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THE NEW MINING REALITY

BLUE NOTE MINING

TECHNICAL REPORT AND PREFEASIBILITY STUDY FOR THE CROINOR PROJECT (according to Regulation 43-101 and Form 43-101F1)

Project Location

Pershing Township, Province of Québec, Canada
(NTS: 32C/03)
(UTM 349800E; 5330200N)
(Zone 18, NAD 83)

Prepared for

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1.0 SUMMARY *(Item 3)*

At the request of Mr. John Martin, President and Chief Operating Officer of Blue Note Mining Inc (“Blue Note Mining” or “the issuer”), InnovExplo has been retained to produce a preliminary feasibility study for the Croinor Project in compliance with Regulation 43-101 and Form 43-101F1. Sylvie Poirier, P. Eng., was assigned to the project and visited the property on April 20 and May 28, 2010.

The prefeasibility study is based on Mineral Resources presented in an earlier report titled “NI 43-101 Resource Estimate Update and 2008 Technical Report on the Croinor 1 and 2 Project”, published in September, 2009 by First Gold Exploration Inc and X-Ore Resources (O’Dowd, 2009).

In addition to Sylvie Poirier, Eng. (InnovExplo), the other qualified persons responsible for the preparation of this report were Carl Pelletier, B.Sc., P.Geo. (InnovExplo), Pierre O’Dowd, B.Sc., P. Geo. (independent consultant), Rodrigue Ouellet Eng. M.Sc.A (Golder) and, Marc Lafontaine, Eng. (Genivar). The Mineral Resources Estimates in this report was prepared by Pierre O’Dowd, the environmental studies in the report were completed by Golder Associates Ltd (Golder) and the review of the custom milling option for the Croinor ore was completed by Genivar Inc (Genivar).

The Croinor property is approximately 70 km northeast of the city of Val-d’Or, Québec, in the Pershing Township on NTS map sheet 32C/03 (Figs. 4.1 and 4.2). The approximate UTM coordinates for the geographic centre of the property are 349800E and 5330200N (Zone 18, NAD83).

The Croinor property comprises 367 mining titles covering a total area of 7,495 ha, and one mining lease (BM 862) covering approximately 90 ha (Fig. 4.2). Table 4.2 lists the claims and their details. All claims are registered to X-Ore Resources Inc. On January 19, 2010, Blue Note Mining proceeded with the acquisition of X-Ore Resources Inc by the amalgamation of two companies, X-Ore Resources Inc and 9216-4706 Québec Inc, a wholly-owned subsidiary of Blue Note Mining.

On July 19, 2010, Blue Note Mining and First Gold Exploration Inc (“First Gold”) announced that they have entered into a binding agreement regarding Blue Note Mining’s acquisition of all of First Gold’s interests in the Croinor gold project located near Val-d’Or, Québec. On June 1, 2011, Blue Note and Critical Elements (formerly First Gold) reported that they have agreed to extend the term of the binding agreement until December 31, 2011 providing for the acquisition by Blue Note of all of Critical Elements’ interests in the Croinor gold project. Pershing Township has been a target for exploration work since the early 1930s. The Croinor deposit was discovered in 1940, probably by a prospector named Fred Thompson. Subsequently, several companies conducted exploration on the property. The work can be subdivided into four main periods:

- 1944-1948: Surface and underground drilling, shaft sinking (three compartments), and the development of 2,020 metres of drift on four levels by Croinor Pershing;
- 1979-1989: Rehabilitation of the shaft, driving of a ramp and surface plus underground drilling by Onaping Resources and then Sullivan Mines followed by Cambior;
- 1996-1997: Open pit mining and custom milling of over 51,000 tonnes by Goldust;

- 1998-2003: Trenching, surface drilling and completion of a 20,000-tonne bulk sample by Exploration Malartic-Sud.

As a result of these previous work, the Croinor deposit is serviced by a ramp measuring 300 m long by 4 m high by 4.5 m wide (4m x 4.5m) that extends to level 125 (38m), and by a 3-compartment shaft extending 195 m deep. Development was completed on four (4) levels: 496 metres on level 125; 560 metres on level 250; 233 metres on level 375; and 730 metres on level 500. Approximately 320 metres of raise development was also completed. The Croinor mine is currently flooded to the portal entrance.

Geology and Mineralization

The Croinor property is located in the eastern part of the Archean Abitibi Greenstone Belt in the southern Superior Province of the Canadian Shield. The Abitibi Greenstone Belt is one of the most extensive continuous expanses of low metamorphic grade Archean volcanic and sedimentary rocks on Earth (Card and Poulsen, 1998). It also happens to be one of the richest mining regions in the world and has produced large amounts of gold, copper, zinc, silver and iron from the Timmins, Kirkland Lake, Rouyn-Noranda, Val-d'Or, Matagami and Chibougamau mining districts.

The southern limit of the Croinor property follows the northeastern border of the Pershing Batholith, and the Garden Island deformation corridor cuts across the property in an NW-SE direction. This deformation zone overprints and partially follows the contact between the Assup Group (mafic and intermediate volcanics) and Aurora Group (mafic volcanics) to the north and the sedimentary Garden Island Domain to the south. The Assup and Aurora groups form the Assup Domain. Lithological units in both domains are generally oriented N295° with steep dips to the north.

The Croinor deposit is hosted by the dioritic synvolcanic Croinor Sill. This sill ranges from 60 to 120 metres thick and is hosted within the volcanic rocks of the Assup Domain. The deposit is characterized by gold-rich lenses consisting of quartz-carbonate-tourmaline-pyrite veins, altered pyritic host-rock material, and/or tectonic breccia (pyritic host fragments within a quartz-carbonate-tourmaline-pyrite vein).

The mineralized lenses at Croinor range from 60 to 120 metres long (Chénard and Turcotte, 2003). The lenses consist of variably inclined to more or less subhorizontal tabular bodies representing shear veins, tectonic breccia and/or tension veins. The lenses can generally be followed from one section to another (10-metre sections) over distances varying from several tens of metres and up to 600 metres laterally. To date, about forty (40) gold-rich lenses have been identified.

Mineral Resource Estimate

The Croinor Project resources were entirely reviewed and re-calculated by Pierre O'Dowd and classified into measured and indicated mineral resources as presented in his Technical Report dated September 2009 (O'Dowd, 2009).

O'Dowd defined four families (or series) of zones (A, B, C and D). Each family is subdivided into a number of subsidiaries (A1, A2, A3, etc.) that are believed to be related to a particular shear structure. Series A are shallow while the B and C series are intermediate and the D series is the deepest one. D is mostly found below current underground workings. Zones, A, C and D host the bulk of the tonnage with, B being marginal at this time.

Table below gives the results of the resource estimate from O'Dowd (2009) for cut off grades of 5 g/t Au and 7 g/t Au.

Blue Note has been drilling the Croinor property since the end of the NI43-101 compliant prefeasibility study presented in August 2010. In all, 53 holes were drilled for a total of 12,550m (as of May 30, 2011). Because the assays from the current drill program are still pending, the drilling performed in 2010 and 2011 is not included in the Mineral Resources estimates presented in the current report. However, InnovExplo is of the opinion that the results of the 2010 and 2011 drilling program could have an impact on the Mineral Resources Estimate. InnovExplo considers that the resources could increase (by less than 25%) with the recent drilling performed and recommend proceeding with a complete update of the Mineral Resources Estimate and the prefeasibility study as soon as the assays results will be available.

Mineral Resource Estimate summary from O'Dowd, 2009 (Table 17.1)

MEASURED and INDICATED RESOURCE						
Category	Cut-off 5.00 g/t Au			Cut-off 7.00 g/t Au		
	Tonnes	gpt	Ounces	Tonnes	gpt	Ounces
Total Measured	31 192	8,59	8 615	15 210	12,46	6 092
Total Indicated	783 036	9,13	229 799	385 636	12,70	157 416
Total	814 228	9,11	238 414	400 847	12,69	163 507

Mineral Reserve

InnovExplo designed the underground mine plan based on the latest Mineral Resource Estimate by Pierre O'Dowd (2009) at a calculated cut-off grade of 5.0 g/t. The resources considered in the prefeasibility study amount to 814,228 tonnes at 9.11 g/t Au for the Measured and Indicated category. InnovExplo considers that the reserves could increase with the recent drilling performed by Blue Note and recommend proceeding with a complete update of the Mineral Resources Estimate and a prefeasibility study as soon as the assays results will be available.

The mining plan for the Croinor project incorporates a combination of conventional and mechanized mining. A conventional room-and-pillar mining method that best suits the orebody will be used to extract most of the reserves. When appropriate, a mechanized long-hole method will be applied and trackless equipment will be used to muck and haul the broken rock.

The proposed approach uses room-and-pillar and sublevel long-hole retreat in an 80:20 ratio. Most of the resources located above level 125 were not included in the reserves because their economics could not justify the required development to bypass the existing pit. Based on the information presented in Section 23 of this report, InnovExplo was able to demonstrate the economic viability of the proposed extraction and processing of the portion of the measured and indicated mineral resources found within the mine plan. Overall, InnovExplo considers that the basic engineering project meets the requirements of a preliminary feasibility study.

The Croinor mine is currently flooded to the portal elevation. As an initial step, an estimated 504,080 m³ of mine water would be pumped from the existing pit and mine infrastructure. Initial dewatering is expected to be carried out at a rate of 5,500 m³/day for an approximate period of 92 days. Mine water will be pumped and processed through geotubes to collect mine sludge.

Mine level development will be reconditioned and extended to meet mine requirements. The existing 200-metre deep shaft will be reconditioned up to level 500 and will be used as a ventilation raise and emergency escape way. Ore and waste haulage to surface will be via ramp.

The development and production activities are based on a two 10-hour shifts, 7 days a week. To minimize capital requirements, contractors will be used for all mine development, mine production and ore haulage activities. A small in house staff workforce will be hired to provide technical support and direction to the contractors.

The production target is 500 tpd, seven days a week, 345 days/year for a total of 172,500 tonnes per year. After mining and milling recoveries, InnovExplo's prefeasibility study estimates a production total of 185,260 ounces of gold over a 5-year period. The estimated proven and probable reserves total 689,829 tonnes of mineralized ore at a diluted grade of 8.35 g/t. The following table presents a summary of the mineral reserves.

Mineral Reserve Estimate (Table 17.2)
(5 g/t cut-off)

Category	Undiluted cut-off 5 g/t Au		
	tonnes	g/t	ounces
Proven	13,619	8.00	3,504
Probable	676,210	8.37	181,756
Total Reserves	689,829	8.35	185,260

Processing

Genivar was commissioned by InnovExplo and Blue Note Mining to review custom milling options in the context of a prefeasibility study for the Croinor gold project. Only four gold ore processing concentrators located within a 120-km radius could potentially process the Croinor ore: Beacon Gold, Aurbel Gold, Sigma-Lamaque Complex and Camflo. This study assumes that the ore will be processed at the Camflo mill. In addition to having successfully processed Croinor ore in the past (hence mitigating the technical risk), the plant is likely to have an availability for new custom feed fitting the life of mine requirements for Croinor and has been in the custom milling business for years. Ore previously mined from the Croinor open pit operations was processed at the Camflo mill and based on the results of those runs, a gold recovery of 97.5% has been used in the present prefeasibility study.

Environment

The last period of mine operations at the Croinor site ended in May 2005. In order to facilitate the resumption of mining operations, Golder undertook a review of environmental permitting and licensing requirements. A Certificate of Authorization (CofA) request document for the operation of the Croinor mine was prepared by Golder and submitted to the Ministry of Sustainable Development, Environment and Parks (Ministère du Développement durable, de l'Environnement et des Parcs; MDDEP) in February 2010. Following the analysis of the CofA document, 2 requests for additional information were received from the MDDEP in March and June 2010. Replies to these requests were submitted in May and June 2010, respectively. The delivery of a CofA by the MDDEP for operating the Croinor mine was delivered in September 2010.

Capital and Operating Cost

InnovExplo prepared a preliminary design for the proposed project infrastructure. Most of the capital cost was estimated using quotes from equipment suppliers and contractors. In some cases, comparable installations at other projects were used. The capital cost estimate is accurate within $\pm 20\%$.

The pre-production costs are estimated at \$17.32 million, including \$925,608 of capitalized operating costs net of production revenue received during the pre-production period. Sustaining capital is estimated at \$7.43 million, excluding \$0.62 million for final closure costs.

Capital expenditure breakdown (Table 19.2)

Description	Pre-production	Sustaining	Total cost
Capitalized operating cost	\$14,843,398		\$14,843,398
Capitalized revenue	-\$13,917,790		-\$13,917,790
Dewatering and rehabilitation	\$1,444,588		\$1,444,588
Development	\$6,671,356	\$6,753,571	\$13,424,926
Ventilation equipment	\$245,410		\$245,410
Mine dewatering	\$416,681		\$416,681
Surface installation and equipment	\$1,403,714		\$1,403,714
Electrical distribution	\$4,958,095	\$429,868	\$5,387,963
Building and infrastructure installations	\$835,208		\$835,208
Environment	\$421,827	\$230,173	\$652,000
Contractor demobilization		\$19,789	\$19,789
Total capital expenditures	\$17,322,486	\$7,433,401	\$24,755,887

Operating costs are estimated in 2010 Canadian dollars with no allowance for escalation. The total life-of-mine operating cost and average unit operating costs are summarized in the table below. The overall operating unit cost is \$171/tonne of ore milled.

InnovExplo estimated mine operating costs using data from similar operations and from budget quotes from contractors and suppliers.

Summary of Total Life-of-Mine Operating Costs (Table 19.3)

Description	Total cost	Unit cost	
Definition drilling	\$2,782,270	4.29 \$/t	15.77 US\$/oz
Stope development	\$5,768,760	8.90 \$/t	32.70 US\$/oz
Mining	\$38,249,620	59.04 \$/t	216.84 US\$/oz
Blue Note staff	\$7,749,997	11.96 \$/t	43.94 US\$/oz
Blue Note mobile equipment	\$165,760	0.26 \$/t	0.94 US\$/oz
Contractor (indirect cost)	\$22,205,890	34.28 \$/t	125.89 US\$/oz
Surface services	\$315,510	0.49 \$/t	1.79 US\$/oz
Energy cost	\$4,903,059	7.57 \$/t	27.80 US\$/oz
Milling and transportation	\$27,857,644	43.00 \$/t	157.93 US\$/oz
Environment	\$778,070	1.20 \$/t	4.41 US\$/oz
Total:	\$110,776,580	171 \$/t	628 US\$/oz

To provide electric power to the site, a new 26-km 25-kV three-phase overhead power line is planned. This new power line is assumed to be private and not owned by Hydro-Québec. Further discussions between the client and Hydro-Québec will be required to define if ownership could be transferred to Hydro-Québec and if capital costs could be shared between both parties.

Financial Analysis

An after tax model was developed for the Croinor project. All costs are in 2010 Canadian dollars with no allowance for inflation or escalation.

The economic valuation of the project was performed using the Internal Rate of Return (IRR) and Net Present Value (NPV) methods. The discount rate used in the analysis is 7%. The following parameters were considered in the financial analysis:

- An average gold price of US\$1250/oz and an exchange rate of 1.03 CAD/1USD which correspond to a Bloomberg consensus estimate in June 2011. Table below gives details of the Bloomberg base case consensus forecasts.
- Resources as described in section 17. The portion of the resources considered in the analysis represents resources at a cut-off grade of 5.0 g/t.
- Gold recovery of 97.5%. This value was based on recovery obtained at the time the mine was operating.
- Royal Mint fees of \$5/oz.
- An estimated mill throughput rate of 172,500 t/year at an average diluted gold grade of 8.35 g/t. The estimated average annual output is 39,181 to 45,631 ounces of gold.
- A royalty payment was considered and evaluated as follows: a royalty of 15% was applied on profit over the carried expenses, which account for \$11,658,371.
- Future annual cash flow estimates based on grade, gold recoveries and cost estimates previously discussed in this report.
- A total of 42,000 tonnes of ore which will be processed during the pre-production period is deemed to be capital production and is not included in production nor is revenue derived from it.

Bloomberg base case consensus forecast as of June 2011 (Table 19.4)

	2012	2013	2014
Gold price (\$US/oz)	1,373	1,296	1,168
Exchange rate (\$C/\$US)	1.01	1.05	1.03

The resulting main parameters and results of the cash flow analysis for the entire project are presented in the following table.

Cash Flow Analysis Summary (Table 19.5)

Parameters	Results
Proven & probable mineral reserves	689,829 t at 8.35 g/t
Total contained gold reserve	185,260 oz
Mine life (including 14-month pre-production)	5 years
Daily mine production	500 t per day
Gold recovery	97.5%
Annual gold production	39,181 to 45,631 oz
LOM recovered gold	170,556 oz
Average cash operating cost	\$171/tonne
Average cash operating cost	US\$ 628/oz
Capital cost (including \$7.43M sustaining/working capital)	\$24.8 million
Total cost per ounce	US\$768/oz
Total gross revenue	\$225.9 million
Total operating cost	\$110.8 million
Total project cost	\$135.5million
Total operating cash flow (before tax & royalties)	\$75.7 million
Estimated mining and income taxes	\$20.6 million
Net cash flow	\$46.9 million
Pre-tax NPV (7% discount)	\$51.3 million
Pre-tax IRR	124 %
After-tax NPV (7% discount)	\$35.4 million
After-tax IRR	99 %
Payback period	25 months
Pre-production period (including 42,000t of production)	14 months

Sensitivity analyses were performed on parameters selected for their potential impact on the outcome of the economic evaluation. The following production parameters were analyzed:

- Grade (g/t)
- Gold price (US\$/oz)
- Total net revenue (REVENUE)
- Operating expenditure (OPEX)
- Capital expenditure (CAPEX)

Sensitivity calculations were performed on the project's NPV, IRR and total cash flow by applying a range of variation ($\pm 25\%$) to the parameter values.

The sensitivity analysis demonstrates that the Croinor Project is highly sensitive to changes in gold price and revenue. It is also sensitive to changes in OPEX and moderately sensitive to changes in CAPEX.

Conclusion and Recommendation

Other than the 2010-2011 drilling carried out by Blue Note that will have to be included when the assays will be available, InnovExplo is not aware of any environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant issues that would materially affect the Mineral Reserve Estimate. InnovExplo considers the present prefeasibility study to be reliable and thorough, based on quality data, reasonable hypotheses and parameters compliant with Regulation 43-101 and CIM standards with regard to Mineral Reserve and Resource estimates.

The results from this prefeasibility study demonstrate that the Croinor project is technically and economically viable and InnovExplo recommends that Blue Note Mining continue to advance the project towards production.

InnovExplo provides the following recommendations.

- Use the findings of the geotechnical–geomechanical surface crown pillar study (Delivered in April 2011) to confirm or revise the assumptions and design parameters of this prefeasibility study.
- Complete the infill and down-plunge exploration drilling aimed at expanding the current resources and reserves.
- Validate the geological model through additional drilling to increase the ratio of lower cost long-hole stoping to room-and-pillar mining.
- Update the Mineral Resources Estimate with further drilling.
- Initiate discussions with Hydro-Québec to determine whether electric line ownership could be transferred to Hydro-Québec and if capital costs could be shared between both parties.
- Advance the design of the electric line extension to the feasibility study stage and initiate related permitting requests.
- Continue to work on general permitting for the project.
- Incorporate technology such as gravity separation to reduce the mill operating cost.
- Evaluate the possibility of applying ore sorting technology at the Croinor site.
- Prepare bid documents for the activities to be contracted and solicit bids for the work.
- Compare the bids to the estimates in this prefeasibility study to determine whether the mine design should be reviewed based on final contractor bids.
- Complete additional work to evaluate the possibility of mining additional resources to the west of the existing West pit and evaluate the possibility of recovering remnant ore in the existing West pit;
- Start negotiations to obtain agreements for custom milling and ore transportation.

To advance the project, InnovExplo estimates a budget of \$155,000, as presented hereunder.

Proposed Work Program and Budget (Table 20.1)

Item	Cost
Revision of geotechnical design parameters	\$5,000
Mineral Resource Estimate update and prefeasibility	\$100,000
Electric line extension feasibility study	\$ 20,000
Preparation of contract documents for mining, ore transportation and custom milling	\$15,000
Evaluation of the potential to mine additional resources located west of the existing pit	\$15,000
Total	\$ 155,000

2.0 INTRODUCTION AND TERMS OF REFERENCE *(Item 4)*

At the request of Mr. John Martin, President and Chief Operating Officer of Blue Note Mining Inc (“Blue Note Mining” or “the issuer”), InnovExplo has been retained to produce a preliminary feasibility study for the Croinor Project in compliance with Regulation 43-101 and Form 43-101F1. The Croinor property is located approximately 70 km northeast of Val-d’Or, Québec. Sylvie Poirier, P. Eng., was assigned to the project and visited the property on April 20 and May 28, 2010.

The study is based on a Mineral Resource Estimate completed in 2009 by Pierre O’Dowd and presented in a 43-101 Technical Report dated September 2009 (O’Dowd, 2009).

The objectives of the prefeasibility study are to:

- Determine the best project design from multiple options.
- Determine the most appropriate mining method according to the geometry and grade of the Croinor deposit;
- Establish the basic design for most of the required facilities and infrastructure to access, develop and mine the mineralized zones;
- Estimate the capital cost;
- Estimate the operating cost;
- Estimate the cost and timeframe for the pre-production and production period;
- Analyze the financial aspects of the project;
- Establish the ore reserves;
- Make recommendations for additional work to be done to allow for a detailed engineering design.

InnovExplo’s review of the Croinor project was based on published material, as well as data, professional opinions and unpublished material submitted by Blue Note Mining.

InnovExplo estimated costs using quotes from contractors and suppliers, as well as data provided in the 2008 and 2009 volumes of Mining Cost Service (with a subscription to Cost Data Update Services) published by CostMine, a division of InfoMine USA Inc.

In addition to Sylvie Poirier, Eng. (InnovExplo), the other qualified persons responsible for the preparation of this report were Carl Pelletier B.Sc., P.Geo. (InnovExplo), Pierre O’Dowd, B.Sc. P.Geo, (Independent consultant), Rodrigue Ouellet Eng. M.Sc.A (Golder) and, Marc Lafontaine, Eng. (Genivar).

InnovExplo has reviewed the data provided by the issuer and/or by its agents. InnovExplo has also consulted other information sources, such as government management databases for assessment work and the status of mining titles.

InnovExplo conducted a review and appraisal of the information used in the preparation of this report, as well as in its conclusions and recommendations, and believes that such information is valid and appropriate considering the status of the project and the purpose for which the report

is prepared. The authors have fully researched and documented the conclusions and recommendations made in the report.

All currency amounts are stated in Canadian Dollars (\$) or US dollars (\$US). Quantities are stated in metric units, as per standard Canadian and international practice, including metric tons (tonnes, t) and kilograms (kg) for weight, kilometres (km) or metres (m) for distance, hectares (ha) for area, and grams (g) or grams per metric ton (g/t) for gold grades. Wherever applicable, imperial units have been converted to the International System of Units (SI units) for consistency. A list of abbreviations used in this report is provided in Appendix I.

3.0 RELIANCE ON OTHER EXPERTS *(Item 5)*

The authors, Qualified and Independent Persons as defined by Regulation 43-101, were contracted by the issuer to study technical documentation relevant to the report, perform a prefeasibility study on the Croinor deposit and recommend a work program if warranted. The authors have reviewed the mining titles, their status, any agreements and technical data supplied by the issuer (or its agents), and any public sources of relevant technical information.

Information about the mining titles and option agreements was supplied by Blue Note Mining staff. InnovExplo is not qualified to express any legal opinion with respect to the property titles or current ownership and possible litigation. Steven Campbell, Eng. (Stavibel) provided the preliminary estimate for the electrical distribution requirements and costs. Lucie Chouinard, CA, M. Fisc., of Samson Bélair Deloitte & Touche completed the after-tax cash flow estimation. Venetia Bodycomb of Vee Geoservices provided the linguistic editing. InnovExplo's technical support was provided by Sylvain Cloutier.

Most of the geological and technical reports for projects in the vicinity of the Croinor property were prepared before the implementation of National Instrument 43-101 in 2001 and Regulation 43-101 in 2005. The authors of such reports appear to have been qualified and the information prepared according to standards that were acceptable to the exploration community at the time. In some cases, however, the data are incomplete and do not fully meet the current requirements of Regulation 43-101. The authors have no known reason to believe that any information used in the preparation of this report is invalid or contains misrepresentations.

The authors believe the information used to prepare the report and formulate its conclusions and recommendations is valid and appropriate considering the status of the project and the purpose for which the report is prepared.

The authors, by virtue of their technical review of the project's exploration potential, affirm that the work program and recommendations presented in the report are in accordance with Regulation 43-101 and CIM technical standards.

4.0 PROPERTY DESCRIPTION AND LOCATION (Item 6)

4.1 Location

The Croinor property is approximately 70 km northeast of the city of Val-d'Or, Québec, in the Pershing Township on NTS map sheet 32C/03 (Fig. 4.1 and 4.2). The approximate UTM coordinates for the geographic centre of the property are 349800E and 5330200N (Zone 18, NAD83).

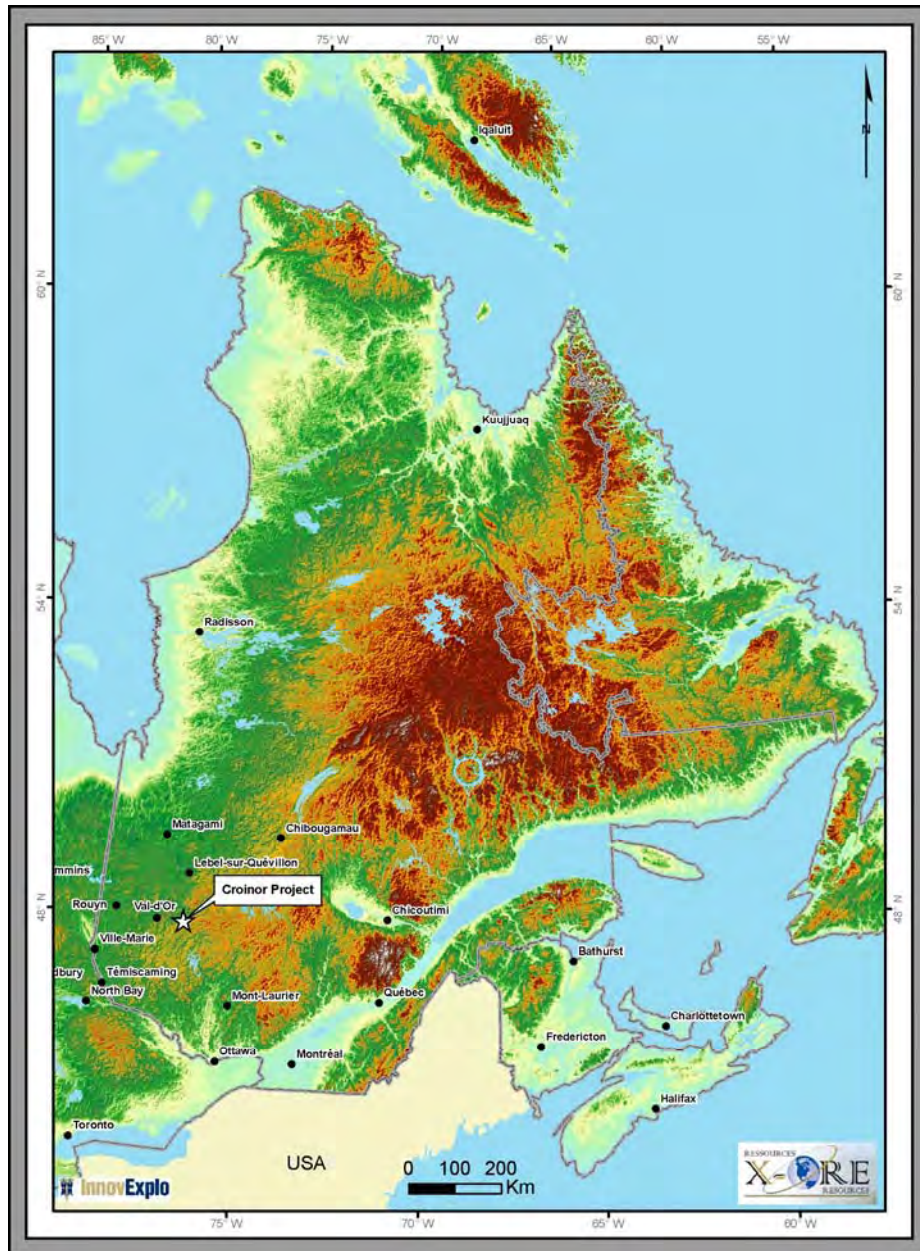


Figure 4.1 – Location of the Croinor property in the province of Québec

4.2 Mining title status

The Croinor property comprises 367 mining titles covering a total area of 7,495 ha, and one mining lease (BM 862) covering approximately 90 ha (Fig. 4.2). Table 4.2 lists the claims and their details. All claims are registered to X-Ore Resources Inc. On January 19, 2010, Blue Note Mining proceeded with the acquisition of X-Ore Resources Inc by the amalgamation of two companies, X-Ore Resources Inc and 9216-4706 Québec Inc, a wholly-owned subsidiary of Blue Note Mining.

On July 19, 2010, Blue Note Mining and First Gold Exploration Inc (“First Gold”) announced that they have entered into a binding agreement regarding Blue Note Mining’s acquisition of all of First Gold’s interests in the Croinor gold project located near Val-d’Or, Québec. That agreement includes the Croinor mining lease (Table 4.3) and the claims included in Table 4.4.

On June 1, 2011, Blue Note Mining and Critical Elements (formerly First Gold) reported that they have agreed to extend the term of the binding agreement announced on July 19, 2010 providing for the acquisition by Blue Note of all of Critical Elements’ interests in the Croinor gold project.

Under the terms of the Agreement, Blue Note has already made cash payments totalling \$135,000 to Critical Elements and, in consideration of additional monthly payments of \$10,000, Blue Note now has until December 31, 2011, or such other later date as mutually agreed by Blue Note and Critical Elements, to make a final payment of \$2,250,000 to complete the transaction. In addition, Blue Note shall issue 17.5 million common shares to be held in escrow, for release at a rate of 500,000 shares per month over 35 months from the date of closing. The transaction includes Critical Elements’ 71% ownership in the Matchi-Manitou property.

The 50/50 Croinor joint operatorship shall remain in effect until the date of closing. In the meantime, First Gold shall be exempted from participating in any further cash calls until such date.

Prior to this binding agreement, four (4) different option agreements were signed regarding claims that now constitute the entire Croinor property and those agreements still affect the respective claims. Two of those four option agreements affect the mining lease (BM 862) on which the Croinor project is located. The agreements are summarized below in Table 4.1, and figures 4.3 to 4.6 illustrate which claims are subject to royalties.

Other than what is discussed in the different option agreements, no liens or charges seem to be registered against the Croinor property. All lands seem to be in good standing according to the GESTIM database (Québec's claim management system).

Table 4.1 – List of various royalties affecting the Croinor property

PROPERTY		Royalty		Description
		Name	Percentage	
CROI NOR	Affecting the mining lease BM 862	Successors of Fred D. Corcoran and Denis R. Agar	7.5% each	<i>Net profit from commercial production of which \$15,000 is payable in September of each year as an advanced payment on royalties</i>
		Canadian Spooner Resources Inc.	5%	<i>Of net income from production on 97 claims that becomes payable only after all expenditures costs have been recouped</i>
	Not affecting the mining lease BM 862	Verner Pakkala	10%	<i>Net profit from commercial production.</i>
		A.N. Ferris	1.5%	<i>Net Smelting return.</i>

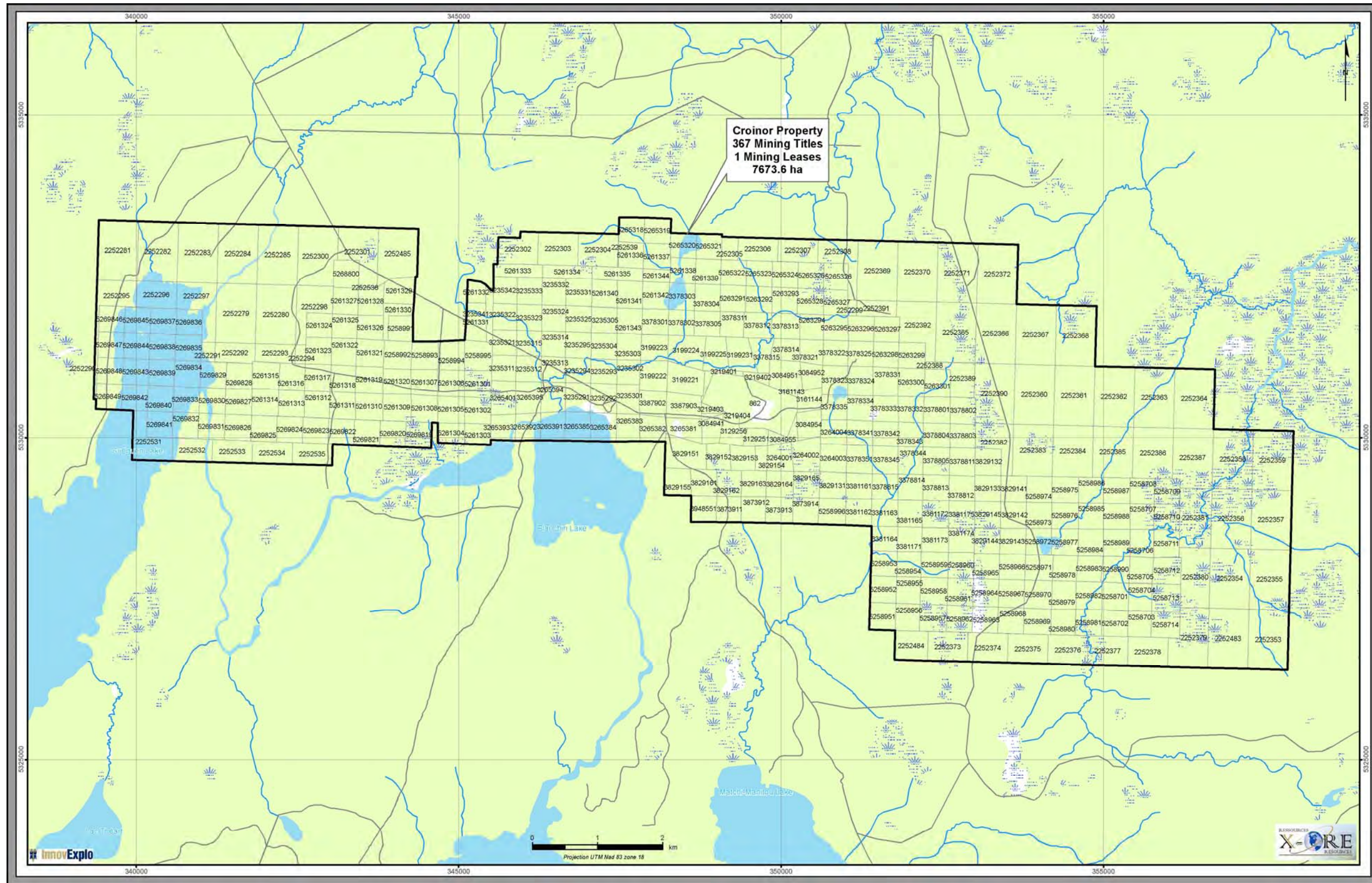


Figure 4.2 – Claim map of the Croinor property

(“Restriction 23604” refers to the government decision to convert the area indicated into map-designed cells instead of its current claim staking status. It does not affect the existing Croinor claims forming the current property, or exploration work on those claims, but staking is prohibited during the conversion period).

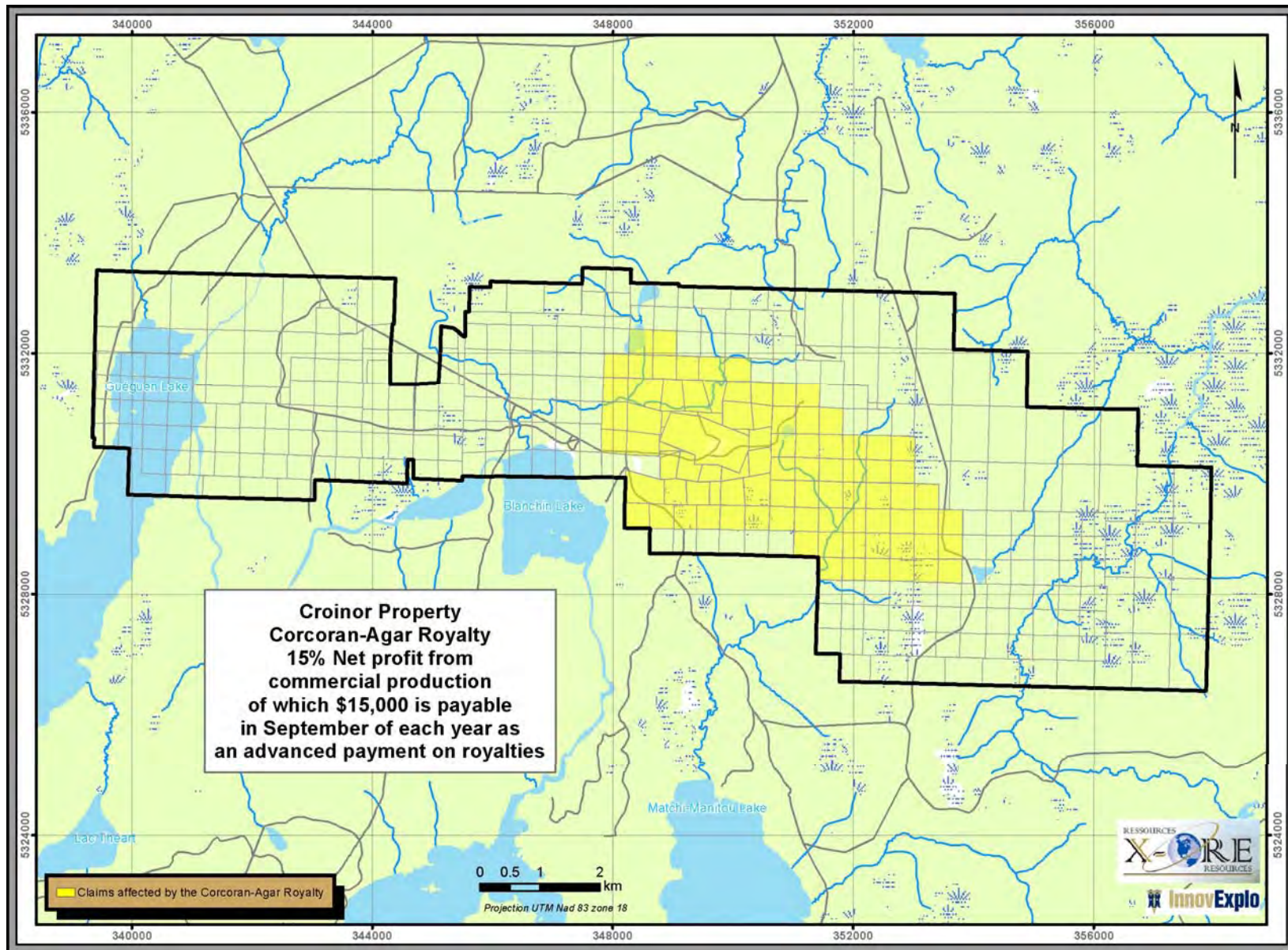


Figure 4.3 – Claims affected by the Corcoran-Agar Royalty

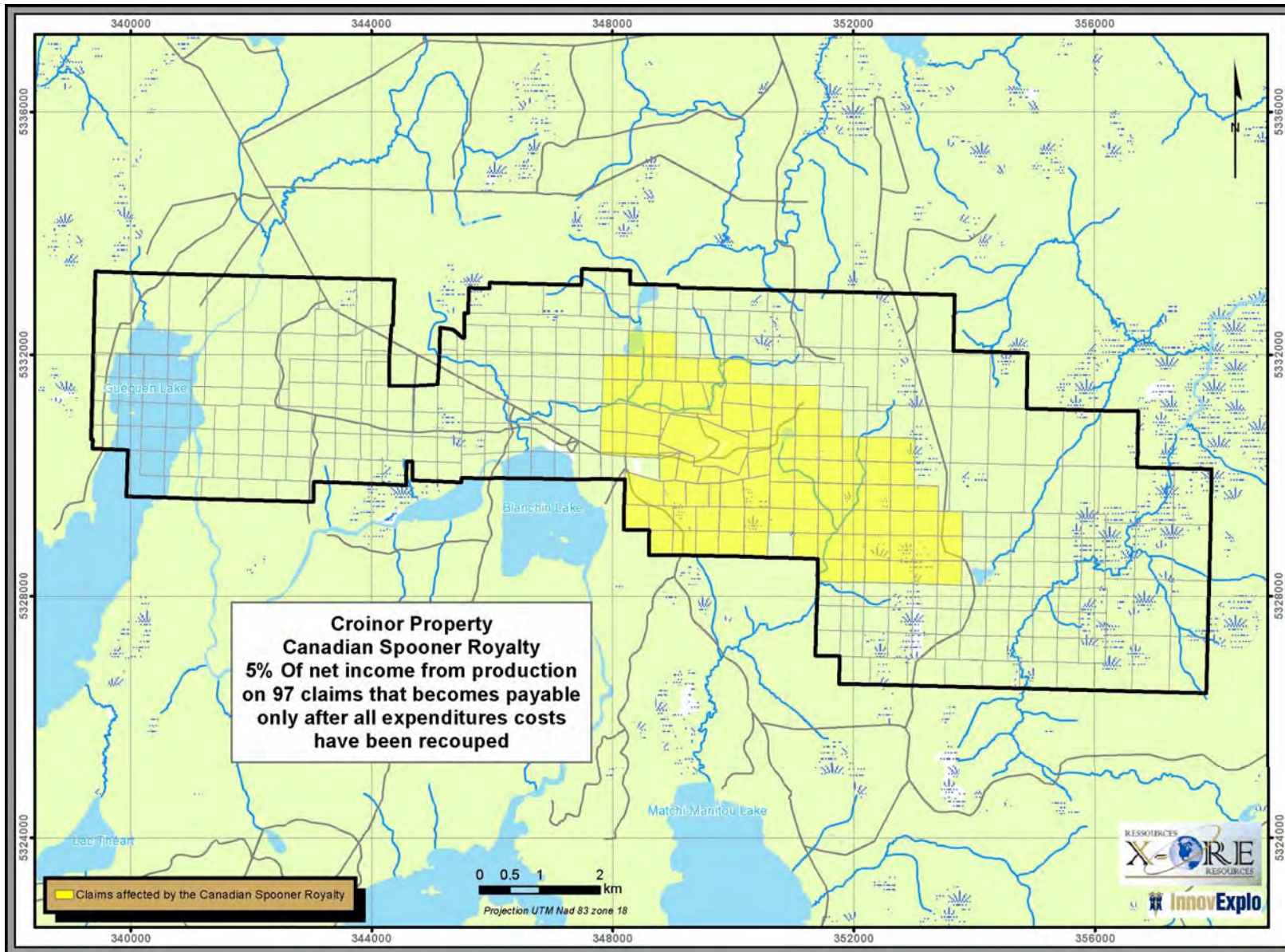


Figure 4.4 – Claims affected by the Canadian Spooner Royalty

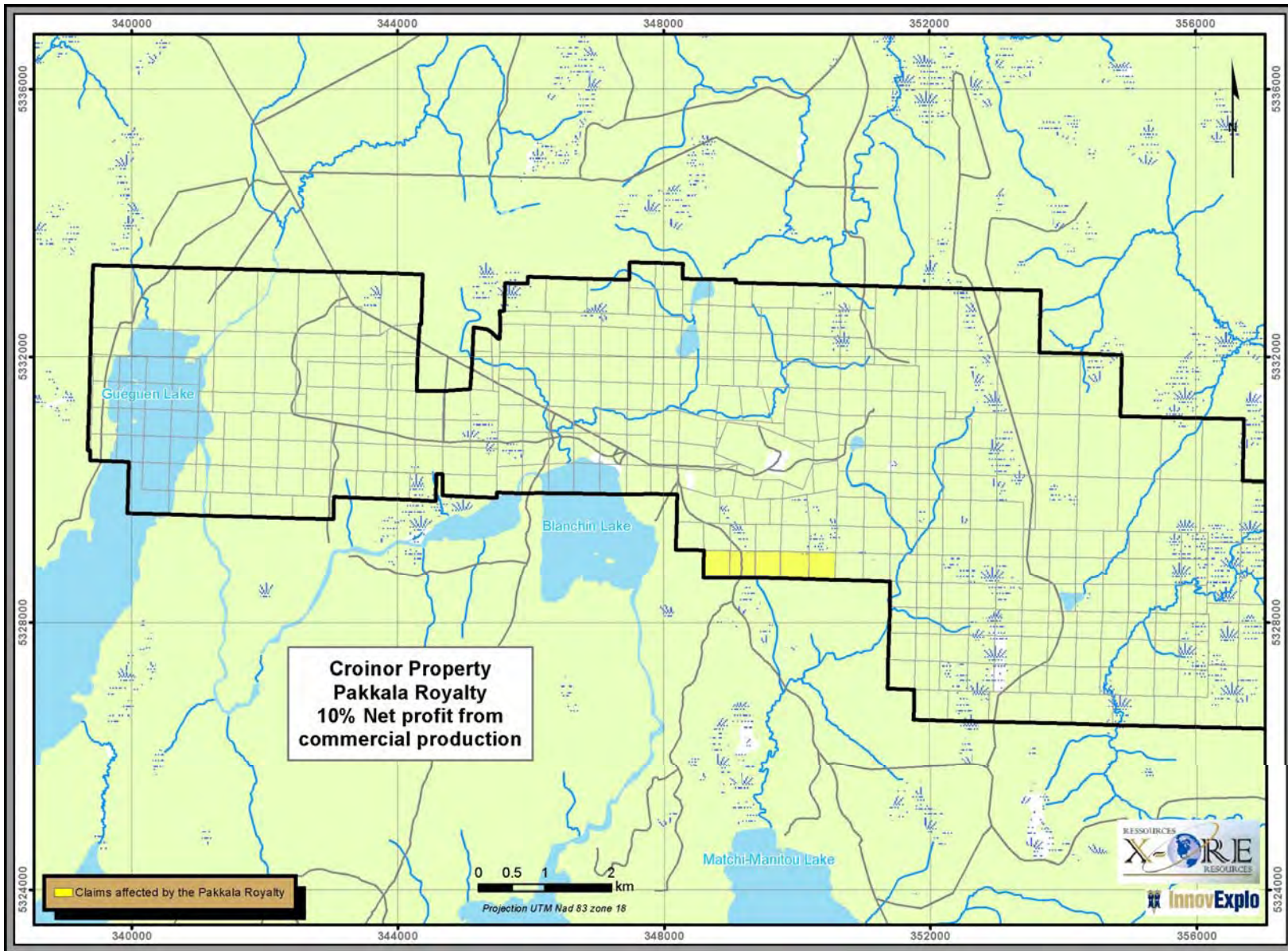


Figure 4.5 – Claims affected by the Pakkala Royalty

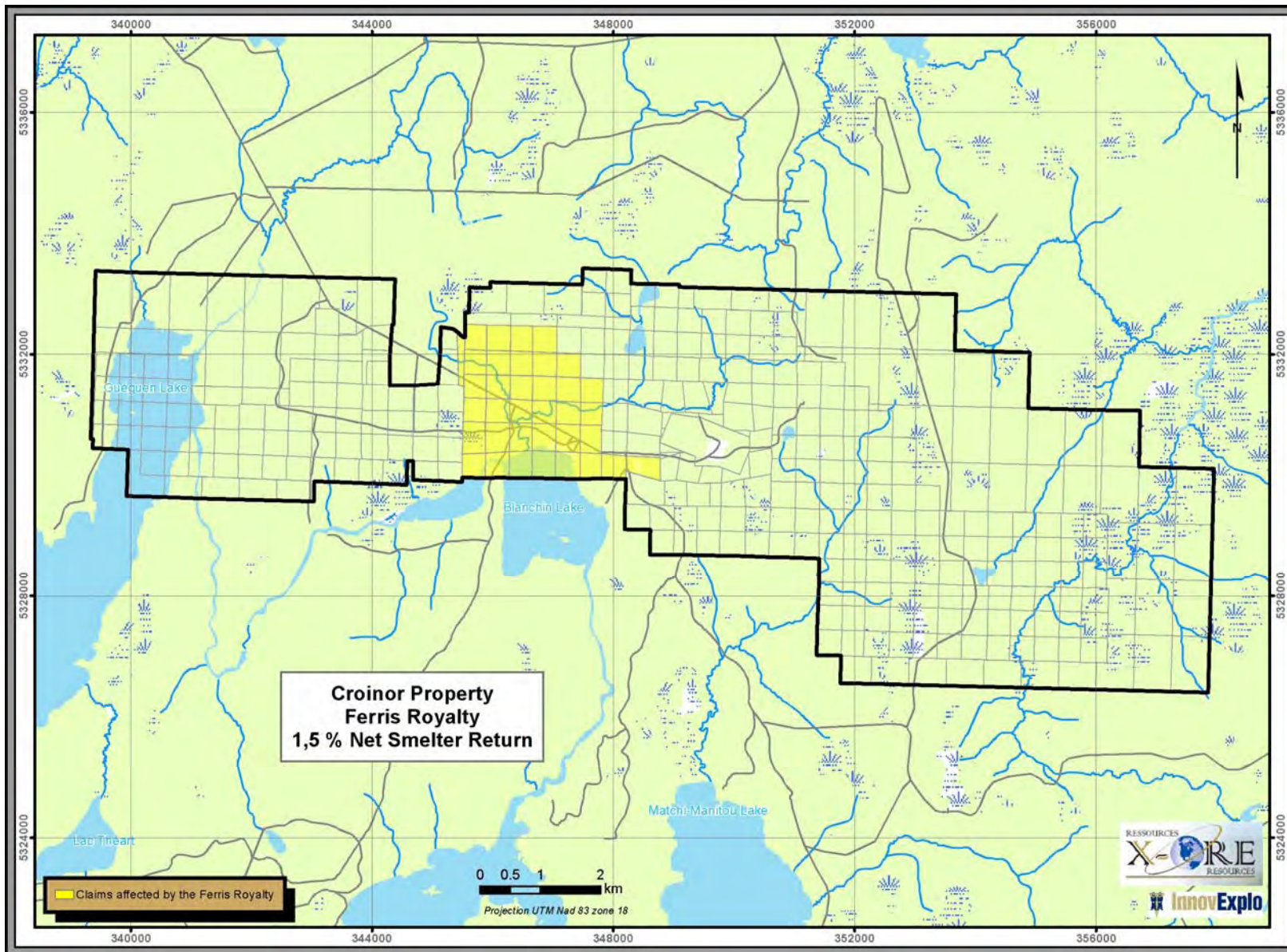


Figure 4.6 – Claims affected by the Ferris Royalty

Title	Type	NTS	Status	Area (ha)	Registration Date	Expiration Date	Work Required	Credit	Owner
5269836	CL		Active	16.00	2004-01-13	2012-01-12	750.00\$	-\$	X-Ore Resources inc (80225) 100 % (liable)
5269837	CL		Active	16.00	2004-01-13	2012-01-12	750.00\$	-\$	X-Ore Resources inc (80225) 100 % (liable)
5269838	CL		Active	16.00	2004-01-13	2012-01-12	750.00\$	-\$	X-Ore Resources inc (80225) 100 % (liable)
5269839	CL		Active	16.00	2004-01-13	2012-01-12	750.00\$	-\$	X-Ore Resources inc (80225) 100 % (liable)
5269840	CL		Active	16.00	2004-01-13	2012-01-12	750.00\$	-\$	X-Ore Resources inc (80225) 100 % (liable)
5269841	CL		Active	16.00	2004-01-13	2012-01-12	750.00\$	-\$	X-Ore Resources inc (80225) 100 % (liable)
5269842	CL		Active	16.00	2004-01-13	2012-01-12	750.00\$	-\$	X-Ore Resources inc (80225) 100 % (liable)
5269843	CL		Active	16.00	2004-01-13	2012-01-12	750.00\$	-\$	X-Ore Resources inc (80225) 100 % (liable)
5269844	CL		Active	16.00	2004-01-13	2012-01-12	750.00\$	-\$	X-Ore Resources inc (80225) 100 % (liable)
5269845	CL		Active	16.00	2004-01-13	2012-01-12	750.00\$	-\$	X-Ore Resources inc (80225) 100 % (liable)
5269846	CL		Active	16.00	2004-01-13	2012-01-12	750.00\$	-\$	X-Ore Resources inc (80225) 100 % (liable)
5269847	CL		Active	16.00	2004-01-13	2012-01-12	750.00\$	-\$	X-Ore Resources inc (80225) 100 % (liable)
5269848	CL		Active	16.00	2004-01-13	2012-01-12	750.00\$	-\$	X-Ore Resources inc (80225) 100 % (liable)
5269849	CL		Active	16.00	2004-01-13	2012-01-12	750.00\$	-\$	X-Ore Resources inc (80225) 100 % (liable)

Table 4.3 – Mining Lease comprised in the Croinor property

Title	NTS	Status	Area (ha)	Registration Date	Expiration Date	Annual Rent	Owner
BM 862	32C03	Valid	89.72	2004-07-06	2024-07-05	3,678.52\$	X-Ore Resources inc (80225) 100 % (liable)

Table 4.4 – Mining titles included in the binding agreement with Critical Elements

Title	Type	NTS	Status	Area (ha)	Registration Date	Expiration Date	Work Required	Credit	Owner
3084951	CL		Active	22.06	1970-07-06	2013-03-29	1,000.00\$	30,291.99\$	X-Ore Resources inc (80225) 100 % (liable)
3084955	CL		Active	9.22	1970-07-06	2013-03-29	1,000.00\$	3,780,881.26\$	X-Ore Resources inc (80225) 100 % (liable)
3129251	CL		Active	9.93	1970-02-13	2013-03-29	1,000.00\$	498,533.90\$	X-Ore Resources inc (80225) 100 % (liable)
3129255	CL		Active	0.01	1970-02-13	2013-03-29	1,000.00\$	991,416.36\$	X-Ore Resources inc (80225) 100 % (liable)
3129256	CL		Active	15.36	1970-02-13	2013-03-29	1,000.00\$	673,370.90\$	X-Ore Resources inc (80225) 100 % (liable)
3161143	CL		Active	1.58	1971-05-10	2013-03-29	1,000.00\$	627,135.10\$	X-Ore Resources inc (80225) 100 % (liable)
3219401	CL		Active	5.00	1972-05-30	2013-03-29	1,000.00\$	229,939.45\$	X-Ore Resources inc (80225) 100 % (liable)
3219402	CL		Active	5.24	1972-05-30	2013-03-29	1,000.00\$	93,893.71\$	X-Ore Resources inc (80225) 100 % (liable)
3219403	CL		Active	4.12	1972-05-30	2013-03-29	1,000.00\$	202,410.90\$	X-Ore Resources inc (80225) 100 % (liable)
BM 862	ML		Valid	89.72	2004-07-06	2024-07-06			X-Ore Resources inc (80225) 100 % (liable)

5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY (Item 7)

5.1 Accessibility

The Croinor property is situated in Pershing Township, roughly 55 km east of Val-d'Or (75 km by road), and is part of the municipality of Senneterre.

From Val-d'Or, access is afforded by the Trans-Canada Highway (Route 117) from the village of Louvicourt. Then, at the intersection of the St-Felix River and Route 117, approximately 8 km south of Louvicourt, a gravel road leads north over a distance of 25 km to Blanchin Lake. This lake straddles the southern edge of the property (Fig. 5.1). Existing roads to and on the site need to be upgraded to support vehicle travel to and from the site, including the offsite transportation of ore for processing. A 13-km segment of the gravel road requires major maintenance. It is also possible to access the project from Senneterre via a gravel road leading south. Numerous trails (snowmobile, ATV) and roads that lead to hunting camps and cottages on Blanchin Lake run across the project area. Ponds and several creeks also cut through the area. Blanchin Lake and Vauquelin Bay represent the most important waterways. A power line exists to the Chimo Mine 20 km south of the property. The access roads are in good condition and require minor maintenance.

5.2 Climate

The region is under the influence of a continental climate marked by dry, cold winters and hot, damp summers. The average temperature for July is 17.1°C, whereas January temperatures hover around -17°C. Mean annual temperatures are 12°C. The registered record temperatures were a low of -43.9°C and a high of 36.1°C. There is an average of 209 days of frost. Historical records of annual precipitation rates indicate a mean rainfall of 954 mm in the Val-d'Or region. Most of the rain is in September with an average of 101.5 mm, although the heaviest individual rainfalls (precipitation per 24 hour period) have been recorded in July, including one of 68 mm. Snow accumulates from October to May with a peak between October and March. The average accumulation for this period, expressed as a water equivalent, is 54 mm.

5.3 Local Resources

The city of Val-d'Or (population 35,000) is the closest major service community. Both skilled and general workforces are readily available. Several operations and mills are currently active in the area. Suppliers, contractors, consulting firms and competent workers are available locally. An outfitter is also located about 10 km south of the Croinor property.

5.4 Physiography

The property is marked by a low relief that mainly consists of poplar and evergreen forests, swamps and glacial drift. Several outcropping areas are found on the property. The property is predominantly covered by swamps in the northeastern and western parts. Waters from the property generally drains into a creek flowing into Blanchin Lake. The latter drains into the Marquis River and then into Vauquelin Bay of Guégen Lake and from there into Simon Lake. Waters from Simon Lake flow north by Villebon Creek, traverse Sleepy Lake and Tiblemont Lake, and finally flow into Bell River.

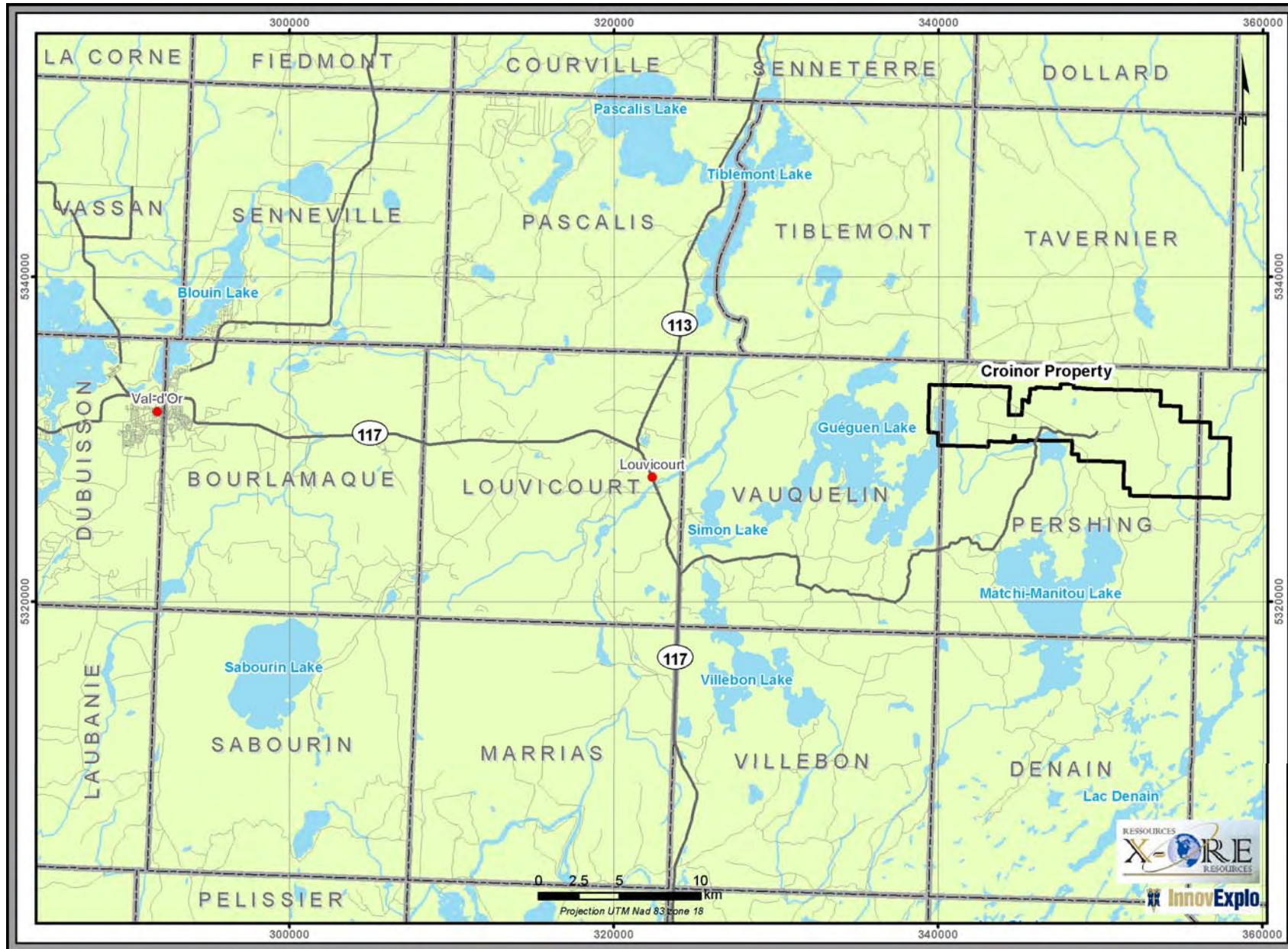


Figure 5.1 – Topography and accessibility of the Croinor property

6.0 HISTORY (Item 8)

Pershing Township has been a target for exploration work since the early 1930s. The Croinor deposit was discovered in 1940, probably by a prospector named Fred Thompson. Subsequently, several companies conducted exploration on the property. The work can be subdivided into four main periods:

- 1944-1948: Surface and underground drilling, shaft sinking (three compartments), and the development of 2,020 metres of drift on four levels by Croinor Pershing;
- 1979-1989: Rehabilitation of the shaft, driving of a ramp and surface plus underground drilling by Onaping Resources and then Sullivan Mines followed by Cambior;
- 1996-1997: Open pit mining and custom milling of over 51,000 tonnes by Goldust;
- 1998-2003: Trenching, surface drilling and completion of a 20,000-tonne bulk sample by Exploration Malartic-Sud.

Table 6.1 summarizes the previous work on the Croinor property, and Table 6.2 summarizes the production history of the project.

Table 6.1 – Summary of previous work on the Croinor property

Year	Company	Work	Results	References
1939-43	Berthiaume option, Consolidated Mining & Smelting Company	<ul style="list-style-type: none"> • Report on geology • Diamond drilling • Longitudinal projection 	<ul style="list-style-type: none"> • Discovery of Croinor deposit 	GM 3072, 7138-A, 7138-B, 7138-C, 7138-D, 8496-A, 8496-B, 8500
1944-48	Midd Pershing Mines Ltd; Croinor Pershing Mines Ltd	<ul style="list-style-type: none"> • 11 215 m of drilling (surface) • Sinking of 195-m shaft • 5 588 m of underground drilling 	<ul style="list-style-type: none"> • 457-m mineralized zone grading 9.9 g/t Au with average width of 4.1 m 	GM 124, 125, 372, 7137, 8066, 8089, 8092, 8093, 8101, 8499-A, 8499-B; MB-88-15
1949-78	Croinor Pershing Mines; Perron Gold Mine; Camflo Mattagami Mines; Anaconda American Brass; F. Corcoran; Les Mines Abigold	<ul style="list-style-type: none"> • Diamond drilling • Trenching • Sampling • 9,979 t bulk sample 	<ul style="list-style-type: none"> • 9 979 t at 3.7 g/t Au (1 187 oz) (bulk sample) with recovery of 95% 	GM 11082, 13997, 17268, 23398, 24487, 28494, 28975, 30000, 30594, 31018, 31862, 32279
1979-82	Onaping Resources; Spooner Mines and Oils; Dominion Explorers	<ul style="list-style-type: none"> • 17 505 m surface diamond drilling • Rehabilitation of the shaft • Sinking of 395-m raise 	<ul style="list-style-type: none"> • Work interrupted in 1982 due to weak gold price 	Hill-Goettler-Delaporte Ltd (1982)
1983-86	Mines Sullivan Inc; Dominion Explorers Ltd	<ul style="list-style-type: none"> • 5 230 m of drilling (underground) • 10 215 m of drilling (surface) • Dewatering of shaft, mapping and sampling • Bulk sampling 	<ul style="list-style-type: none"> • 1 700 t at 1.47 g/t Au (93 oz) (bulk sample) with a recovery of 86% • Resource estimate (Sullivan): 385 978 t at 5.5 g/t Au (68 252 oz) • Resource estimate (Dominion): 840 658 t at 6.0 g/t Au (162 167 oz) 	P. Duhaime (1986); J. Depatie (1983); G. Laforet (1983)
1987-89	Cambior Inc; Dominion Explorers Ltd	<ul style="list-style-type: none"> • 10 475 m of drilling (142 holes) • Trenching, mapping and channelling • Metallurgical tests 	<ul style="list-style-type: none"> • Extended depth of mineralized zone • Resource and reserve estimates: Open pit mineable reserves: 55 820 t at 5.6 g/t Au (10 050 oz) Underground reserves: 148 206 t at 7.4 g/t Au (35 260 oz) Total resources: 863 568 t at 8.0 g/t Au (222 115 oz) 	In-house documents from Cambior

Year	Company	Work	Results	References
1996-97	Goldust Ltd	<ul style="list-style-type: none"> Open-pit mining (ore to waste ratio = 1:8.5) 	<ul style="list-style-type: none"> Amount extracted: 51 010 t at 3.40 g/t Au (5 536 oz)¹ 	Internal reports; GM 55945
1998-99	Exploration Malartic-Sud Inc	<ul style="list-style-type: none"> Line cutting: 34 km Ground geophysics: Mag/EM, 200-m spacing (east area of the deposit) 2 150 m of drilling (9 holes) Evaluation report 	<ul style="list-style-type: none"> Geophysical maps 	Internal report; GM 56512; Gaudreault, 1997 (Géologica)
1999	Val-d'Or Geosciences Services Inc	<ul style="list-style-type: none"> Geophysic magnetic and EMH or MaxMin survey Trenching – 16 trenches in total 	<ul style="list-style-type: none"> Discovery of T13 (trench number) showing : 1.93g/t Au 	GM 58791
2000		<ul style="list-style-type: none"> Trenching between sections 500W and 900W Resource evaluation by Géostat 6 000 m of drilling (52 holes) 	<ul style="list-style-type: none"> Resource and reserve estimate (Géostat): 2.8 Mt at 2.94 g/t Au 	Internal report; SGI, 2000
2001		<ul style="list-style-type: none"> Trenching 4 087 m of drilling (58 holes) 	<ul style="list-style-type: none"> Metallurgical testing Geological modelling 	Internal reports
2002		<ul style="list-style-type: none"> Line cutting (170 km) Ground geophysics (IP) over 154.7 km 14 137 m of drilling (121 holes) 	<ul style="list-style-type: none"> New geological and metallogenic model 	Internal reports; GM 59933
2003		<ul style="list-style-type: none"> Trenching (11 sites = 5 720 m²) 18 265 m of drilling (162 holes) Dewatering and surveying of Goldust pit Metallurgical tests on drill core New mineral inventory 20 000 t bulk sample Line cutting (33 km), IP survey (31 km), Mag survey (195 km) Geological prospecting Re-interpretation of metallogenic model and new geological model 	<ul style="list-style-type: none"> New mineral inventory: 2.5 Mt at 3.46 g/t Au 	Internal reports; Saucier, 2003 (Met-Chem)
2004		<ul style="list-style-type: none"> Geophysical surveys (IP and Mag) over western portion of property Drilling of Bug Lake and Trench #2 area (see section 11: Drilling) Mining of the Centre pit 	<ul style="list-style-type: none"> Many conductors identified Bug Lake <ul style="list-style-type: none"> 2.76 g/t Au over 22.9 m; 2.96 g/t Au over 12 m; 2.86 g/t Au over 8.3 m. Trench #2: <ul style="list-style-type: none"> Discovery of new structure in tuffs (3.84 g/t Au over 3 m) Milled from Centre pit: 30 760 t at 2.2 g/t Au for 2 044 oz 	Internal reports; reports filed with MRNFP; Pelletier & Boudrias, 2005 (43-101 Technical Report)
2005		<ul style="list-style-type: none"> Mining of the West pit New mineral resource estimate (InnovExplo) 	<ul style="list-style-type: none"> Milled from West pit: 24 363 t at 5.0 g/t Au for 3 834 oz New mineral resource estimate: 1 429 075 t at 6.31 g/t Au for 289 890 oz, Measured and Indicated categories 	Pelletier & Boudrias, 2005 (43-101 Technical Report)
2007-2008	First-Gold	<ul style="list-style-type: none"> 12 914 m of drilling 	<ul style="list-style-type: none"> Numerous economic grade intercepts 	Internal reports
2009	First-Gold	<ul style="list-style-type: none"> New mineral resource estimate and 43-101 technical report (P. O'Dowd) Scoping study (F. Chabot, Golder Associates) 	<ul style="list-style-type: none"> New mineral resource estimate: 814 228 t at 9.11 g/t Au for 238 414 oz, Measured and Indicated categories. 	O'Dowd, 2009 (43-101 Technical Report); Chabot, 2009 (43-101 Technical Report)

Source: Marchand, 2004; Chénard and Turcotte, 2003.

¹ Conflicting data exist for this mining period. The numbers presented here are from Chénard and Turcotte (2003), which were taken from the Aurbel mill schedule from March 6 1997 to April 29 1997.

Table 6.2 – Past Production on the Croinor project

Production	Tonnes (t)	Grade (g/t)	Recovered ounces
Surface production			
Goldust (1996-1997)	51 010	3.4	5 536
Bulk sampling (2003-2004)	20 629	3.1	2 056
Centre pit	30 760	2.2	2 044
West pit (2004-2005)	24 363	5.4	3 834
Subtotal	126 762	3.4	13 470
Underground production			
Croinor (1949-78)	9 979	3.7	1 187
Sullivan Mines Inc (1983-86)	1 700	1.5	93
Subtotal	11 679	3.4	1 280
Total	138 441	3.3	14 750

7.0 GEOLOGICAL SETTING (Item 9)

7.1 The Abitibi Greenstone Belt

The Croinor property is located in the eastern part of the Archean Abitibi Greenstone Belt in the southern Superior Province of the Canadian Shield.

The Abitibi Greenstone Belt is one of the most extensive continuous expanses of low metamorphic grade Archean volcanic and sedimentary rocks on Earth (Card and Poulsen, 1998). It also happens to be one of the richest mining regions in the world and has produced large amounts of gold, copper, zinc, silver and iron from the Timmins, Kirkland Lake, Rouyn-Noranda, Val-d'Or, Matagami and Chibougamau mining districts. For these reasons, the Abitibi Greenstone Belt has been the focus of numerous studies. Most of this work is summarized by Card and Poulsen (1998) and presented on a compilation map of the southern Superior Province produced by the *Ministère de l'Énergie et des Ressources du Québec* and the Ontario Geological Survey in 1983. Several articles have also been published about the Abitibi belt, namely by Dimroth et al. (1982; 1983a,b; 1984a,b; 1985a,b), Hodgson (1983), Gélinas and Ludden (1984), Allard et al. (1985), Jensen (1985), Ludden et al. (1986), Card (1990), and Jackson and Fyon (1991).

The Abitibi Greenstone Belt comprises extensive Neoproterozoic volcano-sedimentary sequences and a multitude of intrusions ranging from synvolcanic to post-tectonic in age and from ultramafic to felsic in composition. The vast majority of volcanic episodes took place from 2.75 to 2.70 Ga and was closely followed by deformation, regional metamorphism and an episode of plutonism during the period from 2.70 to 2.65 Ga (Card and Poulsen, 1998). Hocq (1990) explains that early ductile to brittle deformation (folding and faulting) subsequently became increasingly brittle, eventually producing a tectonic collage with diamond-shaped, weakly deformed domains separated by strongly deformed zones. Near the end of deformation, clastic sedimentary basins and shoshonitic-alkaline volcanic rocks were emplaced (Mueller and Donaldson, 1992).

In many parts of the Abitibi Greenstone Belt, the succession may be divided into two major cycles typically characterized by a mafic to ultramafic volcanic sequence at the base, overlain by a mafic to felsic, tholeiitic to calc-alkaline sequence at the top (Card and Poulsen, 1998). Locally, accumulations of sedimentary rocks (turbiditic and alluvial and/or fluvial) occur associated with alkaline to shoshonitic volcanic rocks, as well as a few intrusions (Dimroth et al., 1982; Jensen, 1985). According to Dimroth et al. (1985a,b), these sequences may be correlated with three major physiographic settings, namely extensive subaqueous lava flows, subaqueous to subaerial volcanic complexes, and intra-arc basins.

A series of major volcanic episodes took place from 2750 to 2698 Ma; the latter represent the vast majority of volcanic sequences in the Abitibi Greenstone Belt (Card and Poulsen, 1998). One of these sequences, dated from 2710 to 2698 Ma and restricted to the southern part of the Abitibi Greenstone Belt, forms a volcano-plutonic assemblage that is very widespread throughout the belt. This sequence is composed of a basal komatiitic unit, followed by a bimodal assemblage alternating from basaltic to rhyolitic in composition, and capped by a tholeiitic and calc-alkaline assemblage (Card and Poulsen, 1998). This sequence hosts the vast majority of volcanogenic massive sulphide deposits in the southern part of the Abitibi Greenstone Belt. Many older volcanic sequences (2720 to 2713 Ma; 2730 to 2725 Ma) are widely scattered throughout the Abitibi Greenstone Belt (Card and Poulsen, 1998). These sequences, in the south part of the belt, host the Kidd Creek (2712 Ma) and Prosser (2716 Ma) rhyolites, the Deloro (2725, 2727 Ma), Wabewawa-Catherine (2720 Ma),

Normetal (2728 Ma) and Hunter Mine (2730 Ma) groups, and the Rand (2713 Ma) and Ghost Range (2713 Ma) mafic to ultramafic complexes. In the north part of the belt, these volcanic sequences include the Joutel (2730 Ma), Dumagami (2723 Ma), Watson Lake (2725 Ma) and Garon Lake (2721 Ma) rhyolites, as well as the Waconichi Formation (2728, 2730 Ma), the Bell River (2725 Ma) and Lac Doré (2724, 2728 Ma) gabbro and anorthosite complexes, and the Cummings mafic to ultramafic complex (2717 Ma).

Metasedimentary units in the Abitibi Greenstone Belt include turbiditic flysch sequences overlain by conglomeratic molasse-type sequences (Mueller and Donaldson, 1992). The Porcupine, Cadillac and Kewagama groups occur in the southern Abitibi, whereas the Taibi, Caopatina and Chicobi Lake groups occur in the northern Abitibi. Mueller and Donaldson (1992) explain that these sedimentary units were deposited from 2730 to 2720 Ma in the northern Abitibi, and from 2700 to 2687 Ma in the south.

The economic potential of the Abitibi Greenstone Belt is well established. The Croinor property area is no exception, and the region's economic potential is illustrated by several past and present producers. The Val-d'Or mining camp has produced more than 15 Moz of gold from more than twenty-six (26) mines. Most of the production comes from the Sigma-Lamaque hydrothermal system from which 9 Moz has been extracted.

7.2 Geological Setting of the Croinor Property

The southern limit of the Croinor property follows the northeastern border of the Pershing Batholith, and the Garden Island deformation corridor cuts across the property in an NW-SE direction. This deformation zone overprints and partially follows the contact between the Assup Group (mafic and intermediate volcanics) and Aurora Group (mafic volcanics) to the north and the sedimentary Garden Island Domain to the south. The Assup and Aurora groups form the Assup Domain. Lithological units in both domains are generally oriented N295° with steep dips to the north.

The Croinor deposit is located 3 km northeast of the Pershing Batholith and 2 km northeast of the Garden Island deformation corridor.

The Croinor deposit is hosted by the dioritic synvolcanic Croinor Sill. This sill ranges from 60 to 120 metres thick and is hosted within the volcanic rocks of the Assup Domain. The deposit is characterized by gold-rich lenses consisting of quartz-carbonate-tourmaline-pyrite veins, altered pyritic host-rock material, and/or tectonic breccia (pyritic host fragments within a quartz-carbonate-tourmaline-pyrite vein).

The mineralized lenses are spatially controlled by reverse-oblique shear zones that crosscut and displace both the lenses and its dioritic host. A hydrothermal alteration halo surrounds these structures. Zoning begins with an epidote-chlorite envelope that gradually changes into a chlorite-carbonate zone closer to the shear. Within the shear structure itself, the host rock has undergone extensive alteration characterized by a sericite-ankerite-pyrite assemblage.

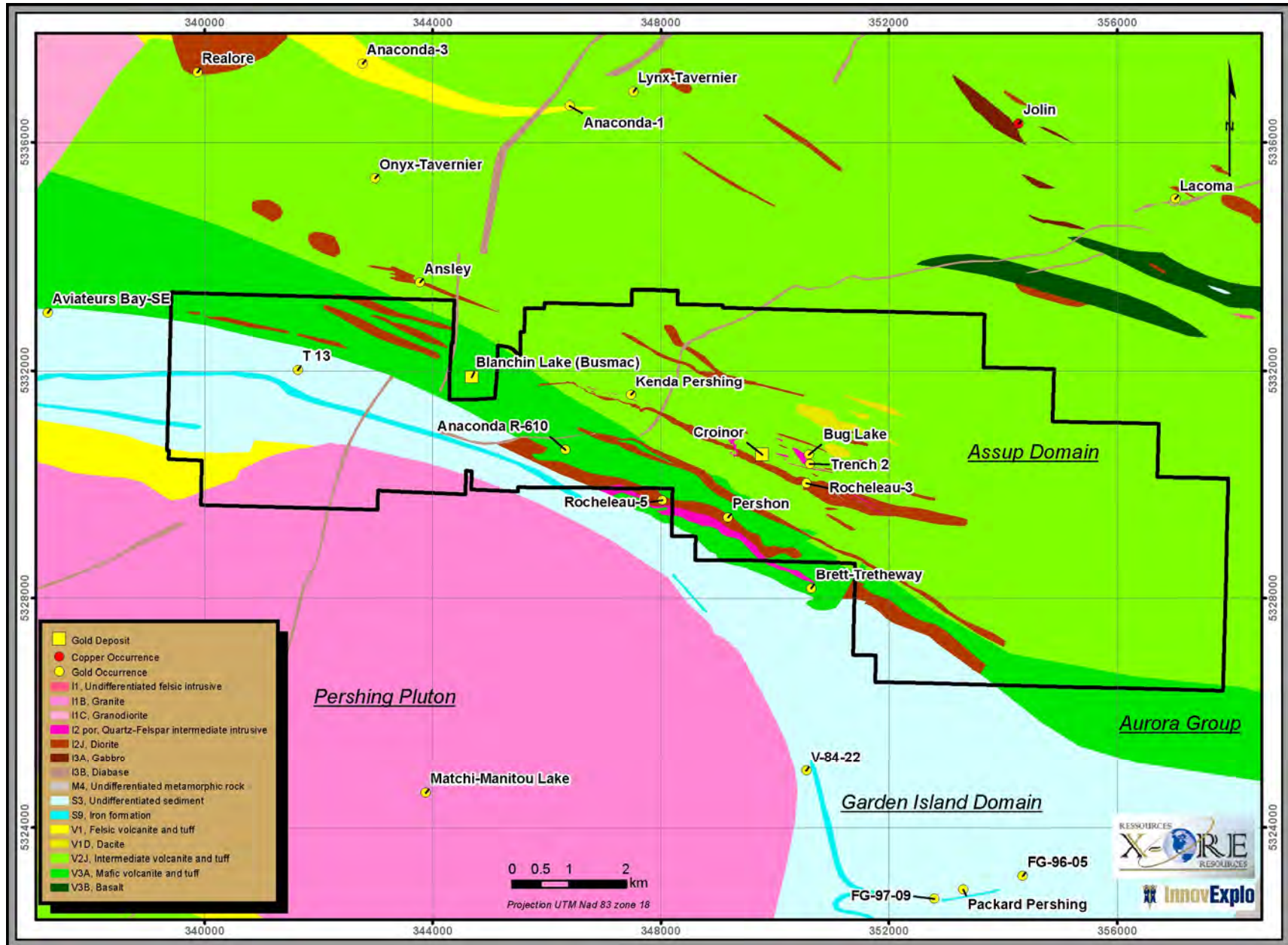


Figure 7.1 – Geology of the Croinor property area

8.0 DEPOSIT TYPES (Item 10)

Lode gold deposits (gold from bedrock sources: Fig. 8.1) occur dominantly in terranes with an abundance of volcanic and clastic sedimentary rocks of a low to medium metamorphic grade (Poulsen, 1996). Greenstone-hosted quartz-carbonate vein deposits are a subtype of lode-gold deposits (Poulsen et al., 2000). They correspond to structurally controlled, complex epigenetic deposits hosted in deformed metamorphosed terranes (Dubé and Gosselin, 2007).

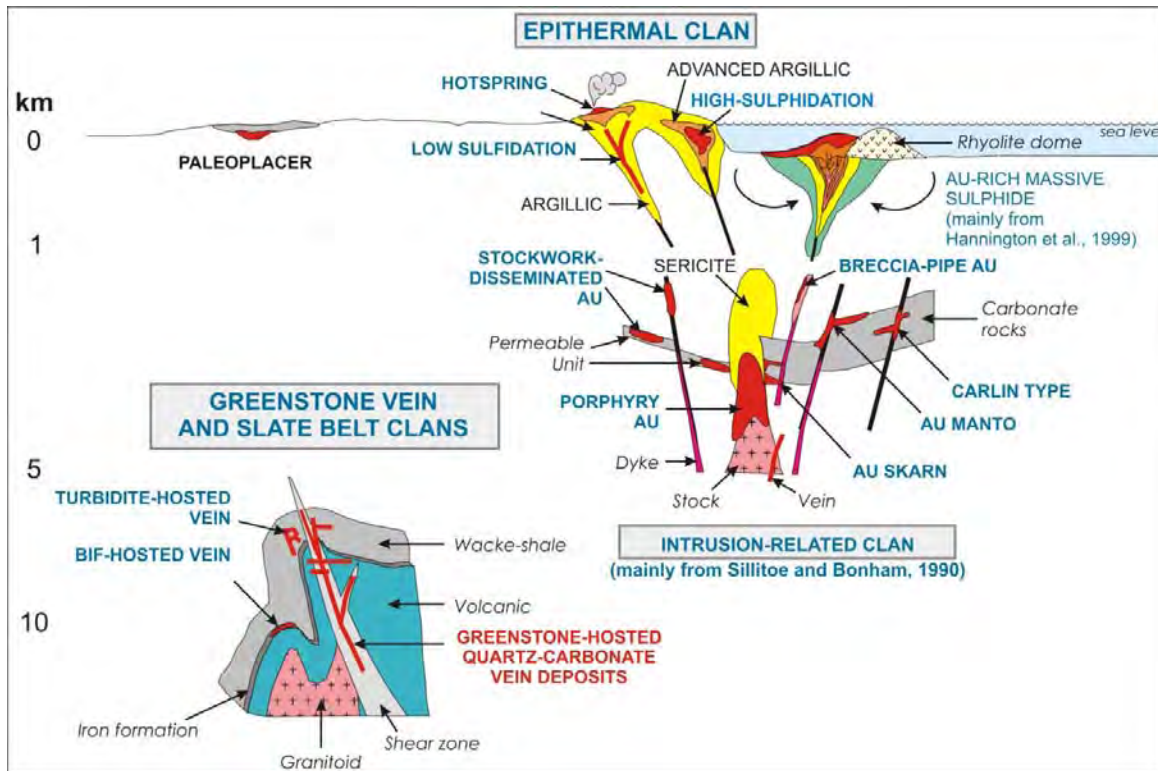


Figure 8.1 – Inferred crustal levels of gold deposition showing the different types of lode gold deposits and the inferred deposit clan (from Dubé et al., 2001; Poulsen et al., 2000).

Greenstone-hosted quartz-carbonate vein deposits consist of simple to complex networks of gold-bearing, laminated quartz-carbonate fault-fill veins in moderately to steeply dipping, compressional brittle-ductile shear zones and faults with locally associated shallow-dipping extensional veins and hydrothermal breccias. They are hosted by greenschist to locally amphibolite facies metamorphic rocks of dominantly mafic composition and formed at intermediate depth in the crust (5-10 km). They are distributed along major compressional to transtensional crustal-scale faults zones (Fig. 8.2) in deformed greenstone terranes of all ages, but are more abundant and significant, in terms of total gold content, in Archean terranes. Greenstone-hosted quartz-carbonate veins are thought to represent a major component of the greenstone deposit clan (Fig. 8.1) (Dubé and Gosselin, 2007). They can coexist regionally with iron formation-hosted vein and disseminated deposits, as well as with turbidite-hosted quartz-carbonate vein deposits.

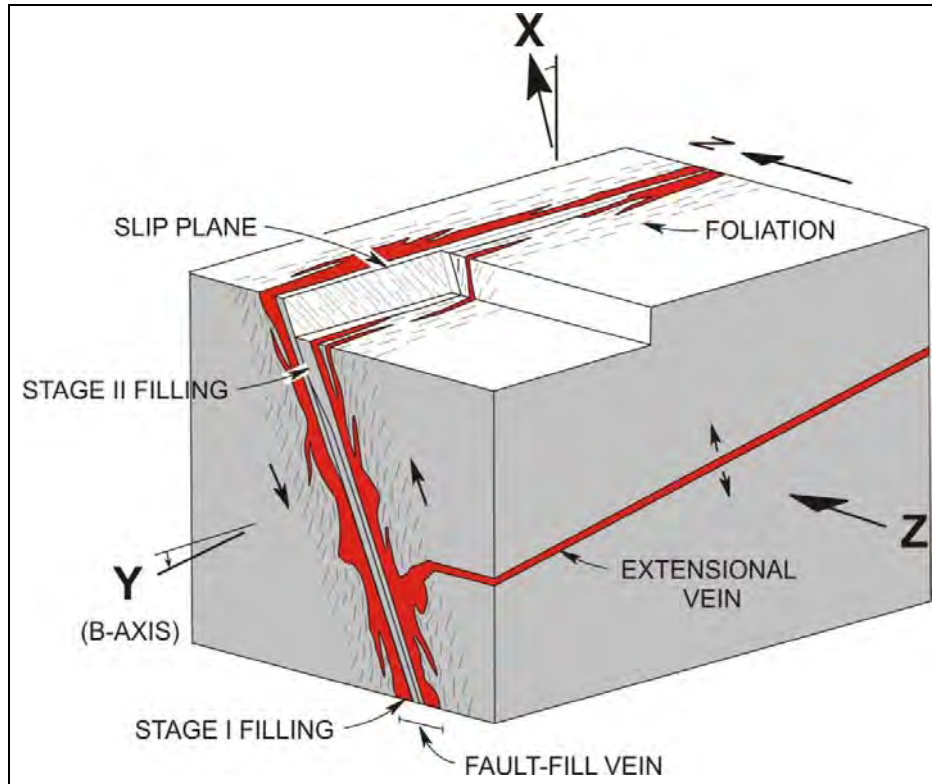


Figure 8.2 – Schematic diagram illustrating the geometric relationships between the structural element of veins and shear zones and the deposit-scale strain axes (from Robert, 1990).

The main gangue minerals are quartz and carbonate with variable amounts of white micas, chlorite, scheelite and tourmaline. The sulphide minerals typically constitute less than 10% of the ore. The main ore minerals are native gold with pyrite, pyrrhotite and chalcopyrite without significant vertical zoning (Dubé and Gosselin, 2007).

Gold-hosting structures within the dioritic Croinor Sill consist of a series of narrow breaks and reverse shears with dips of 25° to 60° to the north. These structures display en-echelon patterns and are variably oriented between N290°-N330°. They can cause displacements of a few centimetres to tens of metres. Tectonic breccias of pyritic quartz-tourmaline-ankerite material occupy the central portion of these shears (Fig. 8.1).

Spatial distribution of the mineralized lenses is somewhat complex. In cross-section, they appear as tabular bodies that go from being nearly vertical to flat lying. They show good lateral continuity over distances of tens of metres to a maximum of 600 metres. As of now, more than 40 gold-bearing lenses have been outlined within the Croinor Sill.

Two types of veins are observed: veins parallel to the shears (shear veins) and subhorizontal tension veins. The veins are made up of quartz, tourmaline and carbonates with minor amounts of pyrite, chalcopyrite and native gold. Gold is essentially associated with metasomatic pyrite located in quartz vein walls as well as in the strongly altered host-rock material of tectonic breccia. Gold occurs as inclusions within and along the edges of pyrite grains. Minor amounts of chalcopyrite and pyrrhotite may accompany the pyrite. Occasionally, free gold is found within quartz veins in shear zones as well as in their strongly metasomatized walls.

9.0 MINERALIZATION *(Item 11)*

9.1 Croinor

The mineralized lenses at Croinor range from 60 to 120 metres long (Chénard and Turcotte, 2003). The lenses consist of variably inclined to more or less subhorizontal tabular bodies representing shear veins, tectonic breccia and/or tension veins. The lenses can generally be followed from one section to another (10-metre sections) over distances varying from several tens of metres and up to 600 metres laterally. To date, about forty (40) gold-rich lenses have been identified.

Two (2) types of veins are observed: 1- veins parallel to the shears (shear veins); and 2- subhorizontal tension veins. The veins consist of quartz, tourmaline and carbonates with minor amounts of pyrite, chalcopyrite and native gold.

The tension veins are generally several centimetres thick and dip gently towards the east. Gold is restricted to rocks affected by pyritic metasomatism; that is, it mainly occurs in pyritic vein selvages, breccia fragments in tectonic breccias, and fragments in brecciated veins. Pyrite is locally associated with minor amounts of chalcopyrite and pyrrhotite. Gold is found as inclusions within pyrite grains or along its boundaries, or within fractures cutting pyrite. Although pyrite is a good indicator of the presence of gold, not all pyritic zones are mineralized with gold: isolated flecks of native gold were also observed in veins and veinlets of smoky quartz associated with shearing and in the highly altered selvages of such veins.

Pyrite occurs as two distinct forms that may correspond to distinct crystallization phases. The earliest phase is present as amorphous clusters and threads that frequently show evidence of deformation and a preferential orientation subparallel to the main foliation. The last phase appears as disseminated cubes with individual grains reaching 0.5 cm to locally 1 cm.

Other than pyrite content, the intensity of deformation and the type of alteration constitute the essential criteria for the presence of economic gold grades. Sericite-ankerite alteration combined with tourmaline and silicification appears to be directly associated with the highest grades within brecciated zones containing pyritic quartz-tourmaline-ankerite material.

Quartzo-feldspathic rocks that intrude the Croinor deposit area may have played an important role in gold mineralization. The relatively late emplacement of these intrusives may have accentuated the intensity of deformation and hence increased host rock porosity in addition to lengthening the mineralization event while contributing to the remobilization of local hydrothermal fluids.

10.0 EXPLORATION (Item 12)

Table 10.1 – Summary of exploration works performed on the Croinor property

Date	Work	Results	References
2003	<ul style="list-style-type: none"> • Trenching (11 sites = 5,720 m²) <ul style="list-style-type: none"> • 18,265 m of drilling (162 holes) • De-watering and surveying of Goldust Pit • Metallurgical tests on drill core • New mineral inventory • 20,000 t Bulk Sample • Line cutting (33 km), IP survey (31 km), Mag survey (195 km) • Geological prospecting • Re-interpretation of metallogenic model and new geological model 	<ul style="list-style-type: none"> • New mineral inventory 2.5 Mt at 3.46 g/t Au 	Internal reports Met-Chem report
2004	<ul style="list-style-type: none"> • Geophysical surveys (IP and Mag) over western portion of property • Drilling of Bug Lake and Trench # 2 area (cf section 11. Drilling) 	<ul style="list-style-type: none"> • Numerous conductors identified • Bug Lake <ul style="list-style-type: none"> • 2.76 g/t Au over 22.9 m; • 2.96 g/t Au over 12 m; • 2.86 g/t Au over 8.3 m. • Trench # 2 <ul style="list-style-type: none"> • Discovery of new structure within tuffs (3.84 g/t Au over 3 m). 	Internal reports and Reports filed with MRNFP

Recent Exploration Works performed by Blue Note.

In 2010, Blue Note Mining commissioned Abitibi Geophysics to carry out their 3D hole-to-hole Resistivity / Induced Polarization over the Croinor property. The objective of the study was to assess the potential for gold mineralization at depth and extents of known mineralization. This information would be used for planning a follow-up program in 2011 over the most promising anomalies.

A total of 26 independent pairs of receiver holes were surveyed over the property. A list of all the holes used in the survey is in Table 10.2, localisations of these holes are shown in Figure 10.1. Overall, the 3D inversion allowed the identification of a potential structural corridor in the north western area surveyed. This corridor is represented by a sharp contact between a resistivity high and a resistivity low that corresponds to a decrease in chargeability. Multiple small IP anomalies were identified adjacent to the structural feature, as well as larger IP anomalies at depth that were intersected by CR-07-332A.

To the southeast area of the survey, multiple smaller shallow IP anomalies were identified, as well as a large anomaly at depth which was intersected by CN-88-127 and CN-88-128.

Table 10.2 – List of boreholes used on the Croinor Project

HOLE-ID	AZIMUTH	DIP	LENGTH	Easting (mE)	Northing (mN)
CN-88-127	200	-70	310.29	350024.36	5330547.59
CN-88-128	200	-70	270.66	349947.28	5330519.89
83-S-261	200	-85	367.89	349814.56	5330598.15
83-S-262	200	-85	371.55	349878.31	5330593.21
83-S-263	200	-83	365.76	349928.90	5330555.61
CR-07-331	205	-78	453	349438.00	5330784.00
CR-07-332-A	25	-62	585	349368.00	5330619.00
CR-07-333	205	-78	516	349624.00	5330729.00
CR-07-334	25	-62	602	349520.33	5330476.77
CR-07-335	205	-72	592	349777.20	5330643.57
CR-07-337	25	-86	399	349685.00	5330627.00
CR-07-338	25	-86	467	349667.00	5330580.00
CR-07-339	108.06	-90	620	349520.00	5330695.00
CR-07-340-A	25	-82	476	349489.00	5330655.00
CR-07-341	25	-87	393	349448.00	5330667.00
CR-07-342	25	-87	384	349304.00	5330730.00
CR-07-345	21	-86	358	349343.00	5330710.00
CR-07-346	65	-87	399	349268.00	5330793.00
CR-07-347	348	-86	399	349213.00	5330790.00
CR-08-349	80	-87	351	349594.08	5330620.64
CR-08-352	0	-87	300	349805.93	5330494.04
CR-08-353	0	-87	251	349249.55	5330744.01
CR-08-360	0	-87	300	349200.01	5330811.01

The information obtained from this study was used for planning the drilling program in 2011. Most of the targets at the extension on the known east and west mineralization were targeted from testing in 2011 and are identified as such in the following chapter. Complete descriptions and images are well documented in the report prepared by Abitibi Geophysics.

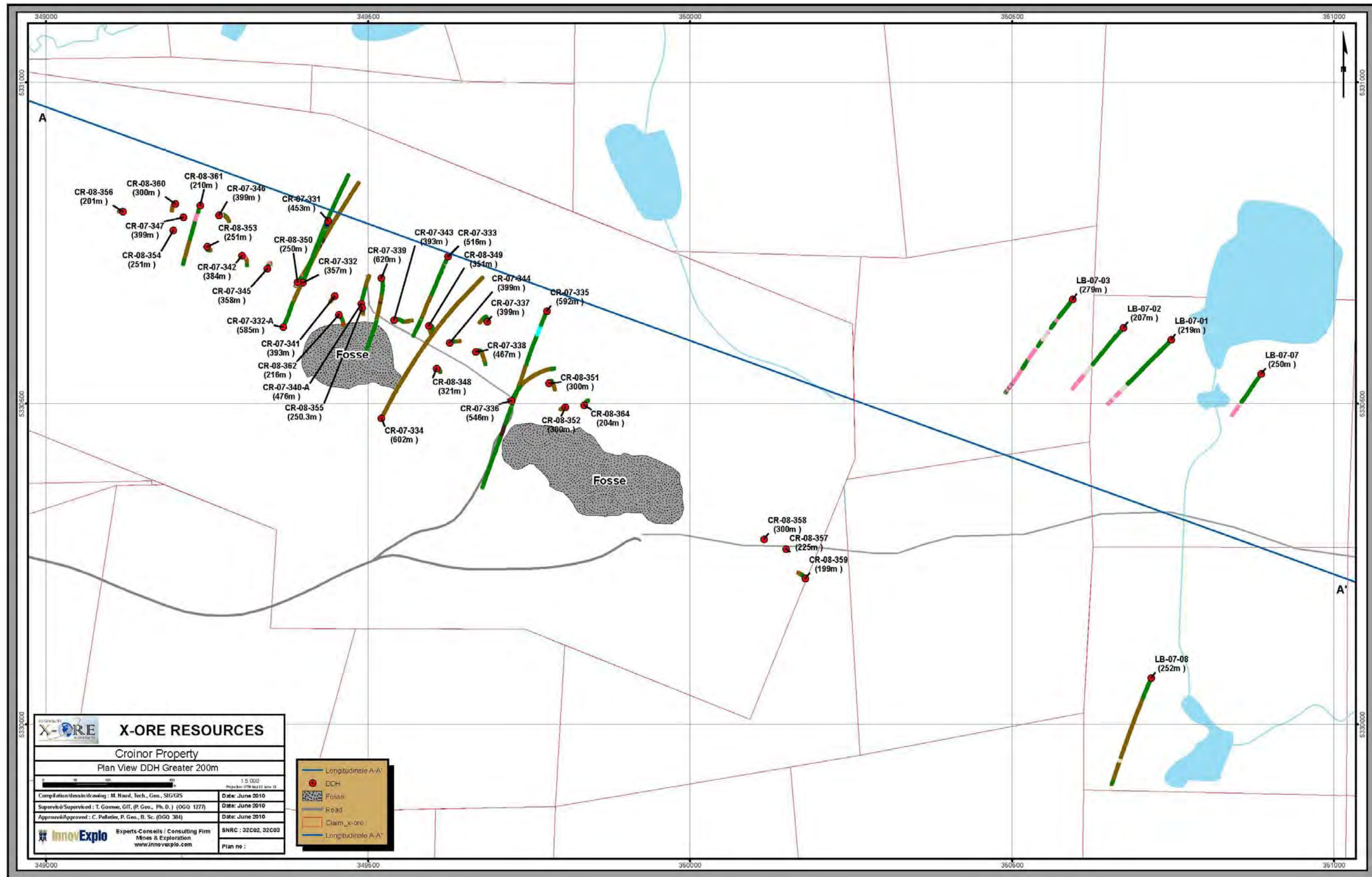


Figure 10.1 – Location of surveyed holes on Croinor property

11.0 DRILLING (Item 13)

The drilling programs conducted on the Croinor property by Blue Note (also under the name of X-Ore, formerly Malartic-Sud) are described below. The description during the period 1998-2004 is coming from the technical report by Pelletier and Boudrias (2005) and is summarized in the Table 11.1. The description of the drilling program during the period 2007-2008 is coming from the technical report by O'Dowd (2009).

11.1 Drilling for the period 1998 to 2004 (Malartic-Sud)

Table 11.1 – Drilling campaign of 1998 – 2004

Year	Description	Comments
1998	<ul style="list-style-type: none"> 9 drill holes for 2,150 m 	
2000	<ul style="list-style-type: none"> 52 drill holes for 6,000 m 	<ul style="list-style-type: none"> Updating of resources
2001	<ul style="list-style-type: none"> 58 drill holes for 4,087 m 	
2002	<ul style="list-style-type: none"> 121 drill holes for 14,137 m 	
2003	<ul style="list-style-type: none"> 2002-2003: total of 198 drill holes for 24,659 m in <u>pit area</u>. 8 geotechnical drill holes (tailings) for 814 m 	<ul style="list-style-type: none"> Discovery of Bug Lake, 1.34 g/t Au over 23.5 m incl, 4.59 g/t Au over 3.5 m and 3.44 g/t Au over 3.0 m
2004	<ul style="list-style-type: none"> 31 drill holes and 5 extensions for 4,094m on Bug Lake and Trench 2 area. 	

11.2 Drilling for the period 2007-2008 (X-Ore/First Gold.)

In 2008, First Gold Exploration completed 4,239 metres of drilling (17 holes) on its Croinor 1 project. During the same period, First Gold completed 2,212 metres of drilling (11 holes) on its Croinor 2 project. Total metres for 2007 and 2008 on Croinor 1 add up to 12,648 m and 3,833 m on Croinor 2. Both NQ and BQ rods were used during the 2008 program. NQ was only used in 2007. The use of BQ rods in the second half of 2008 was due to the lack of availability of NQ rods and the fact that drilling near vertical holes (-87°) did not require maximum stabilization equipment. Diamond drilling on the Mining lease (BM 862) was mostly aimed at testing lateral and vertical extensions of known mineralization related to the Croinor deposit. Most holes intersected anomalous to significant gold mineralization related to known zones or potentially new ones. Some of these intervals are included in the 2009 resources estimate. Others remain to be fully tested to be accounted for at this time. Drill spacing was established at 40 to 50 metres both laterally and vertically. In 2007, First Gold drilled a few holes that reached 500 to 600 metres in length. Mineralization was sparse in those holes. For the scope of the programs in 2007-2008, it was eventually decided to limit the drilling to 400 metres vertically. Giving the style of mineralization, as recently interpreted, drill spacing below 300 m is totally inadequate to investigate the gold potential of that area at depth.

Drilling on Croinor 2 was more speculative as small and poorly known showings were targeted. These targets resulted from a general compilation of the Croinor 2 project. A number of showings, most of which were discovered decades ago, were reviewed and some drill targets were defined. The information available for the compilation was usually quite poor and their location remained approximate.

Diamond drilling was carried out by Benoit Diamond drilling of Val-d'Or (now Major Drilling). NQ and BQ size tubes were used in 2008. Some holes were surveyed by Corriveau and

Associates while others were located by the company staff using a GPS unit. All casings were left in place and properly identified with aluminum tags on steel posts.

Holes were surveyed every 50 metres down hole using a Reflex unit (single shoot). Permitting and environmental matters were mandated to G.E.S.S.T. of Val-d'Or. Samples were prepared and assayed at Laboratoire Expert of Rouyn-Noranda or Technilab of Sainte Germaine de Boule. Core logging was performed by geologist Rodolphe Lavoie under the supervision of the Pierre O'Dowd. All drafting is being carried out in GEMCOM format by InnovExplo of Val-d'Or.

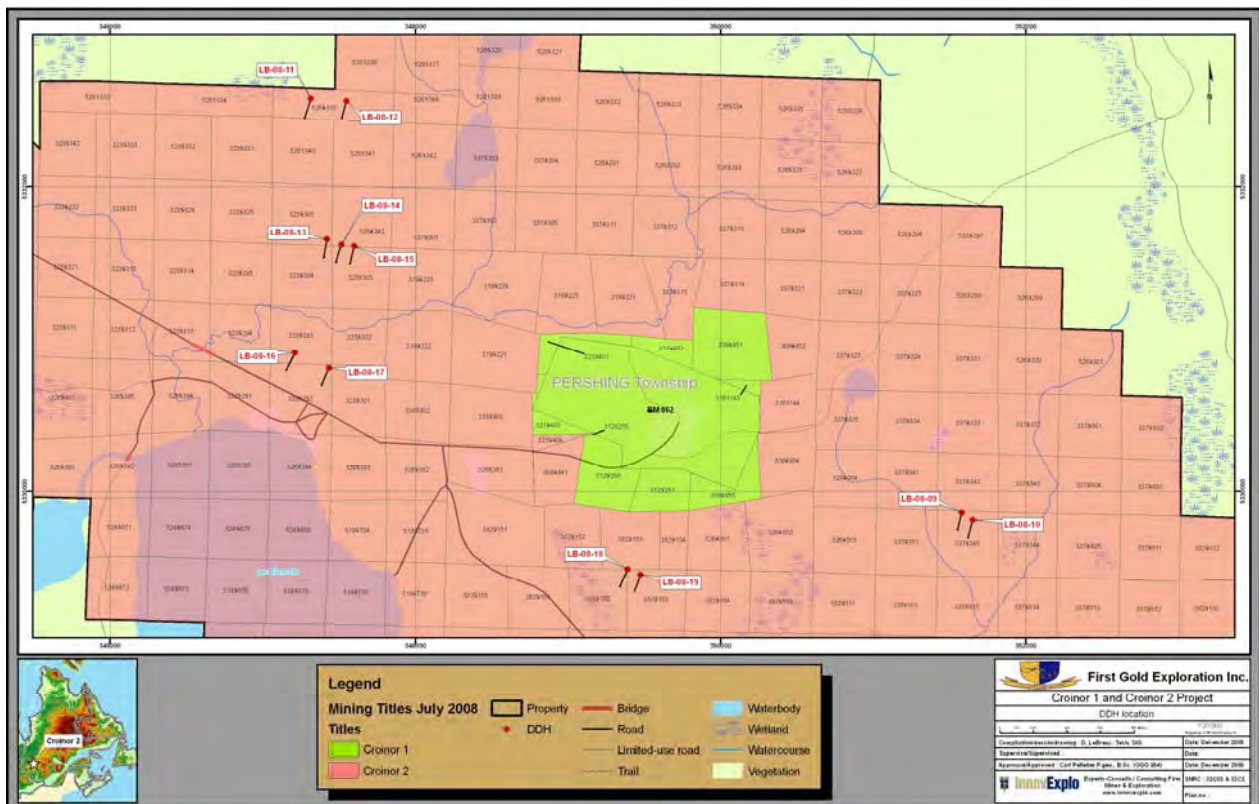


Figure 11.1 – 2007-2008 Diamond drill hole locations on claim map

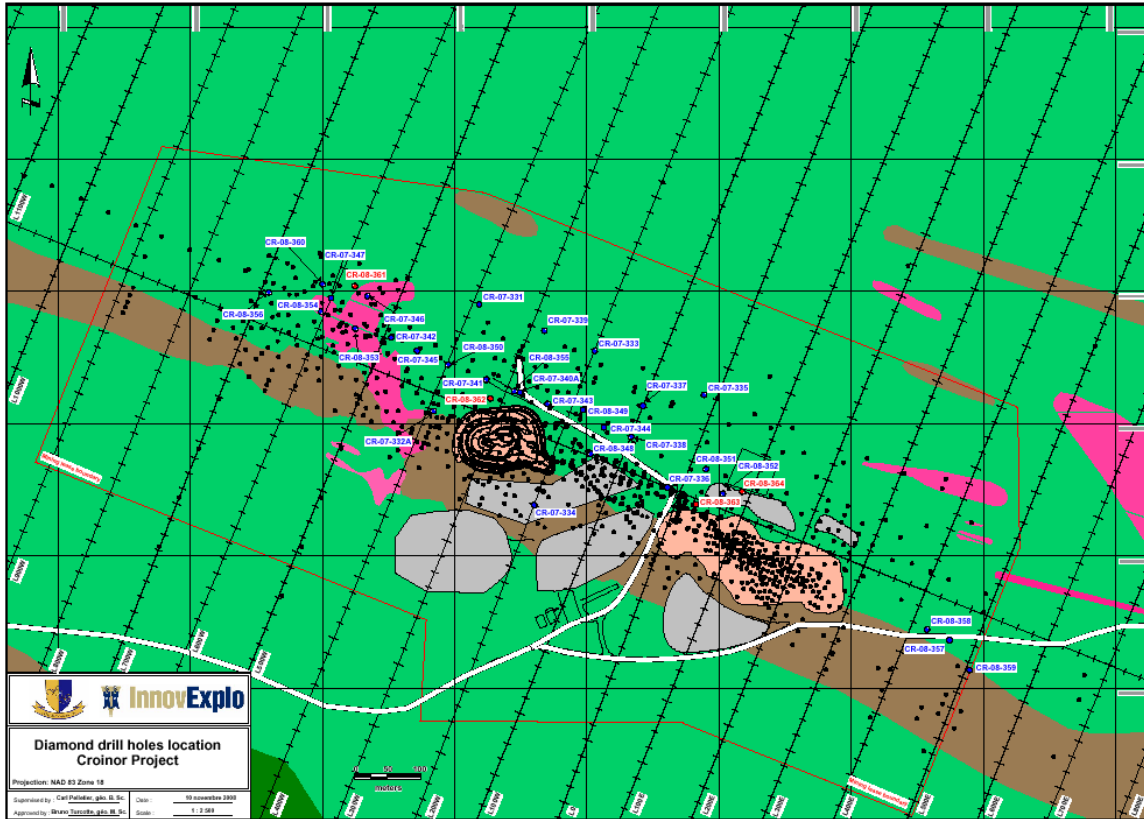


Figure 11.2 – 2007-2008 Diamond drill holes locations

Table 11.2 – Best Intersections CROINOR 1 - 2008

CROINOR 1 - 2008				
DRILL HOLE	FROM	TO	WIDTH	GRADE g/t
CR-08-348	122	123	1.00	2.44
CR-08-348	138	142	3.00	4.36
CR-08-348	145	146	1.00	1.57
CR-08-348	198	202	4.00	4.67
CR-08-348	221	223	2.00	3.80
CR-08-349	255	260	5.00	4.74
CR-08-349	261	262	1.00	1.54
CR-08-350	no value >1g			
CR-08-351	262	263	1.00	1.76
CR-08-352	158	159	1.00	1.30
CR-08-352	162	164	2.00	2.31
CR-08-352	181	182	1.00	2.21
CR-08-353	154	157	3.00	3.20
CR-08-353	170	171	1.00	2.21
CR-08-353	191	192	1.00	2.54
CR-08-353	197	198	1.00	1.12
CR-08-353	200	201	1.00	1.60
CR-08-354	155	156	1.00	4.25
CR-08-354	159	162	3.00	2.65
CR-08-354	164	165	1.00	1.77
CR-08-354	166	169	3.00	4.99
CR-08-354	170	172	2.00	5.33
CR-08-354	181	182	1.00	1.11
CR-08-354	190	192	2.00	14.26
CR-08-354	209	210	1.00	2.38
CR-08-354	211	213	2.00	2.26
CR-08-355	no value >1g			
CR-08-356	151.3	154	2.70	1.83
CR-08-356	187	188	1.00	1.90
CR-08-356	196	197	1.00	1.59
CR-08-357	176	181	5.00	2.30
CR-08-358	160	161	1.00	1.62
CR-08-358	172	173	1.00	1.12
CR-08-358	185	187	2.00	2.90
CR-08-359	107	108	1.00	6.22
CR-08-360	213.5	215	1.50	0.93
CR-08-360	218	219.5	1.50	8.13
CR-08-360	251	253	2.00	5.41
CR-08-360	298	299	1.00	1.03
CR-08-361	179	180	1.00	0.99
CR-08-361	182	186	4.00	1.35

CROINOR 1 - 2008				
DRILL HOLE	FROM	TO	WIDTH	GRADE g/t
CR-08-362	157.3	157.8	0.50	1.20
CR-08-362	166.5	168	1.50	1.48
CR-08-362	171	172.5	1.50	1.05
CR-08-362	171	172.5	1.50	1.05
CR-08-362	179.5	181	1.50	8.51
CR-08-363	72	78	6.00	9.07
CR-08-364	188	189	1.00	1.11
CR-08-364	191	192	1.00	1.01

Table 11.3 – Best Intersections CROINOR 2 - 2008

CROINOR 2 - 2008						
DDH #	FROM	TO	LENGTH	DIP	TRUE WIDTH	Au g/t
LB-08-16	119	120	1.00	55	0.82	1.12
LB-08-19	190	191	1.00	70	0.94	2.48
LB-08-19	191	192	1.00	70	0.94	2.59

11.3 Drilling for the period 2010 to 2011 (Blue Note)

Blue Note has been drilling the Croinor property since the end of the NI43-101 compliant prefeasibility study. In all, 53 holes were drilled for a total of 12,550 m (as of May 30, 2011). This section presents information about the various drilling programs. Because the assays results from the current drill program are still pending, the drilling performed in 2010 and 2011 is not included in the Mineral Resources estimates presented in the current report. However, InnovExplo is of the opinion that the results of the 2010 and 2011 drilling program could have an impact on the Mineral Resources Estimate. InnovExplo considers that the resources could increase (by less than 25%) with the recent drilling performed and recommend proceeding with a complete update of the Mineral Resources Estimate and the prefeasibility study as soon as the assays results will be available. A property map in the pocket (Appendix V) displays the drill holes locations for 2010 and 2011.

11.3.1 Drilling Program – 2010

The 2010 diamond drilling program started during the time that InnovExplo was carrying out the prefeasibility study. The initial phase of drilling at Croinor had two objectives:

1. To test the ground stability of the crown pillar in the Croinor gold deposit. This will provide key information for the mine engineering plan for future mining operations. The full report was completed by Golder Associates Ltd. InnovExplo carried out the core description and selected the samples for mineralization assay analyses.
2. To test near surface mineralization located west of the previously mined west pit for possible open pit potential.

Phase 2 of the Croinor drill program consisted of follow up drilling to delineate potential resources below and lateral to the current resource and to further test the mineralized diorite sill at depth.

A total of 11 diamond drill holes (NQ size) with a total of 720 m were logged and sampled for Phase 1 (Table 11.4) A total of 8 diamond drill holes (NQ size) with a total of 2,069 m were logged and sampled for Phase 2 (Table 11.5). The 2010 program included 602 samples, including certified reference material standards, blanks, and field duplicates.

Previous drilling west of the West Pit identified gold mineralization, typically within 20 metres of surface, which could be easily extracted with a shallow open pit. The 2010 campaign generally confirmed continuity of the mineralization and included higher grade intervals of 7.27 g/t gold over 1.0 metre within a 5.1-metre interval grading 2.30 g/t gold in CR-10-368 and 7.74 g/t gold over 1.1 metre within a 4.1-metre interval grading 2.65 g/t gold in CR-10-371.

Table 11.4 – Croinor Phase 1 drill holes from 2010

DDH	YEAR	Easting (UTM83 Z18)	Northing (UTM83 Z18)	Elevation (m)	Azimuth	Dip	Length	Note
CRG-10-01	2010	349386	5330632	3045	180	-70	98.6	Crown Pillar
CRG-10-02	2010	349580	5330529	3049	200	-70	71.7	Crown Pillar
CRG-10-03	2010	349703	5330481	3048	232	-62	71.4	Crown Pillar
CRG-10-04	2010	349817	5330487	3049	200	-57	113.52	Crown Pillar
CRG-10-05	2010	349906	5330316	3049	336	-75	90	Crown Pillar
CR-10-365	2010	349290	5330641	3040	202	-47	10.5	Abandoned hole
CR-10-365A	2010	349290	5330641	3040	202	-47	12	Abandoned hole
CR-10-365B	2010	349290	5330641	3040	202	-47	42	West Pit
CR-10-366	2010	349273	5330629	3040	202	-61	12	Abandoned hole
CR-10-366A	2010	349273	5330629	3040	202	-61	12	Abandoned hole
CR-10-366B	2010	349273	5330629	3040	202	-61	36	West Pit
CR-10-367	2010	349270	5330620	3041	202	-61	30	West Pit
CR-10-368	2010	349293	5330622	3040	202	-47	30	West Pit
CR-10-369	2010	349310	5330610	3041	0	-90	45	West Pit
CR-10-370	2010	349318	5330607	3041	0	-90	45	West Pit

Total Croinor Phase 1 = 719.72m

Table 11.5 – Croinor Phase 2 drill holes from 2010

DDH	YEAR	Easting (UTM83 Z18)	Northing (UTM83 Z18)	Elevation (m)	Azimuth	Dip	Length	Note
CR-10-371	2010	349346	5330601	3042	202	-42	30	
CR-10-372A	2010	349773	5330550	3045	202	-75	280	
CR-10-373	2010	349651	5330541	3045	202	-75	239	
CR-10-374	2010	349612	5330604	3045	202	-57	240	
CR-10-375	2010	349554	5330730	3045	202	-60	325	
CR-10-376	2010	349510	5330781	3045	202	-54	356.4	
CR-10-377	2010	349395	5330735	3045	202	-60	295	
CR-10-378	2010	349791	5330542	3045	202	-75	304	

Total Croinor Phase 2 = 2,069.4m

11.3.2 Drilling program – 2011

The goals of the 2011 programs included a step-out testing of gold mineralization identified in previous drilling within and further east of the planned development. In 2010, seven drill holes intersected significant gold grades and widths located in close proximity to planned development, demonstrating the potential to expand the reserves. Values returned from the seven holes included 11.81 g/t Au over 7.5 metres, 10.50 g/t Au over 6.7 metres, 29.3 g/t Au over 5.7 metres with values as high as 78.15 g/t Au over 1 metre.

Other targets to be followed-up from the previous campaign include those identified by the hole-to-hole 3D induced polarization (IP) survey east of the planned development, and testing of the host diorite sill to the west of the reserve area where an IP target was identified at the margin of the survey and beyond the limit of previous drilling.

One hole was done to test mineralized veins down dip within the diorite dyke (CR-11-408). In order to test this, a diamond drill hole was drilled close to parallel with the diorite through the diorite to a proposed depth of 750 m.

At the time of writing, the second phase was nearing completion.

A total of 24 diamond drill holes (NQ size) with a total of 7,198 metres were logged and sampled during the first phase (Table 11.6). A total of 7 diamond drill holes (NQ size) with a current total of 2014 metres were logged and sampled during Phase 2 (Table 11.7). The 2011 program included 2,765 samples, including certified reference material standards, blanks, and field duplicates. At the time of writing, assays of Phase 2 were pending.

Table 11.6 – Croinor Phase 1 diamond drill holes for 2011

DDH	YEAR	Easting (UTM83 Z18)	Northing (UTM83 Z18)	Elevation (m)	Azimuth	Dip	Length
CR-11-379	2011	350218	5330370	3045	202	-68	345
CR-11-380	2011	350168	5330323	3047	202	-56	267
CR-11-381	2011	350157	5330165	3049	202	-45	81
CR-11-382	2011	350254	5330327	3046	202	-67	309
CR-11-383	2011	350097	5330227	3049	202	-45	120
CR-11-384	2011	349947	5330582	3042	202	-68	435
CR-11-385	2011	349936	5330541	3043	202	-59	369
CR-11-386A	2011	349913	5330489	3044	202	-58	256
CR-11-387	2011	350054	5330550	3043	202	-62	453
CR-11-388	2011	350037	5330507	3044	202	-61	393
CR-11-389	2011	349524	5330813	3044	203.5	-62.4	405
CR-11-390	2011	349949	5330480	3045	200.7	-61	276
CR-11-391	2011	349423	5330751	3041	202	-70	255
CR-11-392	2011	349591	5330767	3045	202	-65	12
CR-11-392A	2011	349591	5330769	3048	202	-65	396
CR-11-393	2011	349627	5330649	3046	202	-70	309
CR-11-394	2011	350317	5330313	3046	202	-67	309
CR-11-395	2011	349120	5330958	3038	202	-70	327
CR-11-396	2011	350256	5330328	3046	202	-57	285

DDH	YEAR	Easting (UTM83 Z18)	Northing (UTM83 Z18)	Elevation (m)	Azimuth	Dip	Length
CR-11-397	2011	348979	5330959	3035	202	-69	295
CR-11-398	2011	349085	5330874	3039	202	-68	240
CR-11-399	2011	348957	5330907	3040	202	-68	212
CR-11-400	2011	349137	5331005	3040	202	-72	423
CR-11-401	2011	348991	5330991	3035	202	-79	426

Table 11.7 – Croinor Phase 2 diamond drill holes for 2011

DDH	YEAR	Easting (UTM83 Z18)	Northing (UTM83 Z18)	Elevation (m)	Azimuth	Dip	Length
CR-11-402	2011	349199	5330999	3045	202	-65	399
CR-11-403	2011	349234	5330968	3045	202	-70	414
CR-11-404	2011	349205	5330906	3045	202	-65	345
CR-11-405	2011	349165	5330914	3045	202	-65	300
CR-11-406	2011	349025	5330889	3045	202	-65	235
CR-11-407	2011	349058	5330970	3045	202	-65	321
CR-11-408	2011	349029	5330727	3045	22	-60	751

All of the holes in 2010 that tested west of the west pit and the mineralization at depth encountered significant gold grades and widths. The significant values are shown in Table 11.8a and Table 11.8b.

Table 11.8a – Significant intercepts from the 2010 drilling program testing west of west pit

Hole no.	Target Area	From	To (m)	Length	True width	Au g/t
CR-10-365B	W-West Pit	24	24.9	0.9	0.87	1.85
CR-10-366B	W-West Pit	20.8	21.8	1	0.98	2.53
	W-West Pit	27	27.6	0.6	0.6	1.52
CR-10-367	W-West Pit	14.8	16	1.2	1.18	2.61
	W-West Pit	16	16.5	0.5	0.49	0.47
CR-10-368	W-West Pit	13.7	14.7	1	0.99	7.27
	W-West Pit	17.4	18.8	1.4	1.04	2.90
	W-West Pit	22.9	24	1.1	1.05	0.48
CR-10-369	W-West Pit	15	16	1	0.76	3.31
	W-West Pit	21	21.6	0.6	0.46	0.83
CR-10-370	W-West Pit	14.2	17	2.8	2.15	1.55
	W-West Pit	17	18	1	0.76	0.48
CR-10-371	W-West Pit	22.9	24	1.1	1.09	7.74
	W-West Pit	27	28.1	1.1	1.1	0.36

Table 11.8b – Significant intercepts from 2010 drilling program

Hole No.	Section	Dip	From (m)	To (m)	Length (m)	True Width (m)	g/t Au
CR-10-372A	10E	-75	148.4	151	2.6	2.3	2.98
			150.2	151	0.8	0.7	7.16
CR-10-373	100W	-64	63.8	70.6	7.5	6.4	11.81
			66.8	67.8	1	0.9	32.10
			101.5	102.5	1	0.9	8.72
			128.9	130.4	1.5	1.3	6.27
			131.9	132.8	0.9	0.75	1.35
			133.35	134.2	0.85	0.7	1.71
CR-10-374	160W	-57	111.7	112	0.3	0.3	2.37
			123.5	124.5	1	0.8	12.65
			136	137	1	0.8	2.9
			140	141	1	0.8	1.47
			176.9	178	1.1	0.9	1.79
			188	189	1	0.8	6.71
			192.5	193.5	1	0.8	4.86
CR-10-375	260W	-60	224.1	226.5	2.4	2.2	19.94
			232.5	233.3	0.8	0.7	1.57
CR-10-376	320W	-54	226.1	227	0.9	0.9	10.46
			231.6	232.3	0.7	0.7	36.5
			239.7	240.7	1	1	21.45
			241.7	242.7	1	1	23.15
			243.7	244.7	1	1	78.15
			244.7	245.4	0.7	0.7	39.3
			280.6	281.1	0.5	0.5	10.95
CR-10-377	410W	-60	183	184	1	1	1.75
CR-10-378	30E	-75	145.5	146	0.5	0.5	2.58
			152	153.6	1.6	1.4	1.32

Intersections from holes drilled in 2011 on Section 750W include 21.70 g/t gold over 1.0 metre and 28.15 g/t gold over 1.0 metre in CR-11-395, 9.62 g/t gold over 2.5 metres including 17.83 g/t gold over 0.8 metre in CR-11-398 and 44.04 g/t gold over 0.5 metre in CR-11-400. The drill holes on Section 750W are 50 metres west of planned development in the current ore reserves. Step-out drilling on Section 880W intersected 4.04 g/t gold over 1.3 metres that included 6.88 g/t gold over 0.5 meter, indicating continuity of gold mineralization further to the west (Table 11.9).

Assays received for drill holes completed between sections 200E and 390W to test extensions of ore lenses proximal to the current ore reserves, returned up to 10.11 g/t gold over 0.9 metre in CR-11-390 and 6.35 g/t gold over 1.2 metres in CR-11-393 (Table 11.9).

Table 11.9 – Significant intercepts from the 2011 drilling program

Hole no.	Section	Dip	From (m)	To (m)	Length* (m)	Au g/t
CR-11-379	490E	-68	225.6	226.1	0.5	3.03
			226.8	227.7	0.9	7.03
			229.4	230.0	0.6	3.30
			268.3	268.8	0.5	3.49
CR-11-380	460E	-56	194.1	194.7	0.6	0.57
CR-11-381	510E	-45	61.4	61.9	0.5	5.69
			61.9	62.6	0.7	4.33
CR-11-382	540E	-67	199	199.6	0.6	11.75
CR-11-383	430E	-45	85.9	86.4	0.5	0.14
CR-11-384	160E	-68	237.6	238.5	0.9	3
CR-11-385	160E	-59	304	305.3	1.3	1.62
CR-11-386A	160E	-58	110.2	110.7	0.5	0.46
CR-11-387	270E	-62	248.6	249.6	1	1.81
CR-11-388	270E	-61	198.9	199.5	0.6	2.13
			199.5	200.2	0.7	8.23
CR-11-389	320W	-62	279.5	280.5	1	2.01
CR-11-390	200E	-61	153.8	154.7	0.9	10.11
			175.5	176.6	1.1	3.69
			227.9	228.4	0.5	1.07
CR-11-391	390W	-70	136	136.6	0.6	1.73
			205.3	205.8	0.5	1.38
CR-11-392A	240W	-65	297	299	2	4.24
			319	320.3	1.3	1.19
CR-11-393	160W	-70	180.2	181.1	0.9	1.38
			181.1	181.6	0.5	5.73
			245.8	247	1.2	6.35
			247	248.1	1.1	0.69
CR-11-394	509E	-67	205.1	205.9	0.8	4.24
			259.7	260.7	1	21.7
CR-11-395	750W	-70	285	285.5	0.5	6.17
			310	311	1	28.15
			188.4	189.5	1.1	0.22
CR-11-396	540E	-57	188.4	189.5	1.1	0.22
CR-11-397	750W	-69	232.6	233.6	1	28.15
CR-11-398	750W	-68	158.4	159.2	0.8	1.45
			159.2	159.7	0.5	15.03
			159.7	160.4	0.7	2.73
			160.4	160.9	0.5	0.73
CR-11-399	880W	-68	160.9	161.7	0.8	17.83
			168.4	169.2	0.8	0.79
CR-11-400	880W	-72	263.5	264	0.5	44.04
			314.8	315.5	0.7	1.94
			339.2	340.3	1.1	2.79
			359.8	360.9	1.1	3.87
CR-11-401	880W	-79	303.6	304.1	0.5	6.88
			304.1	304.9	0.8	2.27
			321.7	322.7	1	1.89
			335.3	335.8	0.5	1.85
			340.3	342.9	2.6	1.58

12.0 SAMPLING METHOD AND APPROACH (Item 14)

This section presents the sampling method and approach adopted during previous work programs, the work performed by Exploration Malartic-Sud Inc (Malartic-Sud) from 1998 to 2005 (Pelletier et Boudrias, 2005), the work performed by X-Ore/First Gold (O'Dowd, 2009) and the work performed by Blue Note.

12.1 Exploration Malartic-Sud (1998-2005)

12.1.1 Drill core sampling

Samples were taken from the core after it was measured and described (logged). Samples were typically from alteration zones, quartz veins, shear zones and pyritic intervals.

According to Malartic-Sud, there was no written protocol for the sampling procedure, but they sampled according to industry standards: a maximum sample length of 1.50 m and a minimum of 0.5 m for any BQ or NQ core. However, the maximum length was typically shortened to 1.00 m in mineralized zones for NQ core. The minimum sampling length was occasionally reduced to less than 50 cm if warranted (that is, to 25–30 cm) (Marchand, written communication).

InnovExplo verified the sample lengths in Malartic-Sud's computerized database. Drill core sample lengths varied from 0.3 m to 2 m, with an average of about 1.3 m.

12.1.2 Blast hole sampling

InnovExplo is of the opinion that the sampling procedure adopted by Malartic-Sud at the beginning of open pit operations in 2003 was inadequate. This procedure, which lasted until InnovExplo established a new protocol in September 2004, involved systematic sampling every 2.5 m without taking into account the starting elevation. This caused a non-uniform horizontal distribution of the grades (upper part of Fig. 12.1). The grade established for a given bench was therefore not necessarily representative of the material ultimately extracted.

When InnovExplo came into the project in September 2004, the firm's representatives modified the protocol so that each bench was sampled in a truly representative manner (lower part of Fig. 12.1) according to the following instructions:

1. The first sample should end at the 1st bench elevation encountered. If the length is less than 1 m, the sample is added to the 2nd bench sample;
2. No samples are to be taken from the sub-drilling (it comes from the underlying bench);
3. Sample tickets must be put in the bags;
4. Samples books must be legible;
5. Samples must be collected from the pile of cuttings from the drilling waste using a sampling shovel.
6. Sampling is performed on a systematic grid of 2.5 m by 2.5 m.

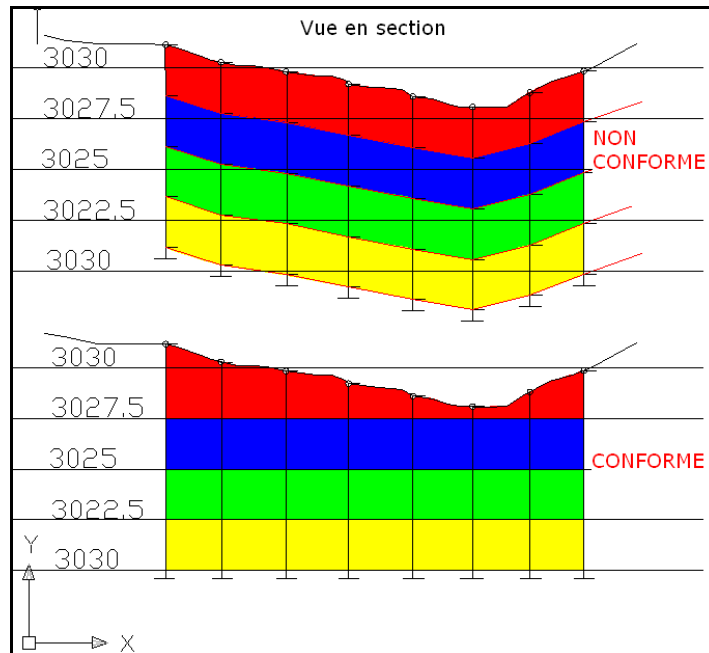


Figure 12.1 – Blast hole sampling. Top: non-uniform horizontal grade distribution caused by the pre-September 2004 sampling protocol; bottom: InnovExplo’s 2004 sampling protocol provides representative grades for a given bench.

12.1.3 Channel sampling on outcrops

Channel samples were taken with a diamond saw. The channels were cut perpendicularly to the mineralized zone with the following dimensions: 1 m long, 5 to 10 cm wide, and 2.5 to 3 cm deep.

12.1.4 Chip sampling

Croinor Pershing Mines sampled underground drifts in the 1940s by chip sampling both walls and the backs of the drifts (Fig. 12.2). Chip samples were systematically taken after each blasting sequence as drifting progressed (Saucier, 2003). The drift sampling was completed by channelling every two (2) metres, on average, between samples. The average length of individual samples was 0.5 metre. The walls and back were sampled when mineralization or quartz veins were present.

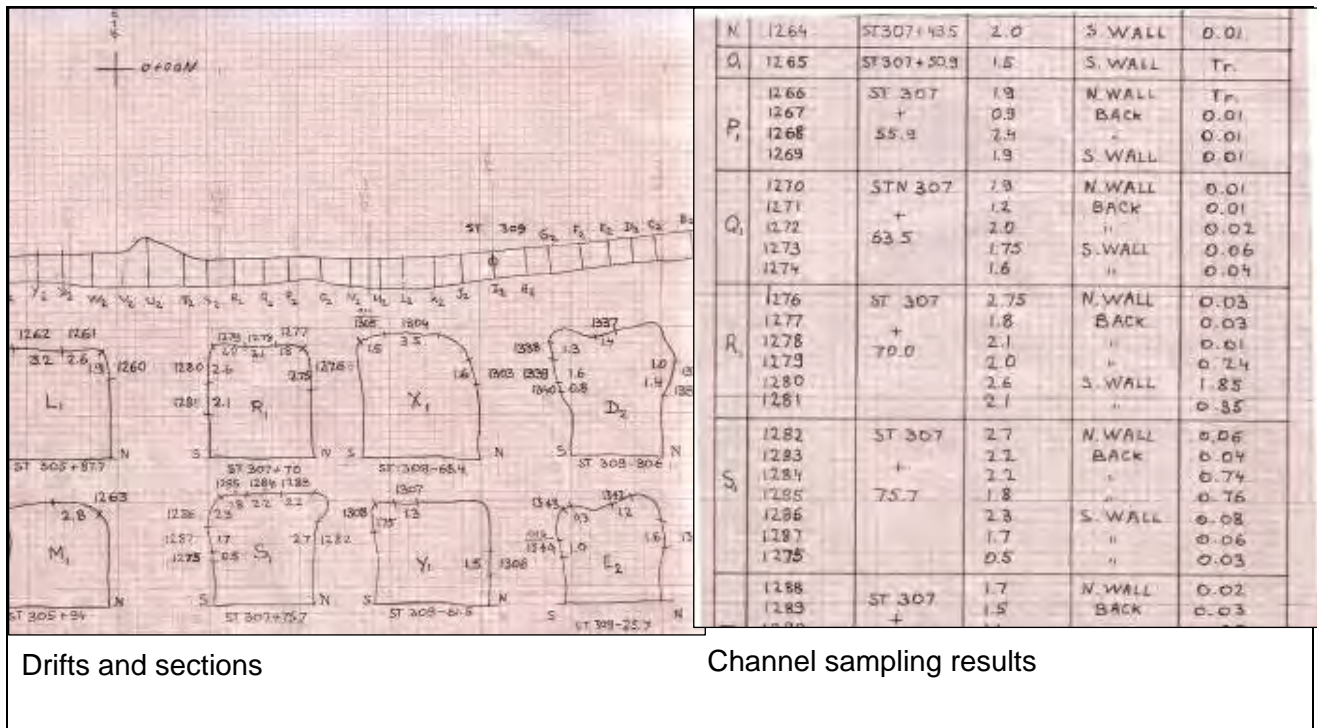


Figure 12.2 – Underground channelling, west drift, level 375. Taken from Malartic-Sud archives.

12.2 Exploration First Gold/X-Ore (2007-2008)

Cores boxes are collected at the drill site every morning by the project geologist or his assistant. Core boxes are opened at the company core shed and eventually labelled according to hole number and depth of the interval in the box (e.g.: CR08-348 141 to 145.5).

The core is then reviewed and described by the geologist who outlines intervals to be sampled with red marks and two sample tags provided by the laboratory (indicating the sample number). One tag is placed in the sample bag and the other is left in the core box to locate the sample. Sample information is listed in the sample book and in the geologist's log (date, interval sampled).

The geologist determines the size of the interval based on geological parameters such as geological contact, alterations, mineralization, etc. Samples rarely exceed 1.5 metres and are usually of a minimum of 30 cm. Most of the 2007 and 2008 sampling were done with 1.0 metre intervals. The procedure is identical for BQ or NQ size core.

12.3 Blue Note (2010-2011)

InnovExplo defined the sampling procedure for Croinor from 2010 onwards. The protocol specifies that samples should be half-split core samples 0.5 to 1.5 metre long determined by geological criteria. If samples required re-analysing for verification purposes a quarter split of the remaining sample may be taken for analysis.

Every zone containing pyrite and quartz vein mineralization (both or singular occurrence) was considered potentially mineralized and therefore sampled. Diamond drill hole core at Croinor is regularly intact with little possibility of loss due to wash out and considered to be of good quality. The core was rarely ground, and where this occurred, it was only over short distances (less than 0.8 m). Overall, the drill core recovery from the mineralized zones can be considered to be representative.

All drill core since 2010 is stored and categorized for future reference purposes at the Blue Note storage facility.

13.0 SAMPLE PREPARATION, ANALYSES AND SECURITY (Item 15)

13.1 Exploration Malartic-Sud (1998-2005)

Samples are marked on the core by the geologist describing it. A technician splits the core in two by means of a hydraulic splitter. He puts back the first half of the core into the box keeping it as reference. The second half is put with a ticket sample in a thick plastic sample bag. A ticket sample bearing a control number is put in the core box with the half sample kept as reference. The splitter and the sampling box are cleaned between each sample preparation to prevent any contamination. Samples are then prepared for shipment and a shipping list is set (Chénard and Turcotte, 2003). Malartic-Sud's technician then delivers the samples to the Chimitec-ALS Chemex laboratory in Val-d'Or.

Samples from quartz veining or highly mineralized were assayed through coarse gold separation method to counterbalance the free gold effect. The balance of the samples was assayed through the fire assay method with atomic absorption finish on 30 g portions. Results grading over 1 g/t Au were systematically assayed again through fire assay with gravimetric finish.

13.2 Exploration First Gold/X-Ore (2007-2008)

Selected intervals for assaying are split in two using a manual or hydraulic core splitter. On half of the interval is put in a plastic bag with one of the tags left in the box by the geologist. The other half is put back at its original location in the core box with the second tag to identify the interval for future reference. The sample bag is sealed and readied for shipping to the laboratory.

The core splitter is thoroughly cleaned between every sample to avoid contamination. Once all intervals have been collected in a box, it is piled outside the company core shed and eventually strapped when piles reach 1.5 metres in height. Samples are brought or shipped to the laboratory at regular intervals depending on volume (every week or every few days).

Only company employees are permitted to handle the samples before reaching the laboratory of the shipping company.

Sampling procedure and approach for drilling programs prior to First Gold Exploration are described in the 2005 NI43-101 report (Pelletier & Boudrias, 2005).

Appendix II gives an exhaustive description (french) of the procedures for sample preparation and analyses in 2007 and 2008. Two accredited independent laboratories were used by First Gold: Laboratoire Expert of Rouyn-Noranda and Technilab of Sainte Germaine de Boule. Sampling preparation and analyses for drilling programs prior to First Gold Exploration are described in the 2005 NI43-101 report (Pelletier & Boudrias, 2005).

13.3 Blue note (2010-2011)

A core shack facility including a partitioned housing area, a rock saw was established in Val-d'Or at InnovExplo during the drilling programs. InnovExplo was responsible for defining the sample preparation, analysis and security protocols for the drilling conducted by Blue Note

mining in 2010. Those protocols remain unchanged at the time of writing this report. Assays were performed at the independent and accredited ALS-Chemex laboratories in Val-d'Or, Quebec or Timmins, Ontario. There is no indication of anything in the drilling, core handling and sampling procedures or in the sampling methods and approach that could have a negative impact on the reliability of the reported assay results.

Drill core is boxed, covered and sealed at the drill rig and moved to the InnovExplo logging and sample preparation facility by the drillers or InnovExplo personnel. After being examined and logged (described), the core is sampled according to the established protocol. The core of the selected section is first cut in half using a typical table-feed circular rock saw, with one half put aside for eventual shipment to the laboratory. The second half of the core is put back in the core box. A tag bearing the same number is placed at the end of the sawed core half, in the core box and within the sample bag containing the other half to be sent to the laboratory. Core sample intervals are selected based on the presence of visual mineralization and geological contacts.

Once the samples arrive at the ALS-Chemex laboratories, they are dried then crushed (jaw crusher) to 90% passing 10 mesh (2 mm). Samples are then riffle-split (Jones riffle splitters) to reduce the sample size for pulverization to a maximum of 1 kg. The 1-kg subsamples are then pulverized (ring and puck) to 90% passing 200 mesh (75µm). A 50-g split is taken from each pulp for fusion. Analytical protocols require all samples be finished using acid digestion-AAS finish (Au-AA26). All results with initial AAS results greater than 3 g/t Au were re-assayed from the same pulp using gravimetric finish (Au-GRA22).

In addition to the regular sampling and assaying of samples, additional quality control protocols initiated externally by InnovExplo require the preparation of various duplicate samples to estimate the precision (i.e. reproducibility) and accuracy (i.e. correctness) of the reported values. Each batch of 25 samples included a certified standard, a blank and field duplicate. Field duplicates were selected randomly and each batch of 25 samples should contain a duplicate from a previous batch of 25. The data was crosschecked once the batch results were complete. Internally, ALS Chemex also conducts quality control protocols by systematically conducting a duplicate for every 25th sample within the batch sent to the lab.

The laboratory delivered results in electronic format through the ALS Chemex Webtrieve™ system via the Internet, as well as by e-mail sent to various recipients at InnovExplo. Assay results were reported in grams per tonne (g/t) and transferred directly into the centralized assay database (available in two formats: GeoticLog and Gemcom).

14.0 DATA VERIFICATION (Item 16)

A QA/QC program was implemented at the beginning of the drilling program in 2007 and followed it through the 2007-2008 drilling programs. In addition to the various and systematic checks made by the laboratories (use of standards and duplicates), five different gold standards and one blank were used.

One standard or one blank were introduced randomly every 31 samples on average (total of 1,756 samples, including 54 blanks and gold standards).

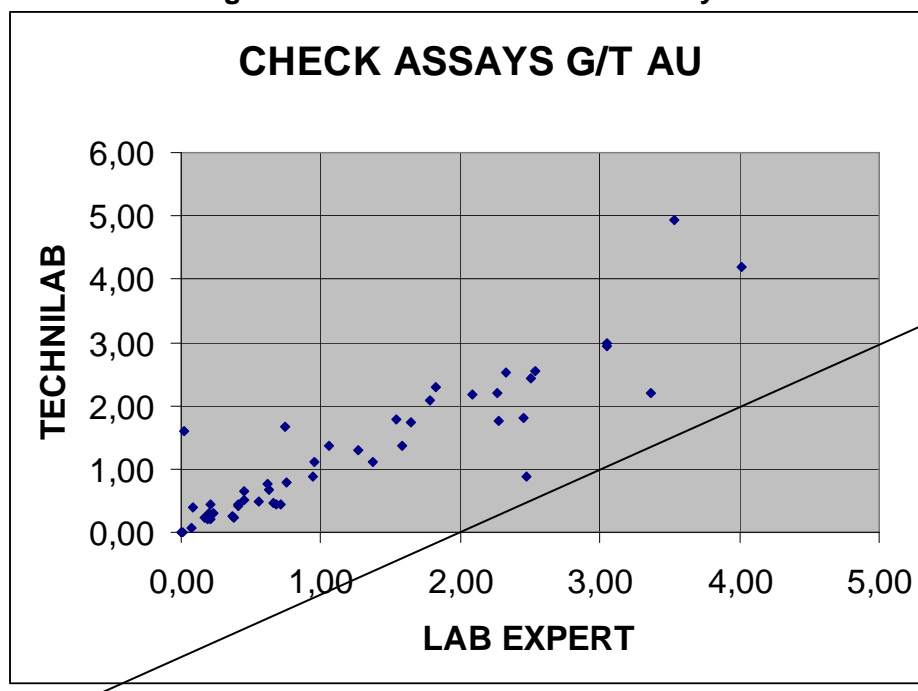
All samples returning values above 3 g/t Au are systematically re-assayed (above 1 g/t Au in 2007). Finally, 50 samples were selected randomly to be re-checked at a different laboratory. Counting the 123 duplicates performed by the laboratories, a total of 227 control samples were assayed for gold (excluding re-assaying of high grade samples). Duplicates were also performed for silver but they are not discussed in the report. Metallic sieve assaying was used once on a sample exhibiting coarse gold.

The following graphics give an overview of the results of the quality control program (Tables in Appendix III).

14.1 Re-Checks

Figure 14.1 shows the results of the check assaying performed at Laboratoire Expert of Rouyn Noranda on samples initially assayed at Technilab of Ste Germaine de Boulé. Of the 50 re-checks performed, we note that one sample is clearly discordant (1.6 g/t Au at Technilab vs 0.021g/t Au at Lab Expert) and four samples show a moderate correlation. Overall though, the correlation coefficient is 90%, hence acceptable.

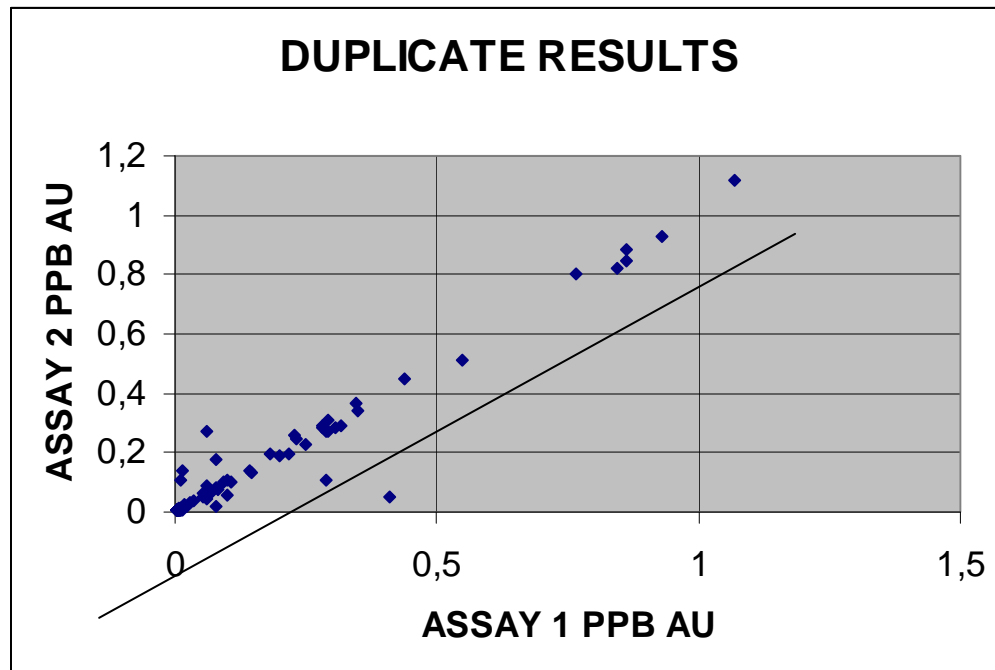
Figure 14.1 – 2007-2008 Check Assays



14.2 Duplicates

Technilab performed 39 duplicates for gold and as many for silver in 2008. Giving the sub-economic nature of the silver on this project, no statistics were performed for those results. Lab Expert performed 84 duplicates on the 2007 samples. As seen on Figure 14.2, correlation between the two populations is excellent (97.5%).

Figure 14.2 – 2007-2008 Duplicates



14.3 Blanks

A total of 27 blank samples were inserted with the regular samples in 2007 and 2008 (Fig. 14.3). Lab Expert had a lower detection limit expressed as <5 ppb Au while Technilab's is <0.06 g/t Au. To homogenize the data set, a value of 5 ppb was given to results below detection limits for both labs.

The average of all blank samples gives 18.1 ppb Au. However, if a result of 112 ppb Au is eliminated the average comes down to 14.5 ppb Au. This average is a bit high but remains acceptable giving the high grade nature of the mineralized intervals on the project.

14.4 Gold Standards

A total of five gold standards were used as control samples (Fig. 14.4).

The first standard has a certified grade of 81 ppb Au. The average of the eight results obtained for this standard gave 129 ppb. This result is strongly biased by a value of 396 ppb

Au and moderately biased by a value of 196 ppb Au. Other results are within acceptable range.

The second gold standard used is 197 ppb Au. One result (5,722 ppb Au) is clearly contaminated. When this result is removed, the average of the five remaining samples is 182.6 ppb Au, hence acceptable.

The third certified standard used is 1,801 ppb Au. The average of three results is 1,638.7 ppb Au. Two of the samples are quite accurate while a third one is too low grade (916 ppb Au).

The fourth certified standard has a grade of 2,645 ppb Au. All six results were excellent and the average gave 2,652 ppb Au.

The fifth standard has a value of 3,557 ppb Au. The four samples averaged 3,615 ppb Au, only slightly higher than anticipated.

Figure 14.3 – 2007-2008 Blank Samples

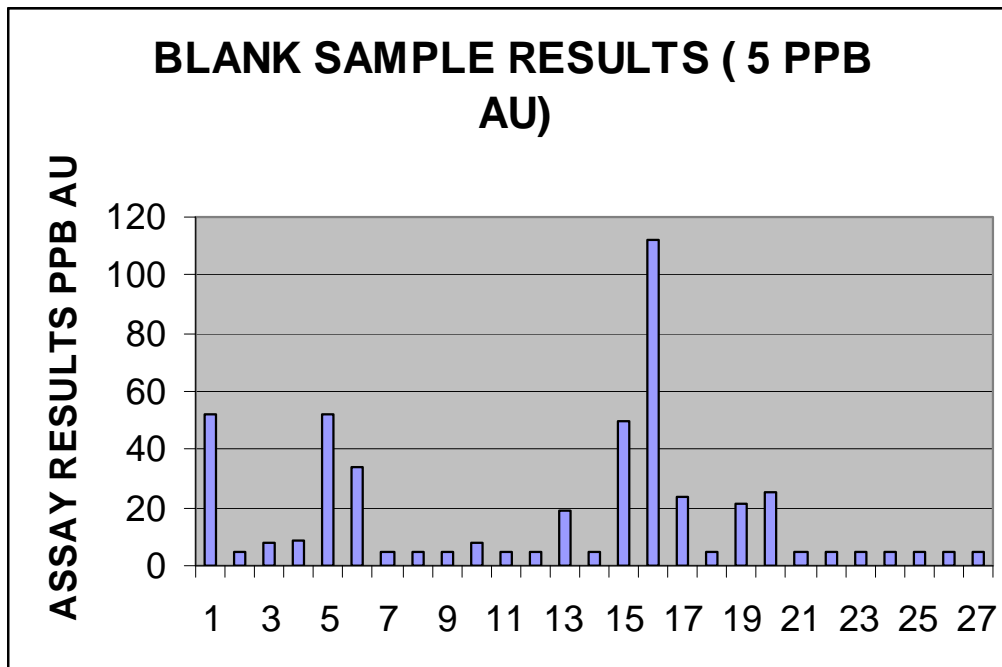
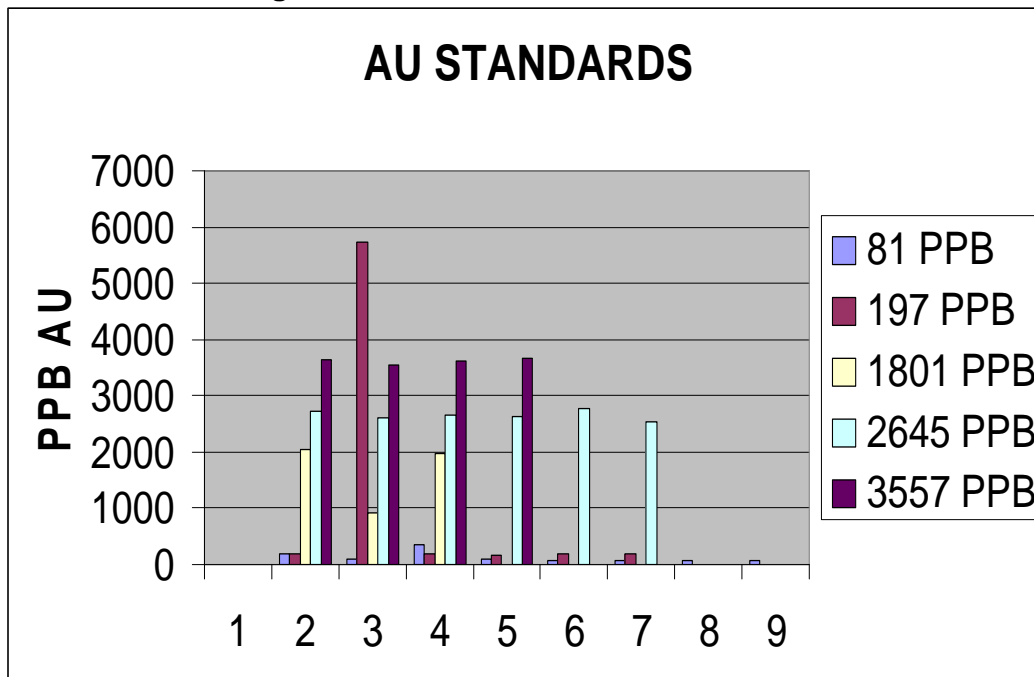


Figure 14.4 – 2007-2008 Gold Standards



When Pierre O’Dowd started to work on the project in 2007, several verifications were made in order to get familiar with the gold mineralization on the property and to insure that historical data were reliable.

The exploration team carried out the following procedure:

- Verification of the location of old casings in the field;
- Review of old logs and old core at X-Ore’s coreshed in Val-d’Or;
- Visit to mineralized areas in the field to check the type of mineralization their historical descriptions (Ore and waste piles, open pit walls, Lac Bug showing, Trench 2 and others).

In addition to this preliminary work, all drill hole data (deviation, orientation, dip etc.) and all mineralized intervals (from, to, grades), recent and historical, were validated for the resource estimates and several mistakes in the data bank were found and corrected. When all data were integrated into Gemcom, the old geological interpretation was re-assessed and modified to account for the new information accumulated in recent drilling programs.

The measured portion of the resource estimates was not re-interpreted but all data (mostly from underground sampling) were rechecked, some errors were found and corrected which explain the minor discrepancies with the 2005 estimate for that resource category.



Figure 14.5 – Block of mineralized quartz vein on an ore pile at the Croinor mine site (summer of 2007)



Figure 14.6 – Close up on a sheared diorite with quartz veining and carbonate alteration, from an ore pile at the Croinor site (summer of 2007)

15.0 ADJACENT PROPERTIES *(Item 17)*

Two of the properties surrounding the Croinor property are owned by Blue Note, the Pershing property to the south and the Bel-Rive property to the North. Between the Croinor and Bel-Rive properties, there is a block of claims owned by Yves Lemieux. To the west, the property is limited by a block of claims owned by René Rousseau. Three others properties are in contact with the Croinor property, a property owned by Brionor Resources to the north, one owned by Wen Fan to the East and one owned by Canadian Mining House to the south (Fig. 15.1).

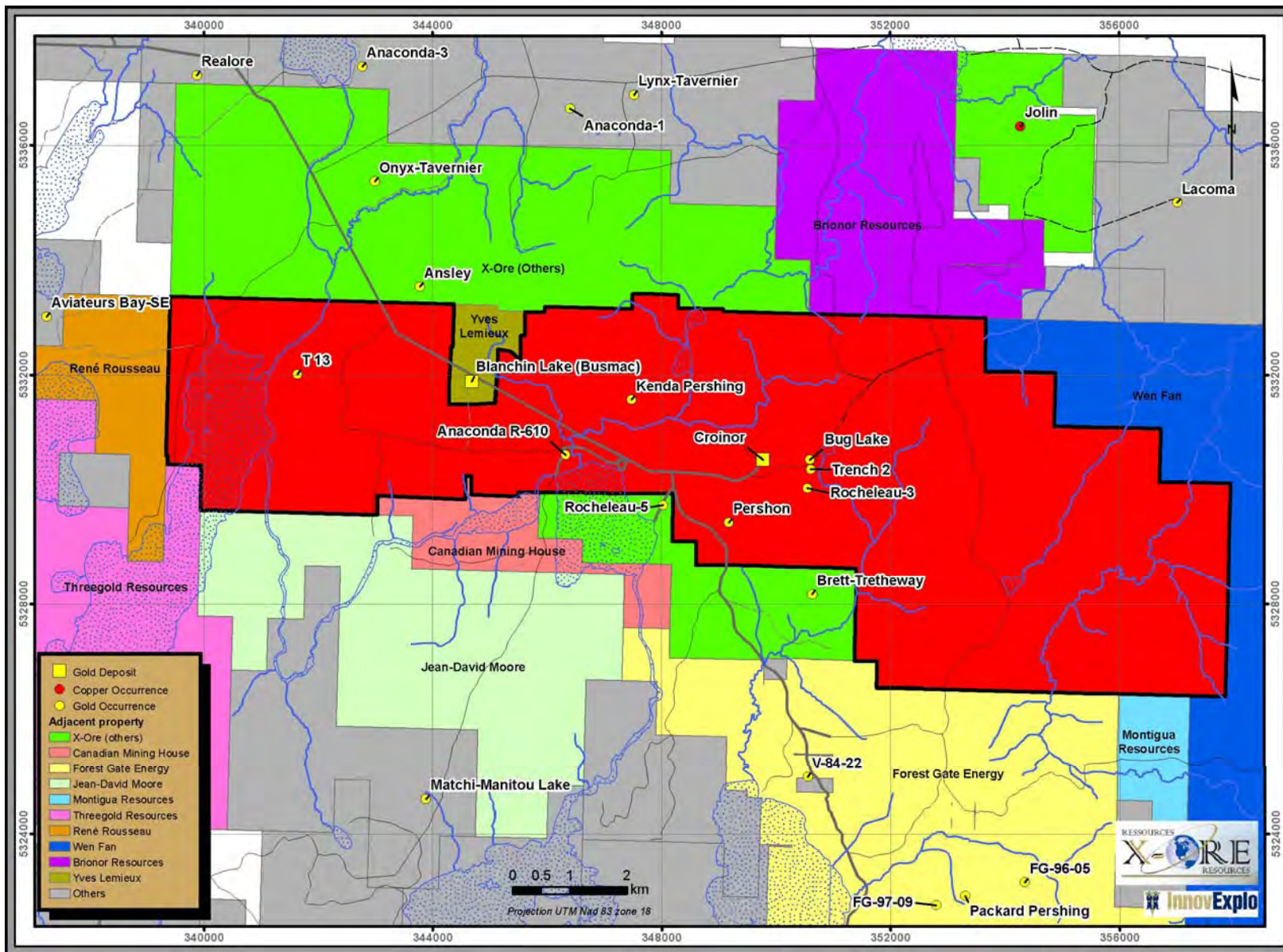


Figure 15.1 – Properties and mineral occurrences in the vicinity of the Croinor property

16.0 MINERAL PROCESSING AND METALLURGICAL TESTING *(Item 18)*

In this section, InnovExplo presents the results of milling operations using the available information from reports. InnovExplo cannot guarantee the accuracy of this information.

InnovExplo did not perform metallurgical tests or any other type of mineral processing testing. The reader is directed to the reports by Chénard and Turcotte (2003) and St-Jean (2001, 2003) for a more complete review of the information from previous milling tests and milling operations.

16.1 Earlier milling operations

16.1.1 Cambior's 1988 metallurgical tests

Cambior requested that Lakefield Research Laboratory perform metallurgical tests (Salter and Furey, 1988 and Chénard and Turcotte, 2003). Flotation and direct cyanidation tests were performed on a 76.8-kg sample composed of mineralized intersections from sixteen (16) drill holes. The direct cyanidation tests reported recovery rates close to 98%, whereas flotation tests gave recovery rates of over 96%. During these tests, the density of the treated mineralized material was 2.82 g/cm³. Note that the calculated grades obtained during Lakefield's tests are comparable to Cambior's original core assays, but the values for both were higher than Lakefield's assays on the same core samples.

16.1.2 Malartic-Sud's 2001 and 2003 metallurgical tests

Malartic-Sud performed two (2) metallurgical tests (Table 16.1). The mandates for these tests were assigned to Laboratoire LTM Inc (St-Jean, 2001; 2003). The first test was to verify the behaviour of the Croinor mineralized material in the Chimo mill. The Knelson tests gave a recovery of 47.3%, flotation tests yielded rates from 83 to 98%, and cyanidation tests gave recovery rates of 96.3% with grinding. Note that the assay grades for the core samples were higher than the grades calculated for the feed during the tests.

Malartic-Sud's second test was performed on two (2) samples from two different zones. Flotation tests gave recovery rates of 94.9% and 97%, and cyanidation tests yielded corresponding recovery rates of 95.1% and 99.1%. Note that the grades obtained during these tests were higher than the grades given for the assayed core. The first sample graded 4.45 g/t Au when assayed from core, whereas the average calculated grade of the feed during the cyanidation tests for the same sample was 6.35 g/t Au. The second sample yielded 6.68 g/t Au when assayed, whereas the average calculated grade of the feed during the cyanidation and flotation tests was 7.45 g/t Au.

The results obtained over these two periods show that there is no difference in the processing characteristics of mineralized material with different grades.

Table 16.1 – Results from metallurgical testing

Company	Year	Type of tests	Pulverization	% recov.	Calculated grade (g/t)	Measured grade (g/t)	Grade difference (g/t)	Grade difference (%)
Cambior	1988	Cyanide	76.8% - 200 MESH	97.8	5.99	5.88	-0.11	1.8
		Cyanide	82.8% - 200 MESH	97.9	5.99	5.58	-0.41	6.8
		Cyanide	88.8% - 200 MESH	97.8	5.99	5.87	-0.12	2.0
		Cyanide	80.0% - 200 MESH	96.7	5.99	5.98	-0.01	0.2
		Flotation	70.0 % - 200 MESH	96.4	5.99	6.01	0.02	0.3
		Flotation	80.0 % - 200 MESH	96.3	5.99	5.46	-0.53	8.8
Malartic-Sud	2001	Flotation	90.0 % - 200 MESH	96.6	5.99	6.41	0.42	6.6
		Knelson	100% -10 MESH	47.3	3.24	2.06	-1.18	36.4
		Flotation	94.1% - 200 MESH	83.3	3.24	2.24	-1.00	30.9
		Flotation	94.1% - 200 MESH	69.9	3.24	2.97	-0.27	8.3
		Flotation	94.1% - 200 MESH	97.7	3.24	2.94	-0.30	9.3
		Cyanide	94.1% - 200 MESH	96.3	3.24	2.01	-1.23	38.0
Malartic-Sud	2003	Cyanide	97.3% - 200 MESH	97.3	3.24	2.01	-1.23	38.0
		Flotation	77.8% - 200 MESH	97.0	4.45	4.12	-0.33	7.4
		Cyanide	68.0% - 200 MESH	94.3	4.45	5.04	0.59	11.7
		Cyanide	79.9% - 200 MESH	95.8	4.45	6.42	1.97	30.7
		Cyanide	82.6% - 200 MESH	93.8	4.45	5.97	1.52	25.5
		Cyanide	84.9% - 200 MESH	94.2	4.45	9.00	4.55	50.6
		Cyanide	87.6% - 200 MESH	95.7	4.45	6.74	2.29	34.0
		Cyanide	94.8% - 200 MESH	93.9	4.45	6.44	1.99	30.9
		Cyanide	97.4% - 200 MESH	96.1	4.45	4.87	0.42	8.6
		Flotation	80.5% - 200 MESH	94.9	6.68	7.33	0.65	8.9
Cyanide	93.0% - 200 MESH	99.1	6.68	7.56	0.88	11.6		

Source: Chénard and Turcotte (2003)

16.1.3 Bulk Sampling

Before Exploration Malartic-Sud began working on the Croinor Project, three (3) bulk samples had been extracted from the property as per the summary in Table 16.2.

Table 16.2 – Bulk samples taken from 1972 to 1997

Year	Location	Mill	Tonnage (t)	Grade (g/t Au)	Recovery Au (%)
1972	Underground	Goldfields	9 979	3.70	95.0
1983	Underground	Belmoral	1 700	1.47	86.0
1996-1997	Goldust pit	Aur-Bel/Chimo	51 010	3.40	97.0

Malartic-Sud milled ore five times since 2003: one period for the bulk sample in 2003, and 4 other periods for the Centre and West open pit operations. All the ore was processed through the Camflo mill in Malartic, owned by Richmond Mines Inc.

16.2 Milling and Metallurgy

The following sections report the milling and metallurgy results of the bulk sample of mineralized material that was processed at the Camflo mill from February 3 to February 25, 2004, as described by Mr Oscar Lafrance, a consultant hired by Malartic-Sud to supervise the milling operations. The text is from the report by Moryoussef (2004). InnovExplo did not verify the data but assumes they are valid and pertinent. No report exists for the milling of mineralized material from the Centre open pit, but the process was exactly the same and also supervised by Lafrance. It should be noted that since the Camflo mill custom processes the milling of ore from

many different sources, a circuit inventory is done before and after each campaign to obtain a representative metallurgical balance. Table 16.3 presents the summary of Malartic-Sud's milling performed at the Camflo mill.

16.2.1 Milling Method

The Camflo mill uses a direct cyanidation circuit for the mineralized material. All the mineralized material is crushed and grinded until 70 to 85% of the material pass through a 200 mesh sieve. It should be noted that grinding could be adjusted to be finer or coarser if needed. All crushed mineralized material in a cyanide and lime solution is agitated in retention tanks in presence of cyanide which, combined to oxygen, dissolves the gold. The solution is then recovered through decant and filtration then, taking out the oxygen, by creating a vacuum, and also by adding zinc powder to the solution, gold is precipitated and then recovered in press filters. The precipitate is then recovered and mixed to a flux to cast an unpure [sic] gold bar which is carried to the Royal Canadian Mint or any other refiner to be purified and marketed. The balance of the mineralized material is taken to the tailing pond, constituting the final waste. (From O. Lafrance, 2004 as reported in Moryoussef, 2004)

16.2.2 Summary of the Mineralized Material Metallurgy

The Croinor mineralized material reacts to the direct cyanidation process practically perfectly. It is difficult to calculate the bond index. In comparison, I would say that the bond index is between 13 and 16 KWh. The tonnage processed to the mills was always thin and the feeding to the cyclone very unstable, this being due to the blocking of feeding chutes by frozen mineralized material. A coarse grinding was obtained, varying between 74% and 79% passing a 200 mesh sieve. The filtration was easy with average liquid waste of 0.0003 ounces per short ton, which is excellent. The average solid rejects were of 0.002 ounces per short ton. This being the assaying detection limit, thus the recovery can be considered almost perfect. Cyanide consumption was of 0.2 kg/short ton, which is very low. Putting apart the physical mineralized material handling due to freezing, all other aspects seem perfect. (From O. Lafrance, 2004 as reported in Moryoussef, 2004)

In summary, the various mineralized material milling steps performed on the Croinor mineralized material at the Camflo mill confirm the excellent response of the mineralized material to direct cyanidation and a satisfactory recovery rate. The tonnage milled to date (75,752 tonnes) coming from various veins and with different grades is considered to be representative enough of the Croinor mineralized material to conclude that no problem is forecasted for any future operation on the same type of mineralized material.

Table 16.3 – Milling results of the Croinor ore at the Camflo mill

Date	Tonnes (t)	Grade (g/t)	Total Ounces	Recovery	Recovered Ounces
February 3-25, 2004	20,629	3.10	2,033	97.4%	1,981
August 6-13, 2004	7,883	1.80	456	95.3%	435
August 18-31, 2004	9,750	1.97	619	95.5%	591
October 7-18, 2004	13,127	2.50	1,055	96.6%	1,019
July 2005	24,363	5.38	3,920	97.9%	3,834
Total	75,752	3.33	8,081	97.0%	7,860

17.0 MINERAL RESOURCE AND MINERAL RESERVE ESTIMATES (Item 19)

The Croinor Project resources were entirely reviewed and re-calculated by Pierre O'Dowd and classified into measured and indicated mineral resources as presented in his Technical Report dated September 2009 (O'Dowd, 2009). This section is based on that report.

Blue Note has been drilling the Croinor property since the end of the NI43-101 compliant prefeasibility study presented in August 2010. In all, 53 holes were drilled for a total of 12,550 m (as of May 30, 2011). Because the assays results from the current drill program are still pending, the drilling performed in 2010 and 2011 is not included in the Mineral Resources estimates presented in the current report. However, InnovExplo is of the opinion that the results of the 2010 and 2011 drilling program could have an impact on the Mineral Resources Estimate. InnovExplo considers that the resources could increase (by less than 25%) with the recent drilling performed and recommend proceeding with a complete update of the Mineral Resources Estimate and the prefeasibility study as soon as the assays results will be available.

O'Dowd defined four families (or series) of zones (A, B, C and D). Each family is subdivided into a number of subsidiaries (A1, A2, A3, etc.) that are believed to be related to a particular shear structure. Series A are shallow while the B and C series are intermediate and the D series is the deepest one (Fig. 17.1). D is mostly found below current underground workings. In terms of tonnage, A, C and D host the bulk of it, B being marginal so far.

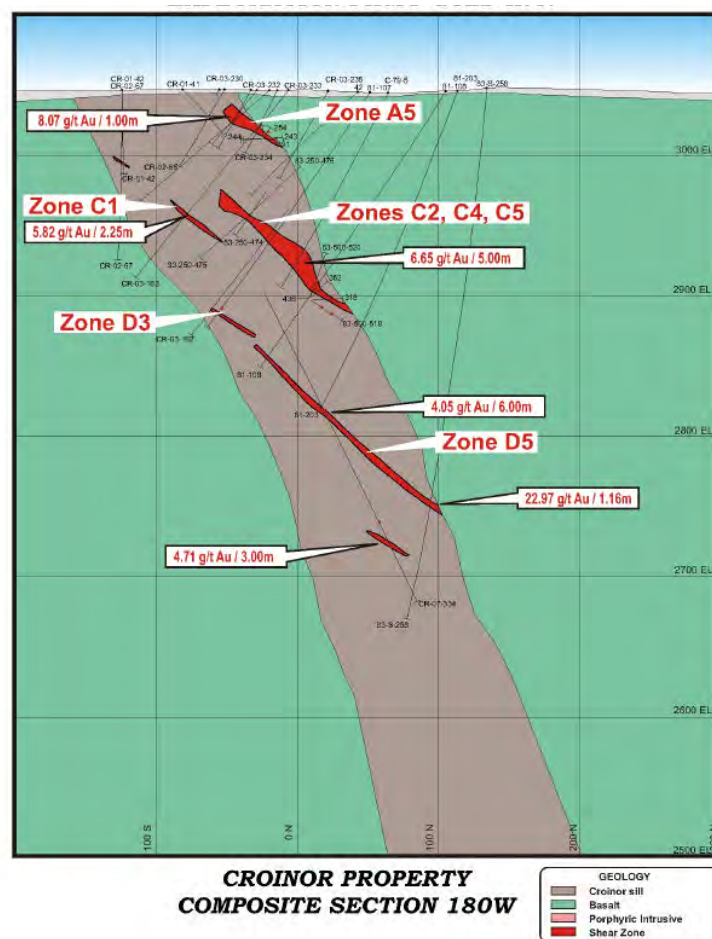


Figure 17.1 – Typical composite cross section of the Croinor deposit (O'Dowd 2009)

17.1 Evaluation Parameters

For the purposes of consistency, the general evaluation parameters used by O'Dowd (2009) were the same as those presented in InnovExplo's 2005 NI43-101 Resource Estimate by Pelletier and Boudrias:

- 1) Minimum mining width of 1.8 m. This number is consistent with Golder's evaluation for a room-and-pillar type operation such as the one being contemplated for Croinor (see scoping study by Chabot, 2009).
- 2) Density of 2.8 g/cm³. This density value was obtained from a density test requested by InnovExplo on June 2, 2005 and carried out by ALS Chemex laboratories in Val-d'Or. The results of the test indicated an average density factor of 2.79 g/cm³. Cambior had obtained 2.82 g/cm³ by metallurgical testing.
- 3) Cut off grade of 5 g/t Au and 7 g/t Au.
- 4) Grade capping at 65 g/t Au. A similar capping grade established by Chénard and Turcotte in 2003 was re-evaluated by InnovExplo in 2005 using a cumulative frequency diagram, which established grade capping at 65 g/t.
- 5) Polygons (resource blocks) drawn on cross sections.
- 6) Polygons extended vertically to half the distance between two holes and up to a maximum of 20 metres. It is believed that, for most of the deposit, the complexity of the zones does not allow for larger polygons.
- 7) Area of polygon influence up to a maximum of 20 metres laterally or half the distance to the closest intercepts on neighbouring sections. The east and west widths of each polygon were obtained on longitudinal sections for each zone.
- 8) No external dilution applied to the resources. Internal dilution was used to reach the minimum width of 1.8 m. The grade then used was the actual assay or 0 g/t Au when no assay was available.

17.2 Definition of resource categories

Resource categories for the Croinor resource estimates follow the recommendations of the CIM Standing Committee on Reserve Definitions:

“Mineral resources are sub-divided, in order of increasing geological confidence into Inferred, Indicated and Measured categories. An Inferred Mineral Resource has a lower level of confidence than that applied to an Indicated Mineral Resource. An Indicated Mineral Resource has a higher level of confidence than an Inferred Mineral Resource but has a lower level of confidence than a Measured Mineral Resource.”

17.2.1 Measured mineral resource

According to CIM Definition Standards, the definition of a measured resource is:

“A ‘Measured Mineral Resource’ is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, and physical characteristics are so well established that they can be estimated with confidence sufficient to allow the appropriate application of technical and economic parameters, to support production planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough to confirm both geological and grade continuity.”

17.2.2 Indicated mineral resource

According to CIM Definition Standards, the definition of an indicated resource is:

“An ‘Indicated Mineral Resource’ is that part of a Mineral Resource for which quantity, grade or quality. Densities, shape and physical characteristics can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic viability of the deposit. The estimate is based on detailed and reliable exploration and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough for geological and grade continuity to be reasonably assumed.”

17.2.3 Inferred mineral resource

According to CIM Definition Standards, the definition of an inferred resource is:

“An ‘Inferred Mineral Resource’ is that part of a Mineral Resource for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes.”

17.3 Resource Estimate

Table 17.1 gives the results of the resource estimate from O’Dowd (2009) for cut off grades of 5 g/t Au and 7 g/t Au.

Table 17.1 – Mineral Resource Estimate summary (from O’Dowd, 2009)

MEASURED and INDICATED RESOURCE						
Category	Cut-off 5.00 g/t Au			Cut-off 7.00 g/t Au		
	Tonnes	gpt	Ounces	Tonnes	gpt	Ounces
Total Measured	31 192	8,59	8 615	15 210	12,46	6 092
Total Indicated	783 036	9,13	229 799	385 636	12,70	157 416
Total	814 228	9,11	238 414	400 847	12,69	163 507

Table 17.2 – Indicated Resources by Zone

Zone	INDICATED RESOURCE					
	Cut-off 5,00 g/t Au			Cut-off 7,00 g/t Au		
	Tonnes	gpt	Ounces	Tonnes	gpt	Ounces
A2	41 007	8,685	11 450	20 705	11,566	7 699
A4	17 469	10,468	5 879	11 136	13,316	4 767
A5	78 439	10,985	27 703	51 546	13,655	22 629
A6	74 650	9,346	22 432	39 922	12,447	15 975
A11	2 978	10,753	1 030	2 978	10,753	1 030
B1	15 346	7,451	3 676	7 247	8,660	2 018
C1	61 496	9,225	18 239	39 073	11,236	14 115
C2	52 895	6,632	11 279	8 955	11,093	3 194
C3	8 679	5,530	1 543			
C4	64 868	9,223	19 234	33 591	12,676	13 689
C5	35 044	6,628	7 468	11 515	8,482	3 140
C6	13 384	13,550	5 830	5 914	23,483	4 465
C7	15 507	9,342	4 658	15 049	9,434	4 565
C8	33 315	8,37	8 962	16 081	11,35	5 869
C9	9 305	6,181	1 849	2 836	7,223	659
C10	8 261	5,694	1 512			
C11	18 877	6,833	4 147	5 750	8,880	1 642
C12	1 105	9,260	329	1 105	9,260	329
C13	1 144	10,950	403	1 144	10,950	403
D1	13 046	5,475	2 296			
D2	73 574	10,402	24 605	30 540	17,038	16 729
D3	79 023	9,928	25 223	40 394	14,136	18 358
D5	63 624	9,802	20 050	40 154	12,502	16 140
Total Indicated	783 036	9,13	229 799	385 636	12,70	157 416

Table 17.3 – Measured Resources by Zone

Zone	MEASURED RESOURCE					
	Cut-off 5.00 g/t Au			Cut-off 7.00 g/t Au		
	Tonnes	gpt	Ounces	Tonnes	gpt	Ounces
A2	1 029	7,47	247	1 029	7,47	247
A4	3 729	11,45	1 373	1 211	22,23	865
A5	13 037	9,27	3 883	8 551	11,04	3 035
A6	9 038	7,47	2 171	1 816	13,00	759
C2	1 393	7,16	321	1 393	7,16	321
C4	1 881	7,22	437	1 211	22,23	865
C5	1 085	5,27	184			
Total Measured	31 192	8,59	8 615	15 210	12,46	6 092

Tables 17.2 and 17.3 give the indicated and measured resources for each zone. Details for all individual polygons are found in Appendix V.

The measured resources were estimated by InnovExplo in 2005. Pierre O'Dowd reviewed and updated the InnovExplo estimate for to the 2009 NI43-101 report (Table 17.1). Only minor changes were made. Resources in that category are derived from underground sampling. Polygons are projected for 8 m from the sampled underground openings and supersede any drilling results. Those resources represent 3% of the total ounces (at 5 g/t Au cut off). They are mostly found in the A4, A5 and A6 veins (formerly zones 1 and 2).

Measured and indicated resources are spread over 23 zones (approximately 30 mineralized shoots), including 6 that contain less than 10,000 tonnes. Therefore, the bulk of the tonnage is contained in 17 different zones. Furthermore, 21% of the tonnage (approx. 175,000 tonnes) is contained in zones A5 and A6 (formerly zones 2, 2S, 16 and 37). A fair proportion of the material in zones A2, A4, A5, A6, A10, C1, C4 and C11 is believed to be amenable to long hole mining (Chabot, 2009).

The smallest resource polygons contain approximately 200 tonnes while the largest contains just over 10,000 tonnes. The bigger polygons are found at depth where drill spacing is larger. The polygon can cover a maximum area of 20 metres X 10 metres.

It is important to note that, although the resource has been, arbitrarily in some cases, distributed in various zones representing interpreted individual shear zone (A2, A4, C1 etc.), the economic mineralization is related to distinct elongated lenses (mineralized shoots) within these interpreted zones. Future mining shall be restricted to these higher grade lenses. The concept of extensive zones or veins is more of an artifice to create longitudinal sections and visualize the deposit. It is not entirely a geological reality.

Mineral resources that are not mineral reserves do not have demonstrated economic viability.

17.4 Mineral Reserve

InnovExplo designed the underground mine plan based on the latest Mineral Resource Estimate by Pierre O'Dowd (2009). The proposed approach uses room-and-pillar and sublevel long-hole retreat in an 80:20 ratio. Most of the resources located above level 125 were not included in the reserves because the economics could not justify the required development to bypass the exiting pit. On the basis that the information presented in Section 23 of this report, InnovExplo was able to demonstrate the economic viability of the proposed extraction and processing of the portion of the measured and indicated mineral resources found within the mine plan. Overall, InnovExplo considers that the basic engineering project meets the requirements of a preliminary feasibility study. InnovExplo considers that the reserves could increase with the recent drilling performed by Blue Note and recommend proceeding with a complete update of the Mineral Resources Estimate and the prefeasibility study as soon as the assays results will be available.

The underground mine reserves were determined using an undiluted cut-off grade of 5.0 g/t and a minimum mining width of 1.8 metres. The estimated proven and probable reserves totalled 185,260 oz after applying a mining recovery of 85% for room-and-pillar mining and 95% for long-hole mining, with a dilution factor of 5% for room-and-pillar stopes and 20% for long-hole stopes. The average width for long-hole stopes is 3.5 metres; the resulting dilution corresponds to a thickness of 0.7 metre. The following table presents a summary of the mineral reserves.

Table 17.4 – Mineral Reserve Estimate (5 g/t cut-off)

Mineral Reserve Estimate			
Category	Undiluted cut-off 5 g/t Au		
	tonnes	g/t	ounces
Proven	13,619	8.00	3,504
Probable	676,210	8.37	181,756
Total Reserves	689,829	8.35	185,260

18.0 OTHER RELEVANT DATA AND INFORMATION *(Item 20)*

There is no other relevant information to be included in this report.

19.0 INTERPRETATION AND CONCLUSIONS *(Item 21)*

InnovExplo's mandate was to prepare a prefeasibility study for the Croinor project. This objective was achieved by the presentation of the results in this report.

A mine-life conceptual mining plan was devised using mineral resources at a calculated cut-off grade of 5.0 g/t Au. The resources considered in the prefeasibility study amount to 814,228 tonnes at 9.11 g/t Au for the Measured and Indicated category (Table 17.1).

Blue Note has been drilling the Croinor property since the end of the NI43-101 compliant prefeasibility study presented in August 2010. In all, 53 holes were drilled for a total of 12,550 m (as of May 30, 2011). Because the assays results from the current drill program are still pending, the drilling performed in 2010 and 2011 is not included in the Mineral Resources estimates presented in the current report. However, InnovExplo is of the opinion that the results of the 2010 and 2011 drilling program could have an impact on the Mineral Resources Estimate. InnovExplo considers that the resources could increase (by less than 25%) with the recent drilling performed and recommend proceeding with a complete update of the Mineral Resources Estimate and the prefeasibility study as soon as the assays results will be available.

The mine will be dewatered and the existing ramp and mine level development will be and extended to meet mine requirements. The existing 200-metre deep shaft will be reconditioned up to level 500 and will be used as a ventilation raise and emergency escape way. Ore and waste haulage to surface will be via ramp.

The development and production activities are based on a two 10-hour shift, 7 day a week schedule. To minimize capital requirements, contractors will be used for all mine development, mine production and ore haulage activities. A small in house staff workforce will be hired to provide technical support and direction to the contractors.

The mining method will be an 80/20 ratio of room-and-pillar mining and long-hole mining. For stopes dipping less than 45 degrees, the mining method will be room-and-pillar with long-hole for the remaining stopes.

Mine output was estimated by applying an undiluted cut-off grade of 5.0 g/t Au and a minimum mining width of 1.8 metres. The estimate of proven and probable reserves included in the mining plan was obtained by applying a mining recovery of 85% for room-and-pillar mining and 95% for long-hole mining, with a dilution factor of 5% for room-and-pillar stopes and 20% for long-hole stopes. The average width for long-hole stopes is 3.5 metres; the resulting dilution corresponds to a thickness of 0.7 metre. The dilution grade was set at 0.0 g/t Au.

The production target is 500 tpd, seven days a week, 345 days/year for a total of 172,500 tonnes per year. After mining and milling recoveries, InnovExplo's prefeasibility study estimates a production total of 185,260 ounces of gold over a 5-year period. This represents 689,829 tonnes of ore at a diluted grade of 8.35 g/t. A summary of the annual mine plan is presented in Table 19.1.

Table 19.1 – Production Schedule according to Method

	Pre-production	Year 1	Year 2	Year 3	Year 4	Total
Room-and-pillar (t)	18,798	105,470	125,089	137,838	127,733	514,928
Grade (g/t)	7.24	8.94	8.86	7.74	9.63	8.71
Long-hole (t)	25,798	67,030	47,411	34,662	0	174,901
Grade (g/t)	7.95	7.65	7.07	6.49	0	7.31
Total (tonnes mined)	44,596	172,500	172,500	172,500	127,733	689,829
Grade (g/t)	7.65	8.44	8.37	7.49	9.59	8.35
Total (tonnes milled)	42,000	172,500	172,500	172,500	130,329	689,829

The Croinor mine is currently flooded to the portal elevation. As an initial step, an estimated 504,080 m³ of mine water would be pumped from the existing pit and mine infrastructure. Initial dewatering is expected to be carried out at a rate of 5,500 m³/day for an approximate period of 92 days. Mine water will be pumped and processed through geotubes to collect mine sludge.

Genivar was commissioned by InnovExplo and Blue Note Mining to review custom milling options in the context of a prefeasibility study for the Croinor gold project. Only four gold concentrators located within a 120-km radius could potentially process the Croinor ore: Beacon Gold, Aurbel Gold, Sigma-Lamaque Complex and Camflo. This study assumes that the ore will be processed at the Camflo mill. In addition to having successfully processed Croinor ore in the past (hence mitigating the technical risk), the plant is likely to have an availability for new custom feed fitting the life of mine requirements for Croinor and has been in the custom milling business for years. Ore previously mined from the Croinor open pit operations was processed at the Camflo mill and based on the results of those runs, a gold recovery of 97.5% has been used in the present prefeasibility study.

InnovExplo prepared a preliminary design for the proposed project infrastructure. Most of the capital cost was estimated using quotes from equipment suppliers and contractors. In some cases, comparable installations at other projects were used. The capital cost estimate is accurate within ±20%.

The pre-production costs are estimated at \$17.32 million, including \$925,608 representing the net of capitalized operating costs and production revenue received during the pre-production period. Sustaining capital is estimated at \$7.43 million, excluding \$0.62 million for final closure costs. The cost breakdown is presented in Table 19.2.

Table 19.2 – Capital expenditure breakdown

Description	Pre-production	Sustaining	Total cost
Capitalized operating cost	\$14,843,398		\$14,843,398
Capitalized revenue	-\$13,917,790		-\$13,917,790
Dewatering and rehabilitation	\$1,444,588		\$1,444,588
Development	\$6,671,356	\$6,753,571	\$13,424,926
Ventilation equipment	\$245,410		\$245,410
Mine dewatering	\$416,681		\$416,681
Surface installation and equipment	\$1,403,714		\$1,403,714
Electrical distribution	\$4,958,095	\$429,868	\$5,387,963
Building and infrastructure installations	\$835,208		\$835,208
Environment	\$421,827	\$230,173	\$652,000
Contractor demobilization		\$19,789	\$19,789
Total capital expenditures	\$17,322,486	\$7,433,401	\$24,755,887

Operating costs are estimated in 2010 Canadian dollars with no allowance for escalation. The total life-of-mine operating cost and average unit operating costs are summarized in Table 19.3. The overall operating unit cost is \$171/tonne of ore milled mineralized material.

InnovExplo estimated mine operating costs using data from similar operations and from budget quotes from contractors and suppliers.

Table 19.3 – Summary of Total Life-of-Mine Operating Costs

Description	Total cost	Unit cost	
Definition drilling	\$2,782,270	4.29 \$/t	15.77 US\$/oz
Stope development	\$5,768,760	8.90 \$/t	32.70 US\$/oz
Mining	\$38,249,620	59.04 \$/t	216.84 US\$/oz
Blue Note staff	\$7,749,997	11.96 \$/t	43.94 US\$/oz
Blue Note mobile equipment	\$165,760	0.26 \$/t	0.94 US\$/oz
Contractor (indirect cost)	\$22,205,890	34.28 \$/t	125.89 US\$/oz
Surface services	\$315,510	0.49 \$/t	1.79 US\$/oz
Energy cost	\$4,903,059	7.57 \$/t	27.80 US\$/oz
Milling and transportation	\$27,857,644	43.00 \$/t	157.93 US\$/oz
Environment	\$778,070	1.20 \$/t	4.41 US\$/oz
Total:	\$110,776,580	171 \$/t	628 US\$/oz

To provide electric power to the site, a new 26-km 25-kV three-phase overhead power line is planned. This new power line is assumed to be private and not owned by Hydro-Québec. Further discussions between the client and Hydro-Québec will be required to define if ownership could be transferred to Hydro-Québec and if capital costs could be shared between both parties.

An after-tax model was developed for the Croinor project. All costs are in 2010 Canadian dollars with no allowance for inflation or escalation.

The economic valuation of the project was performed using the Internal Rate of Return (IRR) and Net Present Value (NPV) methods. The discount rate used in the analysis is 7%. The following parameters were considered in the financial analysis:

- An average gold price of US\$1250/oz and an exchange rate of 1.03 CAD/1USD which correspond to a Bloomberg consensus estimate in June 2011. Table 19.4 gives details of the Bloomberg base case consensus forecasts.
- Resources as described in section 17. The portion of the resources considered in the analysis represents resources at a cut-off grade of 5.0 g/t.
- Gold recovery of 97.5%. This value was based on recovery obtained at the time the mine was operating.
- Royal Mint fees of \$5/oz.
- An estimated mill throughput rate of 172,500 Mt/year at an average diluted gold grade of 8.35 g/t. The estimated average annual output is 39,181 to 45,631 ounces of gold.
- A royalty payment was considered and evaluated as follows: a royalty of 15% was applied on profit over the carried expenses, which account for \$11,658,371.
- Future annual cash flow estimates based on grade, gold recoveries and cost estimates previously discussed in this report.

- A total of 42,000 tonnes of ore which will be processed during the pre-production period is deemed to be capital production and is not included in production nor is revenue derived from it.

Table 19.4 – Bloomberg base case consensus forecast as of June 2011

	2012	2013	2014
Gold price (\$US/oz)	1,373	1,296	1,168
Exchange rate (\$C/\$US)	1.01	1.05	1.03

The resulting main parameters and results of the cash flow analysis for the entire project are presented in Table 19.5.

Table 19.5 – Cash Flow Analysis Summary

Parameters	Results
Proven & probable mineral reserves	689,829 t at 8.35 g/t
Total contained gold reserve	185,260 oz
Mine life (including 14-month pre-production)	5 years
Daily mine production	500 t per day
Gold recovery	97.5%
Annual gold production	39,181 to 45,631 oz
LOM recovered gold	170,556 oz
Average cash operating cost	\$171/tonne
Average cash operating cost	US\$ 628/oz
Capital cost (including \$7.43M sustaining/working capital)	\$24.8 million
Total cost per ounce	US\$768/oz
Total gross revenue	\$225.9 million
Total operating cost	\$110.8 million
Total project cost	\$135.5million
Total operating cash flow (before tax & royalties)	\$75.7 million
Estimated mining and income taxes	\$20.6 million
Net cash flow	\$46.9 million
Pre-tax NPV (7% discount)	\$51.3 million
Pre-tax IRR	124 %
After-tax NPV (7% discount)	\$35.4 million
After-tax IRR	99 %
Payback period	25 months
Pre-production period (including 42,000t of production)	14 months

Sensitivity analyses were performed on parameters selected for their potential impact on the outcome of the economic evaluation. The following production parameters were analyzed:

- Grade (g/t)
- Gold price (US\$/oz)
- Total net revenue (REVENUE)
- Operating expenditure (OPEX)
- Capital expenditure (CAPEX)

Sensitivity calculations were performed on the project's NPV, IRR and total cash flow by applying a range of variation ($\pm 25\%$) to the parameter values.

The sensitivity analysis demonstrates that the Croinor Project is highly sensitive to changes in gold price and revenue. It is also sensitive to changes in OPEX and moderately sensitive to changes in CAPEX.

Other than the 2010-2011 drilling carried out by Blue Note that will have to be included when the assays will be available, InnovExplo is not aware of any environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant issues that would materially affect the Mineral Reserve Estimate. InnovExplo considers the present prefeasibility study to be reliable and thorough, based on quality data, reasonable hypotheses and parameters compliant with Regulation 43-101 and CIM standards with regard to Mineral Reserve and Resource estimates.

20.0 RECOMMENDATIONS (Item 22)

The results from this prefeasibility study demonstrate that the Croinor project is technically and economically viable and InnovExplo recommends that Blue Note Mining continue to advance the project towards production.

InnovExplo provides the following recommendations:

- Update Mineral Resource estimate with 2010-2011 drilling performed by Blue Note.
- Update pre-feasibility.
- Use the findings of the geotechnical–geomechanical surface crown pillar study (April 2011) to confirm or revise the assumptions and design parameters of this prefeasibility study.
- Complete the infill and down-plunge exploration drilling aimed at expanding the current resources and reserves.
- Validate the geological model through additional drilling to increase the ratio of lower cost long-hole stoping to room-and-pillar mining.
- Update the Mineral Resources Estimate with further drilling.
- Initiate discussions with Hydro-Québec to determine whether electric line ownership could be transferred to Hydro-Québec and if capital costs could be shared between both parties.
- Advance the design of the electric line extension to the feasibility study stage and initiate related permitting requests.
- Continue to work on general permitting for the project.
- Incorporate technology such as gravity separation to reduce the mill operating cost.
- Evaluate the possibility of applying ore sorting technology at the Croinor site.
- Prepare bid documents for the activities to be contracted and solicit bids for the work.
- Compare the bids to the estimates in this prefeasibility study to determine whether the mine design should be reviewed based on final contractor bids.
- Complete additional work to evaluate the possibility of mining additional resources to the west of the existing West pit and evaluate the possibility of recovering remnant ore in the existing West pit;
- Start negotiations to obtain agreements for custom milling and ore transportation.

To advance the project, InnovExplo estimates a budget of \$155,000 as presented in Table 20.1.

Table 20.1 – Proposed Work Program and Budget

Item	Cost
Revision of geotechnical design parameters	\$5,000
Mineral Resource Estimate update and prefeasibility	\$100,000
Electric line extension feasibility study	\$ 20,000
Preparation of contract documents for mining, ore transportation and custom milling	\$15,000
Evaluation of the potential to mine additional resources located west of the existing pit	\$15,000
Total	\$ 155,000

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22.0 SIGNATURE PAGE *(Item 24)*

**TECHNICAL REPORT AND PREFEASIBILITY STUDY FOR THE
CROINOR PROJECT**
(according to Regulation 43-101 and Form 43-101F1)

Prepared for
Blue Note Mining Inc
1 Place Ville Marie, Suite 1511
Montréal, Québec, Canada
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23.0 ADDITIONAL REQUIREMENTS FOR TECHNICAL REPORTS ON DEVELOPMENT PROPERTIES AND PRODUCTION PROPERTIES *(Item 25)*

InnovExplo inc (“InnovExplo”) was mandated by John Martin, President and Chief Operating Officer of Blue Note Mining Inc (“Blue Note Mining” or “the issuer”), to complete a technical report and prefeasibility study (“the report”) for the Croinor gold project in compliance with Regulation 43-101 and Form 43-101F1.

The prefeasibility study is based on Mineral Resources presented in an earlier report titled “NI 43-101 Resource Estimate Update and 2008 Technical Report on the Croinor 1 and 2 Project”, published in September, 2009 by First Gold Exploration Inc and X-Ore Resources (O’Dowd, 2009).

The environmental studies in the report were completed by Golder Associates Ltd (Golder) and the review of the custom milling option for the Croinor ore was done by Genivar Inc (Genivar).

23.1 Mining

The mining plan for the Croinor project incorporates a combination of conventional and mechanized mining. A conventional room-and-pillar mining method that best suits the orebody will be used to extract most of the reserves. When appropriate, a mechanized long-hole method will be applied and trackless equipment will be used to muck and haul the broken rock.

23.1.1 Mining Method

The mining methods selected by InnovExplo are long-hole open stoping and room-and-pillar.

Veins dipping more than 45° will be mined by a sublevel retreat long-hole method. The long-hole stopes will be mined from 3-m-high sublevels at 15-m intervals along dip. The maximum stope dimensions were defined as 25 m long and 42 m high (Table 23.1). It is assumed that stopes will not be backfilled and that 5-m pillars will be left between panels and mining horizons. Figure 23.1 illustrates the proposed configurations.

Table 23.1 – Proposed Long-hole Stope Configuration for the Croinor Project.

Configuration	Overall Panel Dimensions (HW)
<p>Configuration #1</p> <ul style="list-style-type: none"> • 15-m-long down-holes drilled from #1 & #2 sublevels • 5-m-wide pillar between panels 	36 m (high) x 25 m (long)
<p>Configuration #2</p> <ul style="list-style-type: none"> • 15-m-long down-holes drilled from #1 & #2 sublevels • 7-m-long up-holes drilled from #2 sublevels • 5-m-wide pillar between panels 	42 m (high) x 25 m (long)

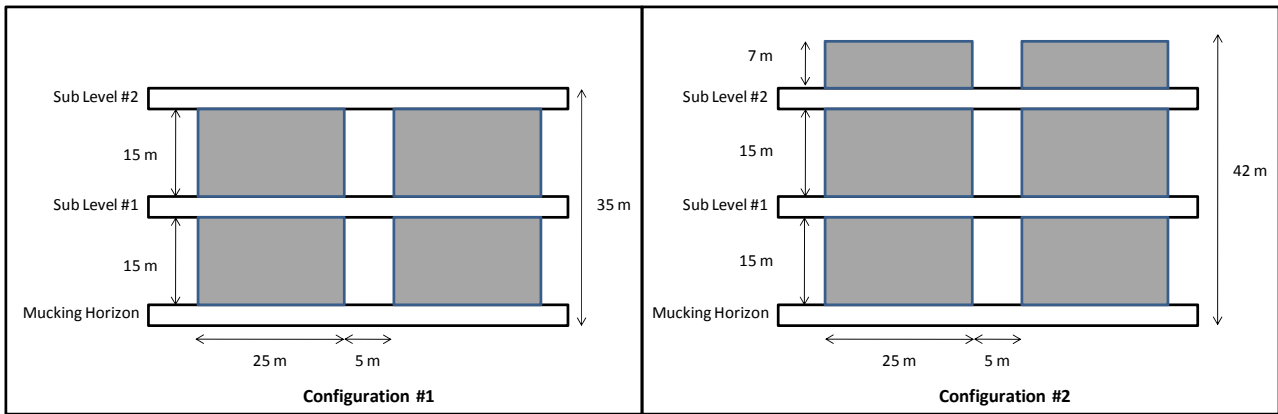


Figure 23.1 – Proposed Long-hole Stope Configurations for Croinor Mine (longitudinal section).

Veins dipping at less than 45° will be mined using a room-and-pillar mining method. The proposed room-and-pillar stope configuration is based on typical industry practices for deposits of similar vein geometry that are currently in operation. This stope geometry should be re-examined using the results of the crown pillar study. The typical height of mining will vary from 1.8 m (minimum) to 3.0 m (maximum). The proposed room-and-pillar dimensions are summarized in the following table and figure.

Table 23.2 – Proposed Room-and-Pillar Stope Configuration for the Croinor Mine.

Rooms	6.5 m wide
Pillars	3 m wide x 5 m long x 1.8–3.0 m high
Mining Height	1.8–3.0 m

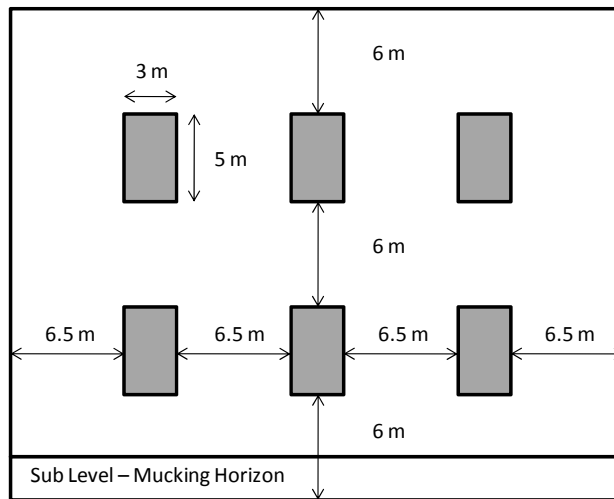


Figure 23.2 – Proposed Room-and-Pillar Stope Configuration for the Croinor Project (Plan View).

23.1.2 Geotechnical investigation

The rock mechanics evaluation was prepared by Jane Alcott (MAsc, P. Eng.) of InnovExplo. At the time of preparation of the prefeasibility study, Blue Note Mining had mandated Golder Associates Ltd to prepare a detailed geomechanical study of the Croinor surface crown pillars. However, this study had yet to be completed at the time of writing. The following geomechanical assessment and design recommendations are based entirely on the review

of documents provided by Golder (Golder, 2004; 2009). As there was no access to core, outcrops or underground workings, it was not possible to verify the values reported in these documents.

23.1.2.1 .Geomechanical Classification

Based on RQD and joint mapping data, Golder (2009) estimated the rock mass quality as being fair to poor and assigned corresponding Q values ranging from 0.4 to 10. No distinction is made for Q values based on lithologies (i.e., Mafic Volcanics and Diorite). The majority of the mineralized zones and accesses will be located in the Diorite. Based on the rock mass strength data contained in Golder (2009), it is likely that $Q = 0.4$ is representative of the Mafic Volcanics (Tuffs) and that $Q = 10$ is representative of the Diorite. For the purpose of this prefeasibility study, the recommended stope configurations are based on typical industry practices for deposits of similar vein geometry that are currently in operation. This study considers that all excavations are located in the Diorite.

$$Q = \frac{RQD}{J_n} \times \frac{J_r}{J_a} \times \frac{J_w}{SRF}$$

In order to determine a Q' , it is necessary to remove the corrections for water (J_w) and stress (SRF).

$$Q' = \frac{RQD}{J_n} \times \frac{J_r}{J_a} = Q \times \frac{SRF}{J_w}$$

It is assumed that joints are dry to only a minor inflow of water ($J_w = 1$) and that excavations will be located between the surface (low stress environment; $SRF = 2.5$) and 305 m of depth (medium stress environment; $SRF = 1$). By removing the corrections for J_w and SRF, values of Q' can be calculated. The data used in the calculation of Q' are listed in Table 23.3.

Table 23.3 – Data used in Calculation of Q'

	Surface	230 m
Q	0.4 - 10	0.4 - 10
J_w	1	1
SRF	2.5	1
Q'	1 - 25	0.4 - 10

23.1.2.2 Stope Dimensions

Based on the Mathews-Potvin stability graph method, the hydraulic radius ($HR = 7.2 - 7.8$) obtained for stoped dimensions presented in the previous section indicate that the stope will be stable to stable with support ($HR = 6 - 9.8$) (Fig. 23.3). These dimensions are also consistent with standard industry practices for deposits of similar geometry. The following assumptions have been made:

- Stopes are located in the Diorite unit;
- $Q' = 10$ (i.e., medium stress environment);
- Vein dips vary from 45° to 60° ; and
- All stopes have a vein parallel joint set.

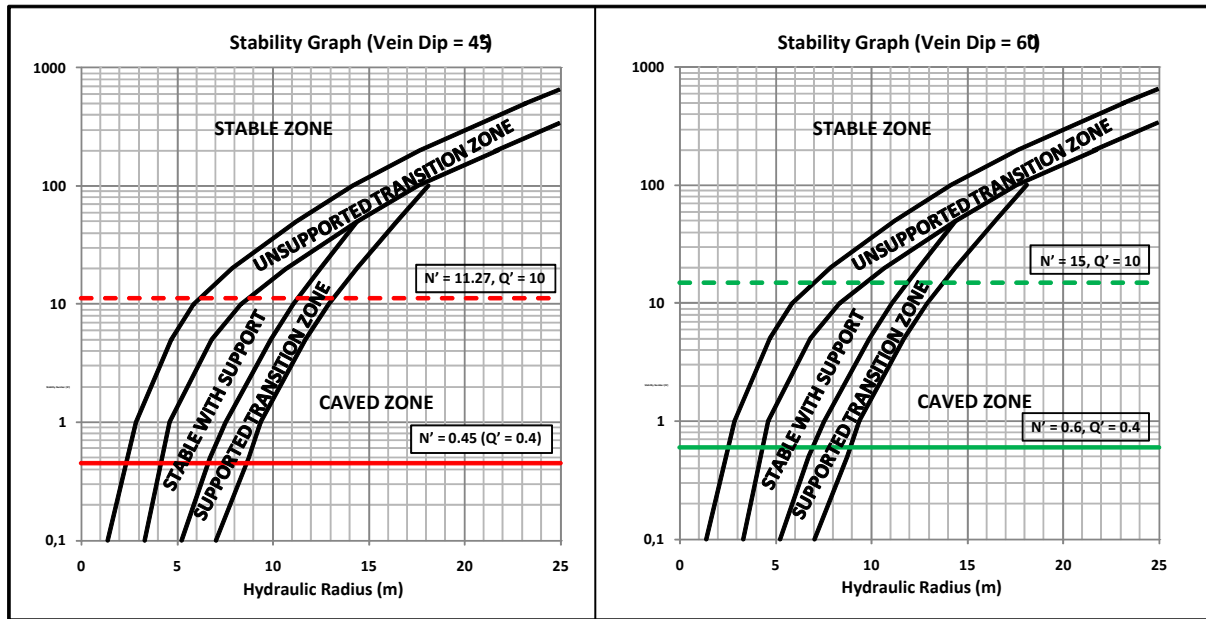


Figure 23.3 – Mathews-Potvin stability graph for the Croinor Mine

Table 23.4 – Mathew-Potvin Interpretation for the Croinor Project.

Hydraulic Radius (m)	HW	
	Vein Dip = 45°	Vein Dip = 60°
Stable	< 6.2	< 7
Unsupported Transition	6.2 – 8.8	7 – 9.8
Stable with Support	8.8 – 10.2	9.8 – 12.8
Supported Transition	10.2 – 13.2	12.8 – 13.8

Veins dipping at less than 45° are assumed to be mined by room-and-pillar methods. The proposed room-and-pillar stope configuration is presented in section 23.1.1. This stope configuration should be re-examined using the results of the crown pillar study become available. For mineralized zones in excess of 3.0 m, either selective mining or backfilling and multiple cut methods should be considered.

23.1.2.3 Typical Ground Support Patterns

These preliminary ground support recommendations are based on standard industry practices. More detailed recommendations will require additional information regarding joint spacing and continuity. Based on Farmer and Shelton (1983) the following bolt lengths for the back (Table 23.5) are proposed based on the excavation span (Bolt Length = 0.3 Span).

Table 23.5 – Typical ground support bolt length.

Bolt length*	Maximum Span
4 ft (1.2 m)	13.1 ft (4 m)
5 ft (1.5 m)	16.5 ft (5 m)
6 ft (1.8 m)	19.7 ft (6 m)
7 ft (2.1 m)	23.0 ft (7 m)
8 ft (2.4 m)	26.2 ft (8 m)

* Bolt length indicates the length installed within the rock and excludes any threads or bar outside the drill hole.

The standard support is illustrated in Figure 23.4 and consists of:

- Back: rock bolts (length based on excavation span) on a 1.2 m x 1.2m (4' x 4') pattern with screen as required (based on excavation height)
- Wall: rows (number of rows based on excavation height) of rock bolts (length = 1.2 – 1.5 m) on a 1.2 m x 1.2m (4' x 4') pattern

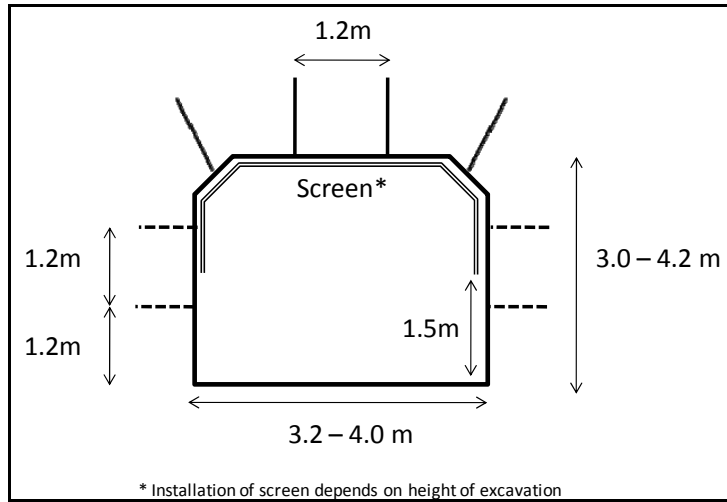


Figure 23.4 – Standard requirement for drift ground support

Screening of the back to 1.5 m above base-of-rail (BOR) is recommended for all excavations 3.5 m or higher. The screen is intended as a safety measure where back height will make routine inspections and scaling more difficult. Once additional structural and rock quality information are available it will be possible to optimize the ground support standards (e.g., possibly eliminate wall bolts for excavations less than 3 m high).

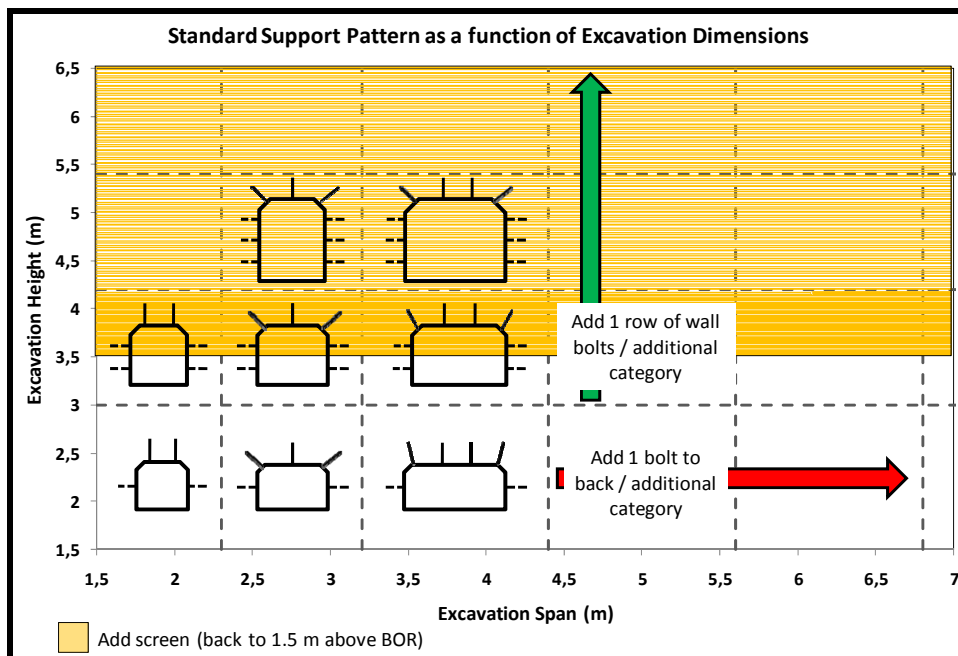


Figure 23.5 – Standard support pattern as a function of excavation dimensions. Note that the transitions between bolting patterns are suggested guidelines and will vary slightly depending on the degree of arching of the excavation back.

23.1.2.4 In-Situ Stress

The in-situ stresses for the Croinor deposit have been estimated based on the Corthésy et al. (1998) stress prediction model for the Cadillac Fault Region. Given the maximum mining depth of 305 m and the lower limit of rock mass strength for the diorite (180 MPa), induced stresses are not anticipated to be problematic. The ratio of induced stress to strength for development excavations at a depth of 305 m is anticipated to vary between 0.16 and 0.32. The upper limit of these levels of induced stress to strength ratio corresponds to the onset of stress-driven cracking, which typically initiates at ratios of 0.33 to 0.4 (Martin, 1993). The stress analysis and assumptions are summarized in the following table.

Table 23.6 – Stress analysis and assumptions

Parameter	Depth = 305 m	Source
Minor Principal Stress (σ_3)	6.26 (± 4.5) MPa	$\sigma_3 = -5.6454E-6(x^2) + 0.022233(x) \pm 4.5$ Corthésy et al. (1998): Cadillac Fault Region
Major Principal Stress (σ_1)	20.35 (± 7.3) MPa	$\sigma_1 = -2.3631E-5(x^2) + 0.073914(x) \pm 7.3$ Corthésy et al. (1998): Cadillac Fault Region
k_o (σ_1/σ_3)	3.25	
Maximum induced stress (σ_1)	29.4 - 58 MPa	Square and arched excavations Hoek and Brown (1980)
Rockmass strength (σ_c)	180 - 290 MPa	Golder (2009) for Diorite
Induced Stress: Strength (σ_1/σ_c)	0.16 – 0.32	Based on $\sigma_c = 180$ MPa (Diorite)

23.1.2.5 Recommendations for future work

Using the geotechnical–geomechanical surface crown pillar study (April 2011), its findings should be used to confirm or revise the assumptions and design parameters of this prefeasibility study.

23.1.3 Mine Design

The mine design incorporated in this study takes advantage of the existing infrastructure in order to limit cost and the amount of waste generated during development.

23.1.3.1 Existing Mine Infrastructure

The Croinor deposit is serviced by a ramp measuring 300 m long by 4 m high by 4.5 m wide (4m x 4.5m) that extends to level 125 (38m), and by a 3-compartment shaft extending 195 m deep. Development was completed on four (4) levels: 496 metres on level 125; 560 metres on level 250; 233 metres on level 375; and 730 metres on level 500. Approximately 320 metres of raise development was also completed. The Croinor mine is currently flooded to the portal entrance. The existing infrastructure is illustrated in Figure 23.6.

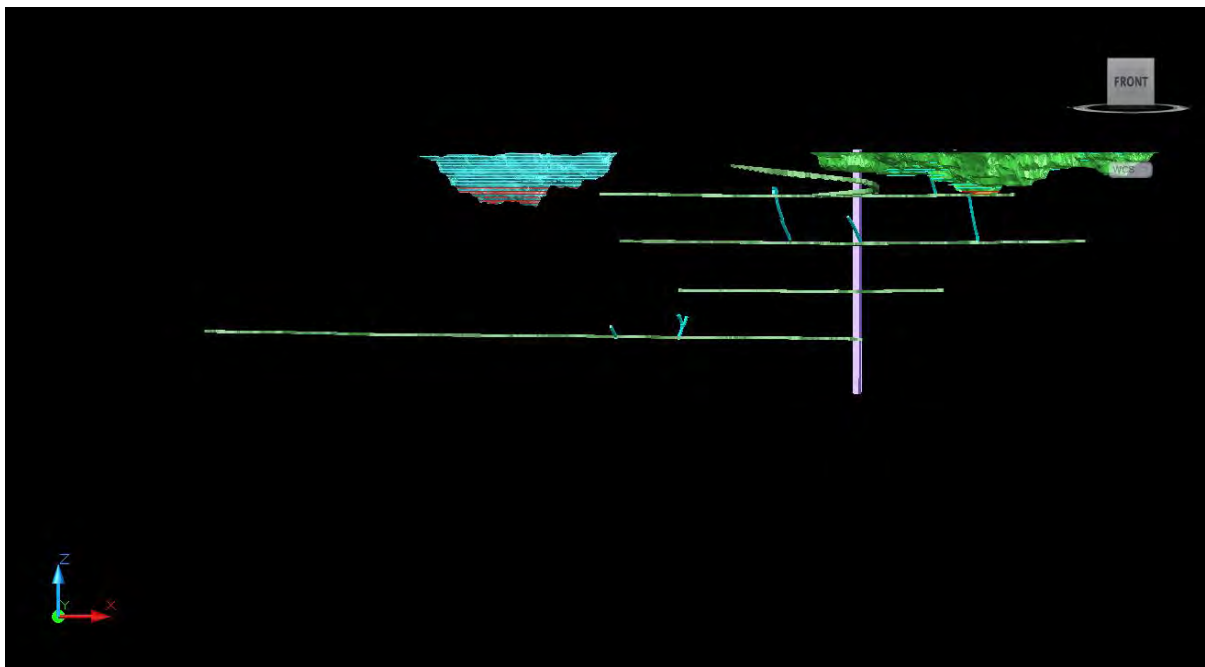


Figure 23.6 – Croinor existing infrastructures

23.1.3.2 Dewatering

Prior to any underground rehabilitation or development work, the existing mine infrastructure will have to be dewatered. The total estimated volume of water present in the mine and the two open pits is 504,080 m³.

- East pit: 270,700 m³
- West pit: 211,900 m³
- Underground opening: 21,482 m³

Water will be pumped from the east and west pit. Initial dewatering is expected to be carried out at a rate of 5,500 m³/day, resulting in an approximate dewatering period of 92 days. Mine water will be pumped and processed through geotubes to clarify the water and collect the mine sludge. Discharge from the geotubes will be directed to the existing settling pond (60 x 60 m). The pond effluent will be monitored and managed in accordance with MMER and *Directive 019* requirements.

23.1.3.3 Primary Development

The existing ramp will be extended to a final depth of 310 metres. The ramp will connect to the existing levels and these levels will be enlarged to either 4m x 4m or 3m x 3.7m in order to accommodate the required equipment. The existing drifts will be extended to access the mineralized zones. Two additional levels are to be developed: the 625 level and the 750 level. The known reserve located below level 750, will be accessed via crosscuts from the main ramp. The ore and waste will be hauled by LHDs from the production area to either a remuck bay or to a loading point close to the ramp and loaded into truck to be hauled directly to surface.

The shaft will be rehabilitated to level 500 and will serve as the main emergency egress as well as for ventilation purposes. Short ventilation raises will be required as development progresses to accommodate the various production areas.

23.1.3.4 Secondary Development

Two permanent refuge stations are planned, one on the 250 level and a second one on the 625 level. These refuge stations will be 4 m x 12 m x 3 m. There will be one sump per level to collect water inflow. The sumps will be interconnected and water will be pumped in stages to the surface. Each sump will measure 3m wide and 3m high by 5m deep.

23.1.3.5 Stope Development

A number of crosscuts will be developed from the level drifts to access the stopes. In the case of room-and-pillar, the cross cut will normally serve as a draw point for the ore. Depending on the elevation of the stopes, short raises will be developed and separated into two compartments by a timber wall, one side to serve as a manway and one side to be used as a chute. The long-hole stopes will be mined by retreating in the lower level or sublevel.

23.1.4 Mine Sequence

Mine development is accelerated in the first two years of the project in order to guarantee sufficient flexibility to achieve production requirements. The development sequence will ensure that many stopes will be available at different locations along the level drifts for mining any given time. However some of the stopes can only be mined at the end of the mine life since they are located directly over or under the level, therefore preventing further access on that level when mined.

23.1.4.1 Mining Dilution and Recoveries

The conversion of Mineral Resources into Mineral Reserves takes into account dilution and mine resource recovery. The Mineral Resources are initially diluted to a minimum width of 1.8 metres. A mining dilution of 5% was added for room-and-pillar stopes and a 20% dilution factor was added to long-hole stopes. The average width for long-hole stopes is 3.5 metres; the resulting dilution corresponds to a thickness of 0.7 metre. To account for ore losses in pillars or from drill/ blast operations, mining recovery was set at 85% for room-and-pillar mining and 95% for long-hole mining.

23.1.4.2 Mining Rate

Based on a reserve of 689,829 tonnes estimated for the Croinor Project, a mining rate of 479 tonnes per day was calculated using Taylor's Law. In the opinion of the author, Sylvie Poirier, Eng., it should nonetheless be possible to achieve 500 tonnes per day given the flexibility and number of available working places, and this value is used in the mining plan prepared for the present prefeasibility study.

23.1.4.3 Mine Plan Schedule Criteria

Contractors will be used for all mine development, mine production and ore haulage activities. A small staff workforce will be hired to provide technical and administrative support and direction to the contractors.

The design criteria used to develop the mine plan, are as follows:

- Multi-face drift development: 9 m/day (an 80% efficiency factor was considered in the first two months to account for the learning curve);
- Sublevel development: 6.1 m/day;
- Raises: 1.8 m/shift;

- Room and pillar stope: 80 t/day;
- Long-hole stope: 360 t/day.
- A mining rate of 500 t/day.

The manpower resource on each working shift used to prepare the following mine schedule includes:

- 6 two-man crews for room-and-pillar;
- 1 long-hole driller;
- 1 truck driver;
- 3 LHD operators;
- 3 development crews:
 - One crew with a two-boom jumbo for the ramp and level development, and one team with a one-boom jumbo;
 - Each crew consist of 1 jumbo operator and 3 workers for ground support and services.
 - One crew of 2 workers for sublevel development.

23.1.4.4 Equipment

The size of the required equipment is listed below. Details of the types of equipment are not available as the equipment will be provided by the contractor and will depend upon the availability of the equipment at the start of the project:

- A two-boom jumbo;
- A one-boom jumbo;
- One 6 cubic yard LHD;
- Two 3.5 cubic yard LHD;
- Two 26 tonne trucks (one is spare);
- Two scissor lifts;
- Jackleg and Stopper drill;
- X Tractor;
- Jack leg and stopper for room-and-pillar and sublevel crew and stopper for drift development crews;
- Scraper for room-and-pillar;
- One long-hole drill (54 mm).
- Service tractors;
- Man carrier;
- Two mine mule carriers.

23.1.4.5 Development and Production Schedule

InnovExplo developed a preliminary development and production schedule based on the existing underground development and mineral resources discussed in Section 17. The operation will use a production schedule of two 10-hour shifts, 7 days a week. The underground mine design provides for a five-year mine plan producing 689,829 tonnes of ore assaying 8.35 g/tonne. Using a mill recovery of 97.5%, a total of 180,629 oz of gold will be produced during this period.

The mining method will have an 80/20 ratio for room-and-pillar mining to long-hole mining. For stopes less than 45 degrees, the mining method will be room-and-pillar with long-hole for the remaining stopes

The mining plan includes all development required to access and mine the mineralized zones. Estimated development quantities are presented in Table 23.7 and the production schedule is presented in tables 23.8 and 23.9. Figure 23.7 gives a general overview of the total development and Figure 23.8 represents the minable zones.

The reserve included in the mining plan was obtained by applying a mining recovery of 85% for room-and-pillar mining and 95% for long-hole mining, with a dilution factor of 5% for room-and-pillar stopes and 20% for long-hole stopes. The average width for long-hole stopes is 3.5 metres; the resulting dilution corresponds to a thickness of 0.7 metre. The dilution grade was set at 0.0 g/t Au.

Table 23.7 – Development Quantities

	Pre-production	Year 1	Year 2	Total
Ramp (m)	921	1,003	0	1,924
Drift 4m x 4m (m)	496	168	0	664
Drift 3 m x 3.7 m (m)	1,462	1,430	237	3,129
Drift enlargement 4m x 4m (m)	345	0	0	345
Drift enlargement 3 m x 3.7 m (m)	689	1,161	0	1,850
Sublevel 3.0m x 2.4m (m)	618	367	0	985
Raises (m)	362	1,223	84	1,669
Tonnage (tonnes)	141,725	135,659	8,127	285,511

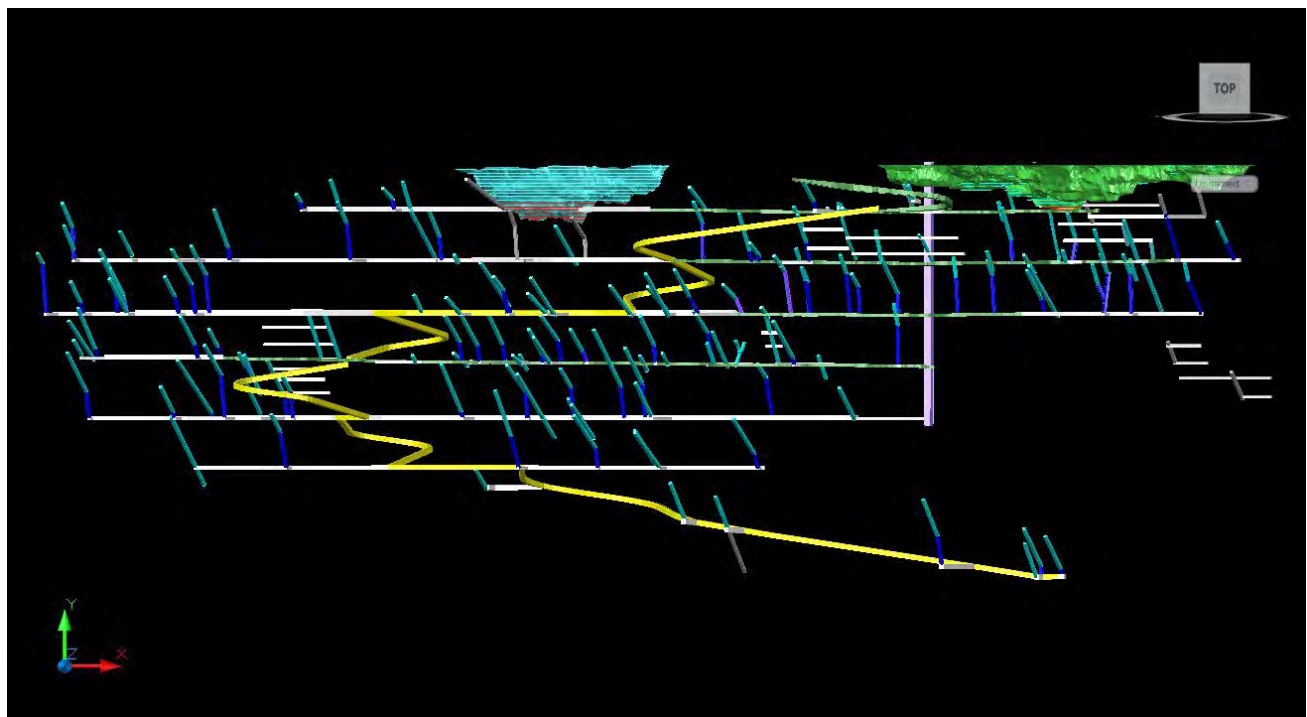


Figure 23.7 – Croinor Mine Development

Table 23.8 – Production Schedule Presented per Level

Production Schedule												
Level	Pre-production		Year 1		Year 2		Year 3		Year 4		Total	
	(t)	(g/t)	(t)	(g/t)	(t)	(g/t)	(t)	(g/t)	(t)	(g/t)	(t)	(g/t)
Level 125 E	4,015	5.90	803	16.67							4,818	7.69
Level 125 W	9,570	8.47	753	6.25							10,323	8.31
Level 250 E	31,011	7.62	51,712	8.01							82,723	7.87
Level 250 W			6,896	8.39	21,692	9.98					28,588	9.60
Level 375 E			31,916	9.32	24,731	9.11			11,990	11.45	68,637	9.61
Level 375 W			38,206	8.70	30,000	8.70					68,206	8.70
Level 500 E			42,214	7.96	40,764	7.79	14,475	8.43			97,453	7.96
Level 500 W							32,008	6.30			32,008	6.30
Level 625 E					38,070	8.46	56,816	8.55	5,074	9.07	99,960	8.54
Level 625 W					17,243	5.88	25,044	6.09	5,169	6.46	47,456	6.05
Level 750 E							30,322	6.59	39,393	6.59	69,715	6.59
Level 750 W							13,835	9.46			13,835	9.46
Ramp (875)							0		21,476	7.33	21,476	7.33
Ramp (1000)							0		44,631	13.37	44,631	13.37
Total	44,596	7.65	172,500	8.44	172,500	8.37	172,500	7.49	127,733	9.63	689,829	8.35

Table 23.9 – Production Schedule Presented per Method

	Pre-production	Year 1	Year 2	Year 3	Year 4	Total
Room-and-pillar (t)	18,798	105,470	125,089	137,838	127,733	514,928
Grade (g/t)	7.24	8.94	8.86	7.74	9.63	8.71
Long-hole (t)	25,798	67,030	47,411	34,662	0	174,901
Grade (g/t)	7.95	7.65	7.07	6.49	0	7.31
Total (tonnes mined)	44,596	172,500	172,500	172,500	127,733	689,829
Grade (g/t)	7.65	8.44	8.37	7.49	9.59	8.35
Total (tonnes milled)	42,000	172,500	172,500	172,500	130,329	689,829

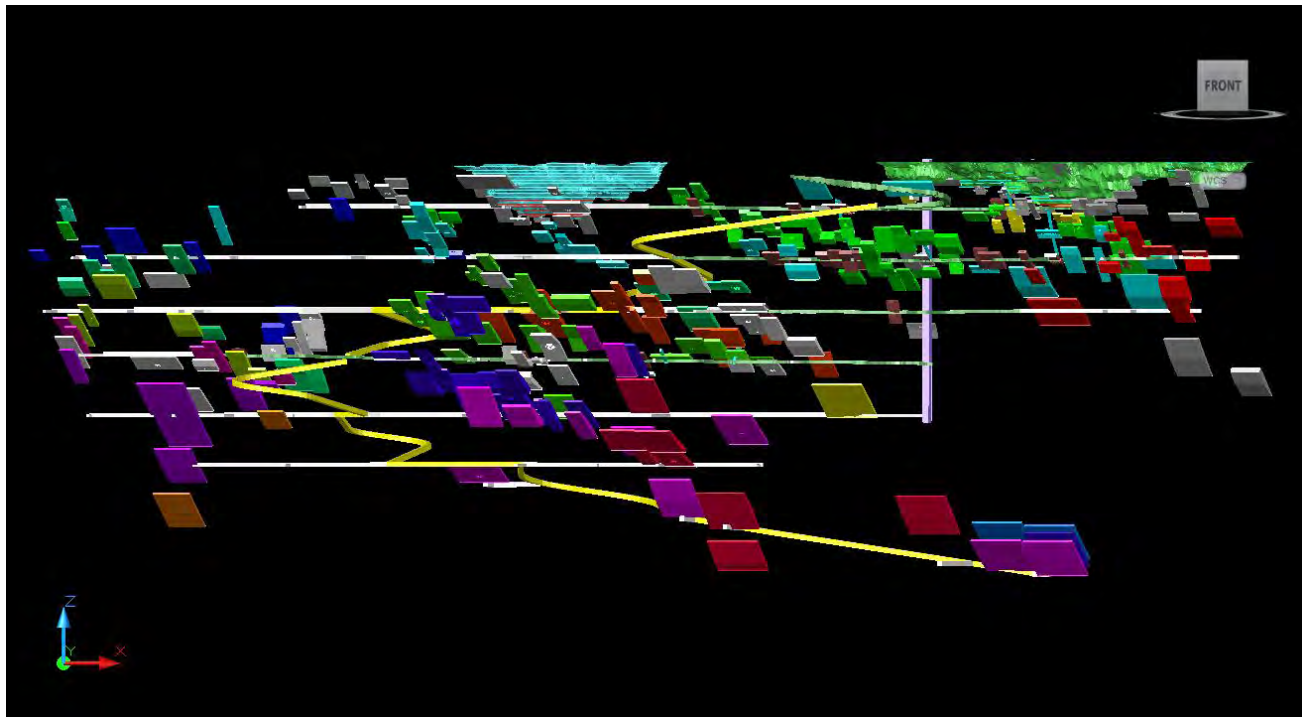


Figure 23.8 – Croinor Mine Development and Reserves

23.1.4.6 Equipment Selection

Mine development, ore production and mine services will be performed by a contractor. The equipment selection was based on contractor quotes and sized to support a 500 tpd mining rate. Development and production will be achieved with the equipment listed in section 23.1.4.4.

23.1.5 Mining Services

23.1.5.1 Ventilation

The existing shaft will be rehabilitated and used for mine ventilation and it will also serve as an emergency escapeway. For the current study, InnovExplo performed a preliminary simulation to establish a main ventilation network from which a secondary fan will bring air to the working area. The required ventilation was determined to be 95 cubic metres per second (200,000 cfm) and will be provided by a 224 kW (300 hp) main air fan. Fresh air will be heated by two 3224-kW (11-MBtu/hr) capacity propane burner systems and will exhaust via the ramp.

23.1.5.2 Dewatering

An innovative dewatering system is proposed for the Croinor Project. It consists of sumps located on each level and a sump located in the lower ramp and at the bottom of the mine. Each sump will be equipped with a 27-hp submersible pump installed outside the sump and submersible mixer in the sump. The use of mixers will avoid the deposition of suspended solids and the need to handle this sludge underground. The dirty water will be pumped in stages to surface. On surface, environmentally safe polymers are added to the water which will then be clarified in geotubes. Over 99% of solids are captured, and the clear filtrate can

be collected and used for production water or discarded into the environment. The solids remain in the geotube bag. When full, the geotube container and contents can be deposited at a landfill or the solids removed and used as a surface cover when appropriate. This type of system allows for smaller sumps and eliminates mud management underground.

Ongoing dewatering during mine operation is estimated at 963 m³/day based on previous operating data.

23.1.5.3 Compressed air

Two 41.8 m³/min (1,476 cfm) self-enclosed electric compressors will be installed on surface. A network of pipe lines will be installed down the shaft and along the ramp and drifts throughout the mine. Compressed air will be provided to various handheld drills and production longhole rigs and provide emergency air supply to the refuge station. A parallel network complete with pressure reducing valves will supply water to the underground operations.

23.1.5.4 Underground Power Distribution

One (1) 5 kV feeder will be used to supply all underground mobile substations. Junction boxes of 5 kV each will be installed at each level, to feed one or two mobile substations.

For the entire project, two 500 MVA and two 250 MVA underground mobile substations are to be installed at different levels to follow production requirements. These substation will be skid-mounted and will provide 600V and 120/208 V power to the underground loads such as pumps, fans, lunchroom, etc.

At each level, 5 kV junction boxes will be available to feed a fixed substation or the mining mobile substation assuring all the flexibility required by the mining operations.

23.2 Processing

Genivar was commissioned by InnovExplo and Blue Note Mining to review custom milling options in the context of a prefeasibility study for the Croinor gold project. The review provided a custom milling recommendation based on information provided by the client.

Genivar did not perform sampling, assaying or metallurgical work of any kind, but considered that the data provided came from reliable sources.

23.2.1 Review of Metallurgical Test Results

The first reported metallurgical study on the Croinor ore was performed by Lakefield Research in 1988 for Cambior. Results were promising for direct leaching, providing recoveries in the 96.7-97.9% range with no clear correlation to grind size. Flotation processing yielded slightly inferior recoveries, averaging 96.4% and also insensitive to grind size in the range tested. It must be emphasized that further gold unit losses for downstream processing (leaching or smelting) would have to be added on top of this, making the flotation-based route less appealing than direct cyanidation.

Early 2000 metallurgical testwork results (St-Jean, 2001; 2003) suggested again that the ore better responds to direct leaching than sequential flotation-leaching, with recoveries in excess of 94%. The sole sequential flotation-leaching test performed led to very poor results:

overall recovery of 87.8 % and significantly higher sodium cyanide consumption (twice as much).

The most recent bulk sample milling campaigns at the Camflo mill, processing ore from the East and West pits, confirmed that the Croinor ore is readily amenable to conventional processing (Pelletier and Boudrias, 2005), achieving recoveries ranging from 95.3% to 97.9%, with a weighted average at 97%. These recoveries were achieved on ore with significantly lower gold content than will be processed from the underground mine. According to the grade anticipated at Croinor, Genivar believes that a recovery of 97.5% is attainable, and this value was used in the present study.

Metallurgical results available are detailed in tables 23.10 and 23.11. It should be noted that gold recovery is usually directly correlated with the head grade. Caution is thus advised when comparing the results of the different test programs.

Table 23.10 – Metallurgical Laboratory Testwork Results

Company	Year	Process	Size distribution			Head Grade				
						Rec.	Calc.	Meas.	Diff.	Diff.
						(%)	(g/t)	(g/t)	(g/t)	(%)
Cambior	1988	Cyanidation	76.8%	-200	MESH	97.8	5.99	5.88	-0.11	1.8
		Cyanidation	82.8%	-200	MESH	97.9	5.99	5.58	-0.41	6.8
		Cyanidation	88.8%	-200	MESH	97.8	5.99	5.87	-0.12	2.0
		Cyanidation	80.0%	-200	MESH	96.7	5.99	5.98	-0.01	0.2
		Flotation	70.0%	-200	MESH	96.4	5.99	6.01	0.02	0.3
		Flotation	80.0%	-200	MESH	96.3	5.99	5.46	-0.53	8.8
		Flotation	90.0%	-200	MESH	96.6	5.99	6.41	0.42	6.6
Malartic-Sud	2001	Knelson	100.0%	-10	MESH	47.3	3.24	2.06	-1.18	36.4
		Flotation	94.1%	-200	MESH	83.3	3.24	2.24	-1.00	30.9
		Flotation	94.1%	-200	MESH	69.9	3.24	2.97	-0.27	8.3
		Flotation	94.1%	-200	MESH	97.7	3.24	2.94	-0.30	9.3
		Cyanidation	94.1%	-200	MESH	96.3	3.24	2.01	-1.23	38.0
		Cyanidation	97.3%	-200	MESH	97.3	3.24	2.01	-1.23	38.0
Malartic-Sud	2003	Flotation-Cyanidation	77.8%	-200	MESH	87.8	4.45	4.12	-0.33	7.4
		Cyanidation	68.0%	-200	MESH	94.3	4.45	5.04	0.59	11.7
		Cyanidation	79.9%	-200	MESH	95.8	4.45	6.42	1.97	30.7
		Cyanidation	82.6%	-200	MESH	93.8	4.45	5.97	1.52	25.5
		Cyanidation	84.9%	-200	MESH	94.2	4.45	9.00	4.55	50.6
		Cyanidation	87.6%	-200	MESH	95.7	4.45	6.74	2.29	34.0
		Cyanidation	94.8%	-200	MESH	93.9	4.45	6.44	1.99	30.9
		Cyanidation	97.4%	-200	MESH	96.1	4.45	4.87	0.42	8.6
		Flotation	80.5%	-200	MESH	94.9	6.68	7.33	0.65	8.9
Cyanidation	93.0%	-200	MESH	99.1	6.68	7.56	0.88	11.6		

Sources: Pelletier and Boudrias (2009), Chénard and Turcotte (2003)

Table 23.11 – Metallurgical Results from 2004-2005 Bulk Campaigns

Date			Tonnage T	Grade g/t	Ounces	Recovery	
						%	Ounces
February	03-25	2004	20629	3.1	2033	97.4%	1981
August	06-13	2004	7883	1.8	456	95.3%	435
August	18-31	2004	9750	1.97	619	95.5%	591
October	07-18	2004	13127	2.5	1055	96.6%	1019
July		2005	24363	5.38	3920	97.9%	3834
Total			75752	3.33	8081	97,0%	7860

Source: Pelletier and Boudrias (2009)

23.2.2 Analysis and Recommendation

Production at the Croinor deposit is planned at a rate of 500 tpd over a four-year period. Only four gold concentrators located within a 120 km radius have the capacity to process the Croinor ore: Beacon Gold Mill, Aurbel Gold Mill, Sigma-Lamaque Complex and Camflo Mill. Table 23.12 summarizes their main features.

Table 23.12 – Potential Plants for Custom Milling

Mill	Company	Process	Capacity	Distance
Beacon Gold Mill	Northern Star Mining	leaching/Merrill-Crowe	900 tpd	60 km
Aurbel Gold Mill	Alexis Minerals	flotation & leaching	1,200 tpd	69 km
Sigma-Lamaque Complex	Century Mining	gravity concentration & leaching	2,500 tpd	73 km
Camflo Mill	Richmond Mines	leaching/Merrill-Crowe	1,200 tpd	105 km

Typical flow sheets for direct leaching/Merrill-Crowe and sequential flotation-leaching/Merrill-Crowe are depicted in figures 23.9 and 23.10 respectively.

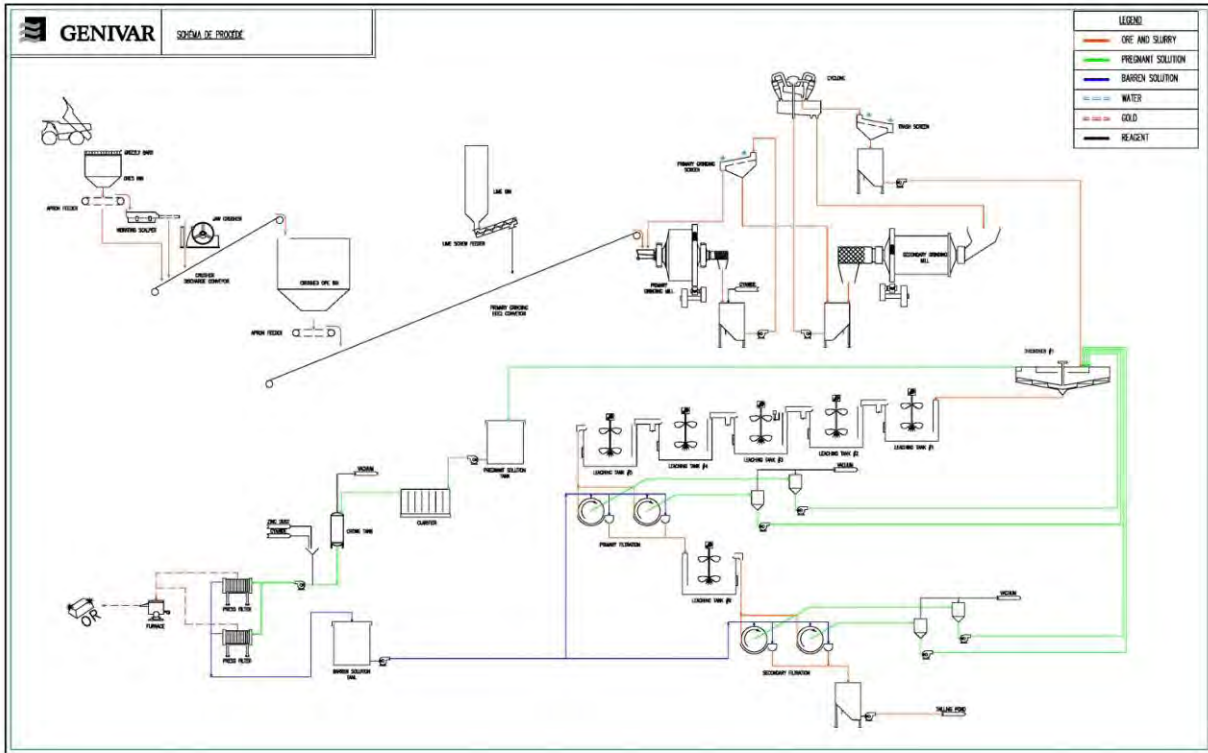


Figure 23.9 – Direct leaching (Merrill-Crowe) typical flow sheet.

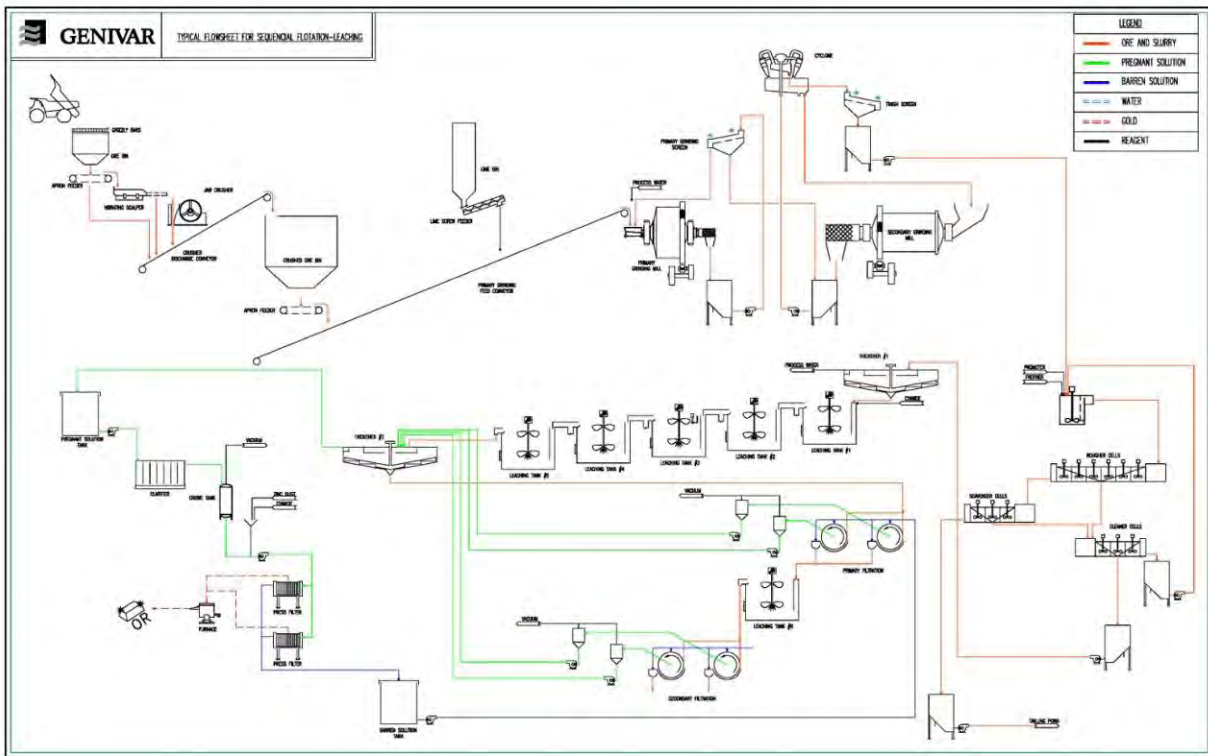


Figure 23.10 – Sequential flotation-leaching (Merrill-Crowe) typical flow sheet.

Sigma-Lamaque Complex could technically be an interesting choice since some test results suggested that gravity concentration could be beneficial for ore originating from Zone A5 (St-Jean, 2003). However at 2,500 tpd, the plant capacity would require several weeks of stockpiling for every campaign. The CIP (carbon-in-pulp) gold recovery process would present another hurdle: the management of loaded carbon inventory in the circuit. In fact, reconciliation of gold recovery in a carbon-based process can be problematic in a custom milling situation involving independent feed sources.

Aurbel Gold Mill would have been an attractive option from a location standpoint. However, the metallurgical results currently available for the flotation-based flowsheet raise some concerns about potential gold unit losses and higher sodium cyanide consumption.

Beacon Gold Mill has been refurbished and is currently under care and maintenance. The interest of Northern Star Mining for custom milling is unknown, but the proximity, gold recovery process and capacity (900 tpd) of the mill make it an attractive candidate to treat the Croinor ore.

Based on the metallurgical results and above considerations, the Camflo mill may be the best option. In addition to having successfully processed the Croinor ore in the past, hence mitigating any technical risk, the plant is likely to have availability for new custom feed, and has been in the custom milling business for years. This plan assumes that the ore will be processed at Camflo for the purpose of estimating milling and transportation costs although a final evaluation and decision will be made when the project commences.

It must be emphasized that in addition to conventional milling, the Croinor ore could be a good candidate for pre-sorting at the mine site. Currently available/proven technologies could help significantly reduce the amount of material requiring processing at the custom-milling facilities, hence reducing transportation and treatment charges. Off-the-shelf processing equipment can be installed with a small footprint and low capital investment. GENIVAR highly recommends considering ore sorting at the mine site prior to conventional milling. In addition, there may be an opportunity to install a gravity separator at the chosen custom mill to reduce operating costs and potentially improve gold recovery.

23.3 Surface Infrastructure

23.3.1 Plant and site layout

Figure 23.11 presents the general surface layout, including the proposed location of the required infrastructure for the Croinor mine.

23.3.2 Electrical Power Supply and Distribution

Stavibel was contracted by InnovExplo to provide electrical single line diagrams and a project load list. Stavibel also provided the electrical installation requirements used in the prefeasibility study. The Croinor property is currently not serviced by an electric power line. The closest power line is located 26 km west of the Croinor site (at the former Chimo mine).

The power demand for the mine site is estimated at 1925 KW. The Croinor mine project requirements include the following electrical installation:

- New overhead 25 kV three-phase power line between the former Chimo mine to the Croinor mine site;
- New overhead 25 kV three-phase power line on site to feed the surface installations such as the dry, offices, garage, etc. and the new 25 kV/4.16 kV substation;

- Underground main distribution (details are given in section 23.1.5.4)



Figure 23.11 – Surface Plan General Arrangement

23.3.2.1 25 kV Three-Phase Overhead Power line (Off-Site)

To supply electric power to the site, a new 26 km 25 kV three-phase overhead power line is planned. This new power line is assumed to be privately held and not owned by Hydro-Québec. Further discussions between the client and Hydro-Québec will be required to define if ownership could be transferred to Hydro-Québec and if capital costs could be shared between both parties.

Operation of a self-powered generator is heavily dependent on fuel. Using 300 litres/hour for one megawatt (1mW) of active power, the fuel cost for one (1) year is estimated at \$2,600,000 (300 l/h x 24 h/day x \$1/l). This cost does not include the generator rental costs, maintenance and operator fees. Since the construction of a new power line is estimated at \$1.8M, discussions were not initiated with generator vendors. By the end of the mine life, the Croinor Project will require a power supply of around 1.7 MW.

23.3.2.2 Croinor Project 25 kV Surface Distribution

A 25 kV voltage level was selected to optimize voltage regulation and to use lower cost standard equipment. As previously stated, the underground main distribution feeders will be operating at 4.16 kV to ensure proper cable sizing and adequate voltage regulation.

The site surface buildings will be supplied by one (1) 25 kV three-phase overhead ACSR line mounted on wood poles. Since all service buildings require less than 500 kVA, all

buildings will be supplied by transformer banks on wooden poles with AC lightning arresters, fuse disconnect switches, and grounding.

The site exterior lighting will also be supplied by 25 kV line through a single-phase transformer. Dusk-to-dawn lights will be mounted on poles in order to maintain minimal lighting in the areas covering the camp site (offices, dry, warehouse, garage and access to ramp). In addition 100W floodlights will be mounted on fifty (50) foot wooden poles near the ramp, ore and waste piles.

23.3.2.3 Croinor Project 25 kV Main Substation

The 25/4.16 kV substation will be designed with no redundancy. The new substation is composed of one 25 kV overhead incoming line with one 25 kV three-phase breaker installed on wood poles, one 2 MVA 25/4.16 oil step-down transformer and a standard air insulated switchgear.

This substation will be installed in a mobile container with refurbished equipment. It will be located near the existing shaft to limit the length of power cables feeding the largest loads. Power factor regulation issues will be addressed by using passive capacitor banks (500 kVAR). The 2 MVA transformers are able to support the full underground mine load, compressors and the main ventilation fan loads.

23.3.3 Site Access

The Croinor site is accessible by way of a 37-km gravel road branching off Route 117 (Trans-Canada Highway), approximately 40 km east of Val-d'Or. Existing roads to and on the site will be upgraded to support vehicle travel to and from the site, including the offsite transportation of ore for processing. A 13-km segment of the gravel road requires major maintenance. Another access to the site is possible via Senneterre using a gravel road.

23.3.4 Camp

No permanent or temporary camp is included. Given the proximity to Val-d'Or, transportation will be organized by Blue Note Mining for its staff and by the contractor for its workers.

23.3.5 Mine site Entrance/Guardhouse

All visitors, contractors, delivery personnel and mine personnel will go through a main entrance located at the west side of the site. A temporary guardhouse will be erected at this point and anyone entering the site will do so only after being authorized by security personnel. A fenced-in car park will be located next to the gate and will have electric outlets to plug in the vehicles during cold weather.

23.3.6 Office Building and Dry complex

A modular installation will be installed by the contractor to serve as offices for administration, engineering, geology and contractors. The dry installation will be adjacent to the offices.

23.3.7 Service Buildings

The existing garage consisting of a single arched type building on a cemented slab is in good condition and will be refurbished to be used for equipment maintenance. A cold storage will be erected on the cemented pad adjacent to the garage. A trailer-type temporary building will be installed near the garage to be use as a core shack.

23.3.8 Site Roads

A site road providing access to various parts of the property already exists and will require minimal restoration work to be fully operational

23.3.9 Compressor Building

Two 41.8 m³/min (1476 cfm) self-enclosed compressors will be located mid-distance between the portal and the main electrical sub-station.

23.3.10 Fuel Storage

Diesel fuel for the mine equipment and vehicles will be stored in an above-ground tank. A 5100-litre diesel tank will be installed according to prevailing environmental laws and regulations. There is no gas station since only surface pick-up trucks are gas operated and they will be fuelled off-site.

23.3.11 Site Fencing

Fencing will only be provided for the main substation, the propane tanks and for a short distance on each side of the main entrance gate.

23.3.12 Water Systems

Fresh water for the mine site will consist of pumped water from a well that will be drilled and tested for its water quality. The water quality must meet the requirements of Québec's drinking water regulations. Regular monitoring will be carried out as required by such regulations.

If the well water does not meet the provincial norms and its treatment is not possible, bottled water will be available on site for human consumption.

23.3.13 Communication system

The Croinor site will be connected to the public telephone service using a wireless telephone network.

A preliminary evaluation of the topography suggests two 70-foot communication towers equipped with microwave radio transmitters installed on a concrete slab. Internet connection will be provided using a satellite system giving a 10 Mbs transfer rate at a reasonable cost of installation. Internet could be included in the point-to-point telephone network. Further discussions with the telephone provider (Télébec) or other third party providers should be held to evaluate all installation and operation options before completing the final design.

The surface radio system consists primarily of channels with local short-distance coverage or extended coverage. At this stage, one radio signal repeater is planned and will be installed inside the dry building since emergency power will be available.

The following channels are planned for the site:

- Security/Emergency;
- Surface operations;
- General and maintenance (mechanical/electrical/housekeeping/etc.);
- Underground operations (underground link with surface).

IP technology is recommended for site communication systems for both voice and data communications. This technology is widespread, versatile and reliable. It allows the use of the similar type of equipment for both purposes, thereby reducing the types of different equipment to be installed and maintained on such a large site.

IP technology permits easy integration of the following services:

- Telephony;
- Computer data (Internet/Intranet).

Voice over IP (VoIP) telephone system with 6 lines/24 extensions will be installed. High-range IP phones are planned for the offices while basic IP phones will be sufficient for other services.

23.3.14 Sewage

It is planned to install a treatment system for the sewage water coming from the buildings. The system is not designed yet and some soil testing is required before proceeding with the design. The system will most likely be composed of septic tank and bed.

23.4 Project Implementation Schedule

The project implementation schedule (pre-production schedule), which is shown in the Gantt chart (Fig. 23.12), has been developed to achieve full production within approximately 14 months of project approval.

It is assumed that all project permitting and financing activities will be completed prior to any construction activities taking place at the site.

Before starting mine dewatering, the existing settling pond and discharge ditch will be refurbished and the final effluent station will be modified. Also, a waste rock source for road construction will be selected and permitted.

The following is a list of some of the pre-production work that can proceed simultaneously beginning in Month 2 following a positive decision to proceed with the project:

- Dewatering;
- Road improvement;
- Electric line extension (to be coordinated with wood cutting under the responsibility of the contractor doing the road improvement). Note that completing the extension of the electric line from the Chimo mine to Croinor mine site is the priority. This will minimize the need for temporary power during the construction period, which is significantly more expensive than permanent power.

Mobilization of the mining contractor is planned about one month prior to the completion of mine dewatering in order to get the surface infrastructure ready before rehabilitating the shaft and ramp.

Development work commences in Month 6.

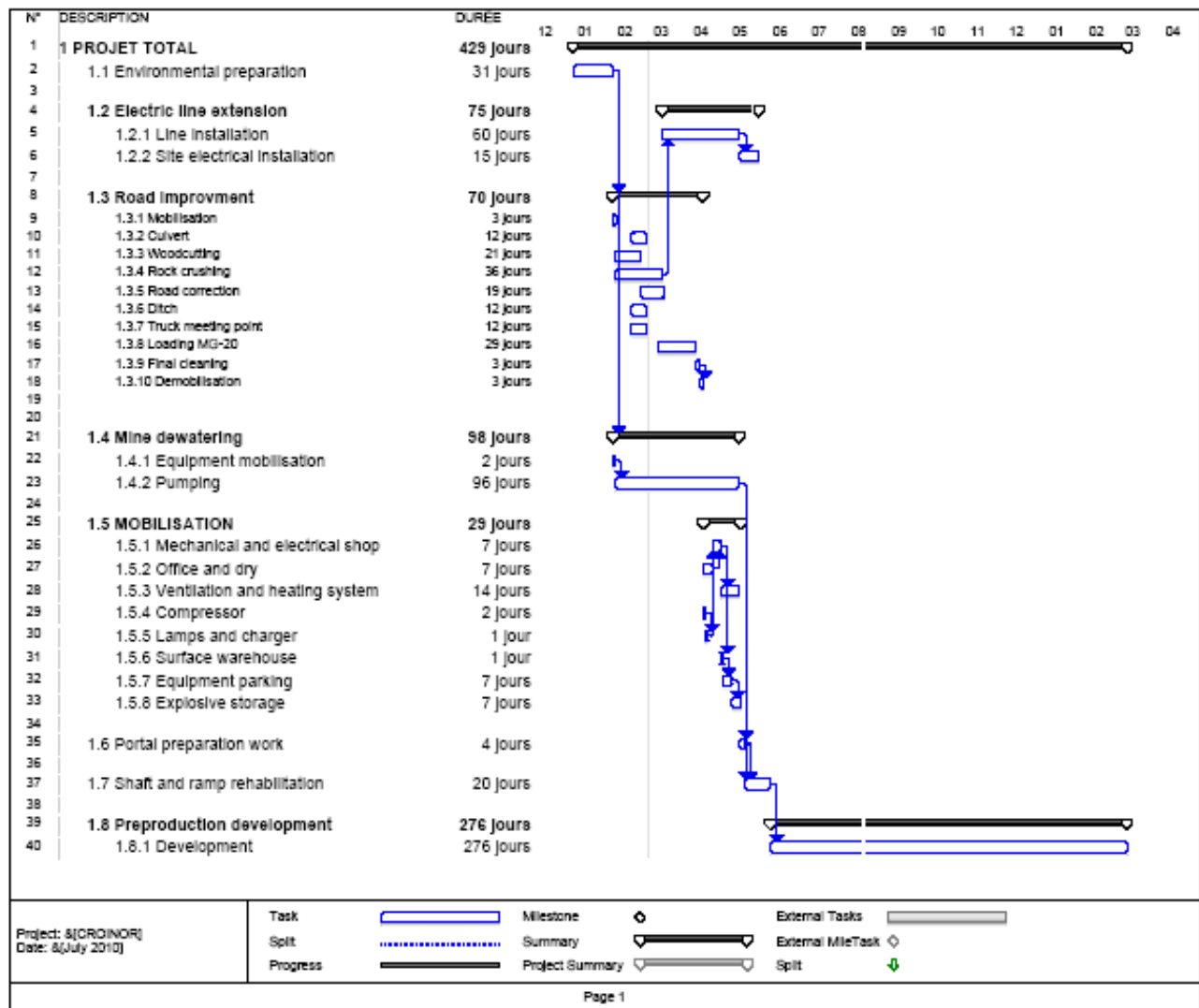


Figure 23.12 – Pre-Production Gantt Chart

23.5 Environment

Golder has been mandated by Blue Note Mining to prepare this section of the current report..

23.5.1 Hydrology

Surface water from the Croinor Property is part of the Bell River watershed. The water flows towards an unnamed stream that is a tributary of Blanchin Lake. The outlet of Blanchin Lake flows into the Marquis River to Guéguen Lake, then to Simon Lake, Tiblemont Lake and Bell River. The mine effluent will be directed through an existing drainage ditch to the unnamed stream.

23.5.2 Hydrogeology

Since it is not expected that the Croinor deposit will generate ore and residues (waste rock) that will be acid-generating or that will leach metals under neutral pH or acid rain conditions, a formal hydrogeological study was not requested as part of the permitting process.

Based on some information gathered from a geotechnical program carried out by Golder in 2003, the soils are mainly composed of sand and silt on the Croinor site. The overburden is thin and water saturated soils were encountered in 3 of the 13 trenches completed.

The likelihood of having a class I or II aquifer on the Croinor site is low.

23.5.3 Waste and Mineralized Rock Characterization

In order to characterize the waste rock and the ore, selected composite samples were collected from drill core samples. The core represented typical geological units and ore that will be extracted during the mine operation.

Ten (10) ore samples, 8 waste rock samples and 3 mud samples (from the settling pond) were collected and tested using the modified Sobek ABA method (acid-base-accounting) in order to determine the acid generating potential.

The 10 ore samples, the 8 waste rock samples and 1 composite sample from the pond mud were assayed for trace elements in order to estimate whether their metal content was above Criterion A of the *Soil Protection and Contaminated Site Rehabilitation Policy* (SPCSR). If metal values are found to be above Criterion A, leach tests are required to evaluate whether metal leaching is possible.

For the leach tests, the 10 ore samples were combined into 5 composite samples. The 8 waste rock samples were combined into 4 composite samples. Leach tests on these 9 composite samples were carried out using the TCLP, SPLP and CTEU-9 protocols (which represent leaching under acetic acid, acid rain conditions and neutral pH respectively).

Based on the results of these tests, the mud of the settling pond is a low-risk non-acid-generating residue. The ore and the waste are not acid-generating and they do not leach metals under neutral pH and acid rain conditions, which are the most likely conditions at Croinor.

23.5.4 Environmental Management

23.5.4.1 Mine Water Management – Initial Development

In order to initiate underground development, the open pits and existing underground openings have to be dewatered (the mine workings are connected to the main pit). Initial dewatering is expected to be carried out at a rate of 5,500 m³/day for an approximate period of 92 days. Ongoing dewatering during mine operation is estimated at 963 m³/day based on previous operating data.

Based on data from previous dewatering during the 2003-2005 period, the effluent quality always met release limit thresholds and metal values were low. Mine water will be pumped and processed through geotubes to collect mine sludge.

Discharge from the geotubes will be directed to the existing settling pond (60 x 60 m). The pond effluent will be monitored according to the MMER and *Directive 019* requirements.

23.5.4.2 Mine Water Management – Operation

During operation, the mine water will be collected and treated on surface using geotubes. The geotubes allow suspended solids and possible contaminants to be removed. The clear filtrate will be collected and used for production water or discarded into the settling pond. The retention time in the pond will provide further polishing of the water. Excess water will

be allowed to flow out of the settling pond, and monitoring of this effluent will be carried out according to prevailing regulations.

23.5.4.3 Runoff Management

The site is not prone to runoff due to the sandy and silty nature of the soils. There is no system to collect runoff due to the high infiltration rates in the soils, waste piles and backfilled areas of the site.

23.5.5 Emergency Response Plan

To ensure the health and safety of workers and protection of the environment, an emergency response plan will be developed for the duration of mining operations. This plan will include, appropriated emergency measures for different potential situations in order to ensure a rapid and effective response.

23.5.6 Monitoring

It is planned to contract out the environmental monitoring and control activities since the scope of the project does not support the need for a full time coordinator. The sampling of the settling pond effluent will be carried out once a week. The effluent will be assayed for pH, total suspended solids (TSS) and metals (As, Cu, Fe, Ni, Pb, Zn, Ra) according to *Directive 019* and MMER requirements. Assaying of an extended list of parameters is required once every quarter and once a year.

The contractor will submit monthly and annual reports to the provincial and federal agencies.

23.5.7 Air Quality

The Québec regulation on air quality requires that no dust clouds be visible more than 2 metres from the source. On surface, the handling and breaking of ore could be a source of dust. If dust clouds become visible during ore handling and breaking, water will be sprayed on the ore to prevent dust from spreading.

Trucking on the mine site is another source of dust. Dust control agents will be used if needed.

23.5.8 Waste Rock Acid-Based Accounting

Waste rock permanently brought to surface either for disposal on surface or for use as a construction material must be tested for acid generation potential.

23.5.9 Effluent Quality

The pond effluent will be monitored according to the MMER and *Directive 019* requirements.

23.5.10 Closure Consideration

One of the site liabilities is its reclamation in accordance with the Québec Mining Act. Waste piles will be reclaimed by re-establishing a soil cover and vegetation. The backfilled area of the site will be reclaimed the same way. Buildings will be dismantled and foundations backfilled and vegetated. Underground openings will be blocked or capped. Equipment will be removed from the mine and the site.

The second liability is to carry out, at final mine closure, an Environmental Site Assessment (ESA) as required by the Environmental Quality Act. If ground contamination is discovered

during the ESA, an environmental rehabilitation plan must be submitted to the Ministry for approval and the site must be decontaminated.

There are no other existing environmental liabilities.

In order to fulfil requirements of the Mining Act, waste rock piles, areas backfilled with waste rock, and cement foundations must be reclaimed by re-establishing vegetation. The settling pond needs to be emptied and levelled. A breach will be opened in the dike to accommodate free water flow. The pond will be seeded.

Self-sustaining vegetation must be in place 5 years following final site reclamation.

Agronomical and geotechnical inspections will be carried out to ensure the site's integrity.

The method selected for re-establishing vegetation over waste rock piles and areas backfilled with waste rock is to place a 15-cm layer of silt and/or organic soil over the rock and then proceed with fertilizing and seeding of grass. A layer of silt and/or organic soil will help retain water in the surface layer. A borrow pit for this material needs to be found near the mine site.

Fertilizing and seeding will be done directly in the settling pond and on the piles of overburden.

Mine workings (ramp and shaft) will be blocked and capped.

A protection abutment will be maintained around the open pits, which will eventually be flooded after mine closure.

23.5.11 Permitting requirement

The last period of mining at the Croinor site ended in May 2005. In order to facilitate the resumption of mining operations, Golder undertook a review of environmental permitting and licensing requirements. Table 23.13 summarizes the status and actions for obtaining the required permits.

**Table 23.13 – Permitting Status
PERMITS AND LICENCES**

Permit / Licence name	Issuing Agency	Status	Comments
Certificate of Authorization (CofA) for operating a mine	MDDEP	Completed	CofA delivered in September 2010
Request for Environmental Objectives for Rejects (OER)	MDDEP	Completed	Delivered in August 2010
CofA for septic installations	MDDEP	To initiate	Soil testing, design and CofA application to initiate once project receives go-ahead
CofA for drinking water well	MDDEP	To initiate	Drilling of well and CofA application to initiate once project receives go-ahead
Environmental Effects Monitoring Studies (EEMS)	Environment Canada	To initiate	Process to be initiated once project CofA for operation is obtained and project receives go-ahead
Rehabilitation plan	MRNFP	Completed	To be submitted to MNRW when project is started
Crown pillar study	MRNFP	Completed	Published April 2011
Wood cutting permit	MRNFP	To initiate	Documentation to be prepared and submitted to MNRW once project receives go-ahead
Gravel pit	MRNFP	To initiate	Only if required; application to be submitted once project receives go-ahead
Construction permit	Town of Senneterre	To initiate	Permit application document to be prepared and submitted once project receives go-ahead
Explosive permit	Natural Resources Canada	To initiate	Permit application document to be prepared and submitted once project receives go-ahead
Fuel storage permit	Régie du bâtiment du Québec	To initiate	Permit application document to be prepared and submitted once project receives go-ahead
Permit to dismantle beaver dams	MRNFP	To initiate	Permit application document to be prepared and submitted once project receives go-ahead

MDDEP: Ministère du Développement durable, de l'Environnement et des Parcs (Ministry of Sustainable Development, Environment and Parks); **MRNFP:** Ministère des Ressources naturelles et de la Faune (Ministry of Natural Resources and Wildlife)

23.5.12 Québec Environmental Quality Act and Legislation

The Québec Environmental Quality Act (EQA) requires that a Certificate of Authorization (CofA) be obtained for an industrial activity that may result in the release of contaminants into the environment.

A CofA request document for the operation of the Croinor mine was prepared by Golder and submitted to the Ministry of Sustainable Development, Environment and Parks (*Ministère du Développement durable, de l'Environnement et des Parcs*; MDDEP) in February 2010. Following the analysis of the CofA document, 2 requests for additional information were received from the MDDEP in March and June 2010. Replies to these requests were submitted in May and June 2010, respectively. The CofA for operating the Croinor mine was delivered in September 2010 by the MDDEP.

The CofA request document was prepared in compliance with Québec's *Directive 019*. As part of the permitting process, a request for environmental objectives of rejects (OER: *Objectifs environnementaux de rejets*) was submitted to the MDDEP in May 2010. A request for additional information about the OER application was received in July 2010 and a reply was submitted to the MDDEP. The MDDEP released the OER in August 2010.

CofA applications will have to be submitted to the MDDEP for the sewage treatment system and the drinking water well. Documentation for these applications will be prepared and submitted to the MDDEP when a positive decision is made to reopen the mine.

23.5.13 Canadian Metal Mining Effluent Regulation

Environmental Effects Monitoring Studies (EEMS) are required by the Canadian Metal Mining Effluent Regulation (MMER). The initial plan of the EEMS for Croinor was prepared and submitted to Environment Canada (EC) in 2005 by Alliance Environment. Since operation of the mine ceased in May 2005, the EEMS process was aborted.

The EEMS process will have to be re-initiated when the CofA is obtained from the MDDEP and the project receives its go-ahead.

23.5.14 Québec Mining Act

The Québec Mining Act (QMA) requires that a mine site rehabilitation plan and a crown pillar stability study be submitted to the Ministry of Natural Resources and Wildlife (*Ministère des Ressources naturelles et de la Faune*; MRNFP) when the project is initiated.

As requested by the QMA, the rehabilitation plan must be updated every 5 years. The last plan for Croinor was prepared and submitted in 2004 and the project is therefore due for an updated rehabilitation plan. The plan serves to establish the financial guarantee that must be delivered to the MRNFP to cover reclamation of the site. When reclamation is completed, the Ministry will reimburse the financial guarantee. To date, X-Ore Resources has deposited a financial guarantee totalling \$105,178. Golder prepared and updated rehabilitation plan which will be submitted to MNRW once the project is started. Drilling for the crown pillar study was completed in June 2010. Field measurements and lab testing on the drill core were carried out in July. The report was delivered in April 2011.

23.5.15 Other permits

The following permits will be required for the development and operation of the Croinor deposit:

- Wood cutting
- Gravel pit
- Construction
- Explosive
- Fuel storage
- Beaver dam dismantling

The application for these various permits will be prepared and submitted to the concerned agencies when a positive decision is made to reopen.

23.6 Capital Expenditure

Most of the capital cost was estimated using quotes from equipment suppliers and contractors. In some cases, comparable installations at other projects were used. The capital cost estimate is accurate within $\pm 20\%$.

The pre-production costs are estimated at \$17.32 million, including \$925,608 of capitalized operating costs net of production revenue received during the pre-production period. Sustaining capital is estimated at \$7.43 million, excluding \$0.62 million for final closure costs. The cost breakdown is presented in Table 23.14.

Table 23.14 – Capital expenditure breakdown

Description	Pre-production	Sustaining	Total cost
Capitalized operating cost	\$14,843,398		\$14,843,398
Capitalized revenue	-\$13,917,790		-\$13,917,790
Dewatering and rehabilitation	\$1,444,588		\$1,444,588
Development	\$6,671,356	\$6,753,571	\$13,424,926
Ventilation equipment	\$245,410		\$245,410
Mine dewatering	\$416,681		\$416,681
Surface installation and equipment	\$1,403,714		\$1,403,714
Electrical distribution	\$4,958,095	\$429,868	\$5,387,963
Building and infrastructure installations	\$835,208		\$835,208
Environment	\$421,827	\$230,173	\$652,000
Contractor demobilization		\$19,789	\$19,789
Total capital expenditures	\$17,322,486	\$7,433,401	\$24,755,887

23.6.1 Capital Operating cost and revenue

During the 14-month pre-production period, a total production of 10,073 ounces of gold is expected, providing revenue of \$13,917,790. The operating cost planned for the pre-production period was estimated at \$14,843,398. The pre-production revenue and pre-production operating costs were capitalized.

23.6.2 Dewatering and rehabilitation

The capital cost related to initial dewatering and rehabilitation totals \$1,444,588. Dewatering of the mine includes the equipment and manpower required for mine dewatering, such as the pumps and all the equipment needed for using geotubes. The rehabilitation work consists of shaft rehabilitation, portal preparation work and ramp rehabilitation to level 125. A 20% contingency is included in the rehabilitation estimates.

23.6.3 Development

A considerable amount of development and rehabilitation work is planned for the pre-production year to provide a degree of flexibility in terms of access, which should facilitate scheduling during the production period.

The capital development is estimated to be \$6,671,356 in the pre-production period and to be \$6,753,571 as sustaining capital. It includes the entire development of the ramp, the excavation and enlargement of a drift of 4m x 4m, and 50% of the remaining drift excavation and enlargement. In the case of the raises, 20% of the overall raise excavation is capitalized since most of the raises are included in stope development. Primary development, such as the electrical station, refuge station, and sump, are part of the development capital cost. A 20% contingency was added to drifts and raises.

23.6.4 Ventilation equipment

The costs for the ventilation system were estimated from budget quotes provided by suppliers. The details of the ventilation costs are presented in Table 23.15. The propane tank installation is not capitalized because the plan is to rent these units.

Table 23.15 – Ventilation equipment capital cost

Description	Quantity	Cost
Main fan (300 hp) and accessories	1	\$43,000
Burner and accessories	1	\$112,000
Underground fan	8	\$58,400
Contingency (15%)		\$32,010
Total		\$245,410

23.6.5 Mine dewatering

The costs for the mine dewatering equipment were estimated using budget quotes provided by suppliers. The capital costs associated with mine dewatering equipment total \$416,681 and are detailed in Table 23.16.

Table 23.16 – Mine Dewatering Capital Cost

Description	Quantity	Cost
ITT Flygt pumps BS-2670	8	\$125,508
Mixer	8	\$69,649
Production water pump	1	\$15,000
Geotube infrastructure	1	\$175,000
Contingency (15%)		\$31,524
Total :		\$416,681

23.6.6 Surface Installation and Equipment

Table 23.17 presents the cost of surface installations and systems based on budget quotes provided by suppliers and existing comparable installations at other projects.

Table 23.17 – Surface Installation and Equipment Capital Cost

Description	Quantity	Cost
Compressors	2	\$221,767
Gate house	1	\$15,000
Parking lot pad preparation	1	\$20,000
Propane farm pad	1	\$5,000
Surveying equipment	1	\$80,000
Material for office	1	\$75,000
Road improvement	1	\$832,780
Contingency (15%) except for compressors		\$154,167
Total		\$1,403,714

23.6.7 Electrical Distribution

The capital cost estimation related to the electrical infrastructure for the Croinor property and the mine were provided by Stavibel and are provided in Table 23.18.

Table 23.18 – Electrical Distribution Capital Cost

Description	Cost
4.16/0.6kV compressors facility and emergency genset	\$340,190
25/4.16kV substation for underground distribution	\$315,484
4.16kV underground distribution	\$947,620
Off-site power line	\$2,305,650
Deforestation work	\$155,345
On-site power line	\$200,750
Surface communication system	\$97,875
Contingency (20%)	\$893,836
Total :	
	\$5,387,963

23.6.8 Building and Infrastructure Mobilization and Installation

The building and infrastructure mobilization and installation costs (Table 23.19) are based on budget quotes provided by mining contractors.

Table 23.19 – Building and infrastructure mobilization and installation capitalized cost

Description	Cost
Mechanical shop	\$92,098
Contractor's office and dry	\$70,987
Blue Note Office and core shack installation	\$20,099
Main ventilation system installation	\$40,196
Compressor installation	\$19,738
Minor lamp charger installation	\$12,180
Warehouse	\$30,266
Diesel tank	\$34,494
Explosives storage	\$53,156
Surface parking for equipment	\$43,841
Underground communication system	\$24,516
Industrial pumping distribution system	\$65,127
Electrical distribution	\$31,356
Equipment preparation and mobilization	\$297,154
Total :	\$835 208

23.6.9 Environment

Environmental capital cost estimates were provided by Golder and are summarized in Table 23.20.

Table 23.20 – Building and infrastructure mobilization and installation capitalizes cost

Description	Cost
Final effluent station and ditch	\$69,800
Characterization of waste for road upgrading	\$10,000
Fees for using water (dewatering)	\$1,260
Drinking water well	\$56,847
CofA application for sewage system	\$13,050
Sewage system	\$120,000
CofA for gravel pit	\$5,000
Miscellaneous permits	\$20,000
Plans for effluent station and ditch	\$10,000
Environmental operating manual	\$20,000
Environmental effects monitoring study	\$39,806
Contingency (15%)	\$56,064
Subtotal :	\$421,827
Financial guarantee to Ministry of Natural Resources (\$105,178 already in guarantee)	\$81,702
Environmental effect monitoring study	\$148,471
Subtotal	\$230,173
Total	\$652,000

23.6.10 Sustaining Capital

The sustaining capital estimate for the operating life of the project includes ongoing development, except stope development costs which are included in the operating cost estimates. Also included in the sustaining capital estimate are ongoing electrical equipment and environment costs as well as the cost of contractor demobilization.

23.6.11 Project Closure Costs

The project closure costs (Table 23.21) have been estimated at \$618,831 by Golder as part of their mandate.

Table 23.21 – Closure Cost Estimation

Description	Yearly cost
Environmental site assessment (ESA)	\$40,000
Environmental effects monitoring study	\$130,000
Garage dismantling, site cleanup etc.	\$69,783
Reclamation of the mine site	\$298,331
Financial guarantee reimbursement	\$186,880
Contingency (15%)	\$80,717
Sub-Total	\$618,831

23.6.12 Equipment residual value

A residual value of \$600,000 has been considered mostly for electrical, ventilation and air heater equipment.

23.7 Operating Cost

Operating costs are estimated in 2010 Canadian dollars with no allowance for escalation. The total life-of-mine operating cost and average unit operating costs are summarized in Table 23.22. The overall unit operating cost is \$171/tonne of ore milled.

InnovExplo estimated mine operating costs using data from similar operations and from budget quotes from contractors and suppliers.

Table 23.22 – Summary of Total Life-of-Mine Operating Costs (Table 19.3)

Description	Total cost	Unit cost	
Definition drilling	\$2,782,270	4.29 \$/t	15.77 US\$/oz
Stope development	\$5,768,760	8.90 \$/t	32.70 US\$/oz
Mining	\$38,249,620	59.04 \$/t	216.84 US\$/oz
Blue Note staff	\$7,749,997	11.96 \$/t	43.94 US\$/oz
Blue Note mobile equipment	\$165,760	0.26 \$/t	0.94 US\$/oz
Contractor (indirect cost)	\$22,205,890	34.28 \$/t	125.89 US\$/oz
Surface services	\$315,510	0.49 \$/t	1.79 US\$/oz
Energy cost	\$4,903,059	7.57 \$/t	27.80 US\$/oz
Milling and transportation	\$27,857,644	43.00 \$/t	157.93 US\$/oz
Environment	\$778,070	1.20 \$/t	4.41 US\$/oz
Total:	\$110,776,580	171 \$/t	628 US\$/oz

23.7.1 Definition Drilling

InnovExplo estimated that 10,000 metres of definition drilling will be required per year until early in Year 4 as most of the definition drilling will already be completed. This estimate is based on similar mine operating practices. According to the mine-life conceptual mining plan, access for setting up the drill will generally be easy. A cost of \$90/metre was used, and the resulting total estimate for definition drilling is \$3.38M or \$5.22/tonne milled.

23.7.2 Stope Development

The unit cost for stope preparation stands at \$13.87 per tonne milled (based on tonnage milled assigned to production), and consists of 50% of the 3m x 3.7m drift excavation or enlargement, and 80% of the raises and sublevel for long-hole mining. A 20% contingency was added to drift and raises development.

23.7.3 Mining

Mining costs are estimated to be \$59.04/tonne milled for a ratio of 20% long-hole and 80% room-and-pillar.

23.7.4 Blue Note Mining Staff and mobile equipment

The staff and associated salaries include administration, technical services and site security. Salaries were evaluated using the 75th percentile of the salary range for each job classification according to data in Mining Cost Services published by Cost Mine, a division of InfoMine USA Inc. To account for benefits, 38% was added and depending on the job, bonuses were also included. The estimate of the department's general operating cost was based on a 15% factor derived from a comparable mine operating budget. The yearly cost is \$2M, averaging \$14.58 per tonne milled. The annual cost of the Blue Note Mining workforce assigned to the Croinor project is detailed in Table 23.23.

Table 23.23 – Blue Note Mining Staff Salary

Description	Quantity	Annual salary
Manager	1	\$222,180
Accounting	1	\$121,440
Chief geologist	1	\$151,800
Geologist	1	\$123,165
Chief engineer	1	\$151,800
Engineer	1	\$130,410
Geological technician	3	\$341,136
Mine technician	3	\$341,136
Gate keeper	4	\$172,224
Total manpower		\$1,755,291
Materials and other		\$263,294
	Total :	\$2,018,585

The mobile equipment assigned to the project is listed in Table 23.24. The yearly rental cost represents a total of \$10,968 averaging \$0.37 per tonne milled.

Table 23.24 – Blue Note Mining Mobile Equipment

Description	Quantity	Monthly cost
Personnel Carrier	1	6 100 \$
Mine mule	2	3 268 \$
Pick up	2	1 600 \$
Total :		10 968 \$

23.7.5 Contractor indirect costs

All the salaries for the manpower required to operate the mine, including supervision, maintenance, surface and underground workers, are included in the contractor indirect costs. The equipment, the rental of some buildings and all supplies are also included in the contractor indirect costs.

23.7.6 Surface services

The surface services cost includes the cost of renting the office and core shack building for the project. As well, the supplies required to operate the treatment station for the geotubes are part of the surface services. Based on data shown in Table 23.25, the estimated yearly cost is \$82,132 during full production, for an average cost of \$0.59 per tonne milled over the life of mine.

Table 23.25 – Surface services operating cost

Description	Unit cost
Office rental	1100 \$/month
Core shack rental	478 \$/month
Geotube operation	
Chemical	95 \$/day
Geotube	9507 \$/unit

23.7.7 Energy Cost

The energy cost includes all electrical consumption, the propane needed to heat the underground air, and the rental of a propane tank. The estimated average annual electrical consumption is 13,586,761kWh, representing an annual cost of \$777,057. The estimated annual propane consumption is 1,151,000 litres per year, amounting to \$529,460 per year at a price of \$0.46/litre (budget quotation from Superior Propane). As shown in Table 23.26, the estimated total annual energy cost is \$1.35M, or an average of \$8.27 per tonne milled.

Table 23.26 – Yearly Energy cost

Description	Yearly cost
Electricity	\$777,057
Propane	\$529,460
Propane tank rental	\$46,200
Total :	\$1,352,717

23.7.8 Milling and transportation

Ore from Croinor will be processed at a mill in the Val-d'Or area with excess capacity for the duration of the Croinor operation. Contact has been made with potential custom milling partners and tentative commitments have been arranged for processing the ore. For the study, it is assumed that the ore will be trucked to a custom mill located approximately 100 km from the Croinor Project. The unit cost for truck loading, transportation and milling is estimated at \$43.00/tonne and is based on budgetary quotes.

23.7.9 Environment

Golder estimated the yearly environmental costs to be \$210,367 (Table 23.27) for an average of \$1.53 per tonne milled.

Table 23.27 – Yearly Environment cost

Description	Yearly cost
Assays	\$34,853
Personnel	\$107,190
Miscellaneous	\$20,000
Fees for using water (dewatering)	\$879
Fees for using water (well)	\$6
Maintenance	\$20,000
Contingency (15%)	\$27,439
Total:	\$210,367

23.7.10 Capitalized Opex

The operating costs incurred during the pre-production period (\$14,843,398) were capitalized.

23.8 Taxes and Royalties

Croinor project is subjected to the following taxes:

- Quebec mining rights;
- Federal and provincial taxes.

The income tax rate is 26.9% (2012 federal and Québec tax rate) and the mining tax rate is 16% (2012) rate and will be sanctioned as proposed in May 2011 bill.

It is assumed that Blue Note Mining Inc. (Blue Note), a federal corporation, and X-Ore Resources Inc. (X-Ore), a Quebec corporation will proceed with a vertical amalgamation. X-Ore and Blue Note can do so, but only following the continuance of X-Ore under the Canada Business corporations Act or of Blue Note under the Business Corporations Act (Quebec). This vertical amalgamation will allow the available non-capital losses of Blue Note and X-Ore to be used by the resulting corporation to offset any future income derived from its mining activities.

The Croinor property is subjected to the Corcoran-Agar Royalty which consist of 15% applied on net profit from commercial production of which \$15,000 is payable in September of each year as an advanced payment on royalties.

Another royalty is affecting the Croinor property, the Canadian Spooner Royalty. Considering that any expense (of whatever nature) incurred on the property since 1983 would have to be

recouped by the operator, it is highly unlikely that any amount would have to be paid with respect to the agreement regarding this royalty.

23.9 Financial and Sensitivity Analysis

23.9.1 Financial Analysis

An after-tax model was developed for the Croinor project. All costs are in 2010 Canadian dollars with no allowance for inflation or escalation.

The economic valuation of the project was performed using the Internal Rate of Return (IRR) and Net Present Value (NPV) methods. The IRR on an investment is defined as the rate of interest earned on the unrecovered balance of an investment. The NPV method converts all cash flows for investments and revenues occurring throughout the planning horizon of a project to an equivalent single sum at present time at a specific discount rate. The discount rate used in the analysis is 7%. According to the NPV method, a positive NPV represents a profitable investment where the initial investment plus any financing interest are recovered.

The following parameters were considered in the financial analysis:

- An average gold price of US\$1250/oz and an exchange rate of 1.03 CAD/1USD which correspond to the Bloomberg consensus estimate of June 2011. Table 23.28 gives details of the Bloomberg base case consensus forecasts.

Table 23.28 – Bloomberg base case consensus forecasts as of June 2011

	2012	2013	2014
Gold price (\$US/oz)	1,373	1,296	1,168
Exchange rate (\$C/\$US)	1.01	1.05	1.03

- Resources are as described in section 17. The portion of the resources considered in the analysis represents resources at a cut-off grade of 5.0 g/t.
- Gold recovery of 97.5%. This value was based on recovery obtained at the time the mine was operating.
- Royal Mint fees of \$5/oz.
- An estimated mill throughput rate of 172,500 Mt/year at an average diluted gold grade of 8.35 g/t. The estimated average annual output is 39,181 to 45,631 ounces of gold.
- A royalty payment was considered and evaluated as follows: a royalty of 15% was applied on profit over the carried expenses, which account for \$11,658,371
- Future annual cash flow estimates based on grade, gold recoveries and cost estimates are as previously discussed in this report.
- A total of 42,000 tonnes of ore, which will be processed during the pre-production period, is deemed to be capital production and is not included in production nor is the revenue derived from it.

The resulting main parameters and cash flow analysis for the entire project are presented in the following table, and Table 23.29 contains the details of the cash flow analysis.

Cash Flow Analysis Summary from Table 19.5

Parameters	Results
Proven & probable mineral reserves	689,829 t at 8.35 g/t
Total contained gold reserve	185,260 oz
Mine life (including 14-month pre-production)	5 years
Daily mine production	500 t per day
Gold recovery	97.5%
Annual gold production	39,181 to 45,631 oz
LOM recovered gold	170,556 oz
Average cash operating cost	\$171/tonne
Average cash operating cost	US\$ 628/oz
Capital cost (including \$7.43M sustaining/working capital)	\$24.8 million
Total cost per ounce	US\$768/oz
Total gross revenue	\$225.9 million
Total operating cost	\$110.8 million
Total project cost	\$135.5 million
Total operating cash flow (before tax & royalties)	\$75.7 million
Estimated mining and income taxes	\$20.6 million
Net cash flow	\$46.9 million
Pre-tax NPV (7% discount)	\$51.3 million
Pre-tax IRR	124 %
After-tax NPV (7% discount)	\$35.4 million
After-tax IRR	99 %
Payback period	25 months
Pre-production period (including 42,000t of production)	14 months

Table 23.29 – Economic analysis for the Croinor Project (figures in Canadian dollars)

	Pre-production	Production				Total
		Year 1	Year 2	Year 3	Year 4	
PRODUCTION						
Room and Pillar	18 798	105 470	125 089	137 838	127 733	514 928
Grade (g/t)	7.24	8.94	8.86	7.74	9.63	8.71
0	136 098	942 902	1 108 289	1 066 866	1 230 069	4 484 223
Long Hole	25 798	67 030	47 411	34 662	0	174 901
Grade (g/t)	7.95	7.65	7.07	6.49	0	7.31
0	205 094	512 780	335 196	224 956	0	1 278 026
Total (tonne mined)	44 596	172 500	172 500	172 500	127 733	689 829
Grade (g/t)	7.65	8.44	8.37	7.49	9.63	8.35
Inventory	2 596	2 596	2 596	2 596		
Grade (g/t)	7.65	7.65	7.65	7.65		
Total (tonne milled)	42 000	172 500	172 500	172 500	130 329	689 829
Grade (g/t)	7.65	8.44	8.37	7.49	9.59	8.35
Recovery (%)	97.50%	97.50%	97.50%	97.50%	97.5%	97.50%
Gold Produced (oz)	10 073	45 631	45 249	40 495	39 181	180 629
Tonne milled assigned to capital	42 000					42 000
Gold Produced assigned to capital (oz)	10 073					10 073
Tonne milled assigned to production	0	172 500	172 500	172 500	130 329	647 829
Grade (g/t)	0.00	8.44	8.37	7.49	9.59	8.40
Gold Produced (oz)	0	45 631	45 249	40 495	39 181	170 556
Grade (g/t)						
Gold Price (\$US/oz)	\$1 373	\$1 286	\$1 168	\$1 168	\$1 168	\$1 209
Exchange rate (\$CAN/\$US)	1.01	1.05	1.03	1.03	1.03	1.03
Gold Price (\$CAN/oz)	\$1 387	\$1 350	\$1 203	\$1 203	\$1 203	\$1 250
Gross Revenue	\$13 968 154	\$61 615 776	\$54 436 161	\$48 716 745	\$47 136 842	\$225 873 678
Mint (cost 5.00\$ per oz)	\$50 364	\$228 156	\$226 244	\$202 474	\$195 907	\$903 144
Capitalized revenue	\$13 917 790					\$13 917 790
Net Revenue	\$0	\$61 387 620	\$54 209 917	\$48 514 272	\$46 940 935	\$211 052 744
OPERATING EXPENDITURES						
Definition drilling	\$600 000	\$900 000	\$900 000	\$900 000	\$82 270	\$3 382 270
Stope development	\$3 216 820	\$4 637 266	\$1 131 495	\$0	\$0	\$8 985 580
Room and pillar	\$1 322 251	\$7 418 760	\$8 798 760	\$9 695 525	\$8 984 739	\$36 220 036
Long Hole	\$371 190	\$1 506 834	\$1 065 799	\$779 202	\$0	\$3 723 025
X-Ore staff	\$1 697 605	\$2 018 585	\$2 018 585	\$2 018 585	\$1 694 243	\$9 447 602
X-Ore Mobile equipment	\$76 213	\$41 130	\$86 230	\$19 200	\$19 200	\$241 973
Contractor Indirect	\$5 019 650	\$6 003 428	\$5 880 056	\$5 880 056	\$4 442 350	\$27 225 540
Surface services	\$69 730	\$69 114	\$82 132	\$82 132	\$82 132	\$385 239
Energy cost	\$453 508	\$1 252 577	\$1 352 717	\$1 352 717	\$945 049	\$5 356 568
Milling and transportation	\$1 806 065	\$7 417 765	\$7 417 765	\$7 417 765	\$5 604 348	\$29 663 708
Environment	\$210 367	\$210 367	\$210 367	\$210 367	\$146 969	\$988 438
Capitalized operating cost	-\$14 843 398					-\$14 843 398
Total operating costs	\$0	\$31 475 826	\$28 943 905	\$28 355 549	\$22 001 299	\$110 776 580
Op. cost/tonne \$CAN	\$0.00	\$182	\$168	\$164	\$172	\$171
Op. cost/oz \$CAN	\$0	\$690	\$640	\$700	\$562	\$650
Op. cost/tonne \$US	\$0.00	\$173.78	\$162.90	\$159.59	\$167.23	\$165.34
Op. cost/oz \$US	\$0	\$657	\$621	\$680	\$545	\$628
Operating Cash Flow	\$0	\$29 911 794	\$25 266 011	\$20 158 723	\$24 939 636	\$100 276 164
CAPITAL EXPENDITURES						
Capitalized operating cost	\$14 843 398					\$14 843 398
Capitalized revenue	-\$13 917 790					-\$13 917 790
dewatering and rehab	\$1 444 588	\$0	\$0	\$0	\$0	\$1 444 588
Development	\$6 671 356	\$6 045 355	\$708 216	\$0	\$0	\$13 424 926
Ventilation equipment	\$245 410	\$0	\$0	\$0	\$0	\$245 410
Mine dewatering	\$416 681	\$0	\$0	\$0	\$0	\$416 681
Surface installation and equipment	\$1 403 714	\$0	\$0	\$0	\$0	\$1 403 714
Electrical distribution	\$4 958 095	\$429 868	\$0	\$0	\$0	\$5 387 963
Building and infrastructure Installation	\$835 208	\$0	\$0	\$0	\$0	\$835 208
Environment	\$421 827	\$40 851	\$40 851	\$148 471	\$0	\$652 000
	\$0	\$0	\$0	\$0	\$19 789	\$19 789
Total capital expenditures	\$17 322 486	\$6 516 074	\$749 067	\$148 471	\$19 789	\$24 755 887
Total Cost cost/oz \$CAN						\$795
Total Cost cost/oz \$US						\$768
Salvage (portion of electrical equipment)		\$0	\$0	\$0	\$600 000	\$600 000
Financial guarantee reimbursement	\$0	\$0	\$0	\$0	\$186 880	\$186 880
Closure Costs	\$0	\$0	\$0	\$0	\$618 831	\$618 831
Net Cash flow before NPI	-\$17 322 486	\$23 395 721	\$24 516 944	\$20 010 252	\$25 087 895	\$75 688 326
Administrative Cost (5%)	\$866 124	\$1 899 595	\$1 484 649	\$1 425 201	\$1 101 054	\$6 776 623
NPI (15%) (Carried expenses: \$11,658,371)	\$15 000	\$15 000	\$1 692 216	\$2 787 758	\$3 598 026	\$8 108 000
Net Cash flow After NPI	-\$17 337 486	\$23 380 721	\$22 824 728	\$17 222 495	\$21 489 869	\$67 580 326
Estimated Mining and Income taxes	\$0	\$2 571 633	\$4 759 192	\$5 887 035	\$7 414 508	\$20 632 368
Cash Surplus After Taxes	-\$17 337 486	\$20 809 088	\$18 065 536	\$11 335 460	\$14 075 361	\$46 947 958
Cumulative Cash flow before NPI	-\$17 337 486	\$3 471 601	\$21 537 137	\$32 872 597	\$46 947 958	
Pre-tax NPV (7%)	\$1 311 084 \$					
Pre-tax IRR	124%					
After-tax NPV (7%)	\$3 402 369 \$					
After-tax IRR	99%					

23.9.2 Sensitivity

The parameters in the sensitivity analysis were chosen based on their potential impact on the outcome of the economic evaluation. The parameters were divided into two different groups: production parameters and economic parameters.

The following production parameters were analyzed:

- Grade (g/t)
- Gold price (US\$/oz)

The following economic parameters were analyzed:

- Total net revenue (REVENUE)
- Operating expenditure (OPEX)
- Capital expenditure (CAPEX)

Sensitivity calculations were performed on the project's after taxes NPV, IRR and total cash flow by applying a range of variation ($\pm 25\%$) to the parameter values. Results are presented in tables 23.30, 23.31 and 23.32. The effects on NPV, total cash flow and IRR are shown graphically in figures 23.13, 23.14 and 23.15.

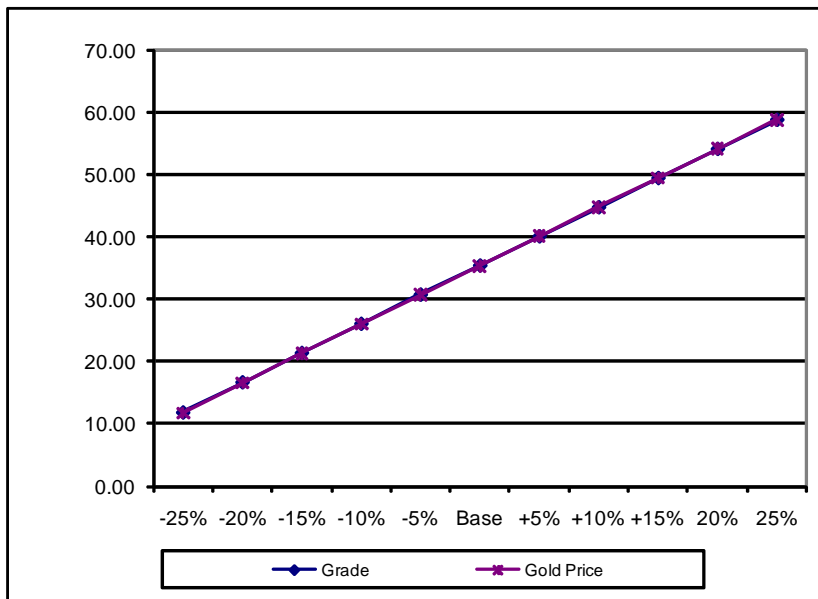
As illustrated in the figures, the Croinor Project is highly sensitive to changes in gold price and revenue. It is also sensitive to changes in OPEX and moderately sensitive to changes in CAPEX.

Table 23.30 – Sensitivity Analysis on NPV at 7% Discounted Rate

	-25%	-20%	-15%	-10%	-5%	Base Case Scenario	+5%	+10%	+15%	20%	25%
PRODUCTION PARAMETERS											
Grade	11.87	16.70	21.40	26.07	30.74	35.40	40.07	44.73	49.40	54.06	58.73
Change (%)	-66%	-53%	-40%	-26%	-13%		13%	26%	40%	53%	66%
Gold Price	11.77	16.62	21.34	26.03	30.72	35.40	40.09	44.77	49.45	54.14	58.82
Change (%)	-67%	-53%	-40%	-26%	-13%		13%	26%	40%	53%	66%
ECONOMIC PARAMETERS											
REVENUE	11.87	16.70	21.40	26.07	30.74	35.40	40.07	44.73	49.40	54.06	58.73
Change (%)	-66%	-53%	-40%	-26%	-13%		13%	26%	40%	53%	66%
OPEX	46.30	44.12	41.94	39.76	37.58	35.40	33.22	31.04	28.86	26.68	24.50
Change (%)	31%	25%	18%	12%	6%		-6%	-12%	-18%	-25%	-31%
CAPEX	40.41	39.41	38.41	37.40	36.40	35.40	34.40	33.40	32.40	31.40	30.40
Change (%)	14%	11%	9%	6%	3%		-3%	-6%	-8%	-11%	-14%

Note : There are no data over the base case for the Recovery Rate, because it would exceed 100%.

A – Sensitivity Analysis of Production Parameters, NPV at 7%



B – Sensitivity Analysis of Economic Parameters, NPV at 7%

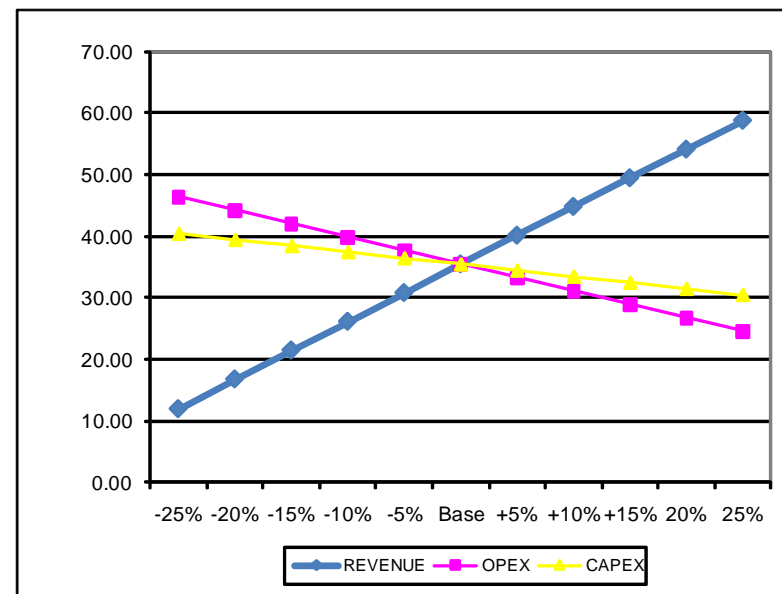


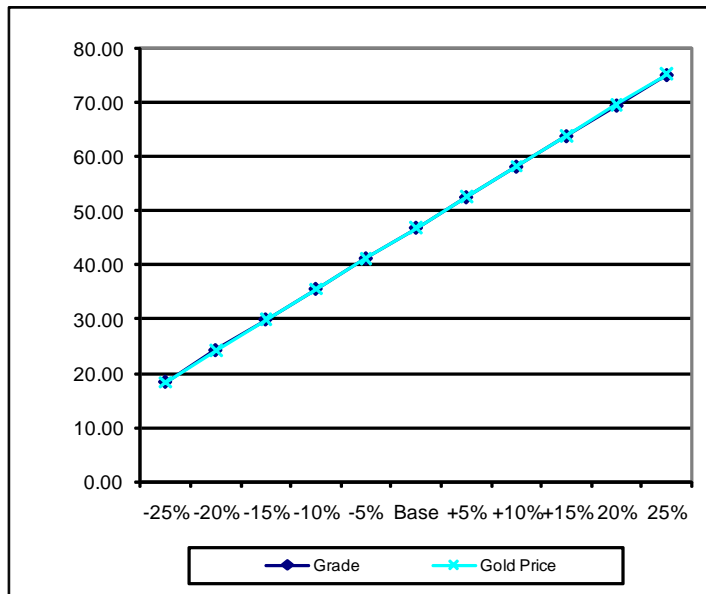
Figure 23.13 – Sensitivity diagram on NPV at a discount rate of 7%

Table 23.31 – Sensitivity Analysis on Total Cash Flow

	-25%	-20%	-15%	-10%	-5%	Base Case Scenario	+5%	+10%	+15%	20%	25%
PRODUCTION PARAMETERS											
Grade	18.41	24.28	29.97	35.63	41.29	46.95	52.61	58.27	63.93	69.59	75.25
<i>Change (%)</i>	-61%	-48%	-36%	-24%	-12%		12%	24%	36%	48%	60%
Gold Price	18.29	24.18	29.90	35.58	41.26	46.95	52.63	58.31	64.00	69.68	75.36
<i>Change (%)</i>	-61%	-48%	-36%	-24%	-12%		12%	24%	36%	48%	61%
ECONOMIC PARAMETERS											
REVENUE	18.41	24.28	29.97	35.63	41.29	46.95	52.61	58.27	63.93	69.59	75.25
<i>Change (%)</i>	-61%	-48%	-36%	-24%	-12%		12%	24%	36%	48%	60%
OPEX	60.39	57.70	55.01	52.33	49.64	46.95	44.26	41.57	38.88	36.19	33.50
<i>Change (%)</i>	29%	23%	17%	11%	6%		-6%	-11%	-17%	-23%	-29%
CAPEX	52.34	51.26	50.18	49.11	48.03	46.95	45.87	44.79	43.71	42.63	41.55
	11%	9%	7%	5%	2%		-2%	-5%	-7%	-9%	-12%

Note : There are no data over the base case for the Recovery Rate, because it would exceed 100%.

A – Sensitivity Analysis of Production Parameters, Total Cash Flow



B – Sensitivity Analysis of Economic Parameters, Total Cash Flow

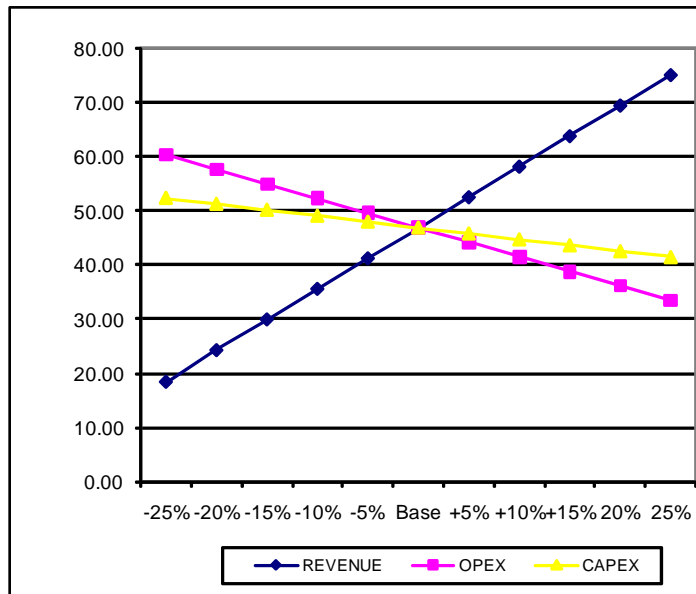


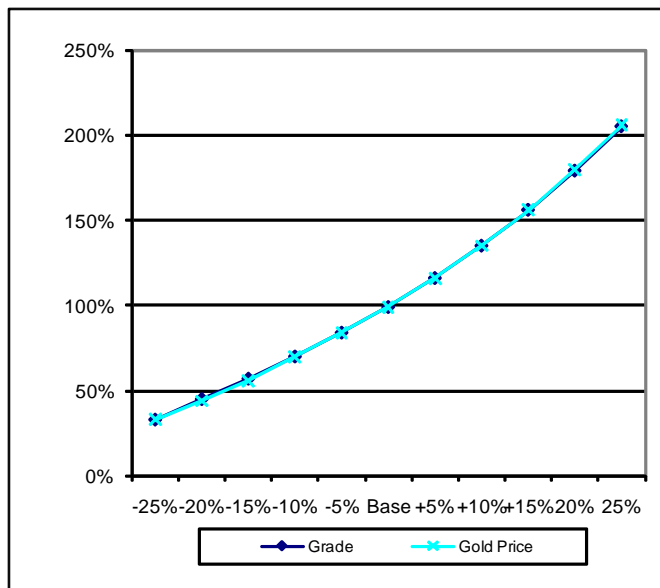
Figure 23.14 – Sensitivity diagram on total cash flow

Table 23.32 – Sensitivity Analysis on IRR

	-25%	-20%	-15%	-10%	-5%	Base Case Scenario	+5%	+10%	+15%	20%	25%
PRODUCTION PARAMETERS											
Grade	33%	45%	57%	70%	84%	99%	116%	135%	156%	179%	205%
Change (%)	-67%	-55%	-42%	-29%	-15%		17%	36%	58%	81%	107%
Gold Price	33%	44%	56%	70%	84%	99%	116%	135%	156%	180%	206%
Change (%)	-67%	-56%	-43%	-29%	-15%		17%	36%	58%	82%	108%
ECONOMIC PARAMETERS											
REVENUE	33%	45%	57%	70%	84%	99%	116%	135%	156%	179%	205%
Change (%)	-67%	-55%	-42%	-29%	-15%		17%	36%	58%	81%	107%
OPEX	130%	124%	117%	111%	105%	99%	93%	87%	81%	76%	70%
Change (%)	31%	25%	18%	12%	6%		-6%	-12%	-18%	-23%	-29%
CAPEX	148%	136%	125%	115%	107%	99%	92%	86%	80%	75%	70%
Change (%)	49%	37%	26%	16%	8%		-7%	-13%	-19%	-24%	-29%

Note : There are no data over the base case for the Recovery Rate, because it would exceed 100%.

A – Sensitivity Analysis of Production Parameters, IRR



B – Sensitivity Analysis of Economic Parameters, IRR

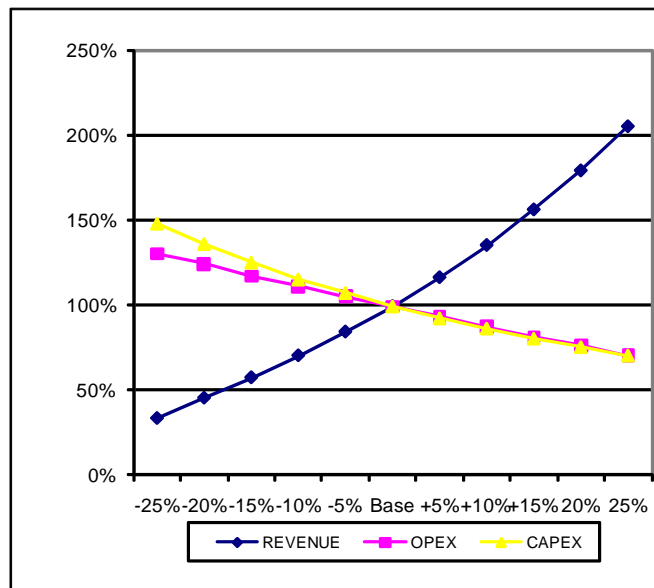


Figure 23.15 – Sensitivity diagram on total IRR

23.9.2.2 Discount Rate Sensitivity

The cash flow has been discounted to 7% and is considered reasonable; however, depending on the financing option, further analysis should be undertaken to establish the true discount rate based on the real cost of capital. Table 23.33 presents sensitivity to discount rate.

Table 23.33 – Sensitivity Analysis on Various Discount Rates

Discount rate	0%	2%	4%	6%	7%	8%	10%
	\$46.95	\$43.25M	\$39.89M	\$36.83M	\$35.4M	\$34.04M	\$31.49M
Change (%)	33%	22%	13%	4%	Base case	-4%	-11%

24.0 CERTIFICATES OF AUTHORS

I, Sylvie Poirier, Eng. (OIQ, no. 112196; PEO 100156918) do hereby certify that:

- 1) I am a Consulting Engineer of: InnovExplo Inc, 560-B 3^e Avenue, Val-d'Or, Québec, Canada, J9P 1S4.
- 2) I graduated with a Bachelor's degree in mining Engineering from École Polytechnique of Montreal in 1994.
- 3) I am a member of Ordre des Ingénieurs du Québec (OIQ, no. 100156918), Professional Engineers of Ontario (PEO no. 112196) and Canadian Institute of Mines 145365.
- 4) I have worked as an engineer for a total of seventeen (17) years since my graduation from university. My mining expertise was acquired while working for Lafarge Canada, for Placer Dome and McWatters at the Sigma mine, and for Natural Resources Canada on a special research initiative program on narrow-vein mining. I have been a consulting engineer for InnovExplo Inc since September 2008.
- 5) I have read the definition of "qualified person" set out in Regulation 43-101 and certify that by reason of my education, affiliation with a professional association (as defined in Regulation 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of Regulation 43-101.
- 6) I am the author of Sections 1.0, 2.0, 3.0, 17.4, 21, 23.1, 23.3, 23.4, 23.6, 23.7, 23.8, 23.9 and co-author of Sections 19, 20, and the Executive Summary of the report titled "Technical Report and Prefeasibility Study for the Croinor Project (according to Regulation 43-101 and Form 43-101F1)" dated August 27, 2010 and modified on June 22, 2011("the Technical Report"). I visited the Croinor property as part of a field visit on April 20 and May 28, 2010 at which time I had no other involvement with the property.
- 7) I have never had any prior involvement with the property that is the subject of the Technical Report.
- 8) Other than the 2010-2011 drilling carried out by Blue Note, I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report, the omission to disclose which would make the Technical Report misleading.
- 9) I am independent of the issuer applying all of the tests in section 1.4 of Regulation 43-101.
- 10) I have read Regulation 43-101 respecting standards of disclosure for mineral projects and Form 43-101F1, and the Technical Report has been prepared in accordance with that regulation and form.
- 11) ¹ I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.

Dated this 22th day of June, 2011

(original signed and sealed)
Sylvie Poirier, Eng.

¹ If an issuer is using this certificate to accompany a technical report that it will file only with the exchange, then the exchange recommends that this paragraph be included in the certificate.

I, Carl Pelletier, P.Ge. (OGQ, no. 384; APGO 1713) do hereby certify that:

- 1) I am a Consulting Geologist of: InnovExplo Inc, 560-B 3^e Avenue, Val-d'Or, Québec, Canada, J9P 1S4.
- 2) I graduated with a Bachelor's degree in Geology from the Université du Québec à Montréal (Montréal, Québec) in 1992 and I initiated a Master's degree at the same university for which I completed the course program but not the thesis.
- 3) I am a member of the Ordre des Géologues du Québec (OGQ, no. 384), Association of Professional Geoscientists of Ontario (APGO 1713) and of the Canadian Institute of Mines, Harricana section.
- 4) I have worked as a geologist for a total of 18 years since my graduation from university. My mining expertise has been acquired in the Silidor, Sleeping Giant, Bousquet II, Sigma-Lamaque and Beaufor Mines whereas my exploration experience has been acquired with Cambior and McWatters. I have been a consulting geologist for InnovExplo inc. since February 2004.
- 5) I have read the definition of "qualified person" set out in Regulation 43-101 and certify that by reason of my education, affiliation with a professional association (as defined in Regulation 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of Regulation 43-101.
- 6) I am responsible for supervising the preparation of the report titled "Technical Report and Prefeasibility Study for the Croinor Project (according to Regulation 43-101 and Form 43-101F1)" dated August 27, 2010 and modified on June 22, 2011("the Technical Report"). I am the author of Sections 4.0, 5.0, 6.0, 7.0, 8.0, 9.0, 15.0, and co-author of Sections 11.0, 12.0, 13.0, 19.0, 20.0, I have conducted several field visits on the Croinor project between the September 2004 and May 2005 and in 2010.
- 7) I supervised the preparation of one earlier report titled "INDEPENDENT TECHNICAL REPORT ON THE MINERAL RESOURCES ESTIMATE OF THE CROINOR PROJECT" dated April 11, 2005.
- 8) Other than the 2010-2011 drilling carried out by Blue Note, I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report, the omission to disclose which would make the Technical Report misleading.
- 9) I am independent of the issuer applying all of the tests in section 1.4 of Regulation 43-101.
- 10) I have read Regulation 43-101 respecting standards of disclosure for mineral projects and Form 43-101F1, and the Technical Report has been prepared in accordance with that regulation and form.
- 11) ¹ I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.

Dated this 22^h day of June, 2011

(original signed and sealed)
Carl Pelletier, B.Sc. P. Geo.

¹ If an issuer is using this certificate to accompany a technical report that it will file only with the exchange, then the exchange recommends that this paragraph be included in the certificate.

I, Rodrigue Ouellet, Eng., M.Sc.A. (OIQ, no. 37361) do hereby certify that:

- 1) I am a Consulting Engineer of Golder Associates Ltd, 375 Avenue Centrale, Bureau 102, Val-d'Or, Québec, Canada, J9P 1P4.
- 2) I graduated with a Bachelor's degree in Geological Engineering from the Université du Québec à Chicoutimi in 1982. In addition, I obtained a Master's Degree in Earth Sciences from the Université du Québec à Chicoutimi in 1986 and a Certificate in Environmental Science from the Université du Québec à Montréal in 2006.
- 3) I am a member of the Ordre des Ingénieurs du Québec (OIQ, no. 37361).
- 4) I have worked as a geological engineer for a total of 25 years since my graduation from university. My expertise in the mining industry has been acquired with Falconbridge Copper Ltd, Minnova Inc, Metal Mining Corporation, Inmet Mining Corporation, and Aur Resources Inc. My expertise in environmental mining has been acquired with Golder Associates Ltd on several mining environment projects. I have been a consulting engineer for Golder Associates Ltd since January 2005.
- 5) I have read the definition of "qualified person" set out in Regulation 43-101 and certify that by reason of my education, affiliation with a professional association (as defined in Regulation 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of Regulation 43-101.
- 6) I am responsible for calculating the costs and writing sections related to environmental aspects and I am the author of Section 23.5 of the report titled "Technical Report and Prefeasibility Study for the Croinor Project (according to Regulation 43-101 and Form 43-101F1)" dated August 27, 2010 and modified on June 22, 2011("the Technical Report"). I visited the Croinor site as part of a field visit on April 12, 2010. I was involved in the permitting process of the project in 2009 and 2010.
- 7) I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report, the omission to disclose which would make the Technical Report misleading.
- 8) I am independent of the issuer applying all of the tests in section 1.4 of Regulation 43-101.
- 9) I have read Regulation 43-101 respecting standards of disclosure for mineral projects and Form 43-101F1, and the Technical Report has been prepared in accordance with that regulation and form.
- 10) ¹ I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.

Dated this 22th day of June 2011,

(original signed and sealed)

Rodrigue Ouellet, Eng, M.Sc.A.

¹ If an issuer is using this certificate to accompany a technical report that it will file only with the exchange, then the exchange recommends that this paragraph be included in the certificate.

I, Marc Lafontaine, Eng. (OIQ, 114548) do hereby certify that:

- 1) I am an Engineer employed as Senior Mineral Processing Engineer by GENIVAR at 1462, rue de la Québécoise, Val-d'Or, Quebec.
- 2) I received a bachelor's degree in Applied Sciences from the Université Laval (Québec city, Québec) in 1994.
- 3) I am a registered member of the Ordre des Ingénieurs du Québec (OIQ member no. 114548).
- 4) I have over 15 years of experience as an engineer in the mining industry. I have been working for GENIVAR since June 2005 as Senior Mineral Processing Engineer and Manager - Mineral Processing, since January 2008.
- 5) I have read the definition of "qualified person" set out in Regulation 43-101 ("R 43-101") standards for disclosure for mineral projects and certify that by reason of my education, affiliation with a professional association (as defined in R 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of R 43-101.
- 6) I am the author of Sections 16 and 23.2 of the report titled "Technical Report and Prefeasibility Study for the Croinor Project (according to Regulation 43-101 and Form 43-101F1)" dated August 27, 2010 and modified on June 22, 2011("the Technical Report").
- 7) I am "independent" (as such term is defined in Section 1.4 of R 43-101) of Blue Note Mining Inc.
- 8) I have never had any prior involvement with the property that is the subject of the Technical Report.
- 9) As of the date of this certificate, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.
- 10) I have read R 43-101, Appendix 43-101A1 and the Technical Report which has been prepared in compliance with that instrument and form.
- 11) I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.

Dated this 22th day of June, 2011

(original signed and sealed)

Marc Lafontaine, Eng.

¹ If an issuer is using this certificate to accompany a technical report that it will file only with the exchange, then the exchange recommends that this paragraph be included in the certificate.

I, Pierre O'Dowd, Geo. (OGQ, no. 668) do hereby certify that:

- 1) I am a consultant geologist. I reside at 622 rue des Fortifications, St-Jean-sur-Richelieu Quebec, J2W 2W8. My telephone number is 514-910-9766.
- 2) I graduated from Montreal University in 1978 with a B.Sc. in Geology.
- 3) I am a member of the « Ordre des Géologues du Québec » (#668) and I am a qualified person under the terms of the NI 43-101 concerning mining projects.
- 4) I have accumulated more than 30 years of experience in mining exploration and development, including twelve years with the Noranda-Falconbridge Group. I've worked in about fifteen various countries on base and precious metal projects. I'm currently a consulting geologist.
- 5) I have visited the property being the object of the report titled "NI 43-101 Resource Estimate update, and 2008 Technical Report on the Croinor 1 and 2 projects, NTS 32c/03, Pershing township, Québec, September 2009" at numerous occasions during the past two years having been in charge of the preparation and supervision of the exploration drilling programs in 2007 and 2008 and the author of 2009 report "NI 43-101 Resource Estimate update, and 2008 Technical Report on the Croinor 1 and 2 projects, NTS 32c/03, Pershing township, Québec, September 2009".
- 6) I am the author of sections 14.0, 17.1, 17.2, 17.3 and co-author of sections 11.0, 12.0 and 13.0 of the report titled "Technical Report and Prefeasibility Study for the Croinor Project (according to Regulation 43-101 and Form 43-101F1)" dated August 27, 2010 and modified on June 22, 2011("the Technical Report"). In many sections, quotes from work done by geologists familiar with the property or the area have been used.
- 7) I'm not aware of any material fact or change concerning the present technical report that is not mentioned or that could be misleading even by being omitted.
- 8) I am independent with the issuer owning the mining titles being the object of the report titled "NI 43-101 Resource Estimate update, and 2008 Technical Report on the Croinor 1 and 2 projects, NTS 32c/03, Pershing township, Québec, September 2009". I will receive consulting fees for writing this qualification report.
- 9) I have read Regulation/NI 43-101 respecting standards of disclosure for mineral projects and Form 43-101F1, and the Technical Report has been prepared in accordance with that regulation and form.
- 10) ¹ I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.

Dated this 22th day of June 2011,

(original signed and sealed)
Pierre O'Dowd, Geo.

¹ If an issuer is using this certificate to accompany a technical report that it will file only with the exchange, then the exchange recommends that this paragraph be included in the certificate.

APPENDIX I

UNITS, CONVERSION FACTORS, ABBREVIATIONS

Units

Units in this report are metric unless otherwise specified. Precious metal content is reported in grams of metal per metric ton (g/t Au or Ag), unless otherwise stated. Tonnage figures are dry metric tons (“tonnes”) unless otherwise stated. Ounces are troy ounces.

Abbreviations

°C	degrees Celsius	oz	troy ounces
ha	hectares	avdp	avoirdupois pound
g	grams	st	short ton
kg	kilograms	oz/t	ounces per short ton
mm	millimetres	t	metric ton (tonne)
cm	centimetres	Mt	millions of metric tonnes
m	metres	g/t	grams per metric ton
km	kilometres	tpd	metric tons per day
masl	metres above sea level	ppb	parts per billion
' or ft	feet	ppm	parts per million
cfm	cubic feet per minute	cps	counts per second
m ³ /min	cubic metres per minute	hp	horsepower
Mbs	megabytes per second	Btu	British thermal units
\$ or C\$ or CAD	Canadian dollars	kV/kVA	kilovolts/kilovolt-amps
US\$ or USD	American dollars	MPa	mega pascals

Conversion factors for measurements

Imperial Unit	Multiplied by	Metric Unit
1 inch	25.4	mm
1 foot	0.305	m
1 acre	0.405	ha
1 ounce (troy)	31.103	g
1 pound (avdp)	0.454	kg
1 ton (short)	0.907	t
1 ounce (troy) / ton (short)	34.286	g/t

APPENDIX II

ANALYTICAL PROCEDURES
(French version only; Source: P. O'Dowd 2009)

TECHNI-LAB S.G.B. ABITIBI INC.

RÉFÉRENCES ET PROCÉDURES DU DÉPARTEMENT DE GÉOCHIMIE

RÉCEPTION ET PRÉPARATION DES ÉCHANTILLONS

Voici les différentes étapes de manutention des échantillons avant l'analyse. Des procédures simples sont suivies pour prévenir les erreurs ou la perte d'échantillons. Des instructions sont également données pour éviter la contamination de ceux-ci.

Réception et concassage des échantillons

Lorsqu'un lot d'échantillon est reçu, ceux-ci sont classés et comptés. La liste ainsi produite, (feuille de projet) se voit attribuer un numéro d'entrée (# de projet). Cette liste est ensuite comparée à la demande d'analyse fournie par le client. ***Toute anomalie (par exemple : échantillon manquant ou surnuméraire, identification douteuse, contamination inter-échantillons) doit être immédiatement signalée au chef d'équipe et au superviseur. Ce dernier contactera le client concerné dans les plus brefs délais, afin de décider avec lui des mesures à prendre pour rectifier la situation.***

De plus, chaque échantillon doit être accompagné de deux étiquettes d'identification (TAG). La première accompagnera la portion d'échantillon pulvérisée (pulpe) et la seconde avec le reste de l'échantillon concassé (rejet).

- Les échantillons sont classés par ordre de priorité et disposés dans les casseroles par ordre numérique. Une table comprend 4 rangées de 12 casseroles numérotées de 1 à 48.
- Les échantillons humides sont séchés au four durant une heure.
- Les sacs destinés à recevoir les échantillons sont identifiés d'après le numéro de projet et de l'échantillon.
- Les échantillons sont concassés au complet. Le concasseur à mâchoires permet d'obtenir une grosseur de particules assez grossières (maximum 1/8). L'échantillon concassé est par la suite passé plusieurs fois sur un séparateur, afin de limiter la masse à broyer tout en homogénéisant l'échantillon.
- La masse d'échantillon concassé retenue pour la pulvérisation varie de 200 à 300 grammes.

Pulvérisation des échantillons

- Un sac de papier est identifié pour recevoir chaque échantillon.
- Les plats et les anneaux sont conditionnés avec la silice avant de commencer la pulvérisation ce qui permet de nettoyer le plat et les anneaux et ainsi, éviter les contaminations entre les échantillons.
- Chaque échantillon est pulvérisé de 2 à 3 minutes de façon à obtenir une pulpe très fine (environ 80 % à 200 mesh).
- L'échantillon peut ensuite être homogénéisé et soumis à la pyro-analyse.

Pyro-analyse des échantillons

Selon la nature de l'échantillon, le technicien peut devoir varier les quantités d'additifs.

- Un formulaire de données est rempli et les sacs de pulpes sont numérotés en suivant l'ordre indiqué sur le formulaire.
- Une série de 24 creusets est préparée incluant blanc, duplicata et étalon de référence; ces éléments de contrôle de la qualité seront répartis à intervalle de 7 échantillons.
- Les creusets sont remplis de 115 grammes de fondant #2 avec une cuillère de farine.
- Une portion de masse connue d'échantillon est pesée et ajoutée au fondant et à la farine dans les creusets. La masse d'échantillon pesée est de 15 ou grammes pour les analyses en grammes par tonnes et de 30 grammes pour les analyses en partie par milliard.
- Le mélange de chaque creuset doit ensuite être homogénéisé.
- Une solution de nitrate d'argent, composée de 25 grammes de nitrate d'argent dans 500ml d'eau distillée et déminéralisée, est ajoutée à raison de deux gouttes pour les analyses en parties par milliards (ppb) et cinq gouttes pour les analyses en grammes par tonne (g/t). Le tout est recouvert de borax pour empêcher les éclaboussures durant la fusion.
- Les échantillons sont enfournés pour la fusion, par série de vingt-quatre. La fusion dure quarante-cinq minutes à une température de 1093°C.
- Ensuite, les échantillons liquéfiés sont versés dans des lingotières et refroidis à l'air. Ils sont recouverts pour éviter les éclaboussures de scories.
- Le refroidissement terminé, il faut marteler les culots obtenus pour en séparer la scorie et en faire un cube grossier qui pourra être envoyé en coupellation.
- Les coupelles d'os de moutons sont préchauffées durant dix minutes avant d'introduire les culots de forme cubique. La coupellation dure environ une heure à température de 954°C.
- Lorsque la coupellation est terminée, les billes d'or et d'argent obtenues sont refroidies. Elles peuvent enfin être analysées par spectroscopie d'absorption atomique ou gravimétrie.

LES ANALYSES

La pyro-analyse sert à extraire l'or de la gangue séchée et pulvérisée. Suite au processus, l'or se présente alors sous forme d'une bille d'or et d'argent. Cette bille peut être attaquée pour être analysée gravimétriquement ou par spectroscopie par absorption atomique.

La concentration de l'or peut être exprimée en grammes par tonnes métriques (g/t), en onces par tonnes métriques (oz/t) ou en parties par milliards (ppb). Les masses d'échantillons utilisées pour les analyses en grammes par tonne sont habituellement de 15 grammes et pour les analyses en ppb, elles sont habituellement de 30 grammes. L'unité de masse arbitrairement utilisée dans l'industrie minière est «Assay/ton» qui équivaut à 30 grammes. Un demi «Assay/ton» équivaut à 15 grammes.

Les métaux peuvent être analysés directement par dissolution de la gangue séchée et pulvérisée. La masse d'échantillon normalement utilisée pour déterminer les métaux est approximativement de deux grammes quelquefois de un gramme et de un demi gramme pour les standards. La concentration des métaux est exprimée en parties par millions (ppm) ou en pourcentage (%).

LA PYRO-ANALYSE

La pyro-analyse sert à extraire l'or de la matrice rocheuse, pour pouvoir en déterminer la concentration. La méthode se résume à fusionner du minerai avec de l'oxyde de plomb et des agents réducteurs. Un alliage de plomb, contenant de l'or et de l'argent coule alors dans le fond de l'échantillon du creuset, la scorie vitreuse étant moins dense que le plomb. Le culot de plomb refroidi ainsi obtenu est dégagé de la scorie solidifiée et fusionnée dans une coupelle, qui absorbera le plomb en laissant une bille d'or et d'argent.

Description de la fusion en creuset

Les mélanges d'échantillons et de réactifs sont contenus dans des creusets fait d'argile réfractaire. La fusion s'effectue dans un four à moufle ou dans un four d'essai. La chambre de fusion est constituée de briques réfractaires et d'une plaque d'enfournement en carbure de silicium. Ce réceptacle est ventilé par l'arrière et chauffé par des éléments de carbure de silicium, installés sous la plaque d'enfournement.

On traite une quantité connue de minerais, habituellement 15 ou 30 grammes, avec de la litharge et les autres réactifs nécessaires dans un creuset en argile réfractaire. Les réactifs sont choisis selon la nature de la matrice du minerai. Ils peuvent être sulfureux, acides, basiques, neutres ou contenir des oxydes. Il est donc nécessaire de bien connaître la nature de la matrice du minerai. Lors de la fusion, la litharge est réduite en plomb. L'or et l'argent sont alors absorbés par les gouttelettes de plomb fondu qui migrent vers le fond du creuset.

La fusion s'effectue à 1050°C. Au commencement, il y a réduction de la litharge, un début de réaction du nitrate de potassium ainsi que la réduction partielle des oxydes. Le mélange, qui a été placé dans le creuset et bien brassé, commence à fondre.

Ensuite, arrivent les réactions plus violentes. La farine, les sulfures et les autres réducteurs réduisent la litharge, les tellurures d'or et les sulfures d'argent en libérant les métaux qui sont entraînés vers le fond du creuset. Le carbonate de sodium et le borax réagissent pour produire la scorie dans laquelle les autres oxydes et l'alumine se dissolvent. Il y alors un violent dégagement de gaz contenant notamment du CO₂, CO, SO₂ et N₂.

Finalement, les réactions se terminent et la scorie se liquéfie davantage. Les petites gouttelettes de plomb peuvent migrer au fond du creuset en entraînant avec elles l'or et l'argent.

Le temps nécessaire à la fusion est de 40 à 55 minutes, pendant lesquelles la porte du four est fermée. La température doit être soigneusement maintenue puisque, si elle est trop haute, il y a danger de volatilisation des composés d'or et d'argent. Par contre, si la température est trop basse, le culot de plomb est trop petit, ce qui fait que l'or et l'argent n'auront pas été complètement collectés. Après la fusion, les creusets sont vidés dans des lingotières. Après refroidissement, la scorie est brisée et le culot de plomb est récupéré en le martelant pour éliminer les traces de scorie. Le culot peut enfin être envoyé en coupellation.

La coupellation

L'or et l'argent sont séparés du plomb dans une coupelle à base de phosphate de calcium, obtenu par la calcination d'os de mouton. Lorsque le culot de plomb est placé dans la coupelle, il est chauffé dans un four à moufle avec la porte initialement fermée. Lorsque la porte est ouverte, la litharge se reforme à partir du plomb, par oxydation. La température du four doit demeurer autour de 880°C. La litharge qui se forme, ne doit pas faire une croûte sur la surface de la coupelle, mais elle doit imbiber ses pores en restant fluide. Une croûte se forme lorsque la coupelle a été placée dans le four à une température trop basse.

Il faut donc préchauffer le four à 900°C durant 10 minutes avant l'introduction de la coupelle, pour éviter ce problème. Lorsque la fusion de la litharge s'effectue, et que celle-ci disparaît dans les pores de la coupelle, il faut descendre la température du four à 780°C, puisque l'oxydation du plomb est très exothermique, et que cela pourrait provoquer la volatilisation de l'or. La litharge semble donc disparaître dans la coupelle jusqu'à ce qu'il ne reste, au fond de la coupelle, qu'une petite bille métallique composée d'or et d'argent. Le temps de coupellation ne doit pas dépasser le point d'étincelle. C'est-à-dire, le point où la bille prend un aspect étincelant, car la bille d'or a tendance à se volatiliser quand il n'y a plus de plomb. Du bismuth peut laisser sur la coupelle un anneau d'apparence caractéristique. Du cuivre, bien que facilement oxydable, peut également se retrouver dans la bille.

ANALYSE DE L'OR PAR LA MÉTHODE GRAVIMÉTRIQUE

La gravimétrie consiste à déterminer la quantité d'or par des pesées successives après avoir obtenu la bille d'or et d'argent par la pyro-analyse (fire assay), puis en ayant séparé ses constituants par attaque à l'acide nitrique.

La séparation de l'or et de l'argent est effectuée par attaque à l'acide nitrique, qui transforme l'argent en nitrate d'argent soluble, mais qui reste inactif sur l'or. L'or forme alors un agglomérat qui peut être lavé et pesé. La séparation est bonne quand l'alliage contient au moins deux fois plus d'argent que d'or. Empiriquement, la meilleure concentration d'acide nitrique pour cette attaque a été déterminée comme étant une dilution par cinq. Plus concentré, la réaction serait trop violente et l'or serait pulvérisé, ce qui rendrait sa pesée difficile.

La séparation est effectuée dans des creusets de porcelaine, avec quelques millilitres d'acide. Après 20 minutes de réaction, la solution acide est décantée dans une casserole blanche pour éviter toute perte d'or. L'acide est éliminé et l'or est lavé trois fois avec de l'eau sans chlore. Après le chauffage et le refroidissement, l'or est pesé sur une balance de précision au cinq millièmes de milligrammes. La masse de l'or est alors déduite directement, et celle de l'argent, par la différence de masse avant et après l'attaque.

Il est à noter qu'à cause de l'effet de pépité, il y a normalement de fortes variations entre les résultats de plusieurs analyses sur le même échantillon.

Procédure expérimentale :

1. Après la pyro-analyse, il faut ramasser les billes dans les creusets et les aplatir délicatement avec un marteau.
2. Faire une digestion avec un volume de 5 ml d'acide nitrique à 20 % et chauffer sur une plaque pendant 30 minutes.

3. Aspirer la partie liquide, dans laquelle se trouve le nitrate d'argent, dans le creuset.
4. Rincer trois fois avec une solution d'ammoniaque dans de l'eau distillée et déminéralisée, dans un rapport un pour neuf.
5. Remettre sur la plaque chauffante pour sécher la bille d'or.
6. Passer la bille d'or à la flamme pour en réduire les oxydes.
7. Procéder à la pesée.

Calibration de la balance gravimétrique :

1. Lever les plateaux et enlever les disques métalliques des plateaux.
2. Baisser les plateaux et appuyer sur la touche «autotarer». Il y aura apparition de 4 chiffres après le point. L'appareil se tare automatiquement en affichant 0,000. Les chiffres disparaissent automatiquement et l'échelle de pesantier change à 200 mg.
3. Lever les plateaux et mettre le poids de 100 milligrammes sur le plateau se situant à l'avant de la balance gravimétrique.
4. Sur le clavier de la balance, il faut inscrire le chiffre 100,00 mg et peser sur la touche «calibration».
5. Baisser les plateaux et attendre que le 100,00 mg disparaisse de l'écran digital.
6. Remonter les plateaux et enlever le poids de 100,00 mg et remettre les disques métalliques sur les plateaux. Automatiquement, l'échelle de pesantier se fixe à 200 mg et le nombre de chiffres après le point est de trois (0,000 mg).
7. Peser sur la touche «autotarer» et peser les billes d'or.

Calcul en ppm ou g/t

Concentration en oz/t :

$$\frac{\text{Pesée de la bille (par gravimétrie) en mg} \times 29,167}{\text{Masse de l'échantillon utilisé pour la fusion en g}}$$

Exemple :

$$\frac{0,042 \text{ mg} \times 29,167}{15\text{g}} = 0,082 \text{ oz/t}$$

Concentration en ppm :

$$\frac{\text{Pesée de la bille (par gravimétrie) en mg} \times 1000}{\text{Masse de l'échantillon utilisé pour la fusion en g}}$$

Exemple :

$$\frac{0,042 \text{ mg} \times 1000}{15\text{g}} = 2,8 \text{ ppm}$$

ANALYSE DE L'OR PAR SPECTROSCOPIE AA

Suite à l'obtention de la bille par pyro-analyse, celle-ci est dissoute dans de l'acide nitrique et chlorhydrique. La détermination de la concentration en or est ensuite obtenue par lecture sur spectroscopie d'absorption atomique.

Teneur en ppb

1. La bille d'or et d'argent est introduite dans un tube de 5 ml.
2. 0,5 millilitre d'acide nitrique 50 % est ajouté. Le tout est chauffé dans un bain marie durant 30 minutes.
3. 1 millilitre d'acide chlorhydrique concentré est ajouté. Le tout est chauffé de nouveau dans un bain marie durant 15 minutes.
4. Finalement, le volume est complété à 5 ml avec de l'eau du robinet, qui contient naturellement du calcium et du sodium. L'échantillon est mélangé, puis analysé par spectroscopie en absorption atomique sur flamme.

Note : La limite de détection de la méthode donne 5 ppb.

Calcul en ppb

Concentration en ppb :

$$\frac{\text{Absorbance} \times \text{volume utilisé en ml} \times 1000}{\text{Masse de l'analyse en g}}$$

Exemple :

$$\frac{0,5 \times 5 \text{ ml} \times 1000}{30\text{g}} = 83 \text{ ppb}$$

Teneur en g/t

1. La bille d'or et d'argent est introduite dans un tube de 10 ml.
2. Un millilitre d'acide nitrique à 50 % est ajouté. Le tout est chauffé dans un bain marie durant 30 minutes.
3. 2 ml d'acide chlorhydrique concentré sont ajoutés. Le tout est à nouveau chauffé dans un bain marie durant 15 minutes.
4. Le volume est finalement complété à 10 ml avec de l'eau du robinet, qui contient naturellement du calcium et du sodium. L'échantillon est finalement mélangé, puis analysé par spectroscopie en absorption atomique sur flamme.

Note : La limite de détection de la méthode donne 0,06 g/t.

Calcul en g/t

Concentration en g/t :

$$\frac{\text{Valeur de l'absorbance X volume utilisé en ml}}{\text{Masse de l'échantillon en g}}$$

Exemple :

$$\frac{1,0 \times 10 \text{ ml}}{15\text{g}} = 0,66 \text{ g/t}$$

Teneurs en oz/t

La procédure expérimentale est la même que celle utilisée pour la teneur en g/t. Le même calcul s'applique avec un facteur de conversion.

$$1 \text{ g/t} = 0,0292 \text{ oz/t}$$

L'exemple précédent donnera en oz/t : $0,66 \text{ g/t} \times 0,0292 = 0,019 \text{ oz/t}$

Note : La limite de détection de la méthode donne 0,002 oz/t.

LE CONTRÔLE DE LA QUALITÉ

L'or et les métaux sont analysés par série de 21 échantillons, accompagnés par un blanc dans son premier tiers, un double dans le second tiers et un standard dans le troisième tiers. La position de chacun est incrémentée d'une position, d'une série à l'autre et revient au début après la huitième série.

Le blanc sert à déceler une contamination. Le double sert à vérifier la reproductibilité de la méthode. Le standard est un échantillon de concentration connue.

Il y a trois types de standards utilisés pour l'or :

- Le standard en parties par milliards (Rocklab)
- Le standard en grammes par tonnes métrique (Rocklab)
- Un standard certifié CANMET pour les vérifications périodiques.

Il y a trois types de standards utilisés pour les métaux :

- Le standard maison pour les métaux.
- Le standard concentré, étalonné chez Techni-Lab.
- Le standard certifié CANMET pour les métaux.

La vérification des standards se fait à tous les mois pour l'or et les métaux sur une série de vingt-quatre échantillons. La série pour l'or comprend sept standards maison en g/t, sept standards maison en ppb, sept standards certifiés et trois blancs intercalés dans la série. La

série pour les métaux comprend onze standards maison, onze standards certifiés et deux blancs intercalés dans la série.

Le calcul de chaque standard est calculé en faisant la moyenne des valeurs obtenues après avoir enlevé le plus grand et le plus petit des résultats. Le taux de récupération du standard certifié doit être supérieur à 90 %. Dans le cas contraire, une révision du standard ou de l'appareil peut être nécessaire afin de retrouver un taux de récupération acceptable.

La mesure est prise sur un spectrophotomètre AA à ionisation par flamme. Les solutions standard ci-dessous sont utilisées pour produire une courbe de calibration.

Tableau 1 : Solutions standard

Élément	Concentrations (ppm)
Or	1 3 5 10 20 50 100
Argent	0,2 0,4 1,0 2,0 4,0
Cuivre	5 10 20 50 100
Zinc	5 10 20 50 100
Fer	5 10 20 50 100
Plomb	5 10 20 50 100

La courbe de calibration doit avoir un coefficient de corrélation au moins égal à 0,995. Dans le cas contraire, un remplacement des solutions standard utilisées ou une révision de l'appareil peut être effectuée.

L'écart acceptable des standards et duplicata est fonction de la méthode utilisée, ainsi que de la valeur mesurée. Un écart plus grand sera toléré sur une faible valeur, et sera refusé sur une valeur élevée. Par exemple, un standard d'or ayant une valeur théorique de 70 ppb aura un intervalle acceptable de $\pm 25\%$, alors qu'un standard de 1000 ppb devra se lire $1000 \pm 10\%$.

Les séries d'échantillons qui n'auront pas rencontré ces normes seront réanalysés et une vérification des procédures sera effectuée.

La vaisselle utilisée est lavée à l'acide chlorhydrique quatre molaires, puis rincée à l'eau distillée et déminéralisée avant chaque analyse.

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Laboratoire Expert

PRÉPARATION DES ÉCHANTILLONS

1- Réception des échantillons

Lors de la réception, les échantillons sont placés en ordre numérique pour ensuite être comparé avec la feuille d'envoi du client afin de s'assurer que tout concorde. Si les échantillons reçus ne correspondent pas à la liste du client, celui-ci en sera informé. Si le client n'inclut aucune feuille d'envoi, la personne en charge de la réception des échantillons en préparera une.

2- Préparation des échantillons

L'échantillon est séché si nécessaire pour être ensuite réduit à ¼ de pouce dans un concasseur à mâchoire. Le concasseur est nettoyé entre chaque échantillon à l'aide d'un compresseur à air et de plus, il est nettoyé avec du matériel stérile entre chaque lot. L'échantillon est ensuite concassé à 90% - 10 mailles dans un concasseur à rouleaux. Ce même concasseur est nettoyé entre chaque échantillon à l'aide d'un compresseur à air et d'une brosse métallique et de plus, il est nettoyé avec du matériel stérile entre chaque lot. Le premier échantillon de chaque lot est tamisé à 10 mailles afin de déterminer si 90% passe à 10 mailles. En cas contraire, le concasseur à rouleaux est ajusté et un autre test est effectué. Les résultats de ces tests sont notés sur un registre prévu à cette fin. Une portion de 300 grammes est ensuite séparée dans un séparateur Jones et cette portion est pulvérisée à 90% - 200 mailles dans un pulvérisateur à anneaux. Le pulvérisateur est nettoyé entre chaque échantillon à l'aide d'un compresseur à air et de plus, il est nettoyé avec de la silice entre chaque lot. Le premier échantillon de chaque lot est tamisé à 200 mailles. Si 90% ne passe pas, le temps de pulvérisation est alors augmenté et un autre test est effectué. Les résultats de ces tests sont notés sur un registre prévu à cette fin. Le matériel en surplus (le rejet) est entreposé pour le client.

OR PAR GÉOCHIMIE (PYROANALYSE)

Un échantillon de 29.166 grammes est pesé et versé dans un creuset dans lequel on a, au préalable, déposé environ 130 grammes de fondant. L'échantillon est ensuite mélangé et 1 mg de nitrate d'argent y est ajouté. L'échantillon est alors mis en fusion à 1800 ° Fahrenheit pour environ 45 minutes. Celui-ci est versé dans un moule conique et on le laisse refroidir. Après refroidissement, la scorie est cassée et un bouton de plomb pesant de 25 à 30 grammes est récupéré. Ce bouton est alors coupé à 1600 ° Fahrenheit et ce, jusqu'à ce que le plomb soit oxydé. Après refroidissement, la bille est placée dans une éprouvette de 12 X 75 mm. Une portion de 0.2 ml d'acide nitrique 1 :1 est ajoutée pour permettre une réaction. L'éprouvette est déposée dans un bain d'eau pour environ 30 minutes. Ensuite, 0.3 ml acide hydrochlorique concentré est ajouté pour permettre une seconde réaction, toujours dans un bain d'eau pour un autre 30 minutes. L'éprouvette est ensuite retirée du bain d'eau et 4.5 ml d'eau distillée y est ajoutée. L'échantillon est alors mélangé vigoureusement pour ensuite le laisser reposer et la concentration d'or est déterminée par absorption atomique.

Chaque lot allant au four comprend 28 échantillons incluant un blanc et un standard pour l'or. Les creusets ne sont réutilisés tant et aussi longtemps que nous n'avons pas eu les résultats d'analyse. Les creusets ayant contenus des échantillons ayant une

valeur supérieure à 200 PPB sont jetés. La limite de détection minimale est de 2 PPB et les échantillons ayant des valeurs supérieures à 1000 PPB sont réanalysés par gravimétrie.

OR PAR GRAVIMÉTRIE (PYROANALYSE)

Un échantillon de 29.166 grammes est pesé et versé dans un creuset dans lequel on a, au préalable, déposé environ 130 grammes de fondant. L'échantillon est ensuite mélangé et 1 mg de nitrate d'argent y est ajouté. L'échantillon est alors mis en fusion à 1800 ° Fahrenheit pour environ 45 minutes. Celui-ci est versé dans un moule conique et on le laisse refroidir. Après refroidissement, la scorie est cassée et un bouton de plomb pesant de 25 à 30 grammes est récupéré. Ce bouton est alors coupellé à 1600 ° Fahrenheit et ce, jusqu'à ce que le plomb soit oxydé. Après refroidissement, la bille est aplatie à l'aide d'un marteau pour ensuite être déposée dans un creuset en porcelaine (parting cup). Ce creuset est rempli avec de l'acide nitrique 1 :7 et chauffé jusqu'à dissolution de l'argent. Quand la réaction semble terminée, une goutte d'acide nitrique concentrée est ajoutée et l'échantillon est observé afin de s'assurer qu'il n'y ait aucune autre réaction. La bille d'or est alors rincée plusieurs fois dans de l'eau chaude distillée, séchée, réchauffée, refroidie et ensuite pesée.

Chaque lot allant au four comprend 28 échantillons incluant un blanc et un standard pour l'or. Les creusets ne sont réutilisés tant et aussi longtemps que nous n'avons pas eu les résultats d'analyse. Les creusets ayant contenus des échantillons ayant une valeur supérieure à 3.00 g/t sont jetés. La limite de détection minimale est de 0.03 g/t et il n'y a aucune limite de détection maximale. Tous les échantillons ayant des valeurs supérieures à 3.00 g/t sont réanalysés avant de soumettre le rapport final.

APPENDIX III

QA/QC TABLES
(Source: P. O'Dowd 2009)

RE-CHECKS

# Sample	Techni-Lab Au g/t	Lab-Expert Au g/t	# Re-assays
5003	0.76	0.62	125001
5004	0.44	0.71	125002
5010	0.48	0.56	125003
5019	1.36	1.06	125004
5023	2.98	3.06	125005
5042	0.89	2.47	125006
5051	2.30	1.82	125007
5052	0.25	0.37	125008
5057	0.87	0.95	125009
5078	0.24	0.38	125010
5083	0.43	0.21	125011
5096	0.21	0.21	125012
5101	0.39	0.08	125013
5106	1.76	2.27	125014
5115	0.06	0.02	125015
5120	1.30	1.27	125016
5124	2.53	2.33	125017
5125	2.08	1.78	125018
5127	0.31	0.20	125019
5131	2.21	2.26	125020
5133	0.22	0.19	125021
5144	0.51	0.45	125022
5153	1.79	1.54	125023
5155	1.81	2.45	125024
5156	0.23	0.17	125025
5161	0.66	0.45	125026
5162	2.21	3.36	125027
5168	2.54	2.54	125028
5169	0.68	0.63	125029
5176	1.12	0.95	125030
5177	0.31	0.23	125031
5179	1.60	0.02	125032
5183	0.45	0.69	125033
5184	4.20	4.01	125034
5187	0.78	0.76	125035
5188	1.74	1.65	125036
5189	4.93	3.53	125037
5195	2.18	2.09	125038
5198	0.45	0.41	125039
5200	1.67	0.75	125040
5205	1.11	1.37	125041
5210	0.41	0.41	125042
5215	0.06	0.01	125043
5217	0.47	0.66	125046
5221	2.44	2.50	125047
5233	0.08	0.07	125048
5236	1.36	1.58	125049
5237	2.95	3.05	125050

# Sample	Type	Known value Au ppb	Assay result Au ppb
88527	BLANK	5	52
88564	BLANK	5	5
88641	BLANK	5	8
88701	BLANK	5	9
88750	BLANK	5	52
89149	BLANK	5	34
89202	BLANK	5	5
89243	BLANK	5	5
89292	BLANK	5	5
97070	BLANK	5	8
97092	BLANK	5	5
97109	BLANK	5	5
97145	BLANK	5	19
97169	BLANK	5	5
97199	BLANK	5	50
97223	BLANK	5	112
97259	BLANK	5	24
97315	BLANK	5	5
97392	BLANK	5	21
97425	BLANK	5	25
97474	BLANK	5	5
5025	BLANK	5	5
5175	BLANK	5	5
5219	BLANK	5	5
5300	BLANK	5	5
5515	BLANK	5	5
5589	BLANK	5	5
89148	STANDARD 0,0811 ppm	81.1	196
89291	STANDARD 0,0811 ppm	81.1	90
97069	STANDARD 0,0811 ppm	81.1	346
97198	STANDARD 0,0811 ppm	81.1	92
97473	STANDARD 0,0811 ppm	81.1	78
5174	STANDARD 0,0811 ppm	81.1	70
5299	STANDARD 0,0811 ppm	81.1	80
5591	STANDARD 0,0811 ppm	81.1	80
97168	STANDARD 0,197 ppm	197	186
88749	STANDARD 0,197 ppm	197	5722
88563	STANDARD 0,197 ppm	197	181
89201	STANDARD 0,197 ppm	197	166
5024	STANDARD 0,197 ppm	197	190
5218	STANDARD 0,197 ppm	197	190

Duplicates	
Assay 1	Assay 2
0.06	0.09
1.07	1.12
0.06	0.06
0.06	0.06
0.93	0.93
0.1	0.11
0.29	0.27
0.06	0.06
0.06	0.06
0.06	0.06
0.06	0.06
0.08	0.02
0.028	0.029
0.009	0.007
0.141	0.139
0.018	0.016
0.007	0.005
0.007	0.009
0.346	0.368
0.248	0.225
0.291	0.27
0.021	0.021
0.014	0.14
0.005	0.005
0.005	0.005
0.02	0.021
0.082	0.076
0.009	0.01
0.018	0.018
0.007	0.009
0.009	0.007
0.291	0.307
0.232	0.244
0.846	0.819
0.006	0.005
0.007	0.005
0.055	0.051
0.005	0.005
0.007	0.007
0.005	0.006
0.108	0.102
0.007	0.005
0.348	0.34
0.005	0.005
0.005	0.005
0.864	0.844
0.005	0.005
0.005	0.005
0.005	0.005

Duplicates	
Assay 1	Assay 2
0.005	0.006
0.005	0.005
0.005	0.005
0.145	0.134
0.019	0.022
0.283	0.292
0.008	0.009
0.012	0.01
0.41	0.049
0.305	0.283
0.316	0.29
0.021	0.017
0.019	0.024
0.013	0.009
0.006	0.006
0.766	0.804
0.44	0.446
0.005	0.005
0.005	0.005
0.864	0.885
0.055	0.066
0.005	0.005
0.005	0.005
0.091	0.103
0.005	0.005
0.005	0.005
0.005	0.005
0.008	0.01
0.005	0.005
0.282	0.286
0.066	0.062
0.012	0.009
0.005	0.005
0.012	0.11
0.216	0.198
0.005	0.005
0.005	0.005
0.005	0.007
0.005	0.005
0.059	0.047
0.229	0.259
0.034	0.035
0.005	0.005
0.181	0.193
0.005	0.006
0.005	0.005
0.005	0.005

APPENDIX IV

2009 RESSOURCE ESTIMATE CALCULATION SHEETS (Source: P. O'Dowd 2009)

MEASURED							
Drift	Zone	Cut-off 5.00 g/t Au			Cut-off 7.00 g/t Au		
		Tonnes	gpt	Ounces	Tonnes	gpt	Ounces
250-125E-2S	A2	1 029	7,473	247	1 029	7,473	247
125-80E-1	A4	1 211	22,230	865	1 211	22,230	865
125-95E-1	A4	793	5,476	140			
125-80E-16	A4	1 725	6,640	368			
Total		3 729	11,454	1 373	1 211	22,230	865
125-115E-1	A5	580	7,151	133	580	7,151	133
250-50W-2	A5	1 688	11,870	644	1 688	11,870	644
250-100W-2	A5	2 532	11,771	958	2 532	11,771	958
250-70W-2	A5	945	9,241	281	945	9,241	281
250-10E-2	A5	854	7,234	199	854	7,234	199
250-40W-2	A5	1 211	6,346	247			
250-0W-2	A5	1 860	6,045	362			
250-60W-2	A5	941	5,426	164			
125-40W-16	A5	994	15,655	500	994	15,655	500
125-50W-16	A5	959	10,366	320	959	10,366	320
250-165E-37	A5	474	5,00	76			
Total	A5	13 037	9,27	3 883	8 551	11,04	3 035
250-180E-1	A6	332	6,544	70			
250-100E-2	A6	781	20,229	508	781	20,229	508
250-110W-2	A6	1 035	7,534	251	1 035	7,534	251
250-70E-2	A6	2 469	6,042	480			
250-60E-2	A6	1 654	5,914	314			
125-165E-3	A6	611	5,310	104			
375-20W-12	A6	1 386	6,644	296			
125-170W-16	A6	771	5,952	148			
Total	A6	9 038	7,470	2 171	1 816	12,995	759
375-120W-4	C2	1 393	7,159	321	1 393	7,159	321
500-230W-6	C4	856	8,850	244	856	8,850	244
500-320W-6	C4	1 025	5,859	193			
Total	C4	1 881	7,220	437	1 211	22,230	865
500-560W-22	C5	1 085	5,268	184			
Total		31 192	8,59	8 615	14 856	11,45	5 470

INDICATED RESOURCE								
Zone	Hole #	Section	Cut-off 5,00 g/t Au			Cut-off 7,00 g/t Au		
			Tonnes	gpt	Ounces	Tonnes	gpt	Ounces
A2	15	270 E	2 827	13,01	1 182	2827	13,01	1 182
A2	81-170	240 E	2 214	13,97	994	2214	13,97	994
A2	81-215	210 E	1 686	5,48	297		5,48	0
A2	81-216	210 E	5 229	10,93	1 838	5229	10,93	1 838
A2	83-S-265	210 E	7 358	6,46	1 528		6,46	0
A2	81-174	200 E	1 191	14,98	574	1191	14,98	574
A2	83-S-236	200 E	1 364	5,95	261		5,95	0
A2	CN-88-114	190 E	1 291	5,14	213		5,14	0
A2	81-155	180 E	680	6,91	151	680	6,91	151
A2	CR-03-255	180 E	536	9,22	159	536	9,22	159
A2	83-250-465	170 E	1 032	5,22	173		5,22	0
A2	CN-88-72	160 E	636	11,22	229	636	11,22	229
A2	CN-88-68	150 E	854	5,58	153		5,58	0
A2	83-250-467	110 E	1 103	10,98	389	1103	10,98	389
A2	C-79-23	110 E	6 718	5,21	1 125		5,21	0
A2	51	010W	1 618	19,30	1 004	1618	19,30	1 004
A2	81-126	370W	4 671	7,85	1 179	4671	7,85	1 179
	Total		41 007	8,69	11 450	20 705	11,57	7 699
A4	11	260 E	2 565	19,45	1 604	2565	19,45	1 604
A4	CN-88-55	230 E	861	5,05	140		5,05	0
A4	81-173	200 E	353	23,38	265	353	23,38	265
A4	CN-88-47	190 E	542	12,74	222	542	12,74	222
A4	CN-88-48	190 E	494	9,54	151	494	9,54	151
A4	CN-88-21	180 E	419	6,72	91		6,72	0
A4	83-125-440	150 E	795	6,14	157		6,14	0
A4	CR-03-252	150 E	609	5,19	102		5,19	0
A4	36	140 E	659	5,99	127	659	5,99	127
A4	CR-03-261	140 E	384	5,11	63		5,11	0
A4	CR-03-251	130 E	538	5,42	94		5,42	0
A4	371	120 E	487	6,19	97		6,19	0
A4	CN-88-119	120 E	1 572	5,14	260		5,14	0
A4	266	090E	679	8,78	192	679	8,78	192
A4	81-145	090E	466	4,95	74		4,95	0
A4	83-250-470	090E	1 084	7,96	277	1084	7,96	277
A4	CN-88-04	090E	201	5,45	35		5,45	0
A4	246	070E	504	7,84	127	504	7,84	127
A4	CN-88-102	070E	304	20,77	203	304	20,77	203
A4	81-139	050E	1 094	8,49	299	1094	8,49	299
A4	CR-03-242	010E	2 859	14,15	1 301	2859	14,15	1 301
	Total		17 469	10,47	5 879	11 136	13,32	4 767
A5	CN-88-61	250 E	951	7,38	226	951	7,38	226
A5	81-179	240 E	197	7,22	46	197	7,22	46

INDICATED RESOURCE								
Zone	Hole #	Section	Cut-off 5,00 g/t Au			Cut-off 7,00 g/t Au		
			Tonnes	gpt	Ounces	Tonnes	gpt	Ounces
A5	CN-88-59	240 E	684	18,31	403	684	18,31	403
A5	340	200 E	740	8,91	212	740	8,91	212
A5	81-173	200 E	502	5,42	88		5,42	0
A5	333	180 E	3 589	29,75	3 433	3589	29,75	3 433
A5	342	180 E	2 483	8,92	712	2483	8,92	712
A5	CN-88-109	180 E	327	10,83	114	327	10,83	114
A5	CR-03-255	180 E	1 264	5,23	213		5,23	0
A5	81-154	170 E	1 208	8,99	349	1208	8,99	349
A5	83-S-239	170 E	602	5,00	97		5,00	0
A5	CN-88-76	170 E	169	7,24	39	169	7,24	39
A5	CR-03-253	160 E	738	6,10	145		6,10	0
A5	CN-88-25	150 E	576	5,15	95		5,15	0
A5	81-153	150 E	668	5,27	113		5,27	0
A5	251	150 E	638	6,93	142	638	6,93	142
A5	CR-03-252	150 E	505	7,43	121	505	7,43	121
A5	36	140 E	662	5,01	107		5,01	0
A5	81-149	140 E	341	12,28	135	341	12,28	135
A5	CN-88-14	140 E	577	9,82	182	577	9,82	182
A5	CN-88-29	140 E	231	7,70	57	231	7,70	57
A5	29	080E	294	7,76	73	294	7,76	73
A5	83-125-446	080E	157	7,41	37	157	7,41	37
A5	27A	070E	989	5,04	160		5,04	0
A5	246	040E	4 784	8,12	1 249	4784	8,12	1 249
A5	CR-00-45	030E	722	8,37	194	722	8,37	194
A5	346	030E	335	6,83	74		6,83	0
A5	325	030E	724	16,12	375	724	16,12	375
A5	83-125-449	020E	1 427	6,82	313		6,82	0
A5	84-250-558	000W	1 926	20,14	1 247	1926	20,14	1 247
A5	84-250-551	000W	848	10,15	277		10,15	0
A5	211	000W	1 453	12,82	599	1453	12,82	599
A5	CR-00-19	010W	3 512	8,13	918	3512	8,13	918
A5	83-375-497	010W	1 688	8,83	479	1688	8,83	479
A5	231	020W	424	5,34	73		5,34	0
A5	CR-00-19	020W	0	9,05	0	0	9,05	0
A5	CR-00-19	020W	0	7,32	0	0	7,32	0
A5	CR-03-215	020W	1 459	18,26	857	1459	18,26	857
A5	84-S-280	030W	1 169	10,62	399	1169	10,62	399
A5	84-S-281	030W	1 443	19,32	897	1443	19,32	897
A5	CR-00-43	030W	3 063	9,09	895	3063	9,09	895
A5	CR-00-42	040W	1 025	7,21	238	1025	7,21	238
A5	CR-03-200	040W	857	5,13	141		5,13	0
A5	276	050W	341	5,63	62		5,63	0
A5	275	050W	228	8,00	59	228	8,00	59
A5	83-375-495	050W	2 247	32,47	2 346	2247	32,47	2 346
A5	83-S-241	060W	949	5,28	161		5,28	0
A5	CR-03-197	070W	2 576	13,54	1 121	2576	13,54	1 121

INDICATED RESOURCE								
Zone	Hole #	Section	Cut-off 5,00 g/t Au			Cut-off 7,00 g/t Au		
			Tonnes	gpt	Ounces	Tonnes	gpt	Ounces
A5	84-S-275	080W	1 713	5,48	302		5,48	0
A5	39	090W	1 049	6,17	208		6,17	0
A5	81-208	090W	405	6,41	84		6,41	0
A5	83-375-493	090W	2 416	17,63	1 369	2416	17,63	1 369
A5	CR-00-17	110W	488	5,50	86		5,50	0
A5	83-S-244	110W	742	6,20	148		6,20	0
A5	CR-03-171	120W	1 553	5,51	275		5,51	0
A5	CR-03-240	130W	1 035	6,21	207		6,21	0
A5	41	140W	1 933	5,53	344		5,53	0
A5	CR-00-16	150W	584	5,85	110		5,85	0
A5	290,00	160W	790	5,83	148		5,83	0
A5	CR-03-236	160W	1 250	7,71	310	1250	7,71	310
A5	396	170W	617	16,07	319	617	16,07	319
A5	391	170W	490	15,25	240	490	15,25	240
A5	254	180W	631	12,10	245	631	12,10	245
A5	CR-03-233	180W	980	6,46	204		6,46	0
A5	81-159	260W	1 375	6,05	267		6,05	0
A5	81-113	270W	1 415	5,50	250		5,50	0
A5	CR-03-221	270W	419	5,05	68		5,05	0
A5	CR-00-09	290W	247	11,89	94	247	11,89	94
A5	CR-03-186	330W	941	9,21	279	941	9,21	279
A5	81-125	370W	906	6,88	200		6,88	0
A5	CR-02-64	370W	322	5,39	56		5,39	0
A5	CR-00-11	380W	1 144	23,74	873	1144	23,74	873
A5	83-S-254	400W	1 403	7,16	323	1403	7,16	323
A5	CR-03-213	400W	1 296	10,15	423	1296	10,15	423
	Total		78 439	10,99	27 703	51 546	13,65	22 629
A6	81-180	240 E	1 365	17,15	753	1365	17,15	753
A6	335	210 E	1 787	5,47	314		5,47	0
A6	81-173	200 E	563	12,34	223	563	12,34	223
A6	83-S-237	200 E	1 407	5,61	254		5,61	0
A6	81-155	180 E	392	20,71	261	392	20,71	261
A6	81-218	180 E	5 722	6,58	1 211		6,58	0
A6	CN-88-45	180 E	825	21,37	567	825	21,37	567
A6	81-154	170 E	392	5,26	66		5,26	0
A6	83-S-239	170 E	811	6,40	167		6,40	0
A6	CN-88-23	170 E	458	6,56	97		6,56	0
A6	330	160 E	1 186	7,93	302	1186	7,93	302
A6	CN-88-17	160 E	314	6,39	64		6,39	0
A6	CN-88-16	150 E	243	9,17	72	243	9,17	72
A6	CR-03-261	140 E	2 340	5,91	445		5,91	0
A6	83-250-471	120 E	779	5,46	137		5,46	0
A6	81-221	090E	5 988	5,30	1 020		5,30	0
A6	81-223	060E	966	6,35	197		6,35	0
A6	CR-00-46	060E	1 229	6,31	249		6,31	0

INDICATED RESOURCE								
Zone	Hole #	Section	Cut-off 5,00 g/t Au			Cut-off 7,00 g/t Au		
			Tonnes	gpt	Ounces	Tonnes	gpt	Ounces
A6	CR-01-08	030E	3 036	7,22	705	3036	7,22	705
A6	CR-01-01	050W	3 266	8,64	907	3266	8,64	907
A6	39	090W	864	7,74	215	864	7,74	215
A6	83-250-478	090W	2 249	15,70	1 135	2249	15,70	1 135
A6	286	120W	847	12,80	349	847	12,80	349
A6	CR-03-241	130W	1 020	12,92	424	1020	12,92	424
A6	53	230W	1 135	6,12	223		6,12	0
A6	CR-02-89	240W	4 350	6,97	975	4350	6,97	975
A6	81-159	260W	2 496	5,97	479		5,97	0
A6	CR-01-58	270W	1 781	8,23	471	1781	8,23	471
A6	CR-01-40	270W	907	7,61	222	907	7,61	222
A6	CR-01-57	270W	575	27,27	504	575	27,27	504
A6	CR-03-220	290W	1 299	19,93	833	1299	19,93	833
A6	CR-03-184	300W	6 252	18,63	3 745	6252	18,63	3 745
A6	81-118	300W	961	5,09	157		5,09	0
A6	CR-01-43	310W	1 002	8,07	260	1002	8,07	260
A6	87	320W	591	7,09	135	591	7,09	135
A6	81-125	370W	1 101	18,09	640	1101	18,09	640
A6	CR-03-191	380W	2 678	15,41	1 327	2678	15,41	1 327
A6	CR-03-189	380W	1 755	9,32	526	1755	9,32	526
A6	CR-02-59	390W	881	7,88	223	881	7,88	223
A6	CR-03-216	390W	811	5,25	137		5,25	0
A6	CR-02-61	390W	870	6,67	187		6,67	0
A6	83-S-254	400W	1 409	5,10	231		5,10	0
A6	81-163	400W	910	5,64	165		5,64	0
A6	CR-03-210	420W	554	5,42	97		5,42	0
A6	CR-02-48	440W	796	5,49	141		5,49	0
A6	86	450W	930	5,02	150		5,02	0
A6	CR-00-27	470W	890	7,04	201	890	7,04	201
A6	CR-02-83	540W	1 663	5,03	269		5,03	0
	Total		74 650	9,35	22 432	39 922	12,45	15 975
A11	CR-02-64	370W	856	7,86	216	856	7,86	216
A11	CR-02-48	440W	2 122	11,92	813	2122	11,92	813
	Total		2 978	10,75	1 030	2 978	10,75	1 030
B1	81-214A	270 E	8 099	6,37	1 659		6,37	0
B1	CR-02-82	230 E	7 247	8,66	2 018	7247	8,66	2 018
	Total		15 346	7,45	3 676	7 247	8,66	2 018
C1	83-375-491	100W	3 103	9,66	964	3103	9,66	964
C1	52	100W	4 637	9,37	1 397	4637	9,37	1 397
C1	CR-03-171	120W	2 202	5,90	418		5,90	0
C1	CR-03-170	120W	1 484	8,91	425	1484	8,91	425
C1	394	120W	1 554	7,70	385	1554	7,70	385
C1	341	130W	1 884	5,25	318		5,25	0

INDICATED RESOURCE								
Zone	Hole #	Section	Cut-off 5,00 g/t Au			Cut-off 7,00 g/t Au		
			Tonnes	gpt	Ounces	Tonnes	gpt	Ounces
C1	CR-03-165	150W	5 609	16,45	2 967	5609	16,45	2 967
C1	332	150W	1 426	6,70	307		6,70	0
C1	CR-03-163	170W	4 239	5,82	793		5,82	0
C1	83-500-514	230W	369	5,63	67		5,63	0
C1	C-79-3	280W	3 493	11,24	1 262	3493	11,24	1 262
C1	83-500-507	290W	2 177	6,84	479		6,84	0
C1	CR-03-138	290W	2 683	6,20	535		6,20	0
C1	CR-01-43	310W	1 539	7,45	369	1539	7,45	369
C1	431	310W	1 032	15,60	518	1032	15,60	518
C1	430	320W	8 235	11,10	2 939	8235	11,10	2 939
C1	337	320W	1 942	15,59	973	1942	15,59	973
C1	94	580W	1 654	5,16	274		5,16	0
C1	CR-08-354	610W	5 789	5,01	933		5,01	0
C1	93	610W	3 423	12,34	1 358	3423	12,34	1 358
C1	CR-02-107	680W	3 021	5,76	559	3021	5,76	559
	Total		61 496	9,22	18 239	39 073	11,24	14 115
C2	314	090W	2 135	5,50	378		5,50	0
C2	83-500-523	120W	3 226	5,62	583		5,62	0
C2	83-500-521	150W	4 134	5,26	699		5,26	0
C2	332	150W	1 694	6,50	354		6,50	0
C2	83-500-520	180W	1 817	5,04	294		5,04	0
C2	CR-07-334	190W	4 395	5,84	825		5,84	0
C2	C-79-4	210W	2 561	15,12	1 245	2561	15,12	1 245
C2	81-109	210W	2 177	5,34	374		5,34	0
C2	C-79-18	220W	1 684	5,95	322		5,95	0
C2	CR-03-150	230W	3 693	5,71	678		5,71	0
C2	C-79-6	230W	3 190	5,55	569		5,55	0
C2	C-79-3	280W	9 620	5,37	1 661		5,37	0
C2	CR-03-143	280W	6 394	9,48	1 949	6394	9,48	1 949
C2	CR-03-193	360W	6 176	6,79	1 348		6,79	0
	Total		52 895	6,63	11 279	8 955	11,09	3 194
C3	C-79-11	070W	8 679	5,53	1 543		5,53	0
C4	341	140W	1 243	5,71	228		5,71	0
C4	437	150W	1 316	5,58	236		5,58	0
C4	332	150W	2 976	22,28	2 132	2976	22,28	2 132
C4	352	170W	3 975	5,56	711		5,56	0
C4	83-500-520	180W	2 525	5,09	413		5,09	0
C4	C-79-9	210W	1 613	10,65	552	1613	10,65	552
C4	81-159	260W	5 468	5,11	898		5,11	0
C4	81-112	270W	3 497	8,40	944	3497	8,40	944
C4	CR-03-143	280W	4 313	5,11	709		5,11	0
C4	CR-03-142	280W	1 701	5,42	296		5,42	0
C4	83-S-251	290W	1 225	6,77	267		6,77	0

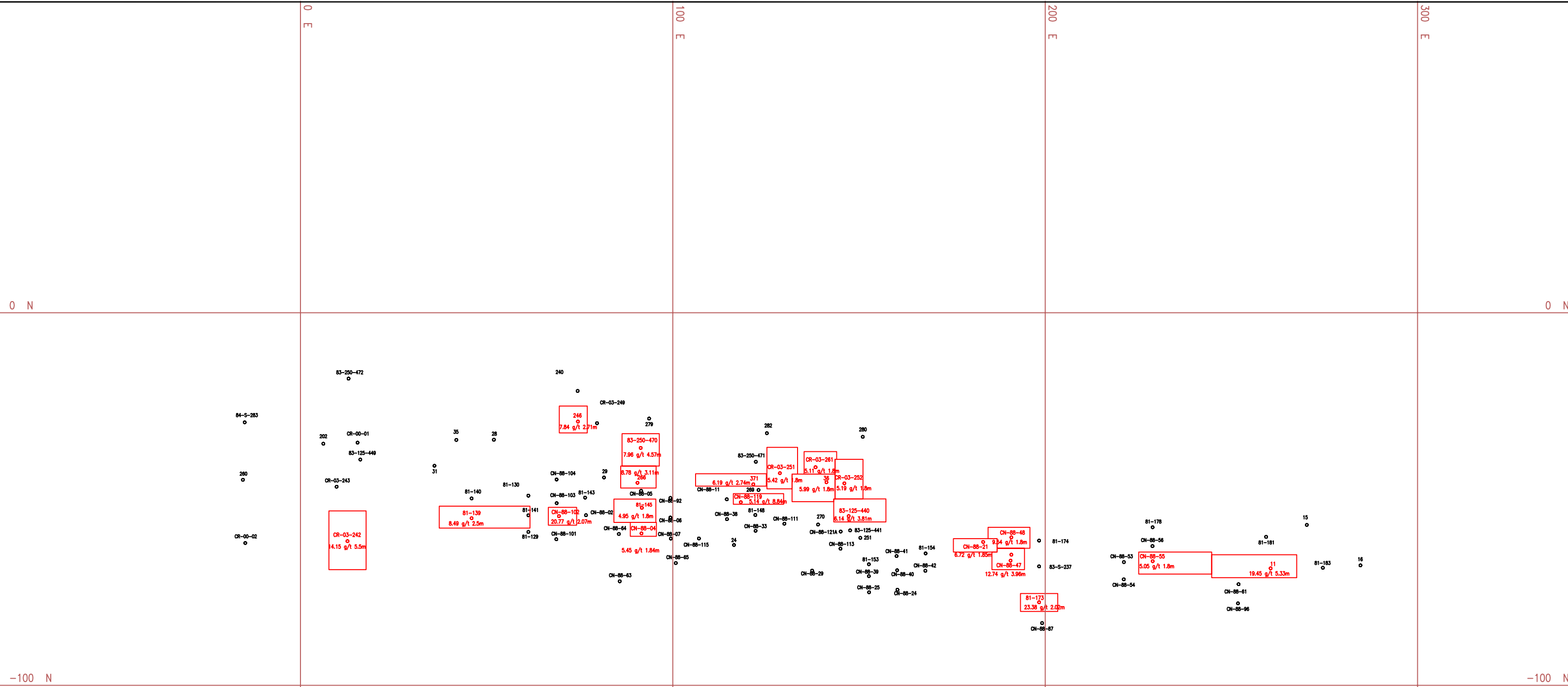
INDICATED RESOURCE								
Zone	Hole #	Section	Cut-off 5,00 g/t Au			Cut-off 7,00 g/t Au		
			Tonnes	gpt	Ounces	Tonnes	gpt	Ounces
C4	C-79-20	300W	3 256	13,01	1 362	3256	13,01	1 362
C4	80-103	300W	6 016	11,96	2 313	6016	11,96	2 313
C4	CR-03-137	300W	1 741	6,78	380		6,78	0
C4	CR-03-184	300W	1 948	10,05	630	1948	10,05	630
C4	CR-03-157	310W	2 280	5,27	386		5,27	0
C4	CR-03-183	320W	743	5,66	135		5,66	0
C4	80-104	330W	3 828	14,06	1 731	3828	14,06	1 731
C4	81-125	370W	2 562	5,85	482		5,85	0
C4	81-126	370W	4 458	8,88	1 273	4458	8,88	1 273
C4	CR-03-192	390W	2 184	5,75	404		5,75	0
C4	CR-02-56	390W	2 858	13,17	1 210	2858	13,17	1 210
C4	CR-07-332-A	390W	3 140	15,28	1 543	3140	15,28	1 543
	Total		64 869	9,22	19 234	33 591	12,68	13 689
C5	CR-03-167	140W	1 704	8,93	489	1704	8,93	489
C5	250	150W	964	7,69	238	964	7,69	238
C5	C-79-5	190W	6 559	6,23	1 314		6,23	0
C5	C-79-4	210W	2 908	10,05	940	2908	10,05	940
C5	C-79-16	510W	2 796	5,21	468		5,21	0
C5	95	520W	2 519	5,79	469		5,79	0
C5	416	520W	3 125	5,07	509		5,07	0
C5	94	580W	1 389	5,66	253		5,66	0
C5	CR-02-121	580W	2 935	6,40	604		6,40	0
C5	CR-02-75	630W	3 903	7,53	945	3903	7,53	945
C5	66	640W	2 035	8,07	528	2035	8,07	528
C5	CR-02-116	650W	2 257	5,09	369		5,09	0
C5	CR-02-100	670W	1 948	5,44	341		5,44	0
	Total		35 044	6,63	7 468	11 515	8,48	3 140
C6	417	500W	2 243	5,50	397		5,50	0
C6	81-167	500W	2 323	5,99	447		5,99	0
C6	CR-02-93	510W	1 671	5,42	291		5,42	0
C6	CR-00-23	520W	1 232	5,81	230		5,81	0
C6	393	530W	1 307	14,53	611	1307	14,53	611
C6	67	590W	2 777	33,04	2 950	2777	33,04	2 950
C6	66	640W	1 829	15,37	904	1829	15,37	904
	Total		13 384	13,55	5 830	5 914	23,48	4 465
C7	CR-00-23	520W	3 051	8,41	825	3051	8,41	825
C7	CR-02-74	530W	2 823	12,03	1 092	2823	12,03	1 092
C7	95	530W	458	6,31	93		6,31	0
C7	CR-03-123	570W	2 018	10,17	660	2018	10,17	660
C7	CR-02-114	620W	3 823	6,98	858	3823	6,98	858
C7	CR-02-116	650W	2 394	8,12	625	2394	8,12	625
C7	68	700W	939	16,72	505	939	16,72	505
	Total		15 507	9,34	4 658	15 049	9,43	4 565

INDICATED RESOURCE								
Zone	Hole #	Section	Cut-off 5,00 g/t Au			Cut-off 7,00 g/t Au		
			Tonnes	gpt	Ounces	Tonnes	gpt	Ounces
C8	CR-02-95	530W	859	7,02	194	859	7,02	194
C8	CR-02-74	540W	7 981	8,96	2 299	7981	8,96	2 299
C8	CR-08-354	610W	7 241	14,50	3 376	7241	14,50	3 376
C8	81-195	610W	8 628	5,61	1 556		5,61	0
C8	CR-08-360	620W	5 910	5,71	1 085		5,71	0
C8	CR-02-107	680W	2 695	5,22	452		5,22	0
	Total		33 315	8,37	8 962	16 081	11,35	5 869
C9	95	520W	1 025	7,44	245	1025	7,44	245
C9	402	570W	2 774	6,40	571		6,40	0
C9	94	580W	1 819	5,09	298		5,09	0
C9	CR-02-107	680W	1 812	7,10	414	1812	7,10	414
C9	CR-02-78	690W	1 875	5,34	322		5,34	0
	Total		9 305	6,18	1 849	2 836	7,22	659
C10	95	520W	2 350	6,51	492		6,51	0
C10	CR-08-360	620W	5 912	5,37	1 021		5,37	0
	Total		8 262	5,69	1 513			
C11	412	550W	1 927	6,20	384		6,20	0
C11	81-185	560W	2 777	5,27	470		5,27	0
C11	404	560W	1 041	6,44	216		6,44	0
C11	81-200	580W	4 310	5,96	826		5,96	0
C11	66	640W	5 750	8,88	1 642	5750	8,88	1 642
C11	81-188	670W	1 111	6,49	232		6,49	0
C11	CR-02-107	680W	1 961	5,99	378		5,99	0
	Total		18 877	6,83	4 147	5 750	8,88	1 642
C12	CR-02-100	670W	1 105	9,26	329	1105	9,26	329
C13	CR-02-100	670W	1 144	10,95	403	1144	10,95	403
D1	CN-88-133	070E	8 020	5,71	1 472		5,71	0
D1	83-S-261	030E	5 025	5,10	824		5,10	0
	Total		13 046	5,48	2 296			
D2	CN-88-133	070E	9 099	5,32	1 556		5,32	0
D2	83-S-247	220W	3 002	34,58	3 338	3002	34,58	3 338
D2	C-79-19	280W	3 725	5,49	658		5,49	0
D2	81-120A	300W	2 501	7,08	569	2501	7,08	569
D2	CR-08-362	310W	1 012	5,71	186		5,71	0
D2	430	320W	3 316	11,97	1 276	3316	11,97	1 276
D2	83-500-505	320W	6 142	5,45	1 076		5,45	0
D2	83-500-503	330W	1 963	8,53	538	1963	8,53	538
D2	83-500-504	330W	6 587	6,46	1 368		6,46	0

INDICATED RESOURCE								
Zone	Hole #	Section	Cut-off 5,00 g/t Au			Cut-off 7,00 g/t Au		
			Tonnes	gpt	Ounces	Tonnes	gpt	Ounces
D2	C-79-2	330W	2 961	7,01	667	2961	7,01	667
D2	CR-03-135	330W	3 470	16,70	1 863	3470	16,70	1 863
D2	80-106	340W	1 791	15,13	871	1791	15,13	871
D2	CR-03-193	350W	9 969	5,86	1 878		5,86	0
D2	CR-03-188	350W	2 135	5,57	382		5,57	0
D2	CR-03-187	350W	2 664	25,73	2 204	2664	25,73	2 204
D2	CR-03-133	360W	1 168	5,82	219		5,82	0
D2	423	380W	1 688	5,00	271		5,00	0
D2	CR-03-130	380W	3 063	18,94	1 865	3063	18,94	1 865
D2	CR-03-130	390W	5 808	18,94	3 537	5808	18,94	3 537
D2	421	400W	1 510	5,80	281		5,80	0
	Total		73 574	10,40	24 605	30 540	17,04	16 729
D3	CN-88-133	070E	8 748	29,64	8 337	8748	29,64	8 337
D3	83-S-261	030E	8 987	10,42	3 011	8987	10,42	3 011
D3	CR-08-348	140W	3 226	6,52	676		6,52	0
D3	83-500-516	210W	0	5,20	0		5,20	0
D3	CR-03-150	220W	3 145	5,04	510		5,04	0
D3	CR-07-343	220W	7 335	9,93	2 342	7335	9,93	2 342
D3	83-S-246	230W	1 874	5,77	348		5,77	0
D3	C-79-17-C	240W	21 776	5,33	3 732		5,33	0
D3	C-79-19	280W	4 056	7,74	1 009	4056	7,74	1 009
D3	83-500-506	310W	8 608	5,78	1 600		5,78	0
D3	CR-03-193	350W	6 508	9,73	2 036	6508	9,73	2 036
D3	CR-07-332-A	390W	4 760	10,61	1 624	4760	10,61	1 624
	Total		79 023	9,93	25 223	40 394	14,14	18 358
D5	CN-89-135	000W	10 127	22,62	7 365	10127	22,62	7 365
D5	CR-08-349	180W	11 968	5,17	1 989		5,17	0
D5	83-S-258	180W	8 708	7,84	2 195	8708	7,84	2 195
D5	CR-02-68	200W	6 120	8,10	1 594	6120	8,10	1 594
D5	83-500-517	210W	10 096	10,60	3 441	10096	10,60	3 441
D5	83-500-516	210W	4 869	5,20	814		5,20	0
D5	83-500-514	230W	6 633	5,19	1 107		5,19	0
D5	83-500-513	230W	5 103	9,42	1 546	5103	9,42	1 546
	Total		63 624	9,80	20 050	40 154	12,50	16 140

APPENDIX V

**SELECTED TYPICAL LONGITUDINAL SECTIONS
WITH POLYGONS (Source: P. O'Dowd 2009)
AND
PROPERTY MAP WITH 2010-2011 DRILL HOLE LOCATIONS**



FIRST GOLD

CROINOR

LONGITUDINALE ZONE A-4 (vue en plan)

Vue en plan Echelle : 1:1000

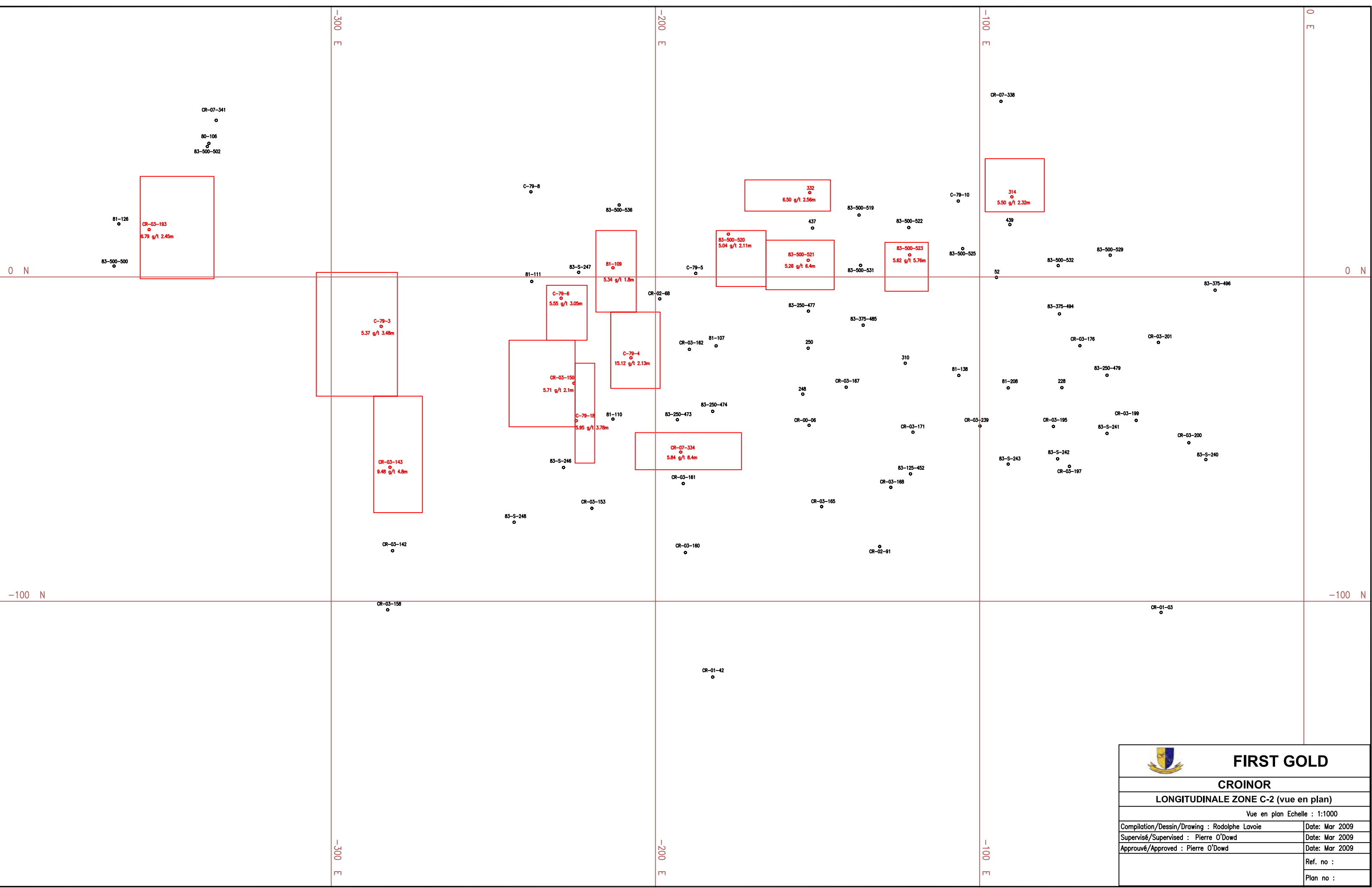
Compilation/Dessin/Drawing : Rodolphe Lavoie Date: Mar 2009

Supervisé/Supervised : Pierre O'Dowd Date: Mar 2009

Approuvé/Approved : Pierre O'Dowd Date: Mar 2009

Ref. no :

Plan no :



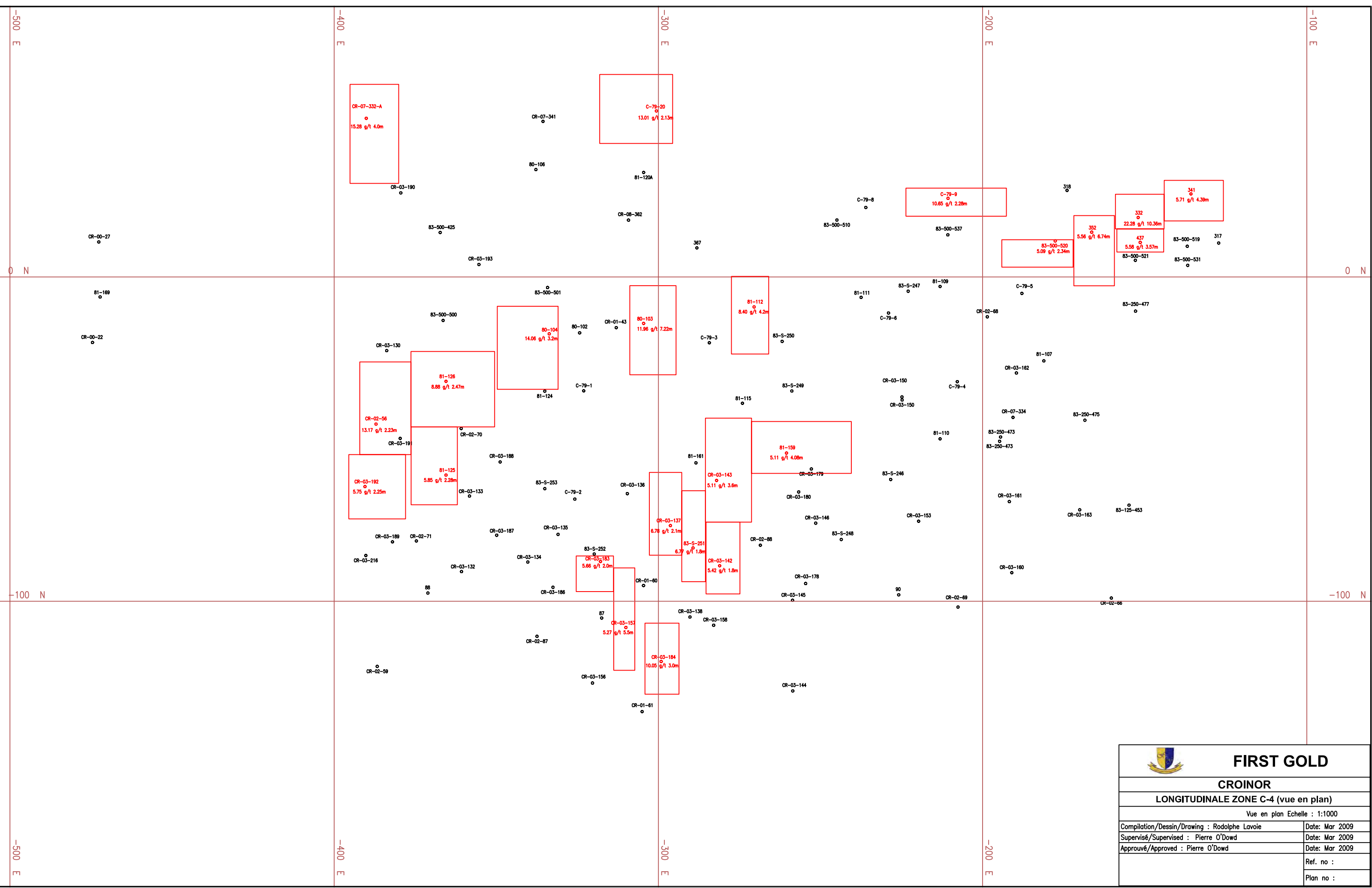
FIRST GOLD

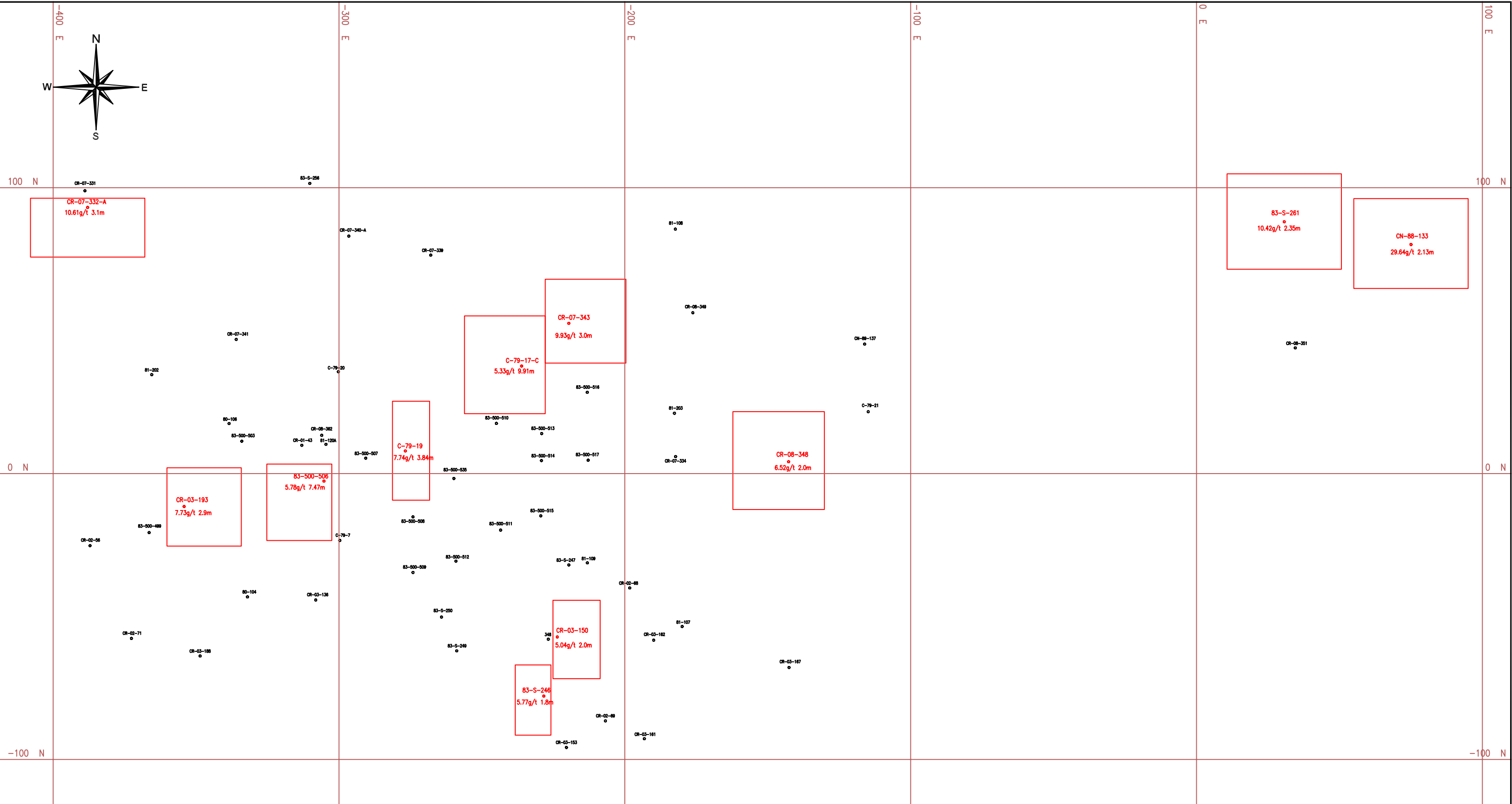
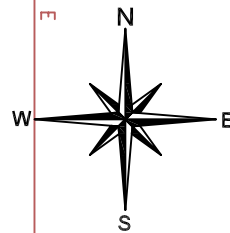
CROINOR


LONGITUDINALE ZONE C-2 (vue en plan)

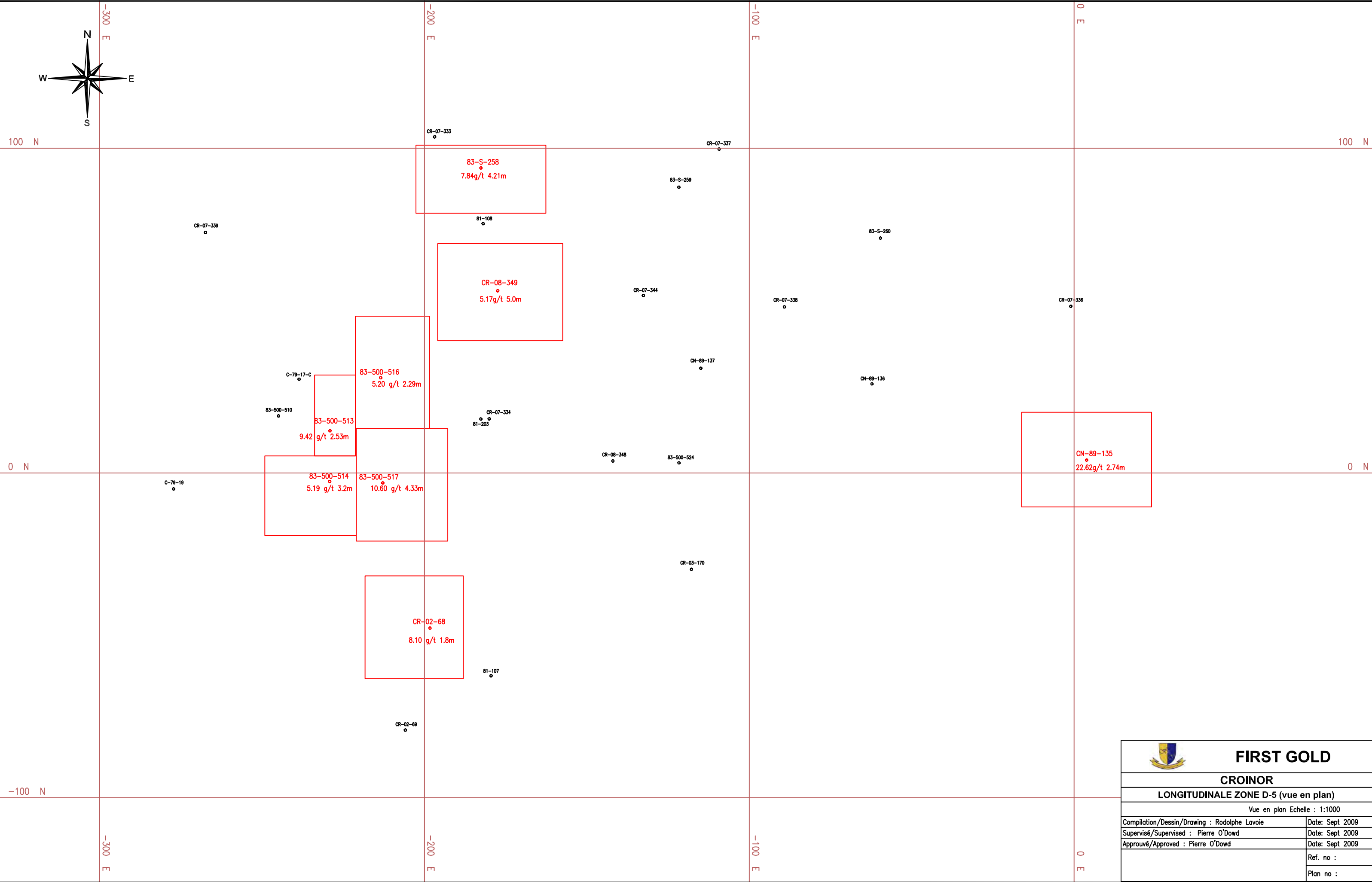
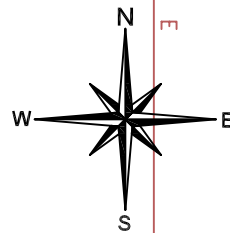
Vue en plan Echelle : 1:1000

Compilation/Dessin/Drawing : Rodolphe Lavoie	Date: Mar 2009
Supervisé/Supervised : Pierre O'Dowd	Date: Mar 2009
Approuvé/Approved : Pierre O'Dowd	Date: Mar 2009
Ref. no :	
Plan no :	





	
FIRST GOLD	
CROINOR	
LONGITUDINALE ZONE D-3 (vue en plan)	
Vue en plan Echelle : 1:1250	
Compilation/Dessin/Drawing : Rodolphe Lavoie	Date: Sept 2009
Supervisé/Supervised : Pierre O'Dowd	Date: Sept 2009
Approuvé/Approved : Pierre O'Dowd	Date: Sept 2009
	Ref. no :
	Plan no :



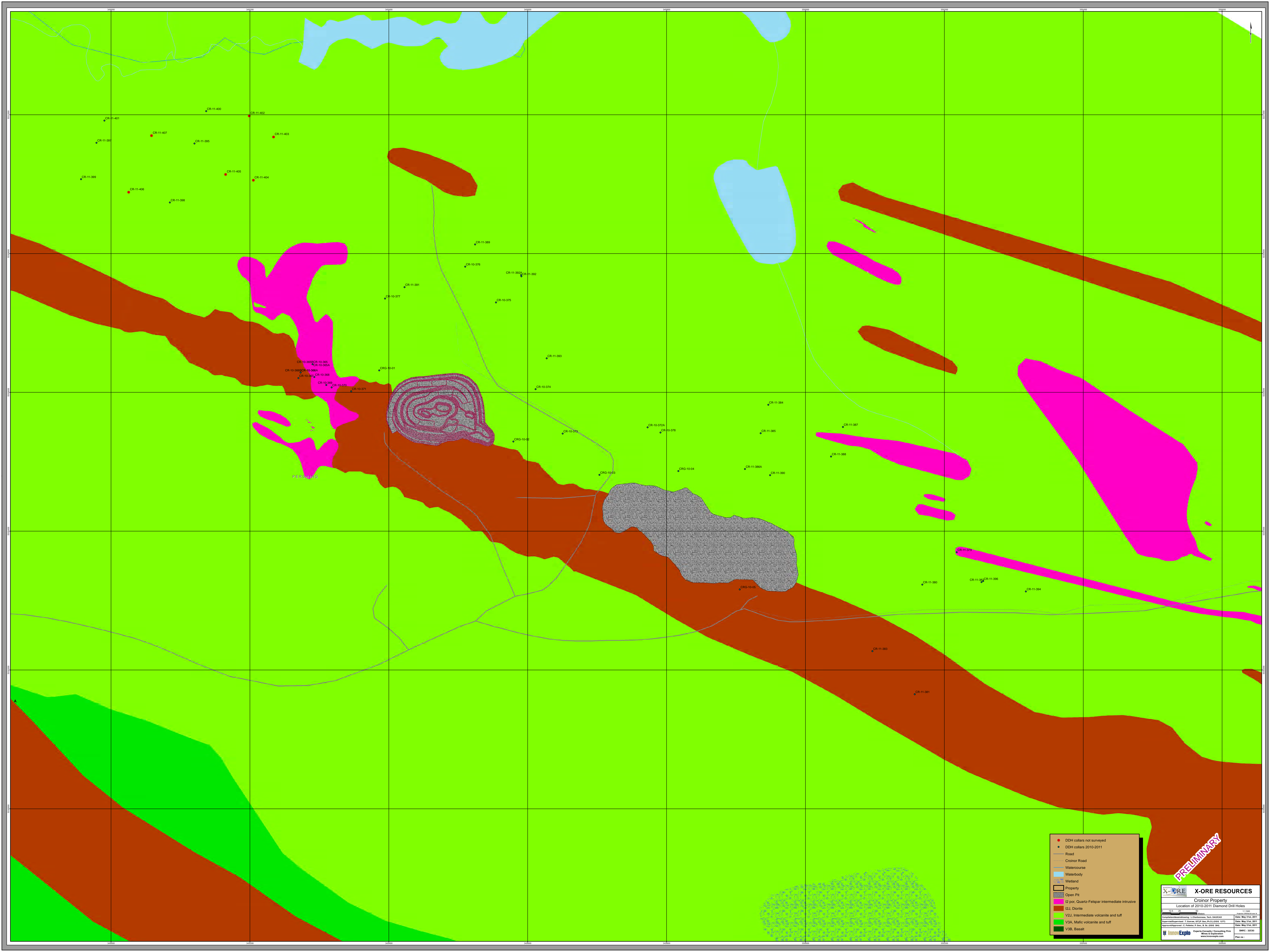
FIRST GOLD

CROINOR

LONGITUDINALE ZONE D-5 (vue en plan)

Vue en plan Echelle : 1:1000

Compilation/Dessin/Drawing : Rodolphe Lavoie	Date: Sept 2009
Supervisé/Supervised : Pierre O'Dowd	Date: Sept 2009
Approuvé/Approved : Pierre O'Dowd	Date: Sept 2009
	Ref. no :
	Plan no :



- DDH collars not surveyed
- DDH collars 2010-2011
- Road
- Croitor Road
- Watercourse
- Wetland
- Property
- Open Pit
- I2J, Quartz-Felspar intermediate intrusive
- I2J, Diorite
- V2J, Intermediate volcanic and tuff
- V3A, Mafic volcanic and tuff
- V3B, Basalt

PRELIMINARY

X-ORE RESOURCES

Croitor Property

Location of 2010-2011 Diamond Drill Holes

<p>Project: Croitor Property</p> <p>Client: X-ORE RESOURCES</p> <p>Scale: 1:500</p> <p>Author: [Name]</p> <p>Checked: [Name]</p> <p>Approved: [Name]</p> <p>Date: May 19, 2011</p>	<p>Project: Croitor Property</p> <p>Client: X-ORE RESOURCES</p> <p>Scale: 1:500</p> <p>Author: [Name]</p> <p>Checked: [Name]</p> <p>Approved: [Name]</p> <p>Date: May 19, 2011</p>
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