005	✓
Chloride	mq/L	<0.4	0.0	-0.5	0.5	✓
Nitrate - N	mq/L	<0.01	0.00	-0.01	0.01	✓
Nitrite - N	mq/L	<0.005	0.000	-0.005	0.005	✓

Material Used: Edmonton Method Blank

Date Acquired: Jul 29, 2005

Acquired By: Marc Dzura

Calibration Check	Units	Measured	Target	% Recovery	Criteria (%)	Passed QC
pH	pH	8.0	8.00	100.50	98.50-101.50	✓

Material Used: s2013 - pH

Date Acquired: Jul 29, 2005

Acquired By: Zahra Momen



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Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: Steve Schlesak
Company: Kinross Gold Corporation

Project
ID:
Name: Lupin Mine
Location: Nunavut
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 398142
Control Number:
Date Received: Jul 28, 2005
Date Reported: Aug 09, 2005
Report Number: 727534

Page: 23 of 26

Routine Water (Continued...)

Control Sample	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Chloride	mq/L	2070	2087.0	1875.2	2298.8	✓
Material Used:	Chloride High					
Date Acquired:	Jul 29, 2005					
Acquired By:	Andrew Jong					
Calcium	mg/L	234	250.0	225.0	275.0	✓
Magnesium	mg/L	94.6	100.0	90.0	110.0	✓
Sodium	mg/L	240	250.0	225.0	275.0	✓
Potassium	mg/L	243	250.0	225.0	275.0	✓
Iron	mg/L	9.75	10.00	9.01	10.99	✓
Manganese	mg/L	2.32	2.500	2.260	2.740	✓
Material Used:	Metals High					
Date Acquired:	Jul 29, 2005					
Acquired By:	To Thong					
Calcium	mq/L	5.0	5.0	4.5	5.5	✓
Magnesium	mq/L	2.1	2.0	1.8	2.2	✓
Sodium	mq/L	4.8	5.0	4.5	5.5	✓
Potassium	mq/L	4.7	5.0	4.5	5.5	✓
Iron	mq/L	0.21	0.20	0.18	0.22	✓
Manganese	mq/L	0.049	0.050	0.045	0.055	✓
Material Used:	Metals Low					
Date Acquired:	Jul 29, 2005					
Acquired By:	To Thong					
pH		9.21	9.23	9.11	9.35	✓
Electrical Conductivity	dS/m at 25 C	2.78	2.730	2.611	2.849	✓
Chloride	mq/L	80.9	81.0	76.4	85.6	✓
Nitrate - N	mq/L	10.2	10.00	9.61	10.39	✓
Nitrite - N	mq/L	10.3	10.000	9.562	10.438	✓
P-Alkalinity	mq/L	492	507	415	599	✓
T-Alkalinity	mq/L	994	1009	969	1049	✓
Material Used:	Water High					
Date Acquired:	Jul 29, 2005					
Acquired By:	Annva Hundal					



Quality Control

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Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: Steve Schlesak
Company: Kinross Gold Corporation

Project
ID:
Name: Lupin Mine
Location: Nunavut
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 398142
Control Number:
Date Received: Jul 28, 2005
Date Reported: Aug 09, 2005
Report Number: 727534

Page: 24 of 26

Routine Water (Continued...)

Control Sample	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
pH		6.90	6.90	6.83	6.97	✓
Electrical Conductivity	dS/m at 25 C	0.080	0.076	0.070	0.081	✓
Chloride	mq/L	14.5	14.9	13.2	16.6	✓
Nitrate - N	mq/L	0.52	0.50	0.44	0.56	✓
Nitrite - N	mq/L	0.521	0.495	0.437	0.553	✓
P-Alkalinity	mq/L	57	54	20	88	✓
T-Alkalinity	mq/L	136	127	118	136	✓

Material Used: Water Low
Date Acquired: Jul 29, 2005
Acquired By: Annva Hundal



Analytical Report

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Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: Steve Schlesak
Company: Kinross Gold Corporation

Project
ID:
Name: Lupin Mine, Nunavut
Location: Lupin Nunavut
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 399493
Control Number:
Date Received: Aug 04, 2005
Date Reported: Aug 12, 2005
Report Number: 730016

Page: 2 of 22

		NWL Number	399493-1	399493-2	399493-3	
		Sample Date	Jul 28, 2005	Jul 29, 2005	Jul 30, 2005	
		Sample Description	925-10 / 51082	925-10 / 51083	925-10 / 51084	
		Matrix	Water - General	Water - General	Water - General	
Analyte		Units	Results	Results	Results	Detection Limit
Routine Water - Continued						
pH			6.40	6.30	6.26	
Electrical Conductivity		µS/cm at 25 C	810	809	812	1
Calcium	Dissolved	mg/L	72.6	75.1	73.9	0.2
Magnesium	Dissolved	mg/L	7.6	7.8	7.7	0.1
Sodium	Dissolved	mg/L	86.8	89.5	88.4	0.4
Potassium	Dissolved	mg/L	7.5	7.6	7.6	0.4
Iron	Dissolved	mg/L	<0.01	<0.01	<0.01	0.01
Manganese	Dissolved	mg/L	0.985	1.02	1.00	0.005
Chloride	Dissolved	mg/L	56.8	57.4	57.3	0.4
Nitrate - N		mg/L	7.40	7.28	7.46	0.01
Nitrite - N		mg/L	0.052	0.052	0.054	0.005
Nitrate and Nitrite - N		mg/L	7.45	7.33	7.51	0.02
Sulfate (SO4)	Dissolved	mg/L	298	295	299	0.9
Hydroxide		mg/L	<5	<5	<5	5
Carbonate		mg/L	<6	<6	<6	6
Bicarbonate		mg/L	<5	<5	<5	5
P-Alkalinity	as CaCO3	mg/L	<5	<5	<5	5
T-Alkalinity	as CaCO3	mg/L	<5	<5	<5	5
Total Dissolved Solids	Calculated	mg/L	530	533	534	1
Hardness	Dissolved as CaCO3	mg/L	212	220	216	
Ionic Balance	Dissolved	%	99	103	100	



Analytical Report

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Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: Steve Schlesak
Company: Kinross Gold Corporation

Project
ID:
Name: Lupin Mine, Nunavut
Location: Lupin Nunavut
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 399493
Control Number:
Date Received: Aug 04, 2005
Date Reported: Aug 12, 2005
Report Number: 730016

Page: 4 of 22

		NWL Number	399493-4	399493-5	399493-6	
		Sample Date	Jul 31, 2005	Aug 01, 2005	Aug 02, 2005	
		Sample Description	925-10 / 51085	925-10 / 51086	925-10 / 51087	
		Matrix	Water - General	Water - General	Water - General	
Analyte		Units	Results	Results	Results	Detection Limit
Routine Water - Continued						
pH			6.22	6.18	6.14	
Electrical Conductivity		µS/cm at 25 C	818	819	812	1
Calcium	Dissolved	mg/L	73.8	72.0	71.6	0.2
Magnesium	Dissolved	mg/L	7.7	7.5	7.5	0.1
Sodium	Dissolved	mg/L	88.0	86.1	85.9	0.4
Potassium	Dissolved	mg/L	7.6	7.4	7.4	0.4
Iron	Dissolved	mg/L	<0.01	<0.01	<0.01	0.01
Manganese	Dissolved	mg/L	1.00	0.981	0.978	0.005
Chloride	Dissolved	mg/L	57.6	57.5	57.3	0.4
Nitrate - N		mg/L	7.44	7.52	7.42	0.01
Nitrite - N		mg/L	0.060	0.060	0.051	0.005
Nitrate and Nitrite - N		mg/L	7.50	7.58	7.47	0.02
Sulfate (SO4)	Dissolved	mg/L	296	294	295	0.9
Hydroxide		mg/L	<5	<5	<5	5
Carbonate		mg/L	<6	<6	<6	6
Bicarbonate		mg/L	<5	<5	<5	5
P-Alkalinity	as CaCO3	mg/L	<5	<5	<5	5
T-Alkalinity	as CaCO3	mg/L	<5	<5	<5	5
Total Dissolved Solids	Calculated	mg/L	530	525	524	1
Hardness	Dissolved as CaCO3	mg/L	216	211	210	
Ionic Balance	Dissolved	%	101	99	98	



Analytical Report

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Report to: Echo Bay Mines Ltd.
9818 International Airport
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T5J 2T2
Attn: Michael Tansey
Sampled By: Steve Schlesak
Company: Kinross Gold Corporation

Project
ID:
Name: Lupin Mine, Nunavut
Location: Lupin Nunavut
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 399493
Control Number:
Date Received: Aug 04, 2005
Date Reported: Aug 12, 2005
Report Number: 730016

Page: 5 of 22

		NWL Number	399493-7	399493-8	399493-9	
		Sample Date	Aug 02, 2005	Aug 02, 2005	Aug 02, 2005	
		Sample Description	925-20 / 51088	925-21 / 51089	925-22-1 / 51090	
		Matrix	Water - General	Water - General	Water - General	
Analyte		Units	Results	Results	Results	Detection Limit
Inorganic Nonmetallic Parameters						
Ammonium - N		mg/L	1.18	<0.05	0.54	0.05
Cyanide	Strong Acid Dissociable	mg/L	0.022	0.002	0.02	0.002
Metals Total						
Iron	Total	mg/L	<0.1	<0.1	<0.1	0.1
Manganese	Total	mg/L	1.07	<0.005	0.368	0.005
Silicon	Total	mg/L	1.58	<0.05	0.64	0.05
Sulfur	Total	mg/L	94.4	0.6	41.5	0.3
Mercury	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Aluminum	Total	mg/L	0.152	0.014	0.048	0.005
Antimony	Total	mg/L	<0.0002	<0.0002	0.0006	0.0002
Arsenic	Total	mg/L	0.0032	0.0006	0.0020	0.0002
Barium	Total	mg/L	0.028	0.002	0.019	0.001
Beryllium	Total	mg/L	0.0001	<0.0001	<0.0001	0.0001
Bismuth	Total	mg/L	<0.0005	<0.0005	<0.0005	0.0005
Boron	Total	mg/L	0.091	0.002	0.040	0.002
Cadmium	Total	mg/L	0.00024	<0.00001	0.00014	0.00001
Chromium	Total	mg/L	<0.0005	<0.0005	<0.0005	0.0005
Cobalt	Total	mg/L	0.0506	<0.0001	0.0162	0.0001
Copper	Total	mg/L	0.006	<0.001	0.002	0.001
Lead	Total	mg/L	<0.0001	0.0001	0.0006	0.0001
Lithium	Total	mg/L	0.028	<0.001	0.012	0.001
Molybdenum	Total	mg/L	<0.001	<0.001	<0.001	0.001
Nickel	Total	mg/L	0.114	0.0005	0.0495	0.0005
Selenium	Total	mg/L	<0.0002	<0.0002	<0.0002	0.0002
Silver	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Strontium	Total	mg/L	0.307	0.005	0.139	0.001
Thallium	Total	mg/L	<0.00005	<0.00005	<0.00005	0.00005
Tin	Total	mg/L	<0.001	<0.001	<0.001	0.001
Titanium	Total	mg/L	0.0041	<0.0005	0.0021	0.0005
Uranium	Total	mg/L	<0.0005	<0.0005	<0.0005	0.0005
Vanadium	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Zinc	Total	mg/L	0.258	<0.001	0.114	0.001
Physical and Aggregate Properties						
Temperature of observed pH		°C	19.4	19.7	20.0	
Solids	Total Suspended	mg/L	<3	<3	<3	1



Analytical Report

Norwest Labs
7217 Roper Road NW
Edmonton, AB. T6B 3J4
Phone: (780) 438-5522
Fax: (780) 438-0396

Bill to: Echo Bay Mines Ltd.
Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: Steve Schlesak
Company: Kinross Gold Corporation

Project
ID:
Name: Lupin Mine, Nunavut
Location: Lupin Nunavut
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 399493
Control Number:
Date Received: Aug 04, 2005
Date Reported: Aug 12, 2005
Report Number: 730016

Page: 6 of 22

		NWL Number	399493-7	399493-8	399493-9	
		Sample Date	Aug 02, 2005	Aug 02, 2005	Aug 02, 2005	
		Sample Description	925-20 / 51088	925-21 / 51089	925-22-1 / 51090	
		Matrix	Water - General	Water - General	Water - General	
Analyte		Units	Results	Results	Results	Detection Limit
Routine Water						
pH			5.48	6.63	6.11	
Electrical Conductivity		µS/cm at 25 C	797	11	387	1
Calcium	Dissolved	mg/L	71.2	0.3	31.8	0.2
Magnesium	Dissolved	mg/L	7.7	0.2	3.8	0.1
Sodium	Dissolved	mg/L	85.3	0.6	37.3	0.4
Potassium	Dissolved	mg/L	7.3	<0.4	3.4	0.4
Iron	Dissolved	mg/L	0.04	0.01	0.01	0.01
Manganese	Dissolved	mg/L	1.05	<0.005	0.371	0.005
Chloride	Dissolved	mg/L	55.9	<0.4	25.1	0.4
Nitrate - N		mg/L	7.42	0.01	3.08	0.01
Nitrite - N		mg/L	<0.005	<0.005	<0.005	0.005
Nitrate and Nitrite - N		mg/L	7.42	<0.02	3.08	0.02
Sulfate (SO4)	Dissolved	mg/L	289	2	128	0.9
Hydroxide		mg/L	<5	<5	<5	5
Carbonate		mg/L	<6	<6	<6	6
Bicarbonate		mg/L	<5	<5	<5	5
P-Alkalinity	as CaCO3	mg/L	<5	<5	<5	5
T-Alkalinity	as CaCO3	mg/L	<5	<5	<5	5
Total Dissolved Solids	Calculated	mg/L	518	3	230	1
Hardness	Dissolved as CaCO3	mg/L	210	2	95	
Ionic Balance	Dissolved	%	101	142	102	



Analytical Report

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Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: Steve Schlesak
Company: Kinross Gold Corporation

Project ID:
Name: Lupin Mine, Nunavut
Location: Lupin Nunavut
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 399493
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Date Received: Aug 04, 2005
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Report Number: 730016

Page: 7 of 22

		NWL Number	399493-10	399493-11	399493-12	
		Sample Date	Aug 02, 2005	Aug 02, 2005	Aug 02, 2005	
		Sample Description	925-22-2 / 51091	925-22-2 / 51092	925-24 / 51093	
		Matrix	Water - General	Water - General	Water - General	
Analyte		Units	Results	Results	Results	Detection Limit
Inorganic Nonmetallic Parameters						
Ammonium - N		mg/L	0.53	0.54	<0.05	0.05
Cyanide	Strong Acid Dissociable	mg/L	0.020	0.022	0.004	0.002
Metals Total						
Iron	Total	mg/L	<0.1	<0.1	<0.1	0.1
Manganese	Total	mg/L	0.372	0.373	0.032	0.005
Silicon	Total	mg/L	0.62	0.63	0.12	0.05
Sulfur	Total	mg/L	42.2	43.0	6.5	0.3
Mercury	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Aluminum	Total	mg/L	0.042	0.044	0.019	0.005
Antimony	Total	mg/L	<0.0002	<0.0002	0.0006	0.0002
Arsenic	Total	mg/L	0.0017	0.0018	0.0011	0.0002
Barium	Total	mg/L	0.018	0.019	0.005	0.001
Beryllium	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Bismuth	Total	mg/L	<0.0005	<0.0005	<0.0005	0.0005
Boron	Total	mg/L	0.039	0.041	0.007	0.002
Cadmium	Total	mg/L	0.00013	0.00012	0.00003	0.00001
Chromium	Total	mg/L	<0.0005	<0.0005	<0.0005	0.0005
Cobalt	Total	mg/L	0.0160	0.0166	0.0012	0.0001
Copper	Total	mg/L	0.002	0.002	<0.001	0.001
Lead	Total	mg/L	0.0004	0.0002	0.0006	0.0001
Lithium	Total	mg/L	0.012	0.013	0.002	0.001
Molybdenum	Total	mg/L	<0.001	<0.001	<0.001	0.001
Nickel	Total	mg/L	0.0482	0.0503	0.0061	0.0005
Selenium	Total	mg/L	<0.0002	<0.0002	<0.0002	0.0002
Silver	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Strontium	Total	mg/L	0.136	0.143	0.024	0.001
Thallium	Total	mg/L	<0.00005	<0.00005	<0.00005	0.00005
Tin	Total	mg/L	<0.001	<0.001	<0.001	0.001
Titanium	Total	mg/L	0.0019	0.0020	0.0007	0.0005
Uranium	Total	mg/L	<0.0005	<0.0005	<0.0005	0.0005
Vanadium	Total	mg/L	<0.0001	0.0001	<0.0001	0.0001
Zinc	Total	mg/L	0.109	0.190	0.015	0.001
Physical and Aggregate Properties						
Temperature of observed pH		°C	20.1	20.4	20.7	
Solids	Total Suspended	mg/L	<3	<3	<3	1



Analytical Report

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Bill to: Echo Bay Mines Ltd.
Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: Steve Schlesak
Company: Kinross Gold Corporation

Project
ID:
Name: Lupin Mine, Nunavut
Location: Lupin Nunavut
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 399493
Control Number:
Date Received: Aug 04, 2005
Date Reported: Aug 12, 2005
Report Number: 730016

Page: 8 of 22

		NWL Number	399493-10	399493-11	399493-12	
		Sample Date	Aug 02, 2005	Aug 02, 2005	Aug 02, 2005	
		Sample Description	925-22-2 / 51091	925-22-2 / 51092	925-24 / 51093	
		Matrix	Water - General	Water - General	Water - General	
Analyte		Units	Results	Results	Results	Detection Limit
Routine Water						
pH			6.16	6.18	6.62	
Electrical Conductivity		µS/cm at 25 C	390	392	67	1
Calcium	Dissolved	mg/L	32.6	32.6	5.2	0.2
Magnesium	Dissolved	mg/L	3.8	3.8	1	0.1
Sodium	Dissolved	mg/L	38.1	38.3	5.6	0.4
Potassium	Dissolved	mg/L	3.4	3.4	0.6	0.4
Iron	Dissolved	mg/L	0.01	0.01	<0.01	0.01
Manganese	Dissolved	mg/L	0.375	0.372	0.033	0.005
Chloride	Dissolved	mg/L	25.0	25.0	3.4	0.4
Nitrate - N		mg/L	3.08	3.07	0.42	0.01
Nitrite - N		mg/L	<0.005	<0.005	<0.005	0.005
Nitrate and Nitrite - N		mg/L	3.08	3.07	0.42	0.02
Sulfate (SO4)	Dissolved	mg/L	131	130	19	0.9
Hydroxide		mg/L	<5	<5	<5	5
Carbonate		mg/L	<6	<6	<6	6
Bicarbonate		mg/L	<5	<5	<5	5
P-Alkalinity	as CaCO3	mg/L	<5	<5	<5	5
T-Alkalinity	as CaCO3	mg/L	<5	<5	<5	5
Total Dissolved Solids	Calculated	mg/L	234	234	35	1
Hardness	Dissolved as CaCO3	mg/L	97	97	17	
Ionic Balance	Dissolved	%	102	103	110	



Analytical Report

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Bill to: Echo Bay Mines Ltd.
Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: Steve Schlesak
Company: Kinross Gold Corporation

Project ID:
Name: Lupin Mine, Nunavut
Location: Lupin Nunavut
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 399493
Control Number:
Date Received: Aug 04, 2005
Date Reported: Aug 12, 2005
Report Number: 730016

Page: 9 of 22

		NWL Number	399493-13	399493-14	
		Sample Date	Aug 02, 2005	Aug 03, 2005	
		Sample Description	925-25 / 51094	925-10 / 51095	
		Matrix	Water - General	Water - General	
Analyte		Units	Results	Results	Detection Limit
Inorganic Nonmetallic Parameters					
Ammonium - N		mg/L	<0.05	1.81	0.05
Cyanide	Strong Acid Dissociable	mg/L	0.002	0.036	0.002
Metals Total					
Iron	Total	mg/L	<0.1	0.1	0.1
Manganese	Total	mg/L	0.007	0.985	0.005
Silicon	Total	mg/L	0.08	1.86	0.05
Sulfur	Total	mg/L	1.8	95.8	0.3
Mercury	Total	mg/L	<0.0001	<0.0001	0.0001
Mercury	Total	ug/L	-	<0.02	0.02
Aluminum	Total	mg/L	0.017	0.134	0.005
Antimony	Total	mg/L	0.0014	<0.0002	0.0002
Arsenic	Total	mg/L	0.0011	0.0096	0.0002
Barium	Total	mg/L	0.003	0.016	0.001
Beryllium	Total	mg/L	<0.0001	<0.0001	0.0001
Bismuth	Total	mg/L	<0.0005	<0.0005	0.0005
Boron	Total	mg/L	0.003	0.10	0.002
Cadmium	Total	mg/L	0.00003	0.00016	0.00001
Chromium	Total	mg/L	<0.0005	<0.0005	0.0005
Cobalt	Total	mg/L	0.0002	0.0529	0.0001
Copper	Total	mg/L	<0.001	0.015	0.001
Lead	Total	mg/L	0.0007	0.0004	0.0001
Lithium	Total	mg/L	0.001	0.030	0.001
Molybdenum	Total	mg/L	<0.001	0.002	0.001
Nickel	Total	mg/L	0.0019	0.101	0.0005
Selenium	Total	mg/L	<0.0002	<0.0002	0.0002
Silver	Total	mg/L	<0.0001	<0.0001	0.0001
Strontium	Total	mg/L	0.009	0.310	0.001
Thallium	Total	mg/L	<0.00005	<0.00005	0.00005
Tin	Total	mg/L	<0.001	<0.001	0.001
Titanium	Total	mg/L	<0.0005	0.0068	0.0005
Uranium	Total	mg/L	<0.0005	<0.0005	0.0005
Vanadium	Total	mg/L	<0.0001	<0.0001	0.0001
Zinc	Total	mg/L	0.009	0.279	0.001
Physical and Aggregate Properties					
Temperature of observed pH		°C	20.4	20.5	



Analytical Report

Norwest Labs
7217 Roper Road NW
Edmonton, AB. T6B 3J4
Phone: (780) 438-5522
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Bill to: Echo Bay Mines Ltd.
Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: Steve Schlesak
Company: Kinross Gold Corporation

Project ID:
Name: Lupin Mine, Nunavut
Location: Lupin Nunavut
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 399493
Control Number:
Date Received: Aug 04, 2005
Date Reported: Aug 12, 2005
Report Number: 730016

Page: 10 of 22

		NWL Number	399493-13	399493-14	
		Sample Date	Aug 02, 2005	Aug 03, 2005	
		Sample Description	925-25 / 51094	925-10 / 51095	
		Matrix	Water - General	Water - General	
Analyte		Units	Results	Results	Detection Limit
Physical and Aggregate Properties - Continued					
Solids	Total Suspended	mg/L	<3	<3	1
Routine Water					
pH			6.67	6.07	
Electrical Conductivity		µS/cm at 25 C	25	827	1
Calcium	Dissolved	mg/L	1.8	71.0	0.2
Magnesium	Dissolved	mg/L	0.6	7.4	0.1
Sodium	Dissolved	mg/L	1.8	84.9	0.4
Potassium	Dissolved	mg/L	0.6	7.3	0.4
Iron	Dissolved	mg/L	<0.01	<0.01	0.01
Manganese	Dissolved	mg/L	0.008	0.971	0.005
Chloride	Dissolved	mg/L	1.5	57.8	0.4
Nitrate - N		mg/L	0.11	7.41	0.01
Nitrite - N		mg/L	<0.005	0.058	0.005
Nitrate and Nitrite - N		mg/L	0.11	7.46	0.02
Sulfate (SO4)	Dissolved	mg/L	6.2	293	0.9
Hydroxide		mg/L	<5	<5	5
Carbonate		mg/L	6	<6	6
Bicarbonate		mg/L	<5	<5	5
P-Alkalinity	as CaCO3	mg/L	<5	<5	5
T-Alkalinity	as CaCO3	mg/L	5	<5	5
Total Dissolved Solids	Calculated	mg/L	15	523	1
Hardness	Dissolved as CaCO3	mg/L	7	208	
Ionic Balance	Dissolved	%	60	99	

Approved by:

Darren Crichton, BSc, PChem
Operations Chemist



Quality Control

Norwest Labs
7217 Roper Road NW
Edmonton, AB. T6B 3J4
Phone: (780) 438-5522
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Bill to: Echo Bay Mines Ltd.
Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: Steve Schlesak
Company: Kinross Gold Corporation

Project
ID:
Name: Lupin Mine, Nunavut
Location: Lupin Nunavut
LSD:
P.O.:
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Date Received: Aug 04, 2005
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Page: 11 of 22

Inorganic Nonmetallic Parameters

Blanks	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Ammonium - N	mq/L	<0.05	0.00	-0.08	0.08	✓
Cyanide	mq/L	<0.001	0.000	-0.001	0.001	✓
Material Used:	Edmonton Method Blank					
Date Acquired:	Aug 10, 2005					
Acquired By:	Gordon Grensmann					
Replicates	Units	Replicate1	Replicate2	% RSD Criteria	Absolute Criteria	Passed QC
Ammonium - N	mq/L	1.81	1.75	9.99	0.10	✓
Material Used:	Edmonton Duplicate					
Date Acquired:	Aug 09, 2005					
Acquired By:	Gordon Grensmann					
Control Sample	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Ammonium - N	mq/L	3.05	2.99	2.59	3.39	✓
Cyanide	mq/L	0.082	0.077	0.067	0.087	✓
Material Used:	Water High					
Date Acquired:	Aug 10, 2005					
Acquired By:	Gordon Grensmann					
Ammonium - N	mq/L	0.83	0.79	0.66	0.91	✓
Cyanide	mq/L	0.015	0.016	0.013	0.018	✓
Material Used:	Water Low					
Date Acquired:	Aug 10, 2005					
Acquired By:	Gordon Grensmann					

Metals Dissolved

Blanks	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Sulfur	mq/L	<0.3	0.0	-0.3	0.3	✓
Material Used:	Edmonton Method Blank					
Date Acquired:	Aug 05, 2005					
Acquired By:	To Thong					
Replicates	Units	Replicate1	Replicate2	% RSD Criteria	Absolute Criteria	Passed QC
Sulfur	mq/L	97.6	98.8	10.0	0.1	✓
Material Used:	Edmonton Duplicate					
Date Acquired:	Aug 05, 2005					
Acquired By:	To Thong					
Control Sample	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Sulfur	mg/L	48.3	50.0	45.0	55.0	✓
Material Used:	Metals High					
Date Acquired:	Aug 05, 2005					
Acquired By:	To Thong					
Sulfur	mq/L	1.1	1.0	0.9	1.2	✓
Material Used:	Metals Low					
Date Acquired:	Aug 05, 2005					
Acquired By:	To Thong					



Quality Control

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Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: Steve Schlesak
Company: Kinross Gold Corporation

Project
ID:
Name: Lupin Mine, Nunavut
Location: Lupin Nunavut
LSD:
P.O.:
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NWL Lot ID: 399493
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Date Received: Aug 04, 2005
Date Reported: Aug 12, 2005
Report Number: 730016

Page: 13 of 22

Metals Total (Continued...)

Replicates	Units	Replicate1	Replicate2	% RSD Criteria	Absolute Criteria	Passed QC
Iron	mq/L	0.4	0.4	15.0	0.2	✓
Manganese	mg/L	0.035	0.034	15.000	0.010	✓
Silicon	mq/L	2.30	2.13	15.00	0.10	✓
Sulfur	mq/L	6.5	6.2	15.0	0.1	✓
Mercury	mq/L	<0.0001	<0.0001	9.9900	0.0003	✓
Aluminum	uq/L	43	44	15	11	✓
Antimony	uq/L	0.6	0.5	15.0	0.4	✓
Arsenic	uq/L	1.6	1.6	15.0	0.4	✓
Barium	uq/L	5	6	15	2	✓
Beryllium	uq/L	<0.1	<0.1	15.0	0.2	✓
Bismuth	ug/L	<0.5	<0.5	15.0	1.1	✓
Boron	uq/L	7	7	15	4	✓
Cadmium	ug/L	0.03	0.03	15.00	0.02	✓
Chromium	uq/L	5020	5140	15.0	1.1	✓
Cobalt	ug/L	1.2	1.3	15.0	0.2	✓
Copper	uq/L	3	3	15	2	✓
Lead	ug/L	17.0	17.0	15.0	0.2	✓
Lithium	uq/L	2	2	15	2	✓
Molybdenum	uq/L	<1	<1	15	2	✓
Nickel	uq/L	6.1	6.4	15.0	1.1	✓
Selenium	uq/L	<0.2	<0.2	15.0	0.4	✓
Silver	uq/L	<0.1	<0.1	15.0	0.2	✓
Strontium	uq/L	7	7	15	2	✓
Thallium	uq/L	<0.05	<0.05	15.00	0.11	✓
Tin	uq/L	<1	<1	15	2	✓
Titanium	ug/L	1.3	1.4	15.0	1.1	✓
Uranium	uq/L	<0.5	<0.5	15.0	1.1	✓
Vanadium	ug/L	0.4	0.4	15.0	0.2	✓
Zinc	uq/L	3400	3400	15	2	✓

Material Used: Edmonton Duplicate
Date Acquired: Aug 08, 2005
Acquired By: Linda Li

Mercury	uq/L	<0.02	<0.02	30.000	0.050	✓
Material Used:	Metals Int. Duplicate - water tot					
Date Acquired:	Aug 08, 2005					
Acquired By:	Kelly Restiaux					



Quality Control

Norwest Labs
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Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: Steve Schlesak
Company: Kinross Gold Corporation

Project
ID:
Name: Lupin Mine, Nunavut
Location: Lupin Nunavut
LSD:
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NWL Lot ID: 399493
Control Number:
Date Received: Aug 04, 2005
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Page: 14 of 22

Metals Total (Continued...)

Control Sample	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Iron	mq/L	2.0	2.0	1.8	2.2	✓
Manganese	mq/L	0.498	0.500	0.450	0.550	✓
Silicon	mq/L	5.08	5.00	4.50	5.50	✓
Sulfur	mq/L	9.5	10.0	9.0	11.0	✓
Mercury	mq/L	0.0007	0.0008	0.0007	0.0010	✓
Aluminum	uq/L	300	322	273	371	✓
Antimony	uq/L	11.3	11.5	10.2	12.8	✓
Arsenic	uq/L	11.2	11.5	10.3	12.7	✓
Barium	uq/L	63	61	52	69	✓
Beryllium	uq/L	5.5	5.9	4.9	7.0	✓
Bismuth	uq/L	29.4	30.2	26.0	34.4	✓
Boron	uq/L	119	125	102	148	✓
Cadmium	uq/L	0.61	0.63	0.47	0.78	✓
Chromium	uq/L	30.7	31.8	27.5	36.2	✓
Cobalt	uq/L	6.2	6.4	5.4	7.5	✓
Copper	uq/L	59	63	55	70	✓
Lead	uq/L	6.3	6.2	5.4	7.0	✓
Lithium	uq/L	65	65	53	76	✓
Molybdenum	uq/L	62	61	53	69	✓
Nickel	uq/L	30.0	31.4	27.0	35.8	✓
Selenium	uq/L	9.9	11.0	9.7	12.3	✓
Silver	uq/L	6.0	6.2	5.5	7.0	✓
Strontium	uq/L	62	64	55	72	✓
Thallium	uq/L	3.18	3.14	2.56	3.72	✓
Tin	uq/L	58	59	52	66	✓
Titanium	uq/L	30.7	31.5	27.0	36.0	✓
Uranium	uq/L	30.3	30.8	26.9	34.7	✓
Vanadium	uq/L	6.3	6.5	5.4	7.6	✓
Zinc	uq/L	55	59	49	69	✓

Material Used: Edmonton Digestion Check

Date Acquired: Aug 08, 2005

Acquired By: Linda Li

Iron	mg/L	9.3	10.0	9.0	11.0	✓
Manganese	mg/L	2.31	2.500	2.250	2.750	✓
Silicon	mg/L	24.0	25.00	22.50	27.50	✓
Sulfur	mg/L	46.9	50.0	45.0	55.0	✓
Mercury	mg/L	0.0030	0.0031	0.0027	0.0035	✓

Material Used: Metals High

Date Acquired: Aug 09, 2005

Acquired By: Nicole Sehn



Quality Control

Norwest Labs
7217 Roper Road NW
Edmonton, AB. T6B 3J4
Phone: (780) 438-5522
Fax: (780) 438-0396

Bill to: Echo Bay Mines Ltd.
Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: Steve Schlesak
Company: Kinross Gold Corporation

Project
ID:
Name: Lupin Mine, Nunavut
Location: Lupin Nunavut
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 399493
Control Number:
Date Received: Aug 04, 2005
Date Reported: Aug 12, 2005
Report Number: 730016

Page: 15 of 22

Metals Total (Continued...)

Control Sample	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Iron	mq/L	0.2	0.2	0.2	0.2	✓
Manganese	mq/L	0.049	0.050	0.045	0.055	✓
Silicon	mq/L	0.49	0.50	0.45	0.55	✓
Sulfur	mq/L	0.9	1.0	0.9	1.2	✓
Mercury	mq/L	0.0008	0.0008	-0.0016	0.0032	✓
Aluminum	uq/L	956	1000	850	1150	✓
Antimony	uq/L	40.0	40.0	34.0	46.0	✓
Arsenic	uq/L	40.7	40.0	34.0	46.0	✓
Barium	uq/L	203	200	170	230	✓
Beryllium	uq/L	20.5	20.0	17.0	23.0	✓
Bismuth	uq/L	98.0	100.0	85.0	115.0	✓
Boron	uq/L	416	400	340	460	✓
Cadmium	uq/L	2.14	2.00	1.70	2.30	✓
Chromium	uq/L	102	100.0	85.0	115.0	✓
Cobalt	uq/L	20.9	20.0	17.0	23.0	✓
Copper	uq/L	198	200	170	230	✓
Lead	uq/L	20.6	20.0	17.0	23.0	✓
Lithium	uq/L	206	200	170	230	✓
Molybdenum	uq/L	200	200	170	230	✓
Nickel	uq/L	99.8	100.0	85.0	115.0	✓
Selenium	uq/L	41.0	40.0	34.0	46.0	✓
Silver	uq/L	21.2	20.0	17.0	23.0	✓
Strontium	uq/L	206	200	170	230	✓
Thallium	uq/L	10.9	10.00	8.50	11.50	✓
Tin	uq/L	197	200	170	230	✓
Titanium	uq/L	102	100.0	85.0	115.0	✓
Uranium	uq/L	102	100.0	85.0	115.0	✓
Vanadium	uq/L	19.9	20.0	17.0	23.0	✓
Zinc	uq/L	218	200	170	230	✓

Material Used: Metals Low
Date Acquired: Aug 08, 2005
Acquired By: Linda Li



Quality Control

Norwest Labs
7217 Roper Road NW
Edmonton, AB. T6B 3J4
Phone: (780) 438-5522
Fax: (780) 438-0396

Bill to: Echo Bay Mines Ltd.
Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: Steve Schlesak
Company: Kinross Gold Corporation

Project
ID:
Name: Lupin Mine, Nunavut
Location: Lupin Nunavut
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 399493
Control Number:
Date Received: Aug 04, 2005
Date Reported: Aug 12, 2005
Report Number: 730016

Page: 16 of 22

Metals Total (Continued...)

Control Sample	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Aluminum	uq/L	54	50	43	58	✓
Antimony	uq/L	2.1	2.0	1.7	2.3	✓
Arsenic	uq/L	2.0	2.0	1.7	2.3	✓
Barium	uq/L	10	10	9	12	✓
Beryllium	uq/L	1.0	1.0	0.9	1.2	✓
Bismuth	uq/L	5.1	5.0	4.3	5.8	✓
Boron	uq/L	22	20	17	23	✓
Cadmium	uq/L	0.10	0.10	0.09	0.12	✓
Chromium	uq/L	5.4	5.0	4.3	5.8	✓
Cobalt	uq/L	1.0	1.0	0.9	1.2	✓
Copper	uq/L	11	10	9	12	✓
Lead	uq/L	1.1	1.0	0.9	1.2	✓
Lithium	uq/L	9	10	9	12	✓
Molybdenum	uq/L	10	10	9	12	✓
Nickel	uq/L	5.2	5.0	4.3	5.8	✓
Selenium	uq/L	2.1	2.0	1.7	2.3	✓
Silver	uq/L	1.1	1.0	0.9	1.2	✓
Strontium	uq/L	11	10	9	12	✓
Thallium	uq/L	0.53	0.50	0.43	0.58	✓
Tin	uq/L	10	10	9	12	✓
Titanium	uq/L	5.0	5.0	4.3	5.8	✓
Uranium	uq/L	5.3	5.0	4.3	5.8	✓
Vanadium	uq/L	1.0	1.0	0.9	1.2	✓
Zinc	uq/L	11	10	9	12	✓
Material Used:	Metals Trace					
Date Acquired:	Aug 08, 2005					
Acquired By:	Linda Li					
Mercury	ug/L	13	14.000	11.000	17.000	✓
Material Used:	S0102 - Hg					
Date Acquired:	Aug 08, 2005					
Acquired By:	Kelly Restiaux					



Quality Control

Norwest Labs
7217 Roper Road NW
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Bill to: Echo Bay Mines Ltd.
Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: Steve Schlesak
Company: Kinross Gold Corporation

Project
ID:
Name: Lupin Mine, Nunavut
Location: Lupin Nunavut
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 399493
Control Number:
Date Received: Aug 04, 2005
Date Reported: Aug 12, 2005
Report Number: 730016

Page: 17 of 22

Physical and Aggregate Properties

Replicates	Units	Replicate1	Replicate2	% RSD Criteria	Absolute Criteria	Passed QC
Solids	mg/L	14	11	10	15	✓
Material Used:	Edmonton Duplicate					
Date Acquired:	Aug 05, 2005					
Acquired By:	Christina Onyskiw					
Control Sample	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Solids	mg/L	199	200	180	220	✓
Material Used:	Water High					
Date Acquired:	Aug 05, 2005					
Acquired By:	Christina Onyskiw					
Solids	mg/L	19	20	18	22	✓
Material Used:	Water Low					
Date Acquired:	Aug 05, 2005					
Acquired By:	Christina Onyskiw					



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Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: Steve Schlesak
Company: Kinross Gold Corporation

Project
ID:
Name: Lupin Mine, Nunavut
Location: Lupin Nunavut
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 399493
Control Number:
Date Received: Aug 04, 2005
Date Reported: Aug 12, 2005
Report Number: 730016

Page: 18 of 22

Routine Water

Blanks	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Calcium	mq/L	<0.2	0.0	-0.2	0.2	✓
Magnesium	mq/L	<0.1	0.0	-0.1	0.1	✓
Sodium	mq/L	<0.4	0.0	-0.4	0.4	✓
Potassium	mq/L	<0.4	0.0	-0.4	0.4	✓
Iron	mq/L	<0.01	0.00	-0.01	0.01	✓
Manganese	mq/L	<0.005	0.000	-0.005	0.005	✓
Chloride	mq/L	<0.4	0.0	-0.5	0.5	✓
Nitrate - N	mq/L	<0.01	0.00	-0.01	0.01	✓
Nitrite - N	mq/L	<0.005	0.000	-0.005	0.005	✓

Material Used: Edmonton Method Blank

Date Acquired: Aug 05, 2005

Acquired By: Marc Dzura

Replicates	Units	Replicate1	Replicate2	% RSD Criteria	Absolute Criteria	Passed QC
pH		7.96	7.96	9.99	0.10	✓
Electrical Conductivity	dS/m at 25 C	0.687	0.685	9.990	0.002	✓
Calcium	mq/L	71.0	73.8	10.0	0.6	✓
Magnesium	mg/L	7.4	7.7	10.0	0.7	✓
Sodium	mq/L	84.9	88.0	10.0	1.2	✓
Potassium	mg/L	7.3	7.5	10.0	1.2	✓
Iron	mq/L	<0.1	<0.1	9.99	0.05	✓
Manganese	mq/L	0.971	1.01	9.990	0.010	✓
Chloride	mq/L	57.5	57.5	10.0	0.5	✓
Nitrate - N	mq/L	3.08	3.08	9.99	0.01	✓
Nitrite - N	mq/L	0.118	0.117	9.990	0.010	✓
Hydroxide	mq/L	<5	<5	10		✓
Carbonate	mq/L	<6	<6	10		✓
Bicarbonate	mq/L	514	474	10		✓
P-Alkalinity	mg/L	<5	<5	10	5	✓
T-Alkalinity	mq/L	422	389	10	5	✓

Material Used: Edmonton Duplicate

Date Acquired: Aug 05, 2005

Acquired By: Annva Hundal



Quality Control

Norwest Labs
7217 Roper Road NW
Edmonton, AB. T6B 3J4
Phone: (780) 438-5522
Fax: (780) 438-0396

Bill to: Echo Bay Mines Ltd.
Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: Steve Schlesak
Company: Kinross Gold Corporation

Project
ID:
Name: Lupin Mine, Nunavut
Location: Lupin Nunavut
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 399493
Control Number:
Date Received: Aug 04, 2005
Date Reported: Aug 12, 2005
Report Number: 730016

Page: 19 of 22

Routine Water (Continued...)

Control Sample	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Chloride	mq/L	2040	2087.0	1875.2	2298.8	✓
Material Used:	Chloride High					
Date Acquired:	Aug 05, 2005					
Acquired By:	Wilailuk Somiit					
Calcium	mg/L	236	250.0	225.0	275.0	✓
Magnesium	mg/L	96.9	100.0	90.0	110.0	✓
Sodium	mg/L	245	250.0	225.0	275.0	✓
Potassium	mg/L	248	250.0	225.0	275.0	✓
Iron	mg/L	9.58	10.00	9.01	10.99	✓
Manganese	mg/L	2.35	2.500	2.260	2.740	✓
Material Used:	Metals High					
Date Acquired:	Aug 05, 2005					
Acquired By:	To Thong					
Calcium	mq/L	5.2	5.0	4.5	5.5	✓
Magnesium	mq/L	2.1	2.0	1.8	2.2	✓
Sodium	mq/L	5.0	5.0	4.5	5.5	✓
Potassium	mq/L	4.9	5.0	4.5	5.5	✓
Iron	mq/L	0.20	0.20	0.18	0.22	✓
Manganese	mq/L	0.050	0.050	0.045	0.055	✓
Material Used:	Metals Low					
Date Acquired:	Aug 05, 2005					
Acquired By:	To Thong					
pH		9.17	9.23	9.11	9.35	✓
Electrical Conductivity	dS/m at 25 C	2.66	2.730	2.611	2.849	✓
Chloride	mq/L	80.1	81.0	76.4	85.6	✓
Nitrate - N	mq/L	10.3	10.00	9.61	10.39	✓
Nitrite - N	mq/L	10.4	10.000	9.562	10.438	✓
P-Alkalinity	mq/L	506	507	415	599	✓
T-Alkalinity	mq/L	997	1009	969	1049	✓
Material Used:	Water High					
Date Acquired:	Aug 05, 2005					
Acquired By:	Annva Hundal					



Quality Control

Norwest Labs
7217 Roper Road NW
Edmonton, AB. T6B 3J4
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Bill to: Echo Bay Mines Ltd.
Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: Steve Schlesak
Company: Kinross Gold Corporation

Project
ID:
Name: Lupin Mine, Nunavut
Location: Lupin Nunavut
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 399493
Control Number:
Date Received: Aug 04, 2005
Date Reported: Aug 12, 2005
Report Number: 730016

Page: 20 of 22

Routine Water (Continued...)

Control Sample	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
pH		6.87	6.90	6.83	6.97	✓
Electrical Conductivity	dS/m at 25 C	0.074	0.076	0.070	0.081	✓
Chloride	mq/L	14.3	14.9	13.2	16.6	✓
Nitrate - N	mq/L	0.52	0.50	0.44	0.56	✓
Nitrite - N	mq/L	0.516	0.495	0.437	0.553	✓
P-Alkalinity	mq/L	58	54	20	88	✓
T-Alkalinity	mq/L	130	127	118	136	✓

Material Used: Water Low
Date Acquired: Aug 05, 2005
Acquired By: Annva Hundal



Analytical Report

Norwest Labs
7217 Roper Road NW
Edmonton, AB. T6B 3J4
Phone: (780) 438-5522
Fax: (780) 438-0396

Bill to: Kinross Gold Corporation
Report to: Kinross Gold Corporation
9818 Edmonton International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Mike Tansey
Sampled By: Steve Schlesak
Company: Kinross Gold Corporation

Project
ID:
Name: Lupin Mine, Nunavut
Location:
LSD:
P.O.: LP 53687
Acct. Code:

NWL Lot ID: 401940
Control Number:
Date Received: Aug 16, 2005
Date Reported: Aug 23, 2005
Report Number: 734895

Page: 2 of 21

		NWL Number	401940-1	401940-2	401940-3	
		Sample Date	Aug 04, 2005	Aug 05, 2005	Aug 06, 2005	
		Sample Description	51096 / 925-10	51097 / 925-10	51098 / 925-10	
		Matrix	Water - General	Water - General	Water - General	
Analyte		Units	Results	Results	Results	Detection Limit
Routine Water - Continued						
pH			5.99	5.95	5.91	
Electrical Conductivity		µS/cm at 25 C	872	874	881	1
Calcium	Dissolved	mg/L	77.1	75.4	76.6	0.2
Magnesium	Dissolved	mg/L	7.2	7.1	7.2	0.1
Sodium	Dissolved	mg/L	91.3	90.6	91.6	0.4
Potassium	Dissolved	mg/L	7.6	7.4	7.5	0.4
Iron	Dissolved	mg/L	<0.01	<0.01	<0.01	0.01
Manganese	Dissolved	mg/L	1.03	1.01	1.02	0.005
Chloride	Dissolved	mg/L	57.4	57.1	58.2	0.4
Nitrate - N		mg/L	7.60	7.56	7.65	0.01
Nitrite - N		mg/L	0.061	0.058	0.060	0.005
Nitrate and Nitrite - N		mg/L	7.66	7.62	7.71	0.02
Sulfate (SO4)	Dissolved	mg/L	299	303	298	0.9
Hydroxide		mg/L	<5	<5	<5	5
Carbonate		mg/L	<6	<6	<6	6
Bicarbonate		mg/L	<5	<5	<5	5
P-Alkalinity	as CaCO3	mg/L	<5	<5	<5	5
T-Alkalinity	as CaCO3	mg/L	<5	<5	<5	5
Total Dissolved Solids	Calculated	mg/L	539	541	539	1
Hardness	Dissolved as CaCO3	mg/L	222	217	221	
Ionic Balance	Dissolved	%	103	100	103	

		NWL Number	401940-4	401940-5	401940-6	
		Sample Date	Aug 07, 2005	Aug 08, 2005	Aug 09, 2005	
		Sample Description	51099 / 925-10	51100 / 925-10	51101 / 925-10	
		Matrix	Water - General	Water - General	Water - General	
Analyte		Units	Results	Results	Results	Detection Limit
Inorganic Nonmetallic Parameters						
Cyanide	Strong Acid Dissociable	mg/L	0.032	0.030	0.028	0.002
Metals Total						
Iron	Total	mg/L	0.1	0.2	0.2	0.1
Manganese	Total	mg/L	0.969	0.970	0.972	0.005
Silicon	Total	mg/L	1.91	1.94	1.92	0.05
Sulfur	Total	mg/L	96.5	93.4	94.3	0.3
Mercury	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Aluminum	Total	mg/L	0.114	0.146	0.132	0.005
Antimony	Total	mg/L	<0.0002	<0.0002	<0.0002	0.0002
Arsenic	Total	mg/L	0.0095	0.0111	0.0100	0.0002
Barium	Total	mg/L	0.017	0.016	0.016	0.001
Beryllium	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Bismuth	Total	mg/L	<0.0005	<0.0005	<0.0005	0.0005
Boron	Total	mg/L	0.089	0.085	0.087	0.002
Cadmium	Total	mg/L	0.00011	0.00012	0.00013	0.00001
Chromium	Total	mg/L	<0.0005	<0.0005	<0.0005	0.0005
Cobalt	Total	mg/L	0.0495	0.0482	0.0489	0.0001
Copper	Total	mg/L	0.014	0.014	0.014	0.001
Lead	Total	mg/L	0.0003	0.0004	0.0004	0.0001
Lithium	Total	mg/L	0.029	0.028	0.029	0.001
Molybdenum	Total	mg/L	0.002	0.002	0.002	0.001
Nickel	Total	mg/L	0.100	0.0970	0.0982	0.0005
Selenium	Total	mg/L	0.0005	0.0005	0.0003	0.0002
Silver	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Strontium	Total	mg/L	0.319	0.308	0.316	0.001
Thallium	Total	mg/L	<0.00005	<0.00005	<0.00005	0.00005
Tin	Total	mg/L	<0.001	<0.001	<0.001	0.001
Titanium	Total	mg/L	0.0046	0.0054	0.0047	0.0005
Uranium	Total	mg/L	<0.0005	<0.0005	<0.0005	0.0005
Vanadium	Total	mg/L	<0.0001	0.0001	0.0001	0.0001
Zinc	Total	mg/L	0.262	0.251	0.259	0.001
Physical and Aggregate Properties						
Temperature of observed pH		°C	19.2	18.8	18.7	
Solids	Total Suspended	mg/L	<3	<2	<3	1
Routine Water						



Analytical Report

Norwest Labs
7217 Roper Road NW
Edmonton, AB. T6B 3J4
Phone: (780) 438-5522
Fax: (780) 438-0396

Bill to: Kinross Gold Corporation
Report to: Kinross Gold Corporation
9818 Edmonton International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Mike Tansey
Sampled By: Steve Schlesak
Company: Kinross Gold Corporation

Project
ID:
Name: Lupin Mine, Nunavut
Location:
LSD:
P.O.: LP 53687
Acct. Code:

NWL Lot ID: 401940
Control Number:
Date Received: Aug 16, 2005
Date Reported: Aug 23, 2005
Report Number: 734895

Page: 4 of 21

		NWL Number	401940-4	401940-5	401940-6	
		Sample Date	Aug 07, 2005	Aug 08, 2005	Aug 09, 2005	
		Sample Description	51099 / 925-10	51100 / 925-10	51101 / 925-10	
		Matrix	Water - General	Water - General	Water - General	
Analyte		Units	Results	Results	Results	Detection Limit
Routine Water - Continued						
pH			5.87	5.75	5.71	
Electrical Conductivity		µS/cm at 25 C	880	866	865	1
Calcium	Dissolved	mg/L	76.5	75.2	75.1	0.2
Magnesium	Dissolved	mg/L	7.2	7.0	7.1	0.1
Sodium	Dissolved	mg/L	91.7	89.4	90.0	0.4
Potassium	Dissolved	mg/L	7.6	7.4	7.5	0.4
Iron	Dissolved	mg/L	<0.01	<0.01	<0.01	0.01
Manganese	Dissolved	mg/L	1.02	1.01	1.01	0.005
Chloride	Dissolved	mg/L	57.3	57.1	56.6	0.4
Nitrate - N		mg/L	7.59	7.55	7.57	0.01
Nitrite - N		mg/L	0.058	0.056	0.056	0.005
Nitrate and Nitrite - N		mg/L	7.65	7.60	7.63	0.02
Sulfate (SO4)	Dissolved	mg/L	300	301	302	0.9
Hydroxide		mg/L	<5	<5	<5	5
Carbonate		mg/L	<6	<6	<6	6
Bicarbonate		mg/L	<5	<5	<5	5
P-Alkalinity	as CaCO3	mg/L	<5	<5	<5	5
T-Alkalinity	as CaCO3	mg/L	<5	<5	<5	5
Total Dissolved Solids	Calculated	mg/L	540	537	538	1
Hardness	Dissolved as CaCO3	mg/L	221	217	217	
Ionic Balance	Dissolved	%	103	100	101	



Analytical Report

Norwest Labs
7217 Roper Road NW
Edmonton, AB. T6B 3J4
Phone: (780) 438-5522
Fax: (780) 438-0396

Bill to: Kinross Gold Corporation
Report to: Kinross Gold Corporation
9818 Edmonton International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Mike Tansey
Sampled By: Steve Schlesak
Company: Kinross Gold Corporation

Project ID:
Name: Lupin Mine, Nunavut
Location:
LSD:
P.O.: LP 53687
Acct. Code:

NWL Lot ID: 401940
Control Number:
Date Received: Aug 16, 2005
Date Reported: Aug 23, 2005
Report Number: 734895

Page: 5 of 21

		NWL Number	401940-7	401940-8	401940-9	
		Sample Date	Aug 09, 2005	Aug 09, 2005	Aug 09, 2005	
		Sample Description	51102 / 925-20	51103 / 925-21	51104 / 925-22-1	
		Matrix	Water - General	Water - General	Water - General	
Analyte		Units	Results	Results	Results	Detection Limit
Inorganic Nonmetallic Parameters						
Ammonium - N		mg/L	0.97	<0.05	0.58	0.05
Cyanide	Strong Acid Dissociable	mg/L	0.01	0.002	0.01	0.002
Metals Total						
Iron	Total	mg/L	0.1	<0.1	<0.1	0.1
Manganese	Total	mg/L	0.936	<0.005	0.422	0.005
Silicon	Total	mg/L	1.59	0.08	0.74	0.05
Sulfur	Total	mg/L	80.5	0.5	46.8	0.3
Mercury	Total	mg/L	<0.0001	<0.0001	0.0001	0.0001
Aluminum	Total	mg/L	0.171	0.017	0.065	0.005
Antimony	Total	mg/L	<0.0002	<0.0002	<0.0002	0.0002
Arsenic	Total	mg/L	0.0037	0.0009	0.0036	0.0002
Barium	Total	mg/L	0.023	0.002	0.018	0.001
Beryllium	Total	mg/L	0.0001	<0.0001	<0.0001	0.0001
Bismuth	Total	mg/L	<0.0005	<0.0005	<0.0005	0.0005
Boron	Total	mg/L	0.075	0.002	0.043	0.002
Cadmium	Total	mg/L	0.00021	<0.00001	0.00013	0.00001
Chromium	Total	mg/L	<0.0005	<0.0005	<0.0005	0.0005
Cobalt	Total	mg/L	0.0456	<0.0001	0.0185	0.0001
Copper	Total	mg/L	0.008	<0.001	0.002	0.001
Lead	Total	mg/L	0.0001	<0.0001	0.0003	0.0001
Lithium	Total	mg/L	0.025	0.001	0.014	0.001
Molybdenum	Total	mg/L	<0.001	<0.001	<0.001	0.001
Nickel	Total	mg/L	0.100	0.0006	0.0568	0.0005
Selenium	Total	mg/L	0.0003	<0.0002	0.0004	0.0002
Silver	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Strontium	Total	mg/L	0.264	0.005	0.154	0.001
Thallium	Total	mg/L	<0.00005	<0.00005	<0.00005	0.00005
Tin	Total	mg/L	<0.001	<0.001	<0.001	0.001
Titanium	Total	mg/L	0.0038	<0.0005	0.0029	0.0005
Uranium	Total	mg/L	<0.0005	<0.0005	<0.0005	0.0005
Vanadium	Total	mg/L	<0.0001	0.0001	0.0001	0.0001
Zinc	Total	mg/L	0.230	0.002	0.134	0.001
Physical and Aggregate Properties						
Temperature of observed pH		°C	18.8	18.9	19.0	
Solids	Total Suspended	mg/L	<2	<2	2	1



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Page: 6 of 21

		NWL Number	401940-7	401940-8	401940-9	
		Sample Date	Aug 09, 2005	Aug 09, 2005	Aug 09, 2005	
		Sample Description	51102 / 925-20	51103 / 925-21	51104 / 925-22-1	
		Matrix	Water - General	Water - General	Water - General	
Analyte		Units	Results	Results	Results	Detection Limit
Routine Water						
pH			5.26	6.50	5.94	
Electrical Conductivity		µS/cm at 25 C	750	12	444	1
Calcium	Dissolved	mg/L	65.5	1.1	37.2	0.2
Magnesium	Dissolved	mg/L	6.5	0.5	3.9	0.1
Sodium	Dissolved	mg/L	78.1	0.8	44.4	0.4
Potassium	Dissolved	mg/L	6.3	0.5	3.8	0.4
Iron	Dissolved	mg/L	0.03	0.02	0.01	0.01
Manganese	Dissolved	mg/L	0.987	<0.005	0.446	0.005
Chloride	Dissolved	mg/L	48.4	3.7	30.4	0.4
Nitrate - N		mg/L	6.31	0.02	3.38	0.01
Nitrite - N		mg/L	<0.005	<0.005	<0.005	0.005
Nitrate and Nitrite - N		mg/L	6.31	<0.02	3.38	0.02
Sulfate (SO4)	Dissolved	mg/L	261	2	146	0.9
Hydroxide		mg/L	<5	<5	<5	5
Carbonate		mg/L	<6	7	<6	6
Bicarbonate		mg/L	<5	<5	<5	5
P-Alkalinity	as CaCO3	mg/L	<5	<5	<5	5
T-Alkalinity	as CaCO3	mg/L	<5	6	<5	5
Total Dissolved Solids	Calculated	mg/L	467	10	266	1
Hardness	Dissolved as CaCO3	mg/L	190	5	110	
Ionic Balance	Dissolved	%	103	40	103	



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Report Number: 734895

Page: 7 of 21

		NWL Number	401940-10	401940-11	401940-12	
		Sample Date	Aug 09, 2005	Aug 09, 2005	Aug 09, 2005	
		Sample Description	51105 / 925-22-2	51106 / 925-22-3	51107 / 925-24	
		Matrix	Water - General	Water - General	Water - General	
Analyte		Units	Results	Results	Results	Detection Limit
Inorganic Nonmetallic Parameters						
Ammonium - N		mg/L	0.54	0.53	0.16	0.05
Cyanide	Strong Acid Dissociable	mg/L	0.008	0.01	0.004	0.002
Metals Total						
Iron	Total	mg/L	0.1	<0.1	<0.1	0.1
Manganese	Total	mg/L	0.364	0.387	0.086	0.005
Silicon	Total	mg/L	0.75	0.72	0.24	0.05
Sulfur	Total	mg/L	39.7	41.3	16.1	0.3
Mercury	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Aluminum	Total	mg/L	0.092	0.071	0.023	0.005
Antimony	Total	mg/L	<0.0002	<0.0002	0.0003	0.0002
Arsenic	Total	mg/L	0.0017	0.0018	0.0014	0.0002
Barium	Total	mg/L	0.018	0.018	0.009	0.001
Beryllium	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Bismuth	Total	mg/L	<0.0005	<0.0005	<0.0005	0.0005
Boron	Total	mg/L	0.039	0.040	0.014	0.002
Cadmium	Total	mg/L	0.00012	0.00012	0.00005	0.00001
Chromium	Total	mg/L	<0.0005	<0.0005	<0.0005	0.0005
Cobalt	Total	mg/L	0.0152	0.0165	0.0031	0.0001
Copper	Total	mg/L	0.002	0.002	0.001	0.001
Lead	Total	mg/L	0.0003	0.0003	0.0006	0.0001
Lithium	Total	mg/L	0.013	0.013	0.005	0.001
Molybdenum	Total	mg/L	<0.001	<0.001	<0.001	0.001
Nickel	Total	mg/L	0.0492	0.0526	0.0158	0.0005
Selenium	Total	mg/L	<0.0002	<0.0002	<0.0002	0.0002
Silver	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Strontium	Total	mg/L	0.140	0.145	0.052	0.001
Thallium	Total	mg/L	<0.00005	<0.00005	<0.00005	0.00005
Tin	Total	mg/L	<0.001	<0.001	<0.001	0.001
Titanium	Total	mg/L	0.0048	0.0036	0.0011	0.0005
Uranium	Total	mg/L	<0.0005	<0.0005	<0.0005	0.0005
Vanadium	Total	mg/L	0.0002	0.0002	0.0001	0.0001
Zinc	Total	mg/L	0.119	0.126	0.039	0.001
Physical and Aggregate Properties						
Temperature of observed pH		°C	19.3	19.4	19.1	
Solids	Total Suspended	mg/L	4	<2	<2	1



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Report Number: 734895

Page: 8 of 21

		NWL Number	401940-10	401940-11	401940-12	
		Sample Date	Aug 09, 2005	Aug 09, 2005	Aug 09, 2005	
		Sample Description	51105 / 925-22-2	51106 / 925-22-3	51107 / 925-24	
		Matrix	Water - General	Water - General	Water - General	
Analyte		Units	Results	Results	Results	Detection Limit
Routine Water						
pH			6.00	5.98	6.39	
Electrical Conductivity		µS/cm at 25 C	416	428	160	1
Calcium	Dissolved	mg/L	34.3	35.3	12.4	0.2
Magnesium	Dissolved	mg/L	3.6	3.7	1.6	0.1
Sodium	Dissolved	mg/L	40.9	42.1	15.1	0.4
Potassium	Dissolved	mg/L	3.4	3.5	1.6	0.4
Iron	Dissolved	mg/L	<0.01	<0.01	<0.01	0.01
Manganese	Dissolved	mg/L	0.383	0.405	0.087	0.005
Chloride	Dissolved	mg/L	28.3	28.4	11.8	0.4
Nitrate - N		mg/L	3.08	3.20	1.09	0.01
Nitrite - N		mg/L	<0.005	<0.005	<0.005	0.005
Nitrate and Nitrite - N		mg/L	3.08	3.20	1.09	0.02
Sulfate (SO4)	Dissolved	mg/L	130	135	47.8	0.9
Hydroxide		mg/L	<5	<5	<5	5
Carbonate		mg/L	<6	<6	<6	6
Bicarbonate		mg/L	<5	<5	<5	5
P-Alkalinity	as CaCO3	mg/L	<5	<5	<5	5
T-Alkalinity	as CaCO3	mg/L	<5	<5	<5	5
Total Dissolved Solids	Calculated	mg/L	241	248	91	1
Hardness	Dissolved as CaCO3	mg/L	100	100	37.8	
Ionic Balance	Dissolved	%	105	105	100	



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Report Number: 734895

Page: 9 of 21

		NWL Number	401940-13	401940-14	
		Sample Date	Aug 09, 2005	Aug 10, 2005	
		Sample Description	51108 / 925-25	51109 / 925-10	
		Matrix	Water - General	Water - General	
Analyte		Units	Results	Results	Detection Limit
Inorganic Nonmetallic Parameters					
Ammonium - N		mg/L	<0.05	1.67	0.05
Cyanide	Strong Acid Dissociable	mg/L	0.002	0.028	0.002
Metals Total					
Iron	Total	mg/L	<0.1	0.2	0.1
Manganese	Total	mg/L	0.026	0.985	0.005
Silicon	Total	mg/L	0.14	1.92	0.05
Sulfur	Total	mg/L	5.3	99.6	0.3
Mercury	Total	mg/L	<0.0001	<0.0001	0.0001
Mercury	Total	ug/L	-	<0.02	0.02
Aluminum	Total	mg/L	0.017	0.142	0.005
Antimony	Total	mg/L	0.0016	<0.0002	0.0002
Arsenic	Total	mg/L	0.0012	0.010	0.0002
Barium	Total	mg/L	0.005	0.017	0.001
Beryllium	Total	mg/L	<0.0001	<0.0001	0.0001
Bismuth	Total	mg/L	<0.0005	<0.0005	0.0005
Boron	Total	mg/L	0.006	0.087	0.002
Cadmium	Total	mg/L	0.00003	0.00014	0.00001
Chromium	Total	mg/L	<0.0005	<0.0005	0.0005
Cobalt	Total	mg/L	0.001	0.0494	0.0001
Copper	Total	mg/L	<0.001	0.016	0.001
Lead	Total	mg/L	0.0005	0.0004	0.0001
Lithium	Total	mg/L	0.002	0.028	0.001
Molybdenum	Total	mg/L	<0.001	0.002	0.001
Nickel	Total	mg/L	0.0053	0.0980	0.0005
Selenium	Total	mg/L	<0.0002	0.0005	0.0002
Silver	Total	mg/L	<0.0001	<0.0001	0.0001
Strontium	Total	mg/L	0.020	0.315	0.001
Thallium	Total	mg/L	<0.00005	<0.00005	0.00005
Tin	Total	mg/L	<0.001	<0.001	0.001
Titanium	Total	mg/L	0.0006	0.0049	0.0005
Uranium	Total	mg/L	<0.0005	<0.0005	0.0005
Vanadium	Total	mg/L	0.0001	0.0001	0.0001
Zinc	Total	mg/L	0.018	0.271	0.001
Physical and Aggregate Properties					
Temperature of observed pH		°C	19.0	18.9	



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Page: 10 of 21

		NWL Number	401940-13	401940-14	
		Sample Date	Aug 09, 2005	Aug 10, 2005	
		Sample Description	51108 / 925-25	51109 / 925-10	
		Matrix	Water - General	Water - General	
Analyte		Units	Results	Results	Detection Limit
Physical and Aggregate Properties - Continued					
Solids	Total Suspended	mg/L	<2	<2	1
Routine Water					
pH			6.51	5.66	
Electrical Conductivity		µS/cm at 25 C	60	863	1
Calcium	Dissolved	mg/L	4.5	75.3	0.2
Magnesium	Dissolved	mg/L	0.8	7.1	0.1
Sodium	Dissolved	mg/L	5.3	90.4	0.4
Potassium	Dissolved	mg/L	0.7	7.4	0.4
Iron	Dissolved	mg/L	<0.01	<0.01	0.01
Manganese	Dissolved	mg/L	0.025	1.01	0.005
Chloride	Dissolved	mg/L	6.2	60.5	0.4
Nitrate - N		mg/L	0.35	7.54	0.01
Nitrite - N		mg/L	<0.005	0.055	0.005
Nitrate and Nitrite - N		mg/L	0.35	7.60	0.02
Sulfate (SO4)	Dissolved	mg/L	17	309	0.9
Hydroxide		mg/L	<5	<5	5
Carbonate		mg/L	<6	<6	6
Bicarbonate		mg/L	<5	<5	5
P-Alkalinity	as CaCO3	mg/L	<5	<5	5
T-Alkalinity	as CaCO3	mg/L	<5	<5	5
Total Dissolved Solids	Calculated	mg/L	34	551	1
Hardness	Dissolved as CaCO3	mg/L	15	217	
Ionic Balance	Dissolved	%	99	99	

Approved by:

Anthony Neumann, MSc
Laboratory Operations Manager



Quality Control

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Report Number: 734895

Page: 11 of 21

Inorganic Nonmetallic Parameters

Blanks	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Ammonium - N	mq/L	<0.05	0.00	-0.08	0.08	✓
Cyanide	mq/L	<0.001	0.000	-0.001	0.001	✓
Material Used:	Edmonton Method Blank					
Date Acquired:	Aug 19, 2005					
Acquired By:	Gordon Grensmann					
Replicates	Units	Replicate1	Replicate2	% RSD Criteria	Absolute Criteria	Passed QC
Ammonium - N	mq/L	0.97	0.96	9.99	0.10	✓
Material Used:	Edmonton Duplicate					
Date Acquired:	Aug 17, 2005					
Acquired By:	Gordon Grensmann					
Control Sample	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Ammonium - N	mq/L	2.94	2.99	2.59	3.39	✓
Cyanide	mq/L	0.079	0.077	0.067	0.087	✓
Material Used:	Water High					
Date Acquired:	Aug 19, 2005					
Acquired By:	Gordon Grensmann					
Ammonium - N	mq/L	0.80	0.79	0.66	0.91	✓
Cyanide	mq/L	0.014	0.016	0.013	0.018	✓
Material Used:	Water Low					
Date Acquired:	Aug 19, 2005					
Acquired By:	Gordon Grensmann					

Metals Dissolved

Blanks	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Sulfur	mq/L	<0.3	0.0	-0.3	0.3	✓
Material Used:	Edmonton Method Blank					
Date Acquired:	Aug 17, 2005					
Acquired By:	To Thong					
Replicates	Units	Replicate1	Replicate2	% RSD Criteria	Absolute Criteria	Passed QC
Sulfur	mq/L	48.5	49.5	10.0	0.1	✓
Material Used:	Edmonton Duplicate					
Date Acquired:	Aug 17, 2005					
Acquired By:	To Thong					
Control Sample	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Sulfur	mg/L	49.4	50.0	45.0	55.0	✓
Material Used:	Metals High					
Date Acquired:	Aug 17, 2005					
Acquired By:	To Thong					
Sulfur	mq/L	1	1.0	0.9	1.2	✓
Material Used:	Metals Low					
Date Acquired:	Aug 17, 2005					
Acquired By:	To Thong					



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Page: 12 of 21

Metals Total

Blanks	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Iron	mq/L	<0.1	0.0	0.0	0.0	✓
Manganese	mq/L	<0.005	0.000	-0.001	0.001	✓
Mercury	mq/L	<0.0001	0.0000	0.0000	0.0000	✓
Aluminum	uq/L	<5	0	-5	5	✓
Antimony	uq/L	<0.2	0.0	-0.2	0.2	✓
Arsenic	uq/L	<0.2	0.0	-0.2	0.2	✓
Barium	uq/L	<1	0	-1	1	✓
Beryllium	uq/L	<0.1	0.0	-0.1	0.1	✓
Bismuth	uq/L	<0.5	0.0	-0.5	0.5	✓
Boron	uq/L	<2	0	-2	2	✓
Cadmium	uq/L	<0.01	0.00	-0.01	0.01	✓
Chromium	uq/L	<0.5	0.0	-0.5	0.5	✓
Cobalt	uq/L	<0.1	0.0	-0.1	0.1	✓
Copper	uq/L	<1	0	-1	1	✓
Lead	uq/L	<0.1	0.0	-0.1	0.1	✓
Lithium	uq/L	<1	0	-1	1	✓
Molybdenum	uq/L	<1	0	-1	1	✓
Nickel	uq/L	<0.5	0.0	-0.5	0.5	✓
Selenium	uq/L	<0.2	0.0	-0.2	0.2	✓
Silver	uq/L	<0.1	0.0	-0.1	0.1	✓
Strontium	uq/L	<1	0	-1	1	✓
Thallium	uq/L	<0.05	0.00	-0.05	0.05	✓
Tin	uq/L	<1	0	-1	1	✓
Titanium	uq/L	<0.5	0.0	-0.5	0.5	✓
Uranium	uq/L	<0.5	0.0	-0.5	0.5	✓
Vanadium	uq/L	<0.1	0.0	-0.1	0.1	✓
Zinc	uq/L	<1	0	-1	1	✓

Material Used: Edmonton Method Blank

Date Acquired: Aug 17, 2005

Acquired By: Linda Li

Mercury	ug/L	<0.02	0.000	-20.010	20.010	✓
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Material Used: Metals Blank - water - total

Date Acquired: Aug 22, 2005

Acquired By: Kelly Restiaux



Quality Control

Norwest Labs
7217 Roper Road NW
Edmonton, AB. T6B 3J4
Phone: (780) 438-5522
Fax: (780) 438-0396

Bill to: Kinross Gold Corporation
Report to: Kinross Gold Corporation
9818 Edmonton International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Mike Tansey
Sampled By: Steve Schlesak
Company: Kinross Gold Corporation

Project
ID:
Name: Lupin Mine, Nunavut
Location:
LSD:
P.O.: LP 53687
Acct. Code:

NWL Lot ID: 401940
Control Number:
Date Received: Aug 16, 2005
Date Reported: Aug 23, 2005
Report Number: 734895

Page: 13 of 21

Metals Total (Continued...)

Replicates	Units	Replicate1	Replicate2	% RSD Criteria	Absolute Criteria	Passed QC
Iron	mq/L	0.1	0.1	15.0	0.2	✓
Manganese	mg/L	0.026	0.028	15.000	0.010	✓
Silicon	mq/L	10.1	10.2	15.00	0.10	✓
Sulfur	mq/L	5.3	5.3	15.0	0.1	✓
Mercury	mq/L	<0.0001	<0.0001	9.9900	0.0003	✓
Aluminum	uq/L	763	753	15	11	✓
Antimony	uq/L	0.2	0.2	15.0	0.4	✓
Arsenic	uq/L	9.8	9.8	15.0	0.4	✓
Barium	uq/L	89	87	15	2	✓
Beryllium	uq/L	<0.1	<0.1	15.0	0.2	✓
Bismuth	ug/L	<0.5	<0.5	15.0	1.1	✓
Boron	uq/L	90	90	15	4	✓
Cadmium	ug/L	0.11	0.11	15.00	0.02	✓
Chromium	uq/L	1.3	1.3	15.0	1.1	✓
Cobalt	ug/L	49.6	49.7	15.0	0.2	✓
Copper	uq/L	2	2	15	2	✓
Lead	ug/L	0.8	0.8	15.0	0.2	✓
Lithium	uq/L	9	9	15	2	✓
Molybdenum	uq/L	2	2	15	2	✓
Nickel	uq/L	3.2	3.3	15.0	1.1	✓
Selenium	uq/L	1.3	1.2	15.0	0.4	✓
Silver	uq/L	<0.1	<0.1	15.0	0.2	✓
Strontium	uq/L	317	322	15	2	✓
Thallium	uq/L	<0.05	<0.05	15.00	0.11	✓
Tin	uq/L	<1	<1	15	2	✓
Titanium	ug/L	4.4	4.6	15.0	1.1	✓
Uranium	uq/L	1.5	1.5	15.0	1.1	✓
Vanadium	ug/L	3.4	3.4	15.0	0.2	✓
Zinc	uq/L	9	10	15	2	✓

Material Used: Edmonton Duplicate

Date Acquired: Aug 17, 2005

Acquired By: Linda Li

Mercury uq/L <0.02 <0.02 30.000 0.050 ✓

Material Used: Metals Int. Duplicate - water tot

Date Acquired: Aug 22, 2005

Acquired By: Kelly Restiaux



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Report to: Kinross Gold Corporation
9818 Edmonton International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Mike Tansey
Sampled By: Steve Schlesak
Company: Kinross Gold Corporation

Project
ID:
Name: Lupin Mine, Nunavut
Location:
LSD:
P.O.: LP 53687
Acct. Code:

NWL Lot ID: 401940
Control Number:
Date Received: Aug 16, 2005
Date Reported: Aug 23, 2005
Report Number: 734895

Page: 14 of 21

Metals Total (Continued...)

Control Sample	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Iron	mq/L	2.0	2.0	1.8	2.2	✓
Manganese	mq/L	0.466	0.500	0.450	0.550	✓
Silicon	mq/L	4.97	5.00	4.50	5.50	✓
Sulfur	mq/L	10.4	10.0	9.0	11.0	✓
Mercury	mq/L	0.0008	0.0008	0.0007	0.0010	✓
Aluminum	uq/L	299	322	273	371	✓
Antimony	uq/L	11.8	11.5	10.2	12.8	✓
Arsenic	uq/L	11.2	11.5	10.3	12.7	✓
Barium	uq/L	65	61	52	69	✓
Beryllium	uq/L	5.8	5.9	4.9	7.0	✓
Bismuth	uq/L	29.8	30.2	26.0	34.4	✓
Boron	uq/L	123	125	102	148	✓
Cadmium	uq/L	0.54	0.63	0.47	0.78	✓
Chromium	uq/L	30.3	31.8	27.5	36.2	✓
Cobalt	uq/L	6.3	6.4	5.4	7.5	✓
Copper	uq/L	63	63	55	70	✓
Lead	uq/L	6.3	6.2	5.4	7.0	✓
Lithium	uq/L	62	65	53	76	✓
Molybdenum	uq/L	60	61	53	69	✓
Nickel	uq/L	30.2	31.4	27.0	35.8	✓
Selenium	uq/L	10.7	11.0	9.7	12.3	✓
Silver	uq/L	6.2	6.2	5.5	7.0	✓
Strontium	uq/L	62	64	55	72	✓
Thallium	uq/L	3.03	3.14	2.56	3.72	✓
Tin	uq/L	60	59	52	66	✓
Titanium	uq/L	30.0	31.5	27.0	36.0	✓
Uranium	uq/L	30.4	30.8	26.9	34.7	✓
Vanadium	uq/L	6.1	6.5	5.4	7.6	✓
Zinc	uq/L	59	59	49	69	✓

Material Used: Edmonton Digestion Check

Date Acquired: Aug 17, 2005

Acquired By: Linda Li

Iron	mg/L	9.6	10.0	9.0	11.0	✓
Manganese	mg/L	2.28	2.500	2.250	2.750	✓
Silicon	mg/L	23.7	25.00	22.50	27.50	✓
Sulfur	mg/L	48.5	50.0	45.0	55.0	✓
Mercury	mg/L	0.0030	0.0031	0.0027	0.0035	✓

Material Used: Metals High

Date Acquired: Aug 17, 2005

Acquired By: Nicole Sehn



Quality Control

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Bill to: Kinross Gold Corporation
Report to: Kinross Gold Corporation
9818 Edmonton International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Mike Tansey
Sampled By: Steve Schlesak
Company: Kinross Gold Corporation

Project
ID:
Name: Lupin Mine, Nunavut
Location:
LSD:
P.O.: LP 53687
Acct. Code:

NWL Lot ID: 401940
Control Number:
Date Received: Aug 16, 2005
Date Reported: Aug 23, 2005
Report Number: 734895

Page: 15 of 21

Metals Total (Continued...)

Control Sample	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Iron	mq/L	0.2	0.2	0.2	0.2	✓
Manganese	mq/L	0.051	0.050	0.045	0.055	✓
Silicon	mq/L	0.53	0.50	0.45	0.55	✓
Sulfur	mq/L	1.1	1.0	0.9	1.2	✓
Mercury	mq/L	0.0008	0.0008	-0.0016	0.0032	✓
Aluminum	uq/L	996	1000	850	1150	✓
Antimony	uq/L	41.3	40.0	34.0	46.0	✓
Arsenic	uq/L	41.0	40.0	34.0	46.0	✓
Barium	uq/L	205	200	170	230	✓
Beryllium	uq/L	21.8	20.0	17.0	23.0	✓
Bismuth	uq/L	97.0	100.0	85.0	115.0	✓
Boron	uq/L	420	400	340	460	✓
Cadmium	uq/L	2.14	2.00	1.70	2.30	✓
Chromium	uq/L	99.0	100.0	85.0	115.0	✓
Cobalt	uq/L	20.7	20.0	17.0	23.0	✓
Copper	uq/L	191	200	170	230	✓
Lead	uq/L	21.5	20.0	17.0	23.0	✓
Lithium	uq/L	211	200	170	230	✓
Molybdenum	uq/L	196	200	170	230	✓
Nickel	uq/L	99.3	100.0	85.0	115.0	✓
Selenium	uq/L	39.2	40.0	34.0	46.0	✓
Silver	uq/L	20.9	20.0	17.0	23.0	✓
Strontium	uq/L	210	200	170	230	✓
Thallium	uq/L	10.6	10.00	8.50	11.50	✓
Tin	uq/L	193	200	170	230	✓
Titanium	uq/L	99.4	100.0	85.0	115.0	✓
Uranium	uq/L	101	100.0	85.0	115.0	✓
Vanadium	uq/L	18.9	20.0	17.0	23.0	✓
Zinc	uq/L	203	200	170	230	✓

Material Used: Metals Low
Date Acquired: Aug 17, 2005
Acquired By: Linda Li



Quality Control

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Bill to: Kinross Gold Corporation
Report to: Kinross Gold Corporation
9818 Edmonton International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Mike Tansey
Sampled By: Steve Schlesak
Company: Kinross Gold Corporation

Project
ID:
Name: Lupin Mine, Nunavut
Location:
LSD:
P.O.: LP 53687
Acct. Code:

NWL Lot ID: 401940
Control Number:
Date Received: Aug 16, 2005
Date Reported: Aug 23, 2005
Report Number: 734895

Page: 16 of 21

Metals Total (Continued...)

Control Sample	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Aluminum	uq/L	52	50	43	58	✓
Antimony	uq/L	2.1	2.0	1.7	2.3	✓
Arsenic	uq/L	2.1	2.0	1.7	2.3	✓
Barium	uq/L	11	10	9	12	✓
Beryllium	uq/L	1.1	1.0	0.9	1.2	✓
Bismuth	uq/L	5.2	5.0	4.3	5.8	✓
Boron	uq/L	22	20	17	23	✓
Cadmium	uq/L	0.10	0.10	0.09	0.12	✓
Chromium	uq/L	4.9	5.0	4.3	5.8	✓
Cobalt	uq/L	1	1.0	0.9	1.2	✓
Copper	uq/L	10	10	9	12	✓
Lead	uq/L	1.1	1.0	0.9	1.2	✓
Lithium	uq/L	11	10	9	12	✓
Molybdenum	uq/L	10	10	9	12	✓
Nickel	uq/L	4.9	5.0	4.3	5.8	✓
Selenium	uq/L	2.2	2.0	1.7	2.3	✓
Silver	uq/L	1.1	1.0	0.9	1.2	✓
Strontium	uq/L	11	10	9	12	✓
Thallium	uq/L	0.48	0.50	0.43	0.58	✓
Tin	uq/L	10	10	9	12	✓
Titanium	uq/L	5.0	5.0	4.3	5.8	✓
Uranium	uq/L	5.2	5.0	4.3	5.8	✓
Vanadium	uq/L	1.0	1.0	0.9	1.2	✓
Zinc	uq/L	11	10	9	12	✓
Material Used:	Metals Trace					
Date Acquired:	Aug 17, 2005					
Acquired By:	Linda Li					
Mercury	ug/L	12	14.000	11.000	17.000	✓
Material Used:	S0102 - Hg					
Date Acquired:	Aug 22, 2005					
Acquired By:	Kelly Restiaux					



Quality Control

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Bill to: Kinross Gold Corporation
Report to: Kinross Gold Corporation
9818 Edmonton International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Mike Tansey
Sampled By: Steve Schlesak
Company: Kinross Gold Corporation

Project
ID:
Name: Lupin Mine, Nunavut
Location:
LSD:
P.O.: LP 53687
Acct. Code:

NWL Lot ID: 401940
Control Number:
Date Received: Aug 16, 2005
Date Reported: Aug 23, 2005
Report Number: 734895

Page: 17 of 21

Physical and Aggregate Properties

Replicates	Units	Replicate1	Replicate2	% RSD Criteria	Absolute Criteria	Passed QC
Solids	mg/L	28	34	10	15	✓
Material Used:	Edmonton Duplicate					
Date Acquired:	Aug 17, 2005					
Acquired By:	Christina Onyskiw					
Control Sample	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Solids	mg/L	198	200	180	220	✓
Material Used:	Water High					
Date Acquired:	Aug 17, 2005					
Acquired By:	Christina Onyskiw					
Solids	mg/L	20	20	18	22	✓
Material Used:	Water Low					
Date Acquired:	Aug 17, 2005					
Acquired By:	Christina Onyskiw					



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T5J 2T2
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NWL Lot ID: 401940
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Date Received: Aug 16, 2005
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Page: 18 of 21

Routine Water

Blanks	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Calcium	mq/L	<0.2	0.0	-0.2	0.2	✓
Magnesium	mq/L	<0.1	0.0	-0.1	0.1	✓
Sodium	mq/L	<0.4	0.0	-0.4	0.4	✓
Potassium	mq/L	<0.4	0.0	-0.4	0.4	✓
Iron	mq/L	<0.01	0.00	-0.01	0.01	✓
Manganese	mq/L	<0.005	0.000	-0.005	0.005	✓
Chloride	mq/L	<0.4	0.0	-0.5	0.5	✓
Nitrate - N	mq/L	<0.01	0.00	-0.01	0.01	✓
Nitrite - N	mq/L	<0.005	0.000	-0.005	0.005	✓

Material Used: Edmonton Method Blank

Date Acquired: Aug 17, 2005

Acquired By: Marc Dzura

Replicates	Units	Replicate1	Replicate2	% RSD Criteria	Absolute Criteria	Passed QC
Calcium	mq/L	37.2	36.5	10.0	0.6	✓
Magnesium	mg/L	3.9	3.8	10.0	0.7	✓
Sodium	mq/L	44.4	44.4	10.0	1.2	✓
Potassium	mg/L	3.8	3.7	10.0	1.2	✓
Iron	mq/L	0.01	0.01	9.99	0.05	✓
Manganese	mg/L	0.446	0.441	9.990	0.010	✓
Chloride	mq/L	57.4	57.4	10.0	0.5	✓
Nitrate - N	mq/L	0.01	0.01	9.99	0.01	✓
Nitrite - N	mq/L	0.015	0.015	9.990	0.010	✓

Material Used: Edmonton Duplicate

Date Acquired: Aug 17, 2005

Acquired By: Marc Dzura



Quality Control

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NWL Lot ID: 401940
Control Number:
Date Received: Aug 16, 2005
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Page: 19 of 21

Routine Water (Continued...)

Control Sample	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Chloride	mq/L	1990	2087.0	1875.2	2298.8	✓
Material Used:	Chloride High					
Date Acquired:	Aug 17, 2005					
Acquired By:	Annva Hundal					
Calcium	mg/L	245	250.0	225.0	275.0	✓
Magnesium	mg/L	95.4	100.0	90.0	110.0	✓
Sodium	mg/L	246	250.0	225.0	275.0	✓
Potassium	mg/L	243	250.0	225.0	275.0	✓
Iron	mg/L	9.69	10.00	9.01	10.99	✓
Manganese	mg/L	2.36	2.500	2.260	2.740	✓
Material Used:	Metals High					
Date Acquired:	Aug 17, 2005					
Acquired By:	To Thong					
Calcium	mq/L	5.1	5.0	4.5	5.5	✓
Magnesium	mq/L	2.0	2.0	1.8	2.2	✓
Sodium	mq/L	5.4	5.0	4.5	5.5	✓
Potassium	mq/L	5.0	5.0	4.5	5.5	✓
Iron	mq/L	0.20	0.20	0.18	0.22	✓
Manganese	mq/L	0.051	0.050	0.045	0.055	✓
Material Used:	Metals Low					
Date Acquired:	Aug 17, 2005					
Acquired By:	To Thong					
pH		9.18	9.23	9.11	9.35	✓
Electrical Conductivity	dS/m at 25 C	2.76	2.730	2.611	2.849	✓
Chloride	mq/L	81.7	81.0	76.4	85.6	✓
Nitrate - N	mq/L	10.4	10.00	9.61	10.39	✓
Nitrite - N	mq/L	10.4	10.000	9.562	10.438	✓
P-Alkalinity	mq/L	482	507	415	599	✓
T-Alkalinity	mq/L	987	1009	969	1049	✓
Material Used:	Water High					
Date Acquired:	Aug 17, 2005					
Acquired By:	Annva Hundal					



Quality Control

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NWL Lot ID: 401940
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Page: 20 of 21

Routine Water (Continued...)

Control Sample	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
pH		6.88	6.90	6.83	6.97	✓
Electrical Conductivity	dS/m at 25 C	0.077	0.076	0.070	0.081	✓
Chloride	mq/L	15.4	14.9	13.2	16.6	✓
Nitrate - N	mq/L	0.52	0.50	0.44	0.56	✓
Nitrite - N	mq/L	0.521	0.495	0.437	0.553	✓
P-Alkalinity	mq/L	50	54	20	88	✓
T-Alkalinity	mq/L	129	127	118	136	✓
Material Used:	Water Low					
Date Acquired:	Aug 17, 2005					
Acquired By:	Annva Hundal					

		NWL Number	402534-1	402534-2	402534-3	
		Sample Date	Aug 11, 2005	Aug 12, 2005	Aug 14, 2005	
		Sample Description	51110 / 925-10	51111 / 925-10	51112 / 925-10	
		Matrix	Water - General	Water - General	Water - General	
Analyte		Units	Results	Results	Results	Detection Limit
Inorganic Nonmetallic Parameters						
Cyanide	Strong Acid Dissociable	mg/L	0.028	0.026	0.13	0.002
Metals Total						
Iron	Total	mg/L	0.2	0.2	0.8	0.1
Manganese	Total	mg/L	1.02	1.05	0.811	0.005
Silicon	Total	mg/L	1.85	1.90	1.82	0.05
Sulfur	Total	mg/L	105	108	106	0.3
Mercury	Total	mg/L	<0.0001	0.0002	<0.0001	0.0001
Aluminum	Total	mg/L	0.149	0.154	0.145	0.005
Antimony	Total	mg/L	<0.0002	<0.0002	0.0029	0.0002
Arsenic	Total	mg/L	0.0091	0.0096	0.0159	0.0002
Barium	Total	mg/L	0.016	0.016	0.016	0.001
Beryllium	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Bismuth	Total	mg/L	<0.0005	<0.0005	<0.0005	0.0005
Boron	Total	mg/L	0.097	0.093	0.103	0.002
Cadmium	Total	mg/L	0.00014	0.00014	<0.00001	0.00001
Chromium	Total	mg/L	<0.0005	<0.0005	<0.0005	0.0005
Cobalt	Total	mg/L	0.0481	0.0489	0.0456	0.0001
Copper	Total	mg/L	0.014	0.014	0.018	0.001
Lead	Total	mg/L	0.0004	0.0004	0.0007	0.0001
Lithium	Total	mg/L	0.029	0.030	0.049	0.001
Molybdenum	Total	mg/L	0.002	0.002	0.008	0.001
Nickel	Total	mg/L	0.0969	0.0991	0.0990	0.0005
Selenium	Total	mg/L	0.0006	0.0004	0.0004	0.0002
Silver	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Strontium	Total	mg/L	0.302	0.307	0.391	0.001
Thallium	Total	mg/L	<0.00005	<0.00005	<0.00005	0.00005
Tin	Total	mg/L	<0.001	<0.001	<0.001	0.001
Titanium	Total	mg/L	0.0046	0.0046	0.0042	0.0005
Uranium	Total	mg/L	<0.0005	<0.0005	<0.0005	0.0005
Vanadium	Total	mg/L	0.0002	0.0002	<0.0001	0.0001
Zinc	Total	mg/L	0.259	0.265	0.254	0.001
Physical and Aggregate Properties						
Temperature of observed pH		°C	21.6	21.8	21.7	
Solids	Total Suspended	mg/L	<2	<3	3	1
Routine Water						



Analytical Report

Norwest Labs
7217 Roper Road NW
Edmonton, AB. T6B 3J4
Phone: (780) 438-5522
Fax: (780) 438-0396

Bill to: Kinross Gold Corporation
Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: Steve Schlesak
Company: Kinross Gold Corporation

Project
ID:
Name: Lupin Mine, Nunavut
Location:
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 402534
Control Number:
Date Received: Aug 18, 2005
Date Reported: Aug 24, 2005
Report Number: 735985

Page: 2 of 27

		NWL Number	402534-1	402534-2	402534-3	
		Sample Date	Aug 11, 2005	Aug 12, 2005	Aug 14, 2005	
		Sample Description	51110 / 925-10	51111 / 925-10	51112 / 925-10	
		Matrix	Water - General	Water - General	Water - General	
Analyte		Units	Results	Results	Results	Detection Limit
Routine Water - Continued						
pH			5.90	5.71	7.06	
Electrical Conductivity		µS/cm at 25 C	880	879	947	1
Calcium	Dissolved	mg/L	71.4	72.1	71.7	0.2
Magnesium	Dissolved	mg/L	7.5	7.6	7.2	0.1
Sodium	Dissolved	mg/L	85.1	85.7	96.5	0.4
Potassium	Dissolved	mg/L	7.4	7.3	8.2	0.4
Iron	Dissolved	mg/L	0.01	0.02	0.03	0.01
Manganese	Dissolved	mg/L	0.991	1.00	0.795	0.005
Chloride	Dissolved	mg/L	58.4	58.2	79.5	0.4
Nitrate - N		mg/L	7.54	7.52	6.52	0.01
Nitrite - N		mg/L	0.050	0.049	0.157	0.005
Nitrate and Nitrite - N		mg/L	7.59	7.57	6.68	0.02
Sulfate (SO4)	Dissolved	mg/L	292	293	292	0.9
Hydroxide		mg/L	<5	<5	<5	5
Carbonate		mg/L	<6	<6	11	6
Bicarbonate		mg/L	<5	<5	<5	5
P-Alkalinity	as CaCO3	mg/L	<5	<5	<5	5
T-Alkalinity	as CaCO3	mg/L	<5	<5	9	5
Total Dissolved Solids	Calculated	mg/L	522	524	561	1
Hardness	Dissolved as CaCO3	mg/L	209	211	208	
Ionic Balance	Dissolved	%	98	99	94	



Analytical Report

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Page: 9 of 27

		NWL Number	402534-13	402534-14	402534-15	
		Sample Date	Aug 16, 2005	Aug 16, 2005	Aug 16, 2005	
		Sample Description	51122 / 925-10	51123 / 925-20	51124 / 925-21	
		Matrix	Water - General	Water - General	Water - General	
Analyte		Units	Results	Results	Results	Detection Limit
Inorganic Nonmetallic Parameters						
Ammonium - N		mg/L	-	0.36	<0.05	0.05
Cyanide	Strong Acid Dissociable	mg/L	0.028	0.022	0.002	0.002
Metals Total						
Iron	Total	mg/L	0.3	0.1	<0.1	0.1
Manganese	Total	mg/L	1.06	0.598	<0.005	0.005
Silicon	Total	mg/L	1.95	1.49	0.09	0.05
Sulfur	Total	mg/L	108	48.2	0.6	0.3
Mercury	Total	mg/L	<0.0001	<0.0001	0.0001	0.0001
Aluminum	Total	mg/L	0.202	0.122	0.015	0.005
Antimony	Total	mg/L	<0.0002	<0.0002	<0.0002	0.0002
Arsenic	Total	mg/L	0.0138	0.0024	0.0006	0.0002
Barium	Total	mg/L	0.018	0.016	0.002	0.001
Beryllium	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Bismuth	Total	mg/L	<0.0005	<0.0005	<0.0005	0.0005
Boron	Total	mg/L	0.086	0.041	<0.002	0.002
Cadmium	Total	mg/L	0.00017	0.00015	<0.00001	0.00001
Chromium	Total	mg/L	<0.0005	<0.0005	<0.0005	0.0005
Cobalt	Total	mg/L	0.0473	0.0274	<0.0001	0.0001
Copper	Total	mg/L	0.015	0.006	<0.001	0.001
Lead	Total	mg/L	0.0006	<0.0001	<0.0001	0.0001
Lithium	Total	mg/L	0.029	0.016	0.001	0.001
Molybdenum	Total	mg/L	0.002	<0.001	<0.001	0.001
Nickel	Total	mg/L	0.0988	0.0634	0.0006	0.0005
Selenium	Total	mg/L	<0.0002	<0.0002	<0.0002	0.0002
Silver	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Strontium	Total	mg/L	0.298	0.141	0.005	0.001
Thallium	Total	mg/L	<0.00005	<0.00005	<0.00005	0.00005
Tin	Total	mg/L	<0.001	<0.001	<0.001	0.001
Titanium	Total	mg/L	0.0047	0.0023	<0.0005	0.0005
Uranium	Total	mg/L	<0.0005	<0.0005	<0.0005	0.0005
Vanadium	Total	mg/L	0.0001	0.0001	<0.0001	0.0001
Zinc	Total	mg/L	0.260	0.129	0.001	0.001
Physical and Aggregate Properties						
Temperature of observed pH		°C	21.9	22.2	22.4	
Solids	Total Suspended	mg/L	11	<3	<3	1



Analytical Report

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9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: Steve Schlesak
Company: Kinross Gold Corporation

Project
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Report Number: 735985

Page: 10 of 27

		NWL Number	402534-13	402534-14	402534-15	
		Sample Date	Aug 16, 2005	Aug 16, 2005	Aug 16, 2005	
		Sample Description	51122 / 925-10	51123 / 925-20	51124 / 925-21	
		Matrix	Water - General	Water - General	Water - General	
Analyte		Units	Results	Results	Results	Detection Limit
Routine Water						
pH			5.22	5.43	6.90	
Electrical Conductivity		µS/cm at 25 C	881	456	12	1
Calcium	Dissolved	mg/L	74.1	36.7	0.8	0.2
Magnesium	Dissolved	mg/L	7.7	4.8	0.5	0.1
Sodium	Dissolved	mg/L	85.4	40.6	<0.4	0.4
Potassium	Dissolved	mg/L	7.4	3.5	<0.4	0.4
Iron	Dissolved	mg/L	0.06	0.11	0.02	0.01
Manganese	Dissolved	mg/L	1.04	0.608	<0.005	0.005
Chloride	Dissolved	mg/L	58.1	27.6	0.9	0.4
Nitrate - N		mg/L	7.56	3.16	<0.01	0.01
Nitrite - N		mg/L	0.040	<0.005	<0.005	0.005
Nitrate and Nitrite - N		mg/L	7.60	3.16	<0.02	0.02
Sulfate (SO4)	Dissolved	mg/L	305	151	2	0.9
Hydroxide		mg/L	<5	<5	<5	5
Carbonate		mg/L	<6	<6	6	6
Bicarbonate		mg/L	<5	<5	<5	5
P-Alkalinity	as CaCO3	mg/L	<5	<5	<5	5
T-Alkalinity	as CaCO3	mg/L	<5	<5	5	5
Total Dissolved Solids	Calculated	mg/L	537	265	7	1
Hardness	Dissolved as CaCO3	mg/L	216	110	4	
Ionic Balance	Dissolved	%	97	100	30	



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Date Reported: Aug 24, 2005
Report Number: 735985

Page: 11 of 27

		NWL Number	402534-16	402534-17	402534-18	
		Sample Date	Aug 16, 2005	Aug 16, 2005	Aug 16, 2005	
		Sample Description	51125 / 925-22-1	51126 / 925-22-2	51127 / 925-22-3	
		Matrix	Water - General	Water - General	Water - General	
Analyte		Units	Results	Results	Results	Detection Limit
Inorganic Nonmetallic Parameters						
Ammonium - N		mg/L	0.21	0.22	0.22	0.05
Cyanide	Strong Acid Dissociable	mg/L	0.004	0.004	0.004	0.002
Metals Total						
Iron	Total	mg/L	0.1	<0.1	<0.1	0.1
Manganese	Total	mg/L	0.165	0.163	0.163	0.005
Silicon	Total	mg/L	0.50	0.43	0.41	0.05
Sulfur	Total	mg/L	21.9	23.6	23.8	0.3
Mercury	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Aluminum	Total	mg/L	0.033	0.039	0.035	0.005
Antimony	Total	mg/L	<0.0002	0.0006	0.0003	0.0002
Arsenic	Total	mg/L	0.0012	0.0015	0.0012	0.0002
Barium	Total	mg/L	0.009	0.009	0.009	0.001
Beryllium	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Bismuth	Total	mg/L	<0.0005	<0.0005	<0.0005	0.0005
Boron	Total	mg/L	0.019	0.020	0.020	0.002
Cadmium	Total	mg/L	0.00005	0.00006	0.00005	0.00001
Chromium	Total	mg/L	<0.0005	<0.0005	<0.0005	0.0005
Cobalt	Total	mg/L	0.0058	0.0060	0.0061	0.0001
Copper	Total	mg/L	0.002	0.002	0.002	0.001
Lead	Total	mg/L	0.0001	0.0004	0.0002	0.0001
Lithium	Total	mg/L	0.006	0.006	0.006	0.001
Molybdenum	Total	mg/L	<0.001	<0.001	<0.001	0.001
Nickel	Total	mg/L	0.0236	0.0247	0.0246	0.0005
Selenium	Total	mg/L	<0.0002	<0.0002	<0.0002	0.0002
Silver	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Strontium	Total	mg/L	0.068	0.070	0.071	0.001
Thallium	Total	mg/L	<0.00005	<0.00005	<0.00005	0.00005
Tin	Total	mg/L	<0.001	<0.001	<0.001	0.001
Titanium	Total	mg/L	0.0012	0.0016	0.0013	0.0005
Uranium	Total	mg/L	<0.0005	<0.0005	<0.0005	0.0005
Vanadium	Total	mg/L	<0.0001	0.0001	0.0001	0.0001
Zinc	Total	mg/L	0.052	0.055	0.055	0.001
Physical and Aggregate Properties						
Temperature of observed pH		°C	22.3	22.3	22.3	
Solids	Total Suspended	mg/L	<2	<3	<2	1



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Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
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Project
ID:
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Page: 12 of 27

		NWL Number	402534-16	402534-17	402534-18	
		Sample Date	Aug 16, 2005	Aug 16, 2005	Aug 16, 2005	
		Sample Description	51125 / 925-22-1	51126 / 925-22-2	51127 / 925-22-3	
		Matrix	Water - General	Water - General	Water - General	
Analyte		Units	Results	Results	Results	Detection Limit
Routine Water						
pH			6.42	6.46	6.48	
Electrical Conductivity		µS/cm at 25 C	217	222	218	1
Calcium	Dissolved	mg/L	16.5	17.1	16.6	0.2
Magnesium	Dissolved	mg/L	2.1	2.2	2.1	0.1
Sodium	Dissolved	mg/L	18.0	18.6	18.2	0.4
Potassium	Dissolved	mg/L	1.5	1.6	1.6	0.4
Iron	Dissolved	mg/L	0.01	0.01	0.02	0.01
Manganese	Dissolved	mg/L	0.151	0.156	0.153	0.005
Chloride	Dissolved	mg/L	13.0	13.5	13.0	0.4
Nitrate - N		mg/L	1.54	1.56	1.54	0.01
Nitrite - N		mg/L	<0.005	<0.005	<0.005	0.005
Nitrate and Nitrite - N		mg/L	1.54	1.56	1.54	0.02
Sulfate (SO4)	Dissolved	mg/L	68.7	69.9	68.6	0.9
Hydroxide		mg/L	<5	<5	<5	5
Carbonate		mg/L	<6	<6	<6	6
Bicarbonate		mg/L	<5	<5	<5	5
P-Alkalinity	as CaCO3	mg/L	<5	<5	<5	5
T-Alkalinity	as CaCO3	mg/L	<5	<5	<5	5
Total Dissolved Solids	Calculated	mg/L	120	123	120	1
Hardness	Dissolved as CaCO3	mg/L	49.9	51.6	50.1	
Ionic Balance	Dissolved	%	97	98	98	



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Page: 13 of 27

		NWL Number	402534-19	402534-20	402534-21	
		Sample Date	Aug 16, 2005	Aug 16, 2005	Aug 17, 2005	
		Sample Description	51128 / 925-24	51129 / 925-25	51130 / 925-10	
		Matrix	Water - General	Water - General	Water - General	
Analyte		Units	Results	Results	Results	Detection Limit
Inorganic Nonmetallic Parameters						
Ammonium - N		mg/L	0.30	<0.05	1.58	0.05
Cyanide	Strong Acid Dissociable	mg/L	0.01	0.002	0.030	0.002
Metals Total						
Iron	Total	mg/L	0.1	<0.1	0.2	0.1
Manganese	Total	mg/L	0.155	0.020	1.07	0.005
Silicon	Total	mg/L	0.38	0.13	1.96	0.05
Sulfur	Total	mg/L	30.4	4.8	108	0.3
Mercury	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Mercury	Total	ug/L	-	-	<0.02	0.02
Aluminum	Total	mg/L	0.028	0.018	0.194	0.005
Antimony	Total	mg/L	0.0005	0.0011	0.0015	0.0002
Arsenic	Total	mg/L	0.0011	0.0010	0.0096	0.0002
Barium	Total	mg/L	0.014	0.004	0.017	0.001
Beryllium	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Bismuth	Total	mg/L	<0.0005	<0.0005	<0.0005	0.0005
Boron	Total	mg/L	0.024	0.005	0.085	0.002
Cadmium	Total	mg/L	0.00006	0.00002	0.00015	0.00001
Chromium	Total	mg/L	<0.0005	<0.0005	<0.0005	0.0005
Cobalt	Total	mg/L	0.0049	0.0007	0.0503	0.0001
Copper	Total	mg/L	0.001	<0.001	0.015	0.001
Lead	Total	mg/L	0.0002	0.0004	0.0006	0.0001
Lithium	Total	mg/L	0.008	0.002	0.027	0.001
Molybdenum	Total	mg/L	<0.001	<0.001	0.002	0.001
Nickel	Total	mg/L	0.0289	0.0044	0.102	0.0005
Selenium	Total	mg/L	<0.0002	<0.0002	0.0002	0.0002
Silver	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Strontium	Total	mg/L	0.089	0.018	0.306	0.001
Thallium	Total	mg/L	<0.00005	<0.00005	<0.00005	0.00005
Tin	Total	mg/L	<0.001	<0.001	<0.001	0.001
Titanium	Total	mg/L	0.0017	0.0006	0.0049	0.0005
Uranium	Total	mg/L	<0.0005	<0.0005	<0.0005	0.0005
Vanadium	Total	mg/L	0.0001	0.0001	0.0001	0.0001
Zinc	Total	mg/L	0.065	0.014	0.273	0.001
Physical and Aggregate Properties						
Temperature of observed pH		°C	22.3	22.7	22.4	



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Page: 14 of 27

		NWL Number	402534-19	402534-20	402534-21	
		Sample Date	Aug 16, 2005	Aug 16, 2005	Aug 17, 2005	
		Sample Description	51128 / 925-24	51129 / 925-25	51130 / 925-10	
		Matrix	Water - General	Water - General	Water - General	
Analyte		Units	Results	Results	Results	Detection Limit
Physical and Aggregate Properties - Continued						
Solids	Total Suspended	mg/L	<3	<2	<3	1
Routine Water						
pH			6.38	6.83	5.47	
Electrical Conductivity		µS/cm at 25 C	275	53	888	1
Calcium	Dissolved	mg/L	21.1	3.6	73.5	0.2
Magnesium	Dissolved	mg/L	2.6	0.7	7.7	0.1
Sodium	Dissolved	mg/L	23.4	3.5	86.4	0.4
Potassium	Dissolved	mg/L	1.9	<0.4	7.2	0.4
Iron	Dissolved	mg/L	0.01	<0.01	0.03	0.01
Manganese	Dissolved	mg/L	0.145	0.019	1.03	0.005
Chloride	Dissolved	mg/L	16.4	3.0	58.4	0.4
Nitrate - N		mg/L	1.92	0.29	7.58	0.01
Nitrite - N		mg/L	<0.005	<0.005	0.043	0.005
Nitrate and Nitrite - N		mg/L	1.92	0.29	7.62	0.02
Sulfate (SO4)	Dissolved	mg/L	86.8	14	312	0.9
Hydroxide		mg/L	<5	<5	<5	5
Carbonate		mg/L	<6	<6	<6	6
Bicarbonate		mg/L	<5	<5	<5	5
P-Alkalinity	as CaCO3	mg/L	<5	<5	<5	5
T-Alkalinity	as CaCO3	mg/L	<5	<5	<5	5
Total Dissolved Solids	Calculated	mg/L	153	25	547	1
Hardness	Dissolved as CaCO3	mg/L	64	10	215	
Ionic Balance	Dissolved	%	98	100	97	

Approved by:

Darlene Lintott, MSc
Client Services Team Leader



Quality Control

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Page: 15 of 27

Inorganic Nonmetallic Parameters

Blanks	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Ammonium - N	mq/L	<0.05	0.00	-0.08	0.08	✓
Cyanide	mq/L	<0.001	0.000	-0.001	0.001	✓
Material Used:	Edmonton Method Blank					
Date Acquired:	Aug 24, 2005					
Acquired By:	Gordon Grensmann					
Replicates	Units	Replicate1	Replicate2	% RSD Criteria	Absolute Criteria	Passed QC
Ammonium - N	mq/L	1.33	1.30	9.99	0.10	✓
Material Used:	Edmonton Duplicate					
Date Acquired:	Aug 19, 2005					
Acquired By:	Gordon Grensmann					
Control Sample	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Ammonium - N	mq/L	2.96	2.99	2.59	3.39	✓
Cyanide	mq/L	0.080	0.077	0.067	0.087	✓
Material Used:	Water High					
Date Acquired:	Aug 24, 2005					
Acquired By:	Gordon Grensmann					
Ammonium - N	mq/L	0.78	0.79	0.66	0.91	✓
Cyanide	mq/L	0.015	0.016	0.013	0.018	✓
Material Used:	Water Low					
Date Acquired:	Aug 24, 2005					
Acquired By:	Gordon Grensmann					

Metals Dissolved

Blanks	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Sulfur	mq/L	<0.3	0.0	-0.3	0.3	✓
Material Used:	Edmonton Method Blank					
Date Acquired:	Aug 19, 2005					
Acquired By:	To Thong					
Replicates	Units	Replicate1	Replicate2	% RSD Criteria	Absolute Criteria	Passed QC
Sulfur	mq/L	699	692	10.0	0.1	✓
Material Used:	Edmonton Duplicate					
Date Acquired:	Aug 19, 2005					
Acquired By:	To Thong					
Control Sample	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Sulfur	mg/L	48.0	50.0	45.0	55.0	✓
Material Used:	Metals High					
Date Acquired:	Aug 19, 2005					
Acquired By:	To Thong					
Sulfur	mq/L	0.9	1.0	0.9	1.2	✓
Material Used:	Metals Low					
Date Acquired:	Aug 19, 2005					
Acquired By:	To Thong					

Material Used:	Edmonton Method Blank
Date Acquired:	Aug 22, 2005
Acquired By:	Linda Li
Mercury	ug/L
Material Used:	Metals Blank - water - total
Date Acquired:	Aug 22, 2005
Acquired By:	Kelly Restiaux



Quality Control

Norwest Labs
7217 Roper Road NW
Edmonton, AB. T6B 3J4
Phone: (780) 438-5522
Fax: (780) 438-0396

Bill to: Kinross Gold Corporation
Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: Steve Schlesak
Company: Kinross Gold Corporation

Project
ID:
Name: Lupin Mine, Nunavut
Location:
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 402534
Control Number:
Date Received: Aug 18, 2005
Date Reported: Aug 24, 2005
Report Number: 735985

Page: 17 of 27

Metals Total (Continued...)

Replicates	Units	Replicate1	Replicate2	% RSD Criteria	Absolute Criteria	Passed QC
Iron	mq/L	0.2	0.2	15.0	0.2	✓
Manganese	mg/L	1.05	1.04	15.000	0.010	✓
Silicon	mq/L	1.90	1.88	15.00	0.10	✓
Sulfur	mq/L	23.6	23.6	15.0	0.1	✓
Mercury	mq/L	<0.0001	<0.0001	9.9900	0.0003	✓
Aluminum	uq/L	28	28	15	11	✓
Antimony	uq/L	0.5	0.5	15.0	0.4	✓
Arsenic	uq/L	13.6	13.9	15.0	0.4	✓
Barium	uq/L	16	16	15	2	✓
Beryllium	uq/L	<0.1	<0.1	15.0	0.2	✓
Bismuth	ug/L	<0.5	<0.5	15.0	1.1	✓
Boron	uq/L	88	91	15	4	✓
Cadmium	ug/L	0.21	0.19	15.00	0.02	✓
Chromium	uq/L	<0.5	<0.5	15.0	1.1	✓
Cobalt	ug/L	46.5	48.5	15.0	0.2	✓
Copper	uq/L	15	16	15	2	✓
Lead	ug/L	0.7	0.6	15.0	0.2	✓
Lithium	uq/L	8	8	15	2	✓
Molybdenum	uq/L	2	2	15	2	✓
Nickel	uq/L	93.1	97.1	15.0	1.1	✓
Selenium	uq/L	0.4	0.5	15.0	0.4	✓
Silver	uq/L	<0.1	<0.1	15.0	0.2	✓
Strontium	uq/L	89	88	15	2	✓
Thallium	uq/L	<0.05	<0.05	15.00	0.11	✓
Tin	uq/L	<1	<1	15	2	✓
Titanium	ug/L	4.4	4.8	15.0	1.1	✓
Uranium	uq/L	<0.5	<0.5	15.0	1.1	✓
Vanadium	ug/L	0.1	0.1	15.0	0.2	✓
Zinc	uq/L	65	67	15	2	✓

Material Used: Edmonton Duplicate
Date Acquired: Aug 22, 2005
Acquired By: Linda Li

Mercury	uq/L	<0.02	<0.02	30.000	0.050	✓
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Material Used: Metals Int. Duplicate - water tot
Date Acquired: Aug 22, 2005
Acquired By: Kelly Restiaux



Quality Control

Norwest Labs
7217 Roper Road NW
Edmonton, AB. T6B 3J4
Phone: (780) 438-5522
Fax: (780) 438-0396

Bill to: Kinross Gold Corporation
Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: Steve Schlesak
Company: Kinross Gold Corporation

Project
ID:
Name: Lupin Mine, Nunavut
Location:
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 402534
Control Number:
Date Received: Aug 18, 2005
Date Reported: Aug 24, 2005
Report Number: 735985

Page: 18 of 27

Metals Total (Continued...)

Control Sample	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Iron	mq/L	2.0	2.0	1.8	2.2	✓
Manganese	mq/L	0.480	0.500	0.450	0.550	✓
Silicon	mq/L	4.73	5.00	4.50	5.50	✓
Sulfur	mq/L	10.0	10.0	9.0	11.0	✓
Mercury	mq/L	0.0008	0.0008	0.0007	0.0010	✓
Aluminum	uq/L	284	322	273	371	✓
Antimony	uq/L	11.7	11.5	10.2	12.8	✓
Arsenic	uq/L	11.4	11.5	10.3	12.7	✓
Barium	uq/L	63	61	52	69	✓
Beryllium	uq/L	5.7	5.9	4.9	7.0	✓
Bismuth	uq/L	29.7	30.2	26.0	34.4	✓
Boron	uq/L	114	125	102	148	✓
Cadmium	uq/L	0.65	0.63	0.47	0.78	✓
Chromium	uq/L	30.3	31.8	27.5	36.2	✓
Cobalt	uq/L	6.2	6.4	5.4	7.5	✓
Copper	uq/L	62	63	55	70	✓
Lead	uq/L	6.2	6.2	5.4	7.0	✓
Lithium	uq/L	60	65	53	76	✓
Molybdenum	uq/L	61	61	53	69	✓
Nickel	uq/L	30.1	31.4	27.0	35.8	✓
Selenium	uq/L	11.5	11.0	9.7	12.3	✓
Silver	uq/L	6.3	6.2	5.5	7.0	✓
Strontium	uq/L	62	64	55	72	✓
Thallium	uq/L	3.14	3.14	2.56	3.72	✓
Tin	uq/L	58	59	52	66	✓
Titanium	uq/L	29.6	31.5	27.0	36.0	✓
Uranium	uq/L	30.6	30.8	26.9	34.7	✓
Vanadium	uq/L	6.3	6.5	5.4	7.6	✓
Zinc	uq/L	59	59	49	69	✓

Material Used: Edmonton Digestion Check

Date Acquired: Aug 22, 2005

Acquired By: Linda Li

Iron	mg/L	10.0	10.0	9.0	11.0	✓
Manganese	mg/L	2.45	2.500	2.250	2.750	✓
Silicon	mg/L	24.4	25.00	22.50	27.50	✓
Sulfur	mg/L	52.3	50.0	45.0	55.0	✓
Mercury	mg/L	0.0030	0.0031	0.0027	0.0035	✓

Material Used: Metals High

Date Acquired: Aug 22, 2005

Acquired By: To Thong



Quality Control

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Phone: (780) 438-5522
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Bill to: Kinross Gold Corporation
Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: Steve Schlesak
Company: Kinross Gold Corporation

Project
ID:
Name: Lupin Mine, Nunavut
Location:
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 402534
Control Number:
Date Received: Aug 18, 2005
Date Reported: Aug 24, 2005
Report Number: 735985

Page: 19 of 27

Metals Total (Continued...)

Control Sample	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Iron	mq/L	0.2	0.2	0.2	0.2	✓
Manganese	mq/L	0.050	0.050	0.045	0.055	✓
Silicon	mq/L	0.48	0.50	0.45	0.55	✓
Sulfur	mq/L	0.9	1.0	0.9	1.2	✓
Mercury	mq/L	0.0008	0.0008	-0.0016	0.0032	✓
Aluminum	uq/L	994	1000	850	1150	✓
Antimony	uq/L	41.2	40.0	34.0	46.0	✓
Arsenic	uq/L	42.0	40.0	34.0	46.0	✓
Barium	uq/L	205	200	170	230	✓
Beryllium	uq/L	20.9	20.0	17.0	23.0	✓
Bismuth	uq/L	97.5	100.0	85.0	115.0	✓
Boron	uq/L	401	400	340	460	✓
Cadmium	uq/L	2.16	2.00	1.70	2.30	✓
Chromium	uq/L	94.6	100.0	85.0	115.0	✓
Cobalt	uq/L	20.8	20.0	17.0	23.0	✓
Copper	uq/L	196	200	170	230	✓
Lead	uq/L	20.5	20.0	17.0	23.0	✓
Lithium	uq/L	206	200	170	230	✓
Molybdenum	uq/L	194	200	170	230	✓
Nickel	uq/L	93.8	100.0	85.0	115.0	✓
Selenium	uq/L	41.5	40.0	34.0	46.0	✓
Silver	uq/L	21.0	20.0	17.0	23.0	✓
Strontium	uq/L	204	200	170	230	✓
Thallium	uq/L	10.5	10.00	8.50	11.50	✓
Tin	uq/L	190	200	170	230	✓
Titanium	uq/L	93.9	100.0	85.0	115.0	✓
Uranium	uq/L	98.1	100.0	85.0	115.0	✓
Vanadium	uq/L	20.2	20.0	17.0	23.0	✓
Zinc	uq/L	208	200	170	230	✓

Material Used: Metals Low
Date Acquired: Aug 22, 2005
Acquired By: Linda Li



Quality Control

Norwest Labs
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Edmonton, AB. T6B 3J4
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Fax: (780) 438-0396

Bill to: Kinross Gold Corporation
Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: Steve Schlesak
Company: Kinross Gold Corporation

Project
ID:
Name: Lupin Mine, Nunavut
Location:
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 402534
Control Number:
Date Received: Aug 18, 2005
Date Reported: Aug 24, 2005
Report Number: 735985

Page: 20 of 27

Metals Total (Continued...)

Control Sample	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Aluminum	uq/L	52	50	43	58	✓
Antimony	uq/L	2.0	2.0	1.7	2.3	✓
Arsenic	uq/L	2.2	2.0	1.7	2.3	✓
Barium	uq/L	10	10	9	12	✓
Beryllium	uq/L	1.0	1.0	0.9	1.2	✓
Bismuth	uq/L	5.1	5.0	4.3	5.8	✓
Boron	uq/L	21	20	17	23	✓
Cadmium	uq/L	0.11	0.10	0.09	0.12	✓
Chromium	uq/L	5.1	5.0	4.3	5.8	✓
Cobalt	uq/L	1.0	1.0	0.9	1.2	✓
Copper	uq/L	10	10	9	12	✓
Lead	uq/L	1.0	1.0	0.9	1.2	✓
Lithium	uq/L	11	10	9	12	✓
Molybdenum	uq/L	10	10	9	12	✓
Nickel	uq/L	4.9	5.0	4.3	5.8	✓
Selenium	uq/L	2.0	2.0	1.7	2.3	✓
Silver	uq/L	1.1	1.0	0.9	1.2	✓
Strontium	uq/L	10	10	9	12	✓
Thallium	uq/L	0.51	0.50	0.43	0.58	✓
Tin	uq/L	10	10	9	12	✓
Titanium	uq/L	5.0	5.0	4.3	5.8	✓
Uranium	uq/L	5.2	5.0	4.3	5.8	✓
Vanadium	uq/L	1.0	1.0	0.9	1.2	✓
Zinc	uq/L	11	10	9	12	✓
Material Used:	Metals Trace					
Date Acquired:	Aug 22, 2005					
Acquired By:	Linda Li					
Mercury	ug/L	12	14.000	11.000	17.000	✓
Material Used:	S0102 - Hg					
Date Acquired:	Aug 22, 2005					
Acquired By:	Kelly Restiaux					



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Norwest Labs
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Edmonton, AB. T6B 3J4
Phone: (780) 438-5522
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Bill to: Kinross Gold Corporation
Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: Steve Schlesak
Company: Kinross Gold Corporation

Project
ID:
Name: Lupin Mine, Nunavut
Location:
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 402534
Control Number:
Date Received: Aug 18, 2005
Date Reported: Aug 24, 2005
Report Number: 735985

Page: 21 of 27

Physical and Aggregate Properties

Replicates	Units	Replicate1	Replicate2	% RSD Criteria	Absolute Criteria	Passed QC
Solids	mg/L	48	47	10	15	✓
Material Used:	Edmonton Duplicate					
Date Acquired:	Aug 19, 2005					
Acquired By:	Christina Onyskiw					
Control Sample	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Solids	mg/L	199	200	180	220	✓
Material Used:	Water High					
Date Acquired:	Aug 19, 2005					
Acquired By:	Christina Onyskiw					
Solids	mg/L	19	20	18	22	✓
Material Used:	Water Low					
Date Acquired:	Aug 19, 2005					
Acquired By:	Christina Onyskiw					



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9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
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Company: Kinross Gold Corporation

Project
ID:
Name: Lupin Mine, Nunavut
Location:
LSD:
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NWL Lot ID: 402534
Control Number:
Date Received: Aug 18, 2005
Date Reported: Aug 24, 2005
Report Number: 735985

Page: 22 of 27

Routine Water

Blanks	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Calcium	mq/L	<0.2	0.0	-0.2	0.2	✓
Magnesium	mq/L	<0.1	0.0	-0.1	0.1	✓
Sodium	mq/L	<0.4	0.0	-0.4	0.4	✓
Potassium	mq/L	<0.4	0.0	-0.4	0.4	✓
Iron	mq/L	<0.01	0.00	-0.01	0.01	✓
Manganese	mq/L	<0.005	0.000	-0.005	0.005	✓
Chloride	mq/L	<0.4	0.0	-0.5	0.5	✓
Nitrate - N	mq/L	<0.01	0.00	-0.01	0.01	✓
Nitrite - N	mq/L	<0.005	0.000	-0.005	0.005	✓

Material Used: Edmonton Method Blank

Date Acquired: Aug 19, 2005

Acquired By: Marc Dzura

Replicates	Units	Replicate1	Replicate2	% RSD Criteria	Absolute Criteria	Passed QC
pH		7.89	7.89	9.99	0.10	✓
Electrical Conductivity	dS/m at 25 C	1.60	1.60	9.990	0.002	✓
Calcium	mq/L	721	714	10.0	0.6	✓
Magnesium	mg/L	4.8	4.7	10.0	0.7	✓
Sodium	mq/L	56	55	10.0	1.2	✓
Potassium	mg/L	45	44	10.0	1.2	✓
Iron	mq/L	0.11	0.10	9.99	0.05	✓
Manganese	mq/L	0.608	0.600	9.990	0.010	✓
Chloride	mq/L	3.0	3.1	10.0	0.5	✓
Nitrate - N	mq/L	7.54	7.57	9.99	0.01	✓
Nitrite - N	mq/L	0.050	0.051	9.990	0.010	✓
Hydroxide	mq/L	<5	<5	10		✓
Carbonate	mq/L	<6	<6	10		✓
Bicarbonate	mq/L	606	612	10		✓
P-Alkalinity	mg/L	<5	<5	10	5	✓
T-Alkalinity	mq/L	497	502	10	5	✓

Material Used: Edmonton Duplicate

Date Acquired: Aug 19, 2005

Acquired By: Annva Hundal



Quality Control

Norwest Labs
7217 Roper Road NW
Edmonton, AB. T6B 3J4
Phone: (780) 438-5522
Fax: (780) 438-0396

Bill to: Kinross Gold Corporation
Report to: Echo Bay Mines Ltd.
9818 International Airport
Edmonton, AB, Canada
T5J 2T2
Attn: Michael Tansey
Sampled By: Steve Schlesak
Company: Kinross Gold Corporation

Project
ID:
Name: Lupin Mine, Nunavut
Location:
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 402534
Control Number:
Date Received: Aug 18, 2005
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Page: 23 of 27

Routine Water (Continued...)

Control Sample	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
Chloride	mq/L	2060	2087.0	1875.2	2298.8	✓
Material Used:	Chloride High					
Date Acquired:	Aug 19, 2005					
Acquired By:	Annva Hundal					
Calcium	mg/L	237	250.0	225.0	275.0	✓
Magnesium	mg/L	95.9	100.0	90.0	110.0	✓
Sodium	mg/L	244	250.0	225.0	275.0	✓
Potassium	mg/L	244	250.0	225.0	275.0	✓
Iron	mg/L	9.77	10.00	9.01	10.99	✓
Manganese	mg/L	2.34	2.500	2.260	2.740	✓
Material Used:	Metals High					
Date Acquired:	Aug 19, 2005					
Acquired By:	To Thong					
Calcium	mq/L	5.1	5.0	4.5	5.5	✓
Magnesium	mq/L	2.1	2.0	1.8	2.2	✓
Sodium	mq/L	4.6	5.0	4.5	5.5	✓
Potassium	mq/L	4.7	5.0	4.5	5.5	✓
Iron	mq/L	0.21	0.20	0.18	0.22	✓
Manganese	mq/L	0.051	0.050	0.045	0.055	✓
Material Used:	Metals Low					
Date Acquired:	Aug 19, 2005					
Acquired By:	To Thong					
pH		9.21	9.23	9.11	9.35	✓
Electrical Conductivity	dS/m at 25 C	2.74	2.730	2.611	2.849	✓
Chloride	mq/L	82.4	81.0	76.4	85.6	✓
Nitrate - N	mq/L	10.4	10.00	9.61	10.39	✓
Nitrite - N	mq/L	10.4	10.000	9.562	10.438	✓
P-Alkalinity	mq/L	498	507	415	599	✓
T-Alkalinity	mq/L	984	1009	969	1049	✓
Material Used:	Water High					
Date Acquired:	Aug 22, 2005					
Acquired By:	Annva Hundal					



Quality Control

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Report to: Echo Bay Mines Ltd.
9818 International Airport
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T5J 2T2
Attn: Michael Tansey
Sampled By: Steve Schlesak
Company: Kinross Gold Corporation

Project
ID:
Name: Lupin Mine, Nunavut
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NWL Lot ID: 402534
Control Number:
Date Received: Aug 18, 2005
Date Reported: Aug 24, 2005
Report Number: 735985

Page: 24 of 27

Routine Water (Continued...)

Control Sample	Units	Measured	Mean	Lower Limit	Upper Limit	Passed QC
pH		6.89	6.90	6.83	6.97	✓
Electrical Conductivity	dS/m at 25 C	0.077	0.076	0.070	0.081	✓
Chloride	mq/L	15.5	14.9	13.2	16.6	✓
Nitrate - N	mq/L	0.52	0.50	0.44	0.56	✓
Nitrite - N	mq/L	0.515	0.495	0.437	0.553	✓
P-Alkalinity	mq/L	61	54	20	88	✓
T-Alkalinity	mq/L	128	127	118	136	✓

Material Used: Water Low
Date Acquired: Aug 22, 2005
Acquired By: Annva Hundal