



**NI 43-101 Technical Report  
Updated Mineral Resource Estimate  
Barry Gold Deposit, Quebec, Canada  
Metanor Resources Inc.**

Submitted to:

**Metanor Resources Inc. (MTO)**

Prepared by:

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## Certificate of Qualified Person

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To accompany the Report entitled: “NI 43-101 Technical Report Updated Mineral Resource, Barry gold deposit, dated August 5, 2016 with effective date of June 22, 2016 (the “Technical Report”).

I, Claude Duplessis, Eng., do hereby certify that:

- a) I am a graduate from the University of Quebec in Chicoutimi, Quebec in 1988 with a B.Sc. in geological engineering and I have practised my profession continuously since that time;
- b) I am a registered member of the Ordre des ingénieurs du Québec (Registration Number 45523). I am also a registered engineer in the province of Alberta and Newfoundland & Labrador. I am a Member of the Canadian Institute of Mining, Metallurgy and Petroleum. I am a Senior Engineer and Consultant of GoldMinds Geoservices Inc;
- c) I have worked as an engineer for a total of 26 years since my graduation. My relevant experience for the purpose of the Technical Report is over 21 years of consulting in the field of Mineral Resource estimation, ore body modelling, mineral resource auditing and geotechnical engineering;
- d) I have prepared and written the technical report, I am responsible of the all sections of this report except section 13 & 17.
- e) I have personally visited the Barry property several times (September 2010, April 2016 and July 2016).
- f) I am independent of the issuer as defined in section 1.5 of NI 43-101 (“The Instrument”);
- g) I have read the definition of “qualified person” set out in the National Instrument 43-101 and certify that by reason of my education, affiliation with a professional association and past relevant work experience, I fulfil the requirements to be an independent qualified person for the purposes of NI 43-101.
- h) I have read NI 43-101 and Form 43-101F1 and have prepared the technical report in compliance with NI 43-101 and Form 43-101F1; and have prepared the report in conformity with generally accepted Canadian mining industry practice, and 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.
- i) I have no personal knowledge as of the date of this certificate of any material fact or material change, which is not reflected in this report.

This 5<sup>th</sup> day of August 2016.

Original signed and sealed

(Signed) “Claude Duplessis”

Claude Duplessis Eng.

Senior Geological Engineer

GoldMinds Geoservices Inc.





## Certificate of Qualified Person

**Gilbert Rousseau, Eng.** - GoldMinds Geoservices Inc. 2999 Chemin Sainte-Foy, suite 200,  
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To accompany the Report entitled: “NI 43-101 Technical Report – Updated Mineral Resource Estimate, Barry Gold Deposit, Quebec, Canada” dated August 5, 2016 with effective date of June 22, 2016 (the “Technical Report”).

I, Gilbert Rousseau, B.Sc.A., Engineer, do hereby certify that:

- a) I graduated with a mining engineer degree from the École Polytechnique of the University of Montreal in 1969.
- b) I am a member of the l'Ordre des Ingénieurs du Québec (#20288)
- c) I have worked as a mining engineer since my graduation, being involved in mining, milling and environment.
- d) I did not visit the site for the purpose of this report.
- e) I have read the definition of “qualified person” set out in National Instrument 43-101 (“NI43-101”) and certify that by reason of my education, affiliation with a professional association, as defined in NI43-101 and past relevant work experience, I fulfill the requirements to be a “qualified person” for the purpose of NI43-101.
- f) I am responsible for the preparation of the section 13 and 17 of the technical report titled “NI 43-101 Technical Report, Updated Mineral Resource Estimate, Barry Gold deposit, Quebec, Canada”.
- g) Except for a visit in 2009 for some other purposes I have not had prior involvement with the property that is the subject of the Technical Report.
- h) I am not aware of any material fact or material change with respect of the subject matter of the Technical Report that is not reflected in the Technical Report, the omission to disclose which makes the Technical Report misleading.
- i) I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with the instrument and form.

I consent to the public 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.

This 5<sup>th</sup> day of August 2016.

Original signed and sealed

(Signed) “Gilbert Rousseau”

Gilbert Rousseau Eng.

Senior Mine/Metallurgist Engineer

GoldMinds Geoservices Inc.





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## 1. Summary

### 1.1. General

This technical report was prepared by GoldMinds Geoservices Inc. for Metanor Resources Inc. to support the disclosure of updated mineral resources according to the guidelines set under “Form 43-101F1 Technical Report” of National Instrument 43-101 Standards.

The report describes the methodology used for modeling and estimation of the mineral resources of the Barry gold deposit using historical and recent drillholes data. The report also presents a review of the history, geology, sample preparation, QA/QC program and data verification of the Barry deposit and provides recommendations for future work.

The report is an update of the mineral resources of the Barry gold project following diamond drilling program of 2016 and uses report written on November 04 of 2010 by SGS Geostat. Metanor supplied electronic format data, from which SGS Geostat generated and validated a final updated database that was lately used after validation/verification by GoldMinds Geoservices in the present report.

### 1.2. Property description and ownership

Metanor has 100% interest in the Barry gold deposit property located in the municipality of Senneterre (Abitibi-Témiscamingue region, Quebec province) at 100 km east of Lebel-sur-Quevillon city and 180 km southwest of Chibougamau city. The Barry property centered on UTM coordinates 443,674E and 5,426,517N (UTM-18, NAD 83) on the topographic map (NTS 32B/13, 32G/04).

The Barry property consists of one mining lease (BM 886) covering an area of 112.04 hectares delivered in August 27th, 2008 by the Ministry of natural resources and Fauna. The mining lease is surrounded by 179 claims covering an area of 8,075.16 hectares.

The Barry property is easily accessible by the provincial paved highway 113, a major regional road linking the town of Senneterre to Chapais, and by a 120 km all-weather gravel road linking the property to the town of Lebel-sur-Quevillon.



### **1.3. Local resources and infrastructures**

The regional resources concerning labour force, supplies and equipment are sufficient. The closest town, Lebel-sur-Quevillon provides the workforce for minor services and the town of Val d'Or and Chibougamau for the possible mine exploitation.

A camp on the property, built in 2007 by Metanor, provides living facilities for 18 persons. Other infrastructures include core logging and splitting facilities, garage, two diesel generators and surface fuel tanks. All major services are available in Val d'Or, Chibougamau, and minor ones in Lebel-sur-Quevillon.

A major hydroelectric power line crosses the eastern part of the property allowing the possibility to build a mill that could run on hydroelectricity.

### **1.4. Geology and mineralization**

The Barry project is located in the Urban-Barry belt in the Northern Volcanic Zone (NVZ) of the Abitibi greenstone belt. The Urban-Barry belt comprises mainly mafic volcanic rocks and isolated felsic volcanic rocks with ages ranging from 2791 Ma to 2707 Ma (Rhéaume and Bandyayera, 2006) interbedded with, or overlain by, volcanoclastic sedimentary rocks.

The geology of the property is composed of mafic volcanic flows, co-magmatic gabbro sills, local felsic flows, lapilli and welded tuffs, sedimentary rocks intruded by tonalite to granodiorite plutons, diorite dykes and feldspar and/or quartz porphyry dykes. These rocks were deformed during the Kenoran orogeny, giving them a dominant east-west trend (Chown et al., 1992). The regional foliation generally strikes NE to ENE with a variable dip from 30 to 85° SE (Hocq, 1989; Joly, 1990).

Regional metamorphism is typically in the lower greenschist facies except for the easternmost part of the belt where lower amphibolite facies is encountered and related to the Grenville Front.

The gold mineralization at the Barry deposit is structurally controlled. The gold mineralization is contained in a system of quartz-carbonate-albite-pyrite veins associated with sheared zones included in a wide deformation corridor at 60°/55 SE. The gold mineralization is mainly associated with 4 main mineralized zones: the Main Zone, Zone 45, Zone 48 and Zone 43 being located 80m south of the Main Zone. The mineralized zones coincide with strong IP anomalies occurring in volcanic units throughout the property. These IP anomalies were detected in the eastern and western extensions of



the Barry deposit, as well as in parallel volcanic units that are highly prospective for gold mineralization similar to the mineralization exposed in the Barry pit.

The gold occurs as inclusions or fracture infill in pyrite, or in sharp contact with carbonate crystals within veins and altered wall rocks, as well as along micro fractures in fine-grained pyrite (Lariviere, 1997; Kitney, 2009).

### **1.5. Drilling recent works 2016**

GoldMinds Geoservices Inc. has a mandate to provide a mineral resources update of Barry project to Metanor resources Inc. The mandate include also the identification of the drilling targets, the drilling supervision and the validation drilling of the high-grade zones with the study of the extensions of certain mineralized zones, for eventual open pit mining.

The drilling campaign of 1,370 meters started the 12th April, 2016. The focus of this drilling program was to test the new mineralization model proposed by Claude Duplessis, Eng. GMG located in the south of the principal pit and connect also the center and south pits with the principal pit.

A total of 15 holes were drilled over the Barry property totalling 1370 meters. A total of 1316 samples not including blanks and standards (63 blank, 61 standards and 120 duplicates) were analyzed at Bachelor laboratory and the first 48 samples were sent also to ALS laboratory for the QA/QC program. The drilling contractor for the 2016 drilling campaign was Forage Orbit Garant.

Claude Duplessis Eng. and Merouane Rachidi, Ph. D., P. Geo. as well as Simon Fontaine Jr. mining Eng. were present during the drilling campaign to supervise the drilling, logging and sampling.

### **1.6. Mineral processing and metallurgical testing**

The purpose of the metallurgical test program was to determine the head grade of three composites samples from Barry project and incidentally determine the possible gold recovery. The samples were processed using gravity separation followed by cyanide leaching of the gravity tailing. An overall gravity separation plus cyanidation metallurgical gold balance was performed to calculate the head grade of each sample. A summary of the testwork results is shown in table below.



Sample	Overall Gold Recovery (%)			CN Residue Au Assay (g/t)	Calculated Heas Grade Au (g/T)
	Gravity	Cyanidation	Gravity + CN		
Comp A	30.4	63.4	93.8	0.20	3.22
Comp B	17.7	77.2	94.8	0.11	2.13
Comp C	22.8	71.4	94.2	0.04	0.69

This test protocol was used in order to avoid the potential discrepancies in the calculation of the head grades due to the course gold “nugget” effect. An overall (gravity + cyanidation) gold metallurgical balance was performed to calculate the head grade of each composites.

### 1.7. Mineral resource estimates

GoldMinds Geoservices Inc. has prepared for Metanor resources Inc. an updated Mineral Resource Estimation using the existing drilling data (561 holes totalling 73,317 meters, and 524 of sampling channels totalling 4367 meters) and the new drilling data from the 2016 drilling campaign (15 holes, totalling 1,370 meters).

Two resources models were produced using model with blocks dimensions of 05 m (EW) x 05 m (NS) x 05 m (Z) and 03 m (EW) x 03 m (NS) x 03 m (Z).

#### - Resource model 1 (block size of 3x3x3) final for public disclosure

The first model corresponds to a mass model including low grade material using blocks dimensions of 3 (E) x 3 (N) x 3 (Z)m. The envelopes of waste were built around specific lithology and subtracted from the mass envelope.

After the verification/validation of the Barry database. GoldMinds Geoservices conducted mineralization interpretation and modelling of the 3D wireframe envelopes of the gold mineralization.

A total of three envelopes were created following the behavior of two specific lithology presenting no mineralization from the rest of the deposit. The three envelopes were then subtracted from the mineralized envelope before generating the blocks model.



- Mineral resources estimations using a cut-off grade of 0.5 g/t (rounded numbers).

<b>Resources classification</b>	<b>Tonnes (t)</b>	<b>Au g/t</b>	<b>Au oz</b>
Measured	5,383,000	1.21	209,400
Indicated	3,037,000	0.98	96,000
Indicated + Measured	8,420,000	1.13	305,000
Inferred	31,919,000	1.02	1,046,000

- Mineral resources estimations using a cut-off grade of 1 g/t (rounded numbers).

<b>Ressource classification</b>	<b>Tonnes (t)</b>	<b>Au g/t</b>	<b>Au oz</b>
Measured	2,421,000	1.82	141,900
Indicated	1,022,000	1.55	51,000
Indicated + Measured	3,443,000	1.74	193,000
Inferred	10,325,000	1.69	560,000

- Mineral resources estimations using a cut-off grade of 1.25 g/t (rounded numbers).

<b>Ressource Class</b>	<b>Tonnes (t)</b>	<b>Au g/t</b>	<b>Au oz</b>
Measured	1,708,000	2.12	116,300
Indicated	644,000	1.81	37,500
Indicated + Measured	2,352,000	2.03	153,800
Inferred	6,557,000	2.01	424,000

- **Resource model 2 (block size of 5x5x5)**

The second model using blocks dimensions of 5 (E) x 5 (N) x 5 (Z)m is the replica of the first model in regard of the dimension and the position of the envelopes. The differences between them are blocks dimensions, the estimation parameters. This model was created to evaluate the effect of block size dimension on the mineral resources estimation.



The model 2 was established using the same database and envelopes as model 1. Estimations were performed with the software Genesis for the modeling and the resource estimation using the same origin as model 1.

- Mineral resources estimations using a cut-off grade of 0.5 g/t

<b>Ressource classification</b>	<b>Tonnes (t)</b>	<b>Au g/t</b>	<b>Au oz</b>
Measured	6,533,000	1.19	250,100
Indicated	2,659,000	0.96	82,000
Indicated + Measured	9,192,000	1.12	332,100
Inferred	27,638,000	1.13	1,003,800

- Mineral resources estimations using a cut-off grade of 1 g/t

<b>Ressource Class</b>	<b>Tonnes (t)</b>	<b>Au g/t</b>	<b>Au oz</b>
Measured	2,837,000	1.82	166,200
Indicated	844,000	1.54	42,000
Indicated + Measured	3,681,000	1.76	208,200
Inferred	10,466,000	1.83	616,000

- Mineral resources estimations using a cut-off grade of 1.25 g/t

<b>Ressource Class</b>	<b>Tonnes (t)</b>	<b>Au g/t</b>	<b>Au oz</b>
Measured	1,987,000	2.12	135,700
Indicated	530,000	1.80	30,700
Indicated + Measured	2,517,000	2.06	166,400
Inferred	6,952,000	2.20	490,800



## **1.8. Mineral reserve estimates**

There are no NI 43-101 compliant mineral reserves at Barry, a Feasibility Study or Preliminary Feasibility Study is required to define mineral reserves.

## **1.9. Interpretation and conclusions**

GoldMinds Geoservices considers the resource estimate to have been reasonably prepared and conform to the current CIM standards and definitions for estimating resources, as required under NI 43-101 “Standards of Disclosure for Mineral Projects”.

GoldMinds believes that the Barry property is highly prospective. The new drilling campaign (holes MB-16-07 and MB-16-15) confirmed a new mineralized zone located a further 250m west from the existing western pit. The mineralization in this sector is located in the basalt, above the quartz feldspar porphyry (QFP) and Diorite contact.

At the Barry property, the mineralized fluids have circulated in the major shear. Additional exploration and geological works are required to increase the amount of mineral resources laterally and at depth.

## **1.10. Recommendations**

The recent drilling at the Barry property has significantly increased the inferred resources and in order to enable conversion these inferred resources into indicated or measured it is necessary to plan a surface drilling campaign on the property.

GMG has proposed a drilling program to Mr. Claude Gobeil (Director of Geology and Exploration at Metanor Resources Inc.). The proposed drillholes are localised in two zones. The first zone correspond to the Barry deposit within the lease mining. A total of 55 drillholes are proposed totalling 4128 meters. These proposed holes will help for the validation of the pits optimized and provide more information on their dimensions. The second zone is considered as an exploration zone, located at the NNE from the Barry lease mining with 3 proposed drillholes totalling 645 meters.

GMG has prepared the current resource estimate update for the Barry project and makes the following additional recommendations:

- A topographic surface survey (survey LIDAR Airborne) on the entire Barry property;
- Dewater the pits in order to carry out a detailed survey of the pit bottom topography;



- Geological and detailed structural mapping of the Barry property with a focus on the IP anomalies for an increase understanding of the structural system bearing gold in association with magnetism;
- The author recommend also to carry a Preliminary Economic Assessment (PEA). The PEA should target an open pit scenario with the mineralized material shipped to the Bachelor mill.



## 2. Introduction

### 2.1. Terms of Reference – Scope of Work

Ressources Metanor Inc. (MTO.V) “Metanor” mandated GoldMinds Geoservices Inc “GMG” to prepare this report to support the disclosure of updated mineral resources on the Barry property compliant to the National Instrument 43-101. The report describes a review of the history, geology, samples preparation and data verification of the Barry deposit and provides recommendations for future works. The report presents also the basis and methodology used for modeling and estimation of the resources of the Barry gold deposit from historical and new data.

This technical report was prepared according to the guidelines set under “Form 43-101F1 Technical Report” of National Instrument 43-101 Standards and Disclosure for Mineral Projects. The original certificate of qualification for the Qualified Persons responsible for this technical report have been supplied to Metanor as separate documents and can also be found at the very end of the report.

The scope of work as defined in the mandate of March 2016 includes the supervision of the drilling campaign, identification of drilling targets, geological logging and sampling, data integration, design of the updated mineral resource model for gold mineralization.

1. Site visit;
2. Compilation and verification/validation/integration of the historical and recent data;
3. Drilling targets identification;
4. Drilling supervision, geological logging and sampling;
3. Data integration and modelling of the mineralized zones;
4. Pit optimisation;
5. The preparation of the updated mineral resource estimation and NI 43-101 compliant technical report.



## 2.2. Sources of Information

The information presented in this technical report was delivered by SGS (database until 2009) and Metanor (drillholes database between 2010 and 2014) to GoldMinds Geoservices. GMG based its work on historical and recent data.

The information available to GMG at the time of preparation of this report comprises:

- Historical data (geological and geochemical data);
- Drillholes database of recent drilling campaigns;
- Channel sampling results;
- Composed surface;
- Other documents (legal, environmental and others) were used in the preparation of this report.

## 2.3. Personal inspection of the property by qualified person

The following persons visited Barry property:

Claude Duplessis P. Eng., Senior Engineer, GoldMinds Geoservices Inc., visited Barry property on two occasions as an independent Qualified Person as defined in the NI 43-101. The initial visit on September 30<sup>th</sup>, 2010 was to carry out an independent sampling program and an analytical check of the samples for the holes drilled in 2009. The second visit was from April 11<sup>th</sup> to 15<sup>th</sup>, 2016, to supervise the start of the drilling campaign, the establishment of a sampling procedure and a QA/QC program.

Merouane Rachidi, P Geo., Ph. D., GoldMinds Geoservices Inc., visited the site from April 11<sup>th</sup> to May 02<sup>nd</sup>, 2016. During this time he supervised drilling, geological logging and he established the sampling procedure and QA/QC program with Claude Duplessis.

Simon Fontaine Jr. Eng., was present at the Barry property from April 11<sup>th</sup> to May 02<sup>nd</sup>, 2016 and he assisted Mr. Rachidi P Geo., during the drilling campaign.

## 2.4. Units and Currency

Quantities and measurements are generally stated in the International System of Units, the standard Canadian and international practice, including metric tonnes (tonnes, t) for weight and kilometers (km) and meters (m) for distance. The reference systems of coordinates used is UTM-18 NAD 83. A local



grid system, in meters, is also used by Metanor Resources Inc. Abbreviations used in the report are listed below.

**Table 1: List of Abbreviations.**

<b>Abbreviation</b>	<b>Description</b>
GoldMinds Geoservices	GMG
Metanor Resources Inc.	MTO
tonnes or t	Metric tonnes
tpd	Tonnes per day
st, ton	Short ton (0.907185 tonnes)
kg	Kilograms
g	Grams
oz	Troy ounce (31.1035 grams)
oz/t	Troy ounce per short ton
g/t	Grams/tonne or ppm
NSR	Net smelter return
ppm, ppb	Parts per million, parts per billion
ha	Hectares
ft	Feet
In	Inches
m	Meters
km	Kilometers
m <sup>3</sup>	Cubic meters
NTS	National Topographic System
MTM	Modified Transverse Mercator coordinate system
UTM NAD83	Universal Transverse Mercator coordinate system – North American Datum of 1983

### 3. Reliance on Other Experts

The author of this technical report, Claude Duplessis, Eng., is not qualified to comment on issues related to legal agreements, royalties, permitting and environmental matters. The author relied upon the representations and documentations supplied by Metanor resources. The author reviewed the mining titles, their status, the legal agreement and technical data supplied by Metanor, and any public sources of relevant technical information.

This report was prepared by GoldMinds Geoservices Inc. using the database (until 2009) delivered by SGS Geostat, database (between 2010 and 2014) delivered by Metanor resources (Claude Gobeil, manager exploration) and also the new database from the drilling campaign of 2016 compiled by



GMG. Information, conclusions, opinions and estimates contained in this document are based on the information available to GoldMinds Geoservices at the time of writing this report.

This report is to be used by Metanor Resources as a technical report in conformity with the Canadian Securities Regulatory System. Use in whole or of any part of this document by a third party for purposes other than those of the Canadian Provincial Securities Act Legislation will be at the risk of the user.

## **4. Property Description and Location**

### **4.1. Location**

The Barry property is located in the municipality of Senneterre (Abitibi-Témiscamingue region, Quebec province) at 100 km east of Lebel-sur-Quevillon city and 180 km southwest of Chibougamau city (Figure 1). The Barry property centered on UTM coordinates 443,674E and 5,426,517N (UTM-18, NAD 83) on the topographic map (NTS 32B/13, 32G/04).







## 4.2. Property Description, Ownership and Agreements

The Barry property consists of one mining lease (BM 886) covering an area of 112.04 hectares delivered in August 27<sup>th</sup>, 2008 by the Ministry of natural resources and Fauna. The mining lease is surrounded by 179 claims covering and area of 8,075.16 hectares. The list of mining titles of the Barry property is shown below (Figure 2, Table 2).

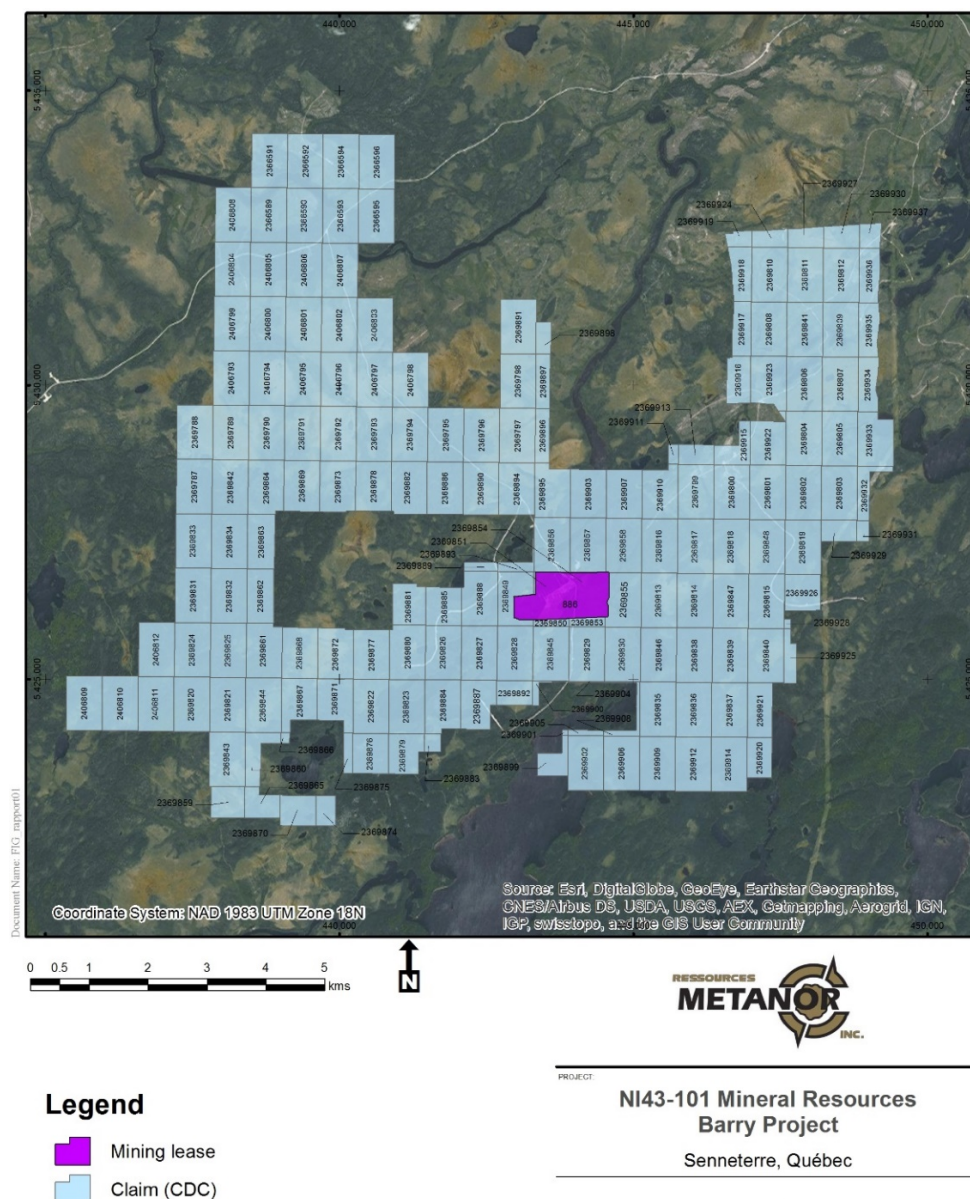


Figure 2: Claims location, Barry project.



**Table 2: Mining Titles List (1) from MNR GESTIM Mining Title Management System.**

<b>Sheet</b>	<b>Title type</b>	<b>Title number</b>	<b>Status</b>	<b>Registration date</b>	<b>Expiry date</b>	<b>Area (Ha)</b>
32B13	BM	886	Active	2008-08-27	2028-08-26	112,04
32B13	CDC	2369813	Active	2012-12-03	2018-08-21	56,48
32B13	CDC	2369814	Active	2012-12-03	2018-08-21	56,48
32B13	CDC	2369815	Active	2012-12-03	2018-08-21	56,48
32B13	CDC	2369816	Active	2012-12-03	2018-08-21	56,47
32B13	CDC	2369817	Active	2012-12-03	2018-08-21	56,47
32B13	CDC	2369818	Active	2012-12-03	2018-08-21	56,47
32B13	CDC	2369819	Active	2012-12-03	2018-08-21	56,47
32B13	CDC	2369820	Active	2012-12-03	2018-08-21	56,5
32B13	CDC	2369821	Active	2012-12-03	2018-08-21	56,5
32B13	CDC	2369822	Active	2012-12-03	2018-08-21	56,5
32B13	CDC	2369823	Active	2012-12-03	2018-08-21	56,5
32B13	CDC	2369824	Active	2012-12-03	2018-08-21	56,49
32B13	CDC	2369825	Active	2012-12-03	2018-08-21	56,49
32B13	CDC	2369826	Active	2012-12-03	2018-08-21	56,49
32B13	CDC	2369827	Active	2012-12-03	2018-08-21	56,49
32B13	CDC	2369828	Active	2012-12-03	2018-08-21	56,49
32B13	CDC	2369829	Active	2012-12-03	2018-08-21	56,49
32B13	CDC	2369830	Active	2012-12-03	2018-08-21	56,49
32B13	CDC	2369831	Active	2012-12-03	2018-08-21	56,48
32B13	CDC	2369832	Active	2012-12-03	2018-08-21	56,48
32B13	CDC	2369833	Active	2012-12-03	2018-08-21	56,47
32B13	CDC	2369834	Active	2012-12-03	2018-08-21	56,47
32B13	CDC	2369835	Active	2012-12-03	2018-08-21	56,5



32B13	CDC	2369836	Active	2012-12-03	2018-08-21	56,5
32B13	CDC	2369837	Active	2012-12-03	2018-08-21	56,5
32B13	CDC	2369838	Active	2012-12-03	2018-08-21	56,49
32B13	CDC	2369839	Active	2012-12-03	2018-08-21	56,49
32B13	CDC	2369840	Active	2012-12-03	2018-08-21	56,49
32B13	CDC	2369843	Active	2012-12-03	2018-08-21	56,51
32B13	CDC	2369844	Active	2012-12-03	2018-08-21	56,5
32B13	CDC	2369845	Active	2012-12-03	2018-08-21	56,49
32B13	CDC	2369846	Active	2012-12-03	2018-08-21	56,49
32B13	CDC	2369847	Active	2012-12-03	2018-08-21	56,48
32B13	CDC	2369848	Active	2012-12-03	2018-08-21	56,47
32B13	CDC	2369849	Active	2012-12-03	2018-08-21	42,94
32B13	CDC	2369850	Active	2012-12-03	2018-08-21	7,6
32B13	CDC	2369851	Active	2012-12-03	2018-08-21	1,41
32B13	CDC	2369852	Active	2012-12-03	2018-08-21	0,03
32B13	CDC	2369853	Active	2012-12-03	2018-08-21	9,66
32B13	CDC	2369854	Active	2012-12-03	2018-08-21	0,23
32B13	CDC	2369855	Active	2012-12-03	2018-08-21	52,32
32B13	CDC	2369856	Active	2012-12-03	2018-08-21	56,41
32B13	CDC	2369857	Active	2012-12-03	2018-08-21	56,39
32B13	CDC	2369858	Active	2012-12-03	2018-08-21	56,41
32B13	CDC	2369859	Active	2012-12-03	2018-08-21	30,39
32B13	CDC	2369860	Active	2012-12-03	2018-08-21	30,99
32B13	CDC	2369861	Active	2012-12-03	2018-08-21	55,62
32B13	CDC	2369862	Active	2012-12-03	2018-08-21	42,66
32B13	CDC	2369863	Active	2012-12-03	2018-08-21	43,16



32B13	CDC	2369865	Active	2012-12-03	2018-08-21	27,6
32B13	CDC	2369866	Active	2012-12-03	2018-08-21	2,74
32B13	CDC	2369867	Active	2012-12-03	2018-08-21	46,71
32B13	CDC	2369868	Active	2012-12-03	2018-08-21	52,68
32B13	CDC	2369870	Active	2012-12-03	2018-08-21	31,23
32B13	CDC	2369871	Active	2012-12-03	2018-08-21	46,61
32B13	CDC	2369872	Active	2012-12-03	2018-08-21	52,04
32B13	CDC	2369874	Active	2012-12-03	2018-08-21	17,04
32B13	CDC	2369875	Active	2012-12-03	2018-08-21	10,38
32B13	CDC	2369876	Active	2012-12-03	2018-08-21	41,74
32B13	CDC	2369877	Active	2012-12-03	2018-08-21	51,12
32B13	CDC	2369879	Active	2012-12-03	2018-08-21	38,16
32B13	CDC	2369880	Active	2012-12-03	2018-08-21	56,07
32B13	CDC	2369881	Active	2012-12-03	2018-08-21	39,17
32B13	CDC	2369883	Active	2012-12-03	2018-08-21	8,49
32B13	CDC	2369884	Active	2012-12-03	2018-08-21	53,59
32B13	CDC	2369885	Active	2012-12-03	2018-08-21	39,58
32B13	CDC	2369887	Active	2012-12-03	2018-08-21	46,78
32B13	CDC	2369888	Active	2012-12-03	2018-08-21	55,72
32B13	CDC	2369889	Active	2012-12-03	2018-08-21	8,9
32B13	CDC	2369892	Active	2012-12-03	2018-08-21	25,81
32B13	CDC	2369893	Active	2012-12-03	2018-08-21	11,09
32B13	CDC	2369899	Active	2012-12-03	2018-08-21	23,32
32B13	CDC	2369900	Active	2012-12-03	2018-08-21	5,79
32B13	CDC	2369901	Active	2012-12-03	2018-08-21	0,94
32B13	CDC	2369902	Active	2012-12-03	2018-08-21	56,51



32B13	CDC	2369904	Active	2012-12-03	2018-08-21	1,24
32B13	CDC	2369905	Active	2012-12-03	2018-08-21	5,79
32B13	CDC	2369906	Active	2012-12-03	2018-08-21	56,51
32B13	CDC	2369908	Active	2012-12-03	2018-08-21	12,08
32B13	CDC	2369909	Active	2012-12-03	2018-08-21	56,51
32B13	CDC	2369912	Active	2012-12-03	2018-08-21	56,51
32B13	CDC	2369914	Active	2012-12-03	2018-08-21	56,51
32B13	CDC	2369920	Active	2012-12-03	2018-08-21	29,16
32B13	CDC	2369921	Active	2012-12-03	2018-08-21	39,11
32B13	CDC	2369925	Active	2012-12-03	2018-08-21	17,14
32B13	CDC	2369926	Active	2012-12-03	2018-08-21	37,55
32B13	CDC	2369928	Active	2012-12-03	2018-08-21	1,91
32B13	CDC	2369929	Active	2012-12-03	2018-08-21	22,16
32B13	CDC	2369931	Active	2012-12-03	2018-08-21	7,54
32B13	CDC	2406809	Active	2014-06-18	2018-06-17	56,5
32B13	CDC	2406810	Active	2014-06-18	2018-06-17	56,5
32B13	CDC	2406811	Active	2014-06-18	2018-06-17	56,5
32B13	CDC	2406812	Active	2014-06-18	2018-06-17	56,49
32G04	CDC	2366589	Active	2012-11-15	2018-04-16	56,42
32G04	CDC	2366590	Active	2012-11-15	2018-04-16	56,42
32G04	CDC	2366591	Active	2012-11-15	2018-04-16	56,41
32G04	CDC	2366592	Active	2012-11-15	2018-04-16	56,41
32G04	CDC	2366593	Active	2012-11-15	2018-04-16	56,42
32G04	CDC	2366594	Active	2012-11-15	2018-04-16	56,41
32G04	CDC	2366595	Active	2012-11-15	2018-04-16	56,42
32G04	CDC	2366596	Active	2012-11-15	2018-04-16	56,41



32G04	CDC	2369787	Active	2012-12-03	2018-08-21	56,47
32G04	CDC	2369788	Active	2012-12-03	2018-08-21	56,46
32G04	CDC	2369789	Active	2012-12-03	2018-08-21	56,46
32G04	CDC	2369790	Active	2012-12-03	2018-08-21	56,46
32G04	CDC	2369791	Active	2012-12-03	2018-08-21	56,46
32G04	CDC	2369792	Active	2012-12-03	2018-08-21	56,46
32G04	CDC	2369793	Active	2012-12-03	2018-08-21	56,46
32G04	CDC	2369794	Active	2012-12-03	2018-08-21	56,46
32G04	CDC	2369795	Active	2012-12-03	2018-08-21	56,46
32G04	CDC	2369796	Active	2012-12-03	2018-08-21	56,46
32G04	CDC	2369797	Active	2012-12-03	2018-08-21	56,46
32G04	CDC	2369798	Active	2012-12-03	2018-08-21	56,45
32G04	CDC	2369799	Active	2012-12-03	2018-08-21	56,46
32G04	CDC	2369800	Active	2012-12-03	2018-08-21	56,46
32G04	CDC	2369801	Active	2012-12-03	2018-08-21	56,46
32G04	CDC	2369802	Active	2012-12-03	2018-08-21	56,46
32G04	CDC	2369803	Active	2012-12-03	2018-08-21	56,46
32G04	CDC	2369804	Active	2012-12-03	2018-08-21	56,45
32G04	CDC	2369805	Active	2012-12-03	2018-08-21	56,45
32G04	CDC	2369806	Active	2012-12-03	2018-08-21	56,45
32G04	CDC	2369807	Active	2012-12-03	2018-08-21	56,44
32G04	CDC	2369808	Active	2012-12-03	2018-08-21	56,44
32G04	CDC	2369809	Active	2012-12-03	2018-08-21	56,44
32G04	CDC	2369810	Active	2012-12-03	2018-08-21	56,43
32G04	CDC	2369811	Active	2012-12-03	2018-08-21	56,43
32G04	CDC	2369812	Active	2012-12-03	2018-08-21	56,43



32G04	CDC	2369841	Active	2012-12-03	2018-08-21	56,44
32G04	CDC	2369842	Active	2012-12-03	2018-08-21	56,47
32G04	CDC	2369864	Active	2012-12-03	2018-08-21	55,58
32G04	CDC	2369869	Active	2012-12-03	2018-08-21	52,77
32G04	CDC	2369873	Active	2012-12-03	2018-08-21	52,69
32G04	CDC	2369878	Active	2012-12-03	2018-08-21	51,65
32G04	CDC	2369882	Active	2012-12-03	2018-08-21	54,39
32G04	CDC	2369886	Active	2012-12-03	2018-08-21	54,31
32G04	CDC	2369890	Active	2012-12-03	2018-08-21	54,38
32G04	CDC	2369891	Active	2012-12-03	2018-08-21	56,44
32G04	CDC	2369894	Active	2012-12-03	2018-08-21	54,15
32G04	CDC	2369895	Active	2012-12-03	2018-08-21	52,75
32G04	CDC	2369896	Active	2012-12-03	2018-08-21	22,71
32G04	CDC	2369897	Active	2012-12-03	2018-08-21	22,68
32G04	CDC	2369898	Active	2012-12-03	2018-08-21	13,61
32G04	CDC	2369903	Active	2012-12-03	2018-08-21	50,22
32G04	CDC	2369907	Active	2012-12-03	2018-08-21	50,59
32G04	CDC	2369910	Active	2012-12-03	2018-08-21	52,01
32G04	CDC	2369911	Active	2012-12-03	2018-08-21	5,85
32G04	CDC	2369913	Active	2012-12-03	2018-08-21	20,75
32G04	CDC	2369915	Active	2012-12-03	2018-08-21	28,3
32G04	CDC	2369916	Active	2012-12-03	2018-08-21	32,7
32G04	CDC	2369917	Active	2012-12-03	2018-08-21	29,04
32G04	CDC	2369918	Active	2012-12-03	2018-08-21	32,06
32G04	CDC	2369919	Active	2012-12-03	2018-08-21	11,61
32G04	CDC	2369922	Active	2012-12-03	2018-08-21	47,01



32G04	CDC	2369923	Active	2012-12-03	2018-08-21	51,2
32G04	CDC	2369924	Active	2012-12-03	2018-08-21	17,89
32G04	CDC	2369927	Active	2012-12-03	2018-08-21	20,69
32G04	CDC	2369930	Active	2012-12-03	2018-08-21	23,53
32G04	CDC	2369932	Active	2012-12-03	2018-08-21	23,43
32G04	CDC	2369933	Active	2012-12-03	2018-08-21	53,09
32G04	CDC	2369934	Active	2012-12-03	2018-08-21	30,91
32G04	CDC	2369935	Active	2012-12-03	2018-08-21	31,61
32G04	CDC	2369936	Active	2012-12-03	2018-08-21	31,87
32G04	CDC	2369937	Active	2012-12-03	2018-08-21	15,34
32G04	CDC	2406793	Active	2014-06-18	2018-06-17	56,45
32G04	CDC	2406794	Active	2014-06-18	2018-06-17	56,45
32G04	CDC	2406795	Active	2014-06-18	2018-06-17	56,45
32G04	CDC	2406796	Active	2014-06-18	2018-06-17	56,45
32G04	CDC	2406797	Active	2014-06-18	2018-06-17	56,45
32G04	CDC	2406798	Active	2014-06-18	2018-06-17	56,45
32G04	CDC	2406799	Active	2014-06-18	2018-06-17	56,44
32G04	CDC	2406800	Active	2014-06-18	2018-06-17	56,44
32G04	CDC	2406801	Active	2014-06-18	2018-06-17	56,44
32G04	CDC	2406802	Active	2014-06-18	2018-06-17	56,44
32G04	CDC	2406803	Active	2014-06-18	2018-06-17	56,44
32G04	CDC	2406804	Active	2014-06-18	2018-06-17	56,43
32G04	CDC	2406805	Active	2014-06-18	2018-06-17	56,43
32G04	CDC	2406806	Active	2014-06-18	2018-06-17	56,43
32G04	CDC	2406807	Active	2014-06-18	2018-06-17	56,43
32G04	CDC	2406808	Active	2014-06-18	2018-06-17	56,42



The property is in good standing based on MERN GESTIM claim management system of Government of Quebec.

### 4.3. Royalty Obligations

On December 14, 2006, the Corporation signed an agreement with Murgor Resources Inc. to acquire a 100% interest in the Barry gold deposit, for a purchase price of \$200,000 in cash and a royalty equivalent to 9% of the proceeds of sales of gold produced from the property.

On September 6, 2007, Metanor Resources Inc. has signed an agreement with Murgor Resources Inc. to buy 7% of its NSR royalty on the Barry Gold Deposit. Metanor will also acquire the remaining interest of Murgor in 8 additional claims of the Barry I property. Further, Metanor also acquired 100% interest in the Barry United property, held jointly by Murgor and Freewest Resources Canada Inc. (FWR: TSX-V). Metanor has an option to acquire 70% interest in the Nelligan Property and the terms of the agreement are as follows:

- Metanor will pay \$906,250 cash to Murgor on signing of the agreement.
- On signing of the agreement, Metanor will also issue 1,126,375 shares of Metanor to Murgor, based on a price of \$0.80 per share for a total value of \$901,100.
- Metanor will pay \$200,000 cash to Murgor upon production of its first ounce of gold from the Barry deposit as an advance on Murgor's remaining 1% NSR royalty on the deposit.
- Upon production, Metanor will pay a royalty to Murgor equal to 1% of the proceeds from the sale of gold.
- Advances on royalties will be reimbursed to Metanor upon 50% of Murgor's first profits upon production.
- Murgor and Freewest will each retain a 0.5% NSR royalty on the Barry United Property.
- The Barry property is subject to a 1% NSR payable to Murgor. This later was bought by Sandstorm Gold in 2015.

On March 12, 2008, the Corporation acquired 158 mining claims by staking and purchasing properties (Barry Extension East, West and Barry Centre) in the sector of the Barry deposit.



#### **4.4. Permits and Environmental Liabilities**

In August 2007, Metanor has received the certificate of approval of 'Ministère du Développement Durable, de l'Environnement et des Parcs' (MDDEP) for a bulk sampling of 50,000 metric tons of ore. In April 2008, Metanor has received the same approval from the Ministère des Ressources Naturelles et de la Faune (MRNF). In July 2008, Metanor has received the certificate of approval of MDDEP for exploitation of 500,000 metric tons of ore. In 2011 Metanor has received the certificate for additional extraction of 1,200,000 metric tons from the Barry property. A deposit for reclamation has been put in place at that time.

A study has confirmed that mineralized and non-mineralized rocks at the Barry deposit are not subject to acid rock drainage.



## **5. Accessibility, Climate, Local Resources, Infrastructure and Physiography**

### **5.1. Accessibility**

The Barry property is easily accessible by the provincial paved highway 113, a major regional road linking the town of Senneterre to Chapais, and by a 120 km all-weather gravel road linking the property to the town of Lebel-sur-Quevillon. Many forest roads give access to the different sectors of the property. When the weather conditions allow it, a 100 km long forest road connects the Barry mine site to the Bachelor lake mill.

### **5.2. Physiography**

The topography is generally flat; the bedrock is covered by a relatively thin layer of till, and, in the majority of the surface property, by fir trees and black spruces. The thickness of the overburden varies between zero in the area already stripped to 30 meters. Only a few natural outcrops are present on the property.

The overburden depth on the Barry property is variable, ranging from zero metre to 5 meters thick in the area of the “Main Showing Zone”, to over 30 meters in other areas of the property. It is often made up of gravel, large boulders and till.

Topographic relief is weak to moderate, locally up to 50 meters in the northwest part of the property due to outcrop ridges and eskers trending in a NE-SW direction. The southeast part of the property is of very low relief and is poorly drained. Fir trees and black spruces characterize the vegetation in the well-drained part of the property. The more poorly drained parts to the south are covered with spruce, balsam and Labrador-tea.

The site of the Barry I Main Zone Area project presents low relief topography. Primarily black spruce forests, swamps, eskers and small lakes cover the property area. The vertical relief in the area is very low with a mean altitude of 400 meters above sea level. Very few outcrops occur on the property.

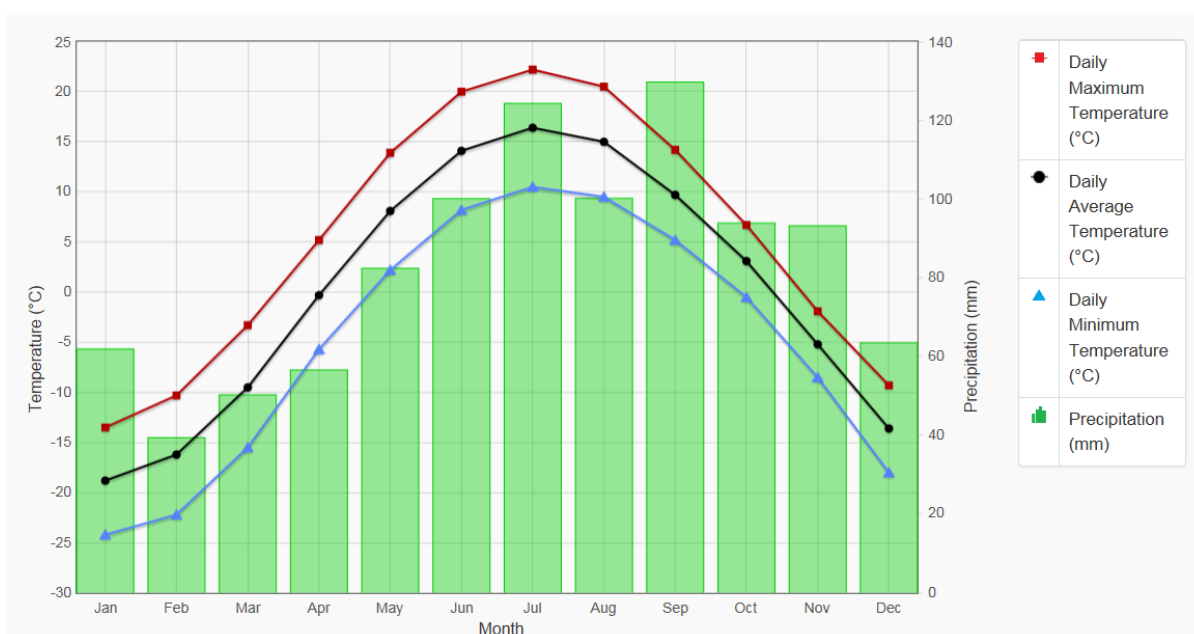
Most of the overburden covering the Barry I Main Zone central area has been removed and is stored on the property. The remaining overburden in the Barry I Main Zone Area shows a thickness smaller than 5 meters, according to the present drilling information.



The following fauna was observed at the Ashuapmushuan Wildlife Reserve which is located approximately 100 km to the east of the mine site. Terrestrial fauna includes terrestrial fauna includes: moose, black bear, wolf, fox, hare and lynx. Notable aquatic animals include: Brook trout, lake trout, walleye, northern pike and vendace. Finally, species of bird include ruffed grouse and spruce grouse.

### 5.3. Climate

The climatologic data used to characterize the sector under study comes from the meteorological station of Chapais, Québec. These observations were carried out from 1981 to 2010. The following figure (Figure 3) shows minimum, average and maximum monthly temperatures as well as average precipitations per month.



**Figure 3: Monthly average temperature and rainfall data.**

The anemometric data collected in Val d'Or between 1961 and 1990 show that, in this sector, the winds have an average velocity varying between 11 and 14 km/h for an average of 13 km/h during the year with gust speed up to 119 km/h in the summer.

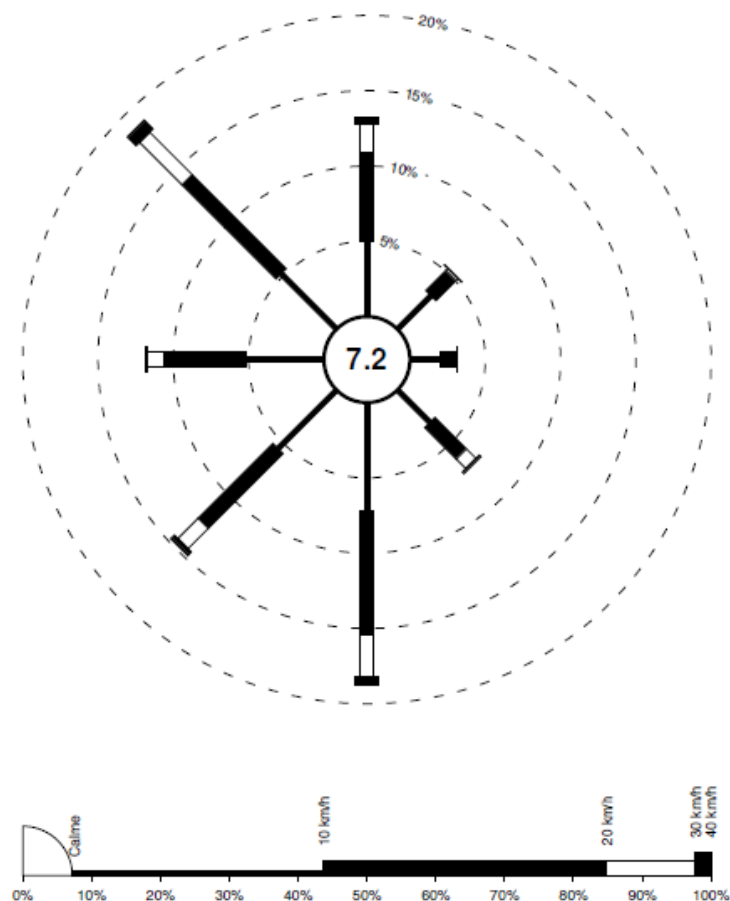
**Table 3: Rainfall and snowfall data.**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
Rainfall (mm)	3.2	2.4	8.8	28.7	75.5	100.1	124.3	100.2	128.6	70.9	36.7	5.0	684.5
Snowfall (cm)	58.8	37.0	41.6	29.5	6.9	0.0	0.0	0.0	1.2	23.0	56.5	58.5	312.9



**Table 4: Wind data.**

Month		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Speed	km/h	13	13	14	14	13	13	12	11	13	13	13	12
Most Frequent direction		S	NW	NW	NW	N	SW	SW	SW	S	S	S	S
Gust Speed	km/h	96	89	91	89	89	119	100	84	98	98	89	104
Direction		NE	S	W	S	S	NW	W	SW	S	S	W	SW



**Figure 4: Val-d'or 1971-2000 wind rose.**

#### 5.4. Local Resources and Infrastructures

The regional resources concerning labour force, supplies and equipment are sufficient, the area being well served by geological and mining service firms. The closest town, Lebel-sur-Quevillon provides the workforce for minor services and the town of Val d'Or and Chibougamau for the possible mine exploitation.



A camp on the property, built in 2007 by Metanor, provides living facilities for 18 persons. Other infrastructures include core logging and splitting facilities, a garage, two diesel generators and surface fuel tanks. All major services are available in Val d'Or, Chibougamau, and minor ones in Lebel-sur-Quevillon.

The construction of the access road, the first camp and the first stripping of the overburden were executed by Murgor between 1995 and 2005 on Barry, and the existing camp and the other infrastructures were added by Metanor and are all kept in a very good condition. It is also important to mention the availability of sand and gravel from an esker crossing the Barry property, if additional material is required.

A major hydroelectric power line crosses the eastern part of the property.

## 6. History

This item was partially taken and updated from the 2010 NI43-101 Report realized under the supervision of Claude Duplessis Eng. (Table 5).

### 6.1. Summary of previous work

1943	Area mapped by Mimer.
1946-47	Area mapped by Fairbairn and Graham.
1958	Geological survey performed by Geological Survey of Canada.
1961	An airborne MAG-EM survey was performed by Claims Ostiguy.
1962-65	Geology, geophysics and 5 drillholes were completed by Fab Metal Mines LTD.
1981-84	An airborne MAG-EM survey was performed by Questor Surveys LTD. for the Quebec Ministry of Energy and Resources.
1981-83	Prospecting and Geological Mapping was carried out by SDBJ followed by three drillholes.
1983	Mines Camchib completed one hole of 146 meters (MB-83-1 1) at the western edge of the property. No significant assays were reported.



1988-89	Ground MAG and EM surveys were completed by Cominco-Agnico Eagle. Nine drillholes followed.
1990	An evaluation of this property was carried out by Albanel Minerals LTD. and Somine.
1995	Overburden stripping, trench and channel sampling by Murgor.
1995	Detailed mapping and geophysical works realized on the discovery showing.
1995-1996	Murgor drilled 56 holes on the property and sent 167 channel samples for assay.
1997	IP survey, geological mapping, lithogeochemical sampling and drilling of 4,456 meters of core by Teck Exploration, mainly on the Barry I Main property.
2004-2005	Geological interpretation and drilling (61 holes) on the property by Osisko Resources Inc.
2005	Writing of a preliminary assessment study on the Barry property by George McIsaac, eng., M. eng.
2005	Murgor realised one drilling campaign of six holes for 225 m. and a new geological interpretation of the Barry deposit by Murgor's staff.
2006	Drilling by Murgor of 32 drillholes for 1,409 m. and survey of the visible drillholes collars of the Main Zone.
2006-2007	Drilling of 58 drillholes totalling 5,076 m.
2008	Drilling of 79 drillholes totalling 9,413 m.
2009	Drilling of 167 drillholes totalling 19,557 m.
2009	52 kilometers of a complementary resistivity/induced polarization survey. (Press release 2010-02-24).
2010	Drilling of 15 drillholes totalling 4127 meters (Press release 2011-05-31).
2009-2011	223 km of magnetic survey and 195 km of IP survey (Press release 2011-10-04).
2013-2014	Drilling of 38 drillholes totalling 12,197 m. (Press release 2014-10-08).



**Table 5: Summary of the previous exploration work on the Barry property.**

Fab Metal Mines	1962-65	5 drillholes	114 m
SDBJ	1981-83	3 drillholes	264 m
Mines Camchib	1983	1 drillhole	146 m
Cominco-Agnico Eagle	1988-89	9 drillholes	1,461 m
Murgor Resources	1995-96	74 drillholes	7,703 m
Murgor Resources	1995	167 channels	1,203 m
Teck Exploration	1997	15 drillholes	4,456 m
Osisko	2004-05	61 drillholes	2,580 m
Murgor Resources	2005	6 drillholes	225 m
Murgor Resources	2006	32 drillholes	1,409 m
Murgor Resources	2006-2007	58 drillholes	5,076 m
Metanor Ressources	2008	79 drillholes	9,412 m
Metanor Ressources	2009	167 drillholes	19,557 m
Metanor Ressources	2009-2011	Ip survey	195 km
Metanor Ressources	2009-2011	Magnetic survey	223 km
Metanor Ressources	2010	15 drillholes	4,127 m
Metanor Ressources	2013-2014	38 drillholes	12,197 m

## 6.2. Details of previous work on Barry

The area surrounding the Murgor property was first mapped in the 1940's, but it was not until 1962 that exploration work on the property was first recorded. Exploration in the area has progressed significantly in the last 10 years due to the increased access provided by the expanding network of logging roads.

### 6.2.1 Work by Fab Metals Mines in 1962-1964

In 1962, Fab Metal Mines, owned by Fred A. Boylen, drilled three short holes totalling 87 meters on the eastern shore of the Macho River outside of the “Main Showing” area. Basalts and feldspar porphyry were intersected, which contained sparse pyrite mineralization and the odd quartz veins.



In 1964, Boylen drilled two additional short holes totalling 37 meters on a zone of strong quartz veining on the west shore of the Macho River. Boylen's drill logs referred to sheared volcanics with quartz tourmaline veins and visible gold. No follow-up work has been done to date on that area.

#### 6.2.2 Work done by Questor Suveys Ltd in 1981-1984

In 1981 and 1984, Questor Surveys Ltd. completed an airborne EM-INPUT and magnetometer survey over the area for the Quebec Ministry of Energy and Resources. This survey (DP 83-08 and DP 85-19A and B) identified several EM anomalies on the Murgor property associated with a strong magnetic conductor.

#### 6.2.3 Work done by SDBJ in 1982-1984

The discovery of the "Main Showing" dates back to 1982 when grab samples taken by SDBJ assayed up to 35 g/t Au. Between 1982 and 1983, SDBJ completed prospecting, line cutting, geological mapping, magnetometer and horizontal loop EM surveys. Three diamond drillholes (83-9, 83-10 and 83-11) totalling 264.5 meters were drilled in the area of the "Main Zone" to test geophysical targets. All the drillholes intersected anomalous gold mineralization, with drillhole 83-9 assaying 4.1 g/t over 1.4 meters.

#### 6.2.4 Work done by Mines Camchib in 1983

In 1983, Mines Camchib completed one hole of 146 meters (MB-83-1 1) at the western edge of the property. No significant assays were reported.

#### 6.2.5 Work done by Cominco-Agnico Eagle in 1989-89

In 1988-89, a Cominco-Agnico Eagle joint venture completed magnetic, EM, IP and soil geochemical surveys along with overburden trenching. Nine diamond drillholes (LON-88-1, -2, -3 & LON-89-4, -5, -6, -7, -8 and -9), totalling 1,461 meters, were drilled on the property. The best assay was from drillhole LON-88-3 with an assay of 6.45 g/t over 1.8 meters.

#### 6.2.6 Work done by Murgor resources in 1994

In November of 1994, Murgor optioned the SDBJ claim block as well as the Duval and Boudreault claim blocks. The property was surveyed with magnetic, IP and basal till surveys along with an



extensive overburden stripping and channel-sampling program. Diamond drilling completed by Murgor concentrated on the Barry I Main Zone Area and totaled 56 holes (MB-1 to 56) for 5,918 meters. The Barry I Main Zone Area had been drilled over a strike length of 800 meters and down to a vertical depth of 250 meters. Multiple gold bearing zones were identified with intersections as high as 9.7 g/t Au over 7.7 meters. A mineral inventory was calculated on the Barry I Main by Murgor, which totalled 610,000 t grading 6.8 g/t Au (Tessier, 1996).

#### 6.2.7 Work done by Murgor in 1995

A program of 18 drillholes was completed on the Barry I property between February 20 to April 2 1995. A total of 1,785 meters of NQ core were drilled and 1,516 samples were assayed for gold.

The drilling confirmed the presence of gold. A typical gold zone is composed of alternating sections of auriferous altered volcanics and unaltered volcanics.

The drill results indicate that the mineralized zones are very complicated, and it is impossible to tie together the mineralization on strike and on section. Some features which may help in localizing the gold mineralization could be the folding, contacts, fractures, flexures or intersecting structures.

The conclusions of the work done by Murgor are the following:

The Barry I property is located within a major deformation zone created by overlapping strain aureoles related to the emplacement of two large plutons. The two large plutons flank the greenstone rocks to the northwest and southeast.

The strike orientation of the gold associated deformation zone is 060° (east-northeast). Several gold showings in this area are also associated with this orientation. The dip of the units on the property is 60° south, whereas the plunge is 45° - 50° to the east.

The gold mineralization is typical of an Archean lode gold style with auriferous quartz-carbonate-albite veinlets hosted within highly carbonatized pillowed basalts and basaltic flows. The gold usually occurs as the native element or as inclusions within the pyrite. Hydrothermal fluids have been deposited within fractures rather than shear zones. Very little shearing is evident. 90% of the veinlets have the same dip as the foliation, which is 060° to the south.



Broad zones of Fe carbonate exist, zoned away from the veinlets. Biotite alteration also exists at the immediate contact with the volcanics and sometimes along fractures at right angles within the veinlets. The presence of biotite and the hornfelsic appearance of the volcanics locally suggest a very high fluid deposition temperatures.

Some drillholes did not encounter the expected gold mineralization, as the results of previous surface works, suggesting a possible plunge of the main showing.

The same style of veinlets and sulphides observed in the quartz feldspar porphyries did not carry gold mineralization even though they did in the volcanics. This suggested that the QFP was not chemically correct to allow for gold precipitation.

The initial showing corresponds to a coinciding MAG high and IP anomaly.

The greater the vein frequency, the stronger the alteration, the higher the percentage of pyrite and therefore the higher the gold assays.

The veinlets are bulged suggesting a stretching deformation, while the pillows are flattened suggesting a compression deformation.

#### 6.2.8 Work done by Teck option during 1997

A total of 4,456 meters of diamond drilling in 15 drillholes were completed on the Murgor property between June and August of 1997. This drilling tested the extensions of the auriferous Barry I Main Zone and parallel or faulted off structures to the north.

##### - Drilling

A total of six holes were drilled by Teck (MB-57 to MB-62 and MB-68 to MB-71) on the property. These holes tested the extension of the gold mineralization hosted in the Barry I Main Zone, along a strike of 800 meters and down to a vertical depth of 325 meters below surface. The gold mineralization was intersected in mineralized corridors in a variety of stratigraphic units. The most significant areas in order of importance include:

1. Altered basalts at the hanging wall contact of the quartz-feldspar-porphyry.
2. Basalts at the footwall contact of the quartz-feldspar-porphyry.



3. Basalt-gabbro to the north of the quartz-feldspar porphyry.
4. Quartz-feldspar porphyry.
5. Massive basalt unit to the south of the quartz-feldspar porphyry.
6. Brecciated basalt unit.

Sections with anomalous gold mineralization were identified in the quartz-feldspar-porphyry unit, the brecciated basalt unit, the more massive basalt unit to the south of the quartz-feldspar-porphyry and in the massive basalt-gabbro unit to the north of the quartz-feldspar-porphyry. Assay results for these zones were as high as 3.49 g/t Au over 1.8 meters. The gold mineralization in these corridors was commonly present as sheared and altered zones close to small quartz-feldspar-porphyry sills.

The diamond drilling did confirmed that the mineralized system at the Barry I Main Zone Area is large, and the zone was intersected in virtually every hole. Although the mineralization remains open in all directions, the drilling shows that on a detailed scale the gold bearing zones are represented by numerous smaller lenses. Based on previous surface stripping and close spaced shallow drilling the size of individual mineralized lenses may only be in the order of 45 meters in strike.

The diamond drillholes MB-63 to MB-67 targeted a chargeability anomaly and associated magnetic high parallel and to the north of the Barry I Main Zone. The only significant assay from this shallow diamond drilling was from hole MB-64, which assayed 1.73 g/t Au over a core length of 1.6 meters. The gold mineralization encountered in this area is similar in style to that encountered at the Barry I Main Zone, and is associated with biotite-carbonate alteration, quartz-carbonate veining and disseminated pyrite. The assay quoted above in drillhole MB-64 is from the contact of a small quartz-feldspar-porphyry unit.

#### - Surface Mapping and Sampling

A program of surface mapping and outcrop sampling was completed on the property concurrently with the diamond-drilling program in the summer of 1997. A total of 52 samples were analyzed for gold. Of these, 27 samples were also analyzed for major and minor elements. The highest gold assay from a surface grab sample outside of the Barry I Main Zone Area was 2.01 g/t Au. This sample was taken from a small pit, located approximately 150 meters to the north of the Barry I Main Zone, which



corresponds to the northern IP conductor drill tested with holes MB-63 to 67. The IP anomalies are due to the presence of disseminated pyrite and local stringers of magnetite.

A significant amount of quartz veining with rare pyrite mineralization was located in outcrops close to IP chargeability anomalies in the northern part of the property at L23+85E, l2+75N and in the eastern part of the property at L4l+85E, 7+105. The quartz veins in the northern part of the property on L23+85E were also found to contain up to 5% of a mineral identified as geikielite ( $\text{MgTiO}_3$ ), which has been found to be locally associated with gold mineralization in the Val d'Or mining camp.

#### - Geophysical IP survey

A dipole-dipole array IP survey was realized over 53 km, covering portions of the property not covered by previous surveys. Several moderate to strong chargeability anomalies were outlined in the northern and eastern parts of the property.

Two of the 12 anomalies defined by previous surveys correspond to the known sulphide mineralization; i.e. the Barry I Main Zone Area and the zone 150-200 meters to the north. These 17 anomalies are characterized by strong chargeability, background resistivity signatures and are associated with magnetic highs. Both of these anomalies, each approximately 1,000 meters in length, appear to have been offset by an E-W trending structure with a sinistral movement. The chargeability highs are due to finely disseminated pyrite (3-7%) and lesser pyrrhotite and magnetite.

Based on the recent IP survey, there exists up to six separate IP (chargeability) anomalies in the northern and eastern parts of the property. Individual IP anomalies can be traced over strike lengths of up to 2,000 meters. All are untested by diamond drilling and no outcrops are present in the area of the anomalies.

IP surveying has proven to be the most useful geophysical technique in the Urban-Barry Volcanic Belt. It works well in identifying and locating the disseminated style of the sulphide mineralization associated with the gold mineralization.

#### - Litho-geochemistry results

Systematic core sampling at 30 meters intervals, for 160 samples, was completed on all drillholes. The samples were analyzed for 10 major oxides, loss on ignition and a 32 elements package by ICP.



Alteration trends were appraised through bulk chemistry methods designed to monitor relative enrichment-depletion patterns of mobile elements typical of gold deposits.

The basaltic rocks are of tholeiitic to transitional affinity as defined by immobile element plots. Three populations of chemically different rock units were identified from various X-Y plots using  $Al_2O_3$ ,  $TiO_2$ , and Zr concentrations. These included quartz-feldspar porphyry, basalts and plagioclase-phyric basalts or feldspar porphyries. No significant geochemical difference could be established amongst the various subunits of basalts and gabbros.

Though the most significant gold intersections were hosted within the basalts, the quartz-feldspar-porphyry unit commonly showed a higher background concentration of gold. Median gold levels in the basalts are of 6 ppb while, in the quartz-feldspar-porphyry, the values were almost four times higher at 23 ppb. The mineralized zones within the basalts do not show any significantly large alteration haloes identifiable by geochemical anomalous gold values or associated pathfinder elements. The gold mineralization is restricted to the quartz veins and their borders.

- The conclusions on the work done by Teck option during 1997 are the following:

The mineralized corridors do however remain open in all directions. The continuity and size of these individual higher-grade zones are difficult to establish and appears erratic. No significant increase in the gold grade was observed along strike or at depth.

The Murgor property covers iron rich basalts intruded by quartz-feldspar porphyry, both of which are favourable hosts for gold mineralization. Mineralization at the Barry I Main consists mainly of sheeted auriferous quartz-carbonate-albite veins aligned parallel to the regional foliation at  $060^\circ$ . A second set of contemporaneous quartz-carbonate-albite veins is also present, oriented at  $020^\circ$  parallel to the Milner Shear Zone.

#### 6.2.9 Work done by Osisko option during 2004-2005

A total of 61 drillholes, for 2,580 meters, were drilled mainly on the Barry I Main Zone Area by Osisko Resources Inc. during the June 2004 and February 2005 periods. A partial survey of the drillhole collars was carried out during this period. Only the computerized version of the drill logs was available for this study. One database including all the computerized data on the Barry property was prepared and kept up to date. No other document prepared by Osisko was given to Murgor.



The staff of Osisko described a new interpretation of the mineralized deposit according to the information retrieved from the new drillholes. Following their study of the gold potential for that deposit, they released their option to concentrate their efforts on another deposit of larger tonnage. The size of the Barry deposit does not fulfill their requirement for a large deposit to exploit.

#### 6.2.10 Work done by Murgor during 2005-2006

Six drillholes totalling 225 meters were drilled mostly on the Barry I Main Zone by Murgor during December 2005. A new geological model interpretation was developed according to the new data and tested by three drillholes, as required by Geostat Systems International. These drillholes confirmed the presence of gold mineralization. The three others aimed to add tonnage to the Barry I Main and to test a high-grade target in the southwest part of the Barry I Main Zone. One database was created and verified by Geostat's staff. The position of the collars had to be surveyed. The data of five of the previously drillholes were not found. All the assays greater than 1 g/t Au were checked when the assay certificates were available. A new resource estimate was calculated from the new geological interpretation and aimed at defining resources possibly mined by open-pit. They were estimated by inverse distance using a maximum of 10 composites of 1.5 meters of length.

The Barry I Main Zone Area property, as per February 6, 2006 and including holes drilled in December 2005, i.e. 162-167, contained a total of 27,800 ounces in the indicated category and 18,700 ounces in the inferred category, at a cut-off grade of 2 g/t Au.

#### 6.2.11 Work done by Murgor during 2006

A second drilling campaign was executed in the first months of 2006. A total of 32 holes were drilled (totalling 1,409 m) on the Main Zone and tested the SW extension of the Main Zone Area and the Zone 43.

This new drilling campaign permitted to better define the extension of the mineralized zone inside the Main Zone Area and to verify the southwest and northwest extensions of the Main Zone. Some of the holes drilled tested the extension of the Zone 43 located southwest of the Main Zone. They intersected this zone at a depth of up to 50 meters and the known southwest - northeast extension is 130 meters long.



A new interpretation of the mineralized zones and an update of the previously estimated resources were performed. The resource estimate aimed to define mineralization exploitable by open-pit mining. This new design included the mineralized zones from the Main Zone, the zones 43 and 45, and the southwest extension of the Main Zone.

#### 6.2.12 Work done during 2006-2007

A new drilling campaign was completed with a total of 58 holes (total of 5,076 m) drilled on the Main Zone and tested the east, north and south deeper extensions of the Main Zone Area and the Zone 43. A total of 4,988 samples were sent to the lab for gold analysis.

This new drilling campaign permitted to better define the extension of the mineralized zone inside the Main Zone Area and to verify the extensions of the Main Zone.

A new interpretation of the mineralized zones and an update of the previously estimated resources were performed. The resource estimate aimed to define mineralization exploitable by open-pit mining. This design comprised of the mineralized zones from the Main Zone, the zones 43 and 45, and the southwest extension of the Main Zone.

#### 6.2.13 Work done during 2008-2009

In 2008, Metanor completed a drilling campaign of 79 holes (MB-08-258 to MB-08-337) for a total of 9,412 m on the property in order to increase the geological resources of the main mineralized zone and to evaluate the potential at shallow depth of mineralized zones located in the extension towards west of the open pit (Main zone). The majority of those diamond drillholes intersected the extensions of the gold bearing zones of the East zone and the West zone. A total of 5954 samples was taken and analyzed for gold.

Metanor also extended the stripped zone towards the west over a distance towards west of approximately 270 m and over a width of approximately 80 m, between the sections 1015 E and 745 E, allowing to expose on surface approximately 21,500 m<sup>2</sup> of volcanic rocks and an intrusive granitic unit which host the known gold bearing zones. A systematic channel sampling of the new exposed area with spacing of 5m of the north-south lines resulted in a total of 2280 samples taken and analyzed for gold.



In 2009, 167 holes (MB-09-338 to MB-09-504) were drilled for a total of 19,557 m. This drilling program investigated certain sectors of the Main zone, particularly in the extensions at depth of the Main zone, of the Center zone which represents the extension towards the west of zone 43, the extension of the mineralized zones occurring to the south and between the Main zone (current Pit) and the West zone.

A total of 14,336 samples were sent to the lab for gold assay. In this program, 62 holes were drilled (MB-09-344 with MB-09-399) for a total of 6,550m. This allowed to extend the West zone up to the surface and to consider its extraction by mining with open pit, and also allowed to extend the Main zone of several tens of meters towards the west in the direction of the granitic intrusion.

Then, a bulk sample of 50,000 metric tons was completed in 2007-2008 and a stage of pre-production began on the East zone of the Barry deposit with an aim of evaluating certain mining parameters of the mineralized zones and the profitability of mining these zones according with the choice of mining methods. Given the lack of information at a shallow depth on many sections, the advance in the open pit continued towards the west on several benches at the same time in order to check the continuity at depth of mineralized zones.

#### 6.2.14 Work done during 2009-2011

Metanor has mandated Abitibi Géophysique in 2009 to carry out an Induced Polarization (IP) survey covering parts of the Barry United claims, the Barry Center claims & the Barry West Extension claims of the Barry property. This allowed to detect several anomalies which may coincide with gold bearing zones similar to the Barry deposit.

Between October and December 2009, a complementary resistivity/induced polarization survey was carried out by Abitibi Géophysique on parts of the Barry property. Fifty-two (52) kilometres of IP survey (dipole-dipole,  $a=25\text{m}$ ,  $n=1$  to 6) were carried out to cover extensions of the preceding IP surveys on parts of the Barry United, Barry Center and on the northern block of the Barry Extension West properties. In this area, the Urban volcanic formation is northeast trending and contains several  $N030^\circ$  to  $N045^\circ$  trending anomalies which are characteristic of disseminated to massive sulphide mineralization.

Magnetic and resistivity/induced polarization surveys were carried out by TMC Géophysique of Val-d'Or on parts of the Barry property. Two hundred twenty-three (223) kilometers of magnetic survey



and one hundred ninety-five (195) kilometers of IP survey (dipole-dipole,  $a=25\text{m}$ ,  $n=1$  to 6) were carried out to cover extensions of the preceding IP surveys on parts of the Barry United and Barry Extension East properties. In this area, the Urban volcanic formation is northeast trending and contains several 300 to 450 trending anomalies which are characteristic of disseminated to massive sulphide mineralization.

A total of eighty-nine (89) IP anomalies were detected as new anomalies or like extensions of the anomalies were detected during preceding surveys bringing the total to over 150 anomalies on the property to date. They were correlated with the magnetic pattern oriented WSW-ENE and are numbered BU-1 to BU-23 on the west block and BU-24 to BU-89 on the east block.

On the Barry property surrounding the mining concession, several IP anomalies characteristics of gold bearing mineralization of the vein type were localized on the edge of a resistive zone located to the south-west of the Barry deposit. This resistive zone has the signature of a series of quartz and feldspar porphyry intrusions (QFP) which hosts the various gold bearing bodies constituting the Barry mine (Main zone, zone 43, Center zone and zone 48). These mineralized zones are located to the east of a porphyritic intrusion and in a major deformation corridor (Mazère fault), oriented  $N060^\circ$ . Several IP anomalies with strong intensity, similar to those defining the gold bearing zones of the Barry mine, are within or at the edge of the western resistive zone which represents a very promising environment for the search of gold bearing zones of the same type and in the prolongation of those of the Barry mine.



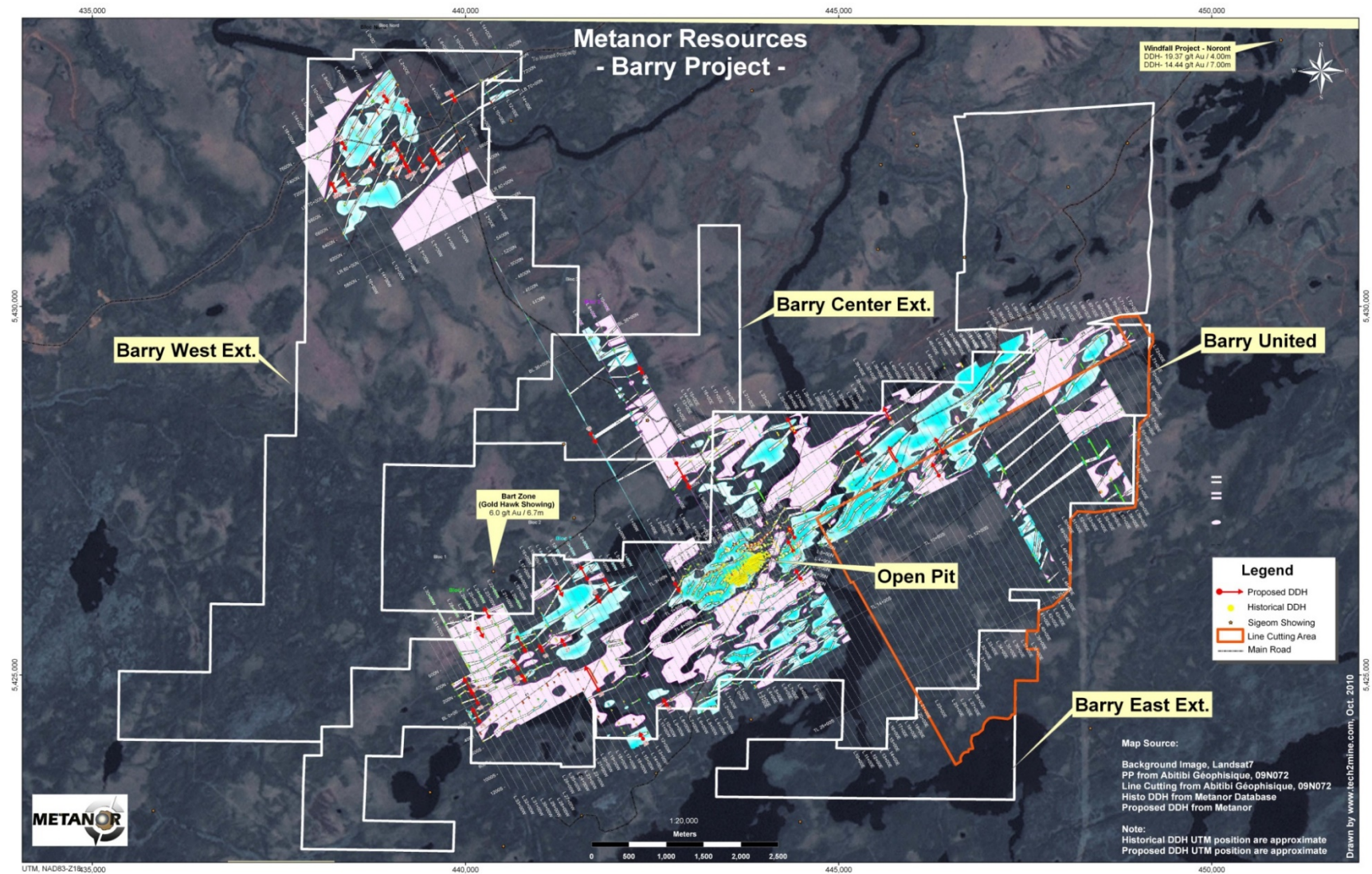


Figure 5: Landsat map of PP from Abitibi Géophysique (November 2009) on the Barry property.



## 6.2.15 Work done during 2013-2014

In 2013-2014, Metanor completed a drilling campaign of 38 diamond drillholes totalling 12,197 meters on the property in order to investigate some of the 153 IP anomalies detected between 2009 and 2013. The holes have been drilled at a distances ranging from more than 1 km up to 7 km from the Barry deposit. The drilling campaign enabled Metanor to investigate two known gold areas (Goldhawk and Moss) to confirm their extension laterally and at depth. It also enabled them to discover 5 new sectors with gold mineralization.

### - NW Extension block

A series of subparalleles IP anomalies, often with a strong intensity and oriented to the northeast, have been detected in a large deformation corridor of approximately 1.5 km in width. These IP anomalies extend over large distances and coincide with deformation zones containing disseminated to massive sulphides in volcanic units and associated intrusive sills. Five (5) diamond drillholes totalling 1,967 m have intersected many fractured zones containing variable amounts of pyrrhotite and chalcopyrite. A mineralized fault zone has returned anomalous gold values over 16.6m, including an intersection of 0.5 g/t Au over 3.0m (BE-13-03). This mineralized zone has returned several anomalous gold values including an intersection of 3.16 g/t Au over 0.4m (BE-13-04) approximately 750m towards the southwest and an anomalous gold intersection of 0.20 g/t over 8.10m (BE-13-06) approximately 1km further southwest. These results are encouraging and guarantee the continuation of exploration work in this area.

### - Goldhawk-Oracle Block

The Bart zone has been investigated to the west and to a vertical depth of 160m with diamond drillhole MB-13-01 which has intersected an heavily mineralized pyrite zone with a gold-bearing intersection of 25.80 g/t Au over 5.6m. The future exploration works should allow the extension of the mineralized gold zone located approximately 3.5 km west of the Barry mine even further to the west. A series of strong IP anomalies have been investigated to the east end of the property and coincides with several subparalleles mineralized zones containing pyrite-pyrrhotite and having returned anomalous gold values over widths reaching 10.7 m. A strong IP anomaly oriented east-west located at the south end of the property has been investigated and corresponds to a pyrite rich zone that has returned a gold-bearing intersection of 1.96 g/t in over 2m, including 3.39 g/t Au on 1.0 m.



#### - Block Moss

A series of IP anomalies crossing the whole claim block over a width of 500 m and located immediately to the west of the Eagle Hill Exploration property have been investigated on a lateral distance of 2 km. In this deformation corridor, several mineralized zones associated with felsic units are altered, fractured and injected with pyrite-quartz veins which have returned anomalous gold intersections over widths of up to 9.5 m at the north-eastern end and up to 300m along the south-west extensions. The longest gold intersection has been obtained in diamond drillhole MB-14-22 which intersected to a vertical depth of 30 m, a mineralized zone returning 2.14 g/t Au over 19.4m, including 5.28 g/t Au over 7.8 m. Approximately 500 m further to the south-west along the deformation corridor, diamond drillhole MB-14-21 has also intersected significant gold mineralization returning anomalous values over a width of 300m including gold intersections of 18.20 g/t Au on 0.5m and 3.39 g/t Au on 1.2m.

#### - Barry SE Extension

At the east end of this claims block in contact with the Bonterra property, a section of several diamond drillholes was designed to investigate a series of very strong IP anomalies which extend toward the northeast in a large deformation corridor of nearly 1 km in width. These anomalies coincide with sericite-carbonate-quartz mineralized zones containing variable amounts of pyrite-pyrrhotite and chalcopyrite. All These diamond drillholes have all returned at least one gold intersection with anomalous values over widths of up to 9.9 m (MB-13-04) and the best intersection was obtained in the diamond drillhole MB-13-10, which returned 2.38 g/t Au over 3.0 m. The type of alteration observed in this fractured and mineralized belt is similar to the one that found at the Barry mine and this mineralized zone may represent the northeast extension of the mine displaced towards the south by a north-west striking fault.

#### - Barry United SW Block

A series of IP anomalies extends in a northeast direction over a width of approximately 500 m up to the south-west limit of the property situated approximately 6 km away from the Barry deposit. In this area diamond drillholes have all intersected fractured locally sheared and mineralized pyrite-rich zones. The best gold intersections have been obtained in hole MB-13-14 which returned 14.8 g/t In over 0.5 m 1 km to the south-west of the Barry deposit, in the hole MB-13-16 which returned an intersection of 2.94 g/t in over 0.5 m 1.5 km to the south-west of the Barry mine and in the hole MB-13-19 which



has returned an intersection of 11.75 g/t Au over 0.9m approximately 5 km south-west of the Barry mine. These really spaced gold intersections were obtained along the south-west extension of the Barry deposit and indicate the possibility of finding significant gold mineralization in those areas which certainly require additional exploration work.



## 7. Geological Setting

Most of the information in this section was taken from the report RG 2001- 14: Geologie de la region des lacs Piquet et Mesplet, (32G/04 and 32B/13) and from the 2010 NI43-101 report realized by SGS Geostat.

### 7.1. Regional Geology

The Barry project is located in the Urban-Barry belt in the Northern Volcanic Zone (NVZ) of the Abitibi greenstone belt. The Urban-Barry belt is an E-W trending band of mafic to felsic volcanic and volcanoclastic rocks. The belt extends one hundred thirty five (135) kilometres along strike and has a maximum thickness of twenty (20) kilometers, the belt is bounded to the north, south and west by granitoid batholiths and towards the east by the Grenville geological province. The geology of the Urban-Barry belt and Lac aux Loutres region has been described by Milner (1939 and 1943), Joly (1990) and Bandyayera et al. (2002, 2003, 2004a, 2004b).

The geology of the property is composed of mafic volcanic flows, co-magmatic gabbro sills, local felsic flows, lapilli and welded tuffs, sedimentary rocks intruded by tonalite to granodiorite plutons, diorite dykes and feldspar and/or quartz porphyry dykes (Figure 6). These rocks were deformed during the Kenoran orogeny (Card, 1990; Goldfarb et al., 2001), giving them a dominant east-west trend (Chown et al., 1992). The regional foliation generally strikes NE to ENE with a variable dip from 30 to 85° SE (Hocq, 1989; Joly, 1990).

The rocks on the property are overprinted by a weak to moderate NE-SW trending foliation (S2) that is parallel to the regional shearing and the contacts of the large granitic intrusions (Chown et al., 2002).

Regional metamorphism is typically in the lower greenschist facies except for the easternmost part of the belt, where a lower amphibolite facies is encountered and related to the Grenville Front.



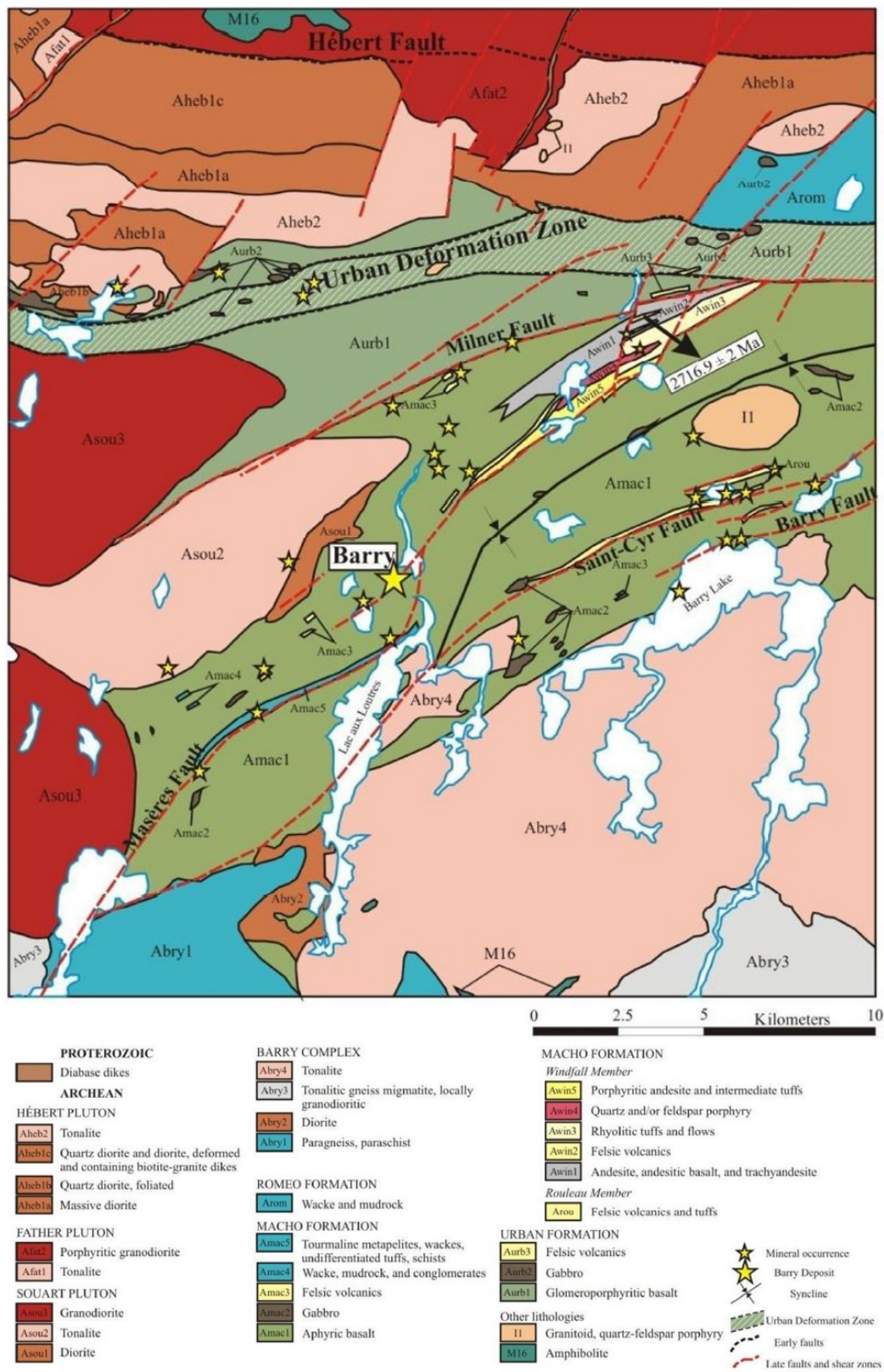


Figure 6: Geological map of the Urban-Barry belt (SNRC 32G/04 and 32B/13), map (Bandyayera et al., 2002).



## 7.2. Property Geology

### - Geology

The Urban-Barry belt mainly comprises of mafic volcanic rocks and isolated felsic volcanic rocks with ages ranging from 2791 Ma to 2707 Ma (Rhéaume and Bandyayera, 2006) interbedded with, or overlain by, volcanoclastic sedimentary rocks (Figure 6).

Geological mapping and diamond drilling identified a series of basaltic flows that are interpreted to cover over 90% of the property. The only intrusive bodies identified on the property were the quartz-feldspar porphyry in the area of the Barry I Main Zone Area and a series of gabbro sills to the north. An outcrop of siltstone was identified approximately 300 meters northeast of the Barry I Main Zone. Stratigraphic tops are to the southeast, as indicated by pillow facing directions.

The mafic volcanic rocks are the most common rocks on the property and consist of dark green, fine-grained, iron-rich tholeiitic basalts. The mafic volcanic rocks in the area of the Barry I Main Zone Area vary from generally non-magnetic to locally strongly magnetic with up to 5% disseminated magnetite crystals and less commonly stringers of magnetite. These rocks are intruded by a series of porphyritic to granitic felsic dykes or sills. They are grey to pink in colour and contain up to 50% white feldspars, 15% blue quartz and 10% biotite phenocrysts ranging in size from 2 to 10 mm. The quartz-feldspar porphyry varies in colour from a fresh looking medium grey, to a reddish tint (due to hematization), to a bleached light grey (due to strong silicification, Figure 7). The quartz-feldspar porphyry is “sill like”, maintaining a general stratigraphic position within the volcanic pile, while, at the same time, it can be seen crosscutting the volcanic stratigraphy on surface. The thickness of this unit varies from several meters to over 125 meters.

The volcanic rock units are locally intruded by a series of quartz feldspar porphyry (QFP, Figure 7) dykes and minor altered mafic dykes and sills (Figure 7). During 2006, Murgor has identified three (3) different phases of porphyry intrusions within the Main Zone of the Barry gold deposit. The different phases are distinguished by their grain size and by their percentage of quartz and plagioclase.

- a) The first porphyry intrusion, called "crowded", contains 40% quartz, up to 50% plagioclase, and 10% mafic minerals (biotite, hornblende and chlorite) with a grain size generally smaller than 1.5 millimetres. It varies from a porphyritic texture to an equigranular texture. This porphyry intrusion phase forms a sill-like body dipping between 20 and 40 degrees to the



southeast and reaches a maximum thickness of 70 meters around section 900 E, where it splits the main Barry gold zone.

- b) The second porphyry intrusion, called QFP 1, contains 10-15% quartz and 15- 35% plagioclase. Its texture is clearly porphyritic with a grain size reaching up to 3 millimetres. It forms a 5-15 meters thick sill-like body, sub-parallel to but deeper than, the "crowded" porphyry intrusion.
- c) The third porphyry intrusion, called QFP 2, is characterized by less than 5% quartz and 10-25% plagioclase with a grain size of 2 millimetres. This intrusion phase is characterized by narrow dykes oriented N060 degrees and dipping at 50 to 60 degrees to the southeast. No clear cross-cutting relationships between the different phases have been observed but it is interpreted that the crowded porphyry and the QFP 1 are older than the QFP 2.



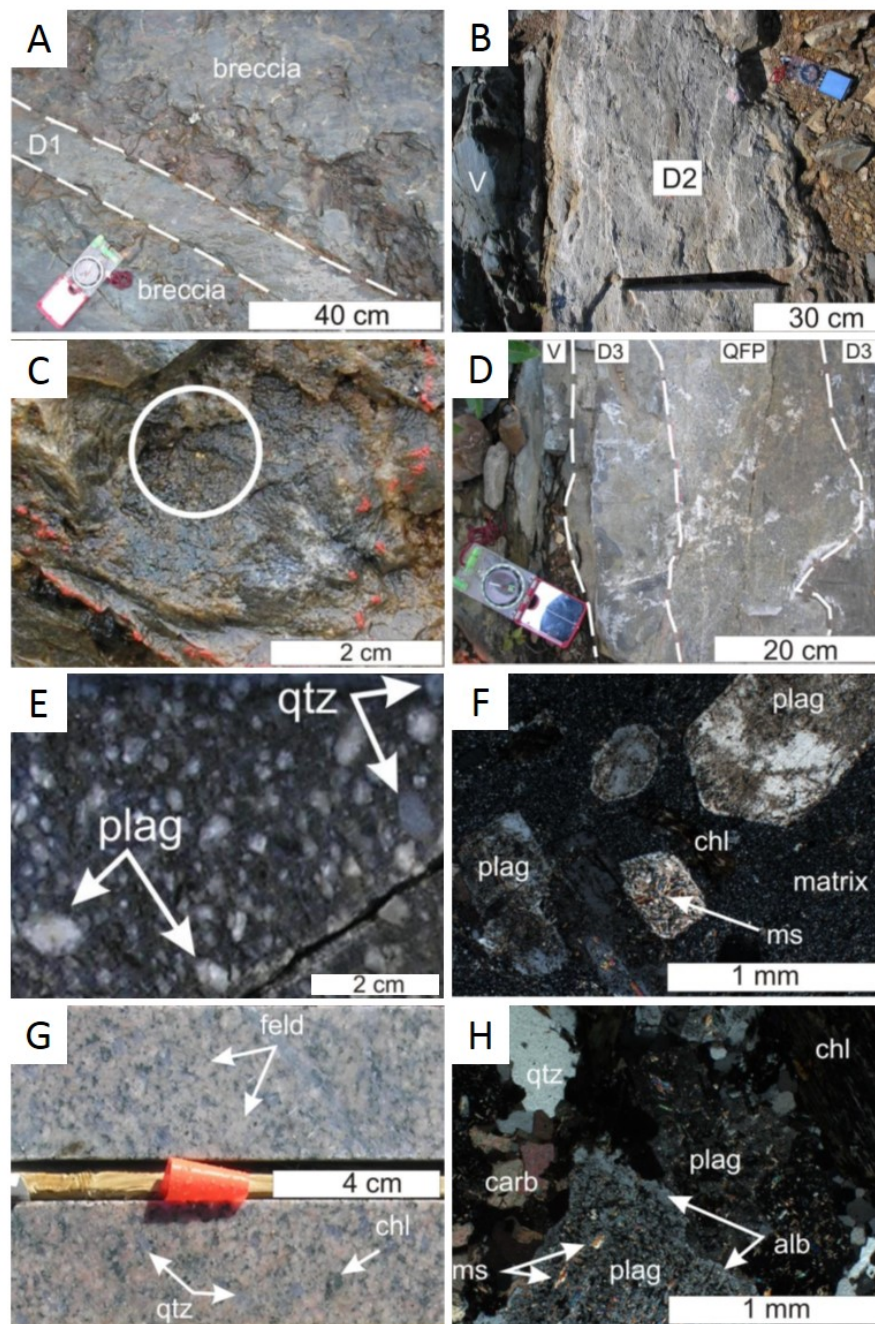


Figure 7: A) Diorite 1 (D1) dyke cutting brecciated volcanic rock. B) Diorite 2 (D2) dyke cutting mafic volcanic rocks. C) Visible gold grain within diorite. D) Diorite 3 (D3) dyke along a QFP margin cutting mafic volcanic rocks. E) Photograph of QFP core sample showing plagioclase and quartz phenocrysts in fine grained groundmass; F) Photomicrograph of (E) in cross-polarized transmitted light. G) Quartz monzonite drill core sample, light pink K-feldspar, quartz, and chlorite crystals are coarse-grained with little to no groundmass in between; H) Photomicrograph of (G) in crossed-polarized light (Photomicrograph taken from Kitney, 2009).

- Structural geology



Rocks in the region were deformed during the 2.71-2.66 Ga Kenoran orogeny (Card, 1990; Goldfarb et al., 2001), giving them a dominant east-west trend (Chown et al., 1992).

The mafic volcanics at the Barry deposit are locally folded along the S0 planes between volcanic facies. Their fold axes commonly trend N60-75°E and plunge 20°-40° to the NE. Limbs of folds are cut by minor shear zones, shear fractures, and veinlets (Hocq, 1989; Joly, 1990).

The Barry property is transected by the NE to E trending (Figure 8), gold-bearing Mazere deformation zone which is synchronous with major regional east-trending faults (Diop et al., 2003). Deformation associated with the Mazere fault is characterized by a penetrative ENE-trending schistosity moderately dipping towards the southeast. The regional foliation generally strikes NE to ENE with a variable dip from 30° to 85° SE, characterized by the planar orientation of phyllosilicates on sub-millimetre schistosity planes and breccia fragments.

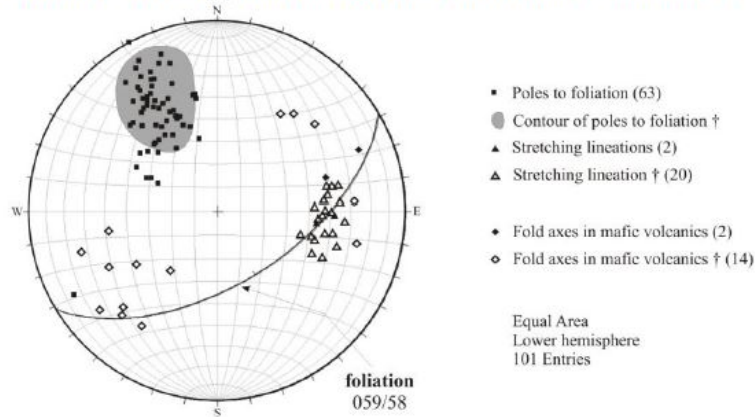
Two fault systems are observed at the Barry deposit (Kitney, 2009): an earlier one oriented at N55-60°E, dipping 40°-58° SE, and a later one with two fault orientations: N3°W strike with moderate to steep dip (66°-90° W); and N9°W strike with moderate to steep dip (70°-90° E). The NE trending faults corresponds to brittle-ductile structures, obliquely cut by late N trending faults that record evidence of minor apparent sinistral and dextral displacements. These late structures are barren and only slightly distorted and reorient previously developed fabrics. This set of structures is cross-cut by E-trending shear zones.

The presence of deformed albite-carbonate-quartz veins (associated with gold mineralization) within the early fault indicates that gold mineralization occurred pre- to syn-ductile deformation (D2) of this fault. The northernmost early fault has most recently offset mafic volcanic facies, intrusive dykes, and the mineralized zone to the north, indicating that it has undergone brittle deformation post-mineralization (Kitney, 2009).

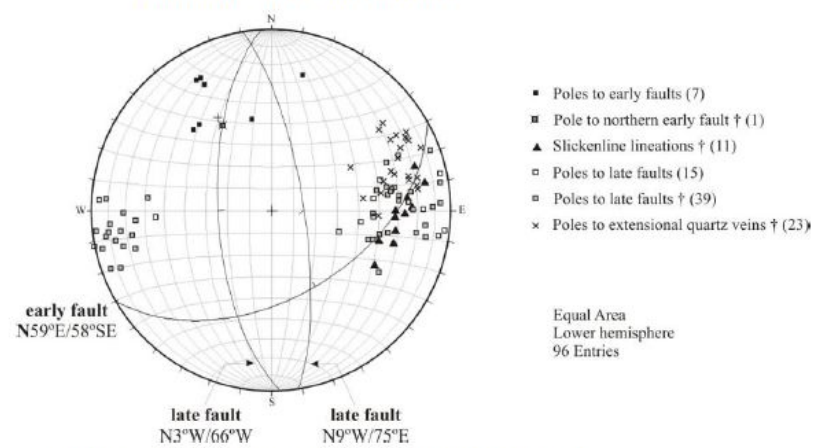
The second fault system comprises brittle structures, ranges in width from <10cm to 1m, and is continuous for at least 50m along strike. The offsets caused by their displacement controls the topography of the trenched region with differences of 0.5 to 3m in elevation across a fault. These late faults offset lithologic units and mineralization, with faults dipping to the west appearing to have a sinistral sense of offset, while faults dipping to the east appear to have a dextral offset.



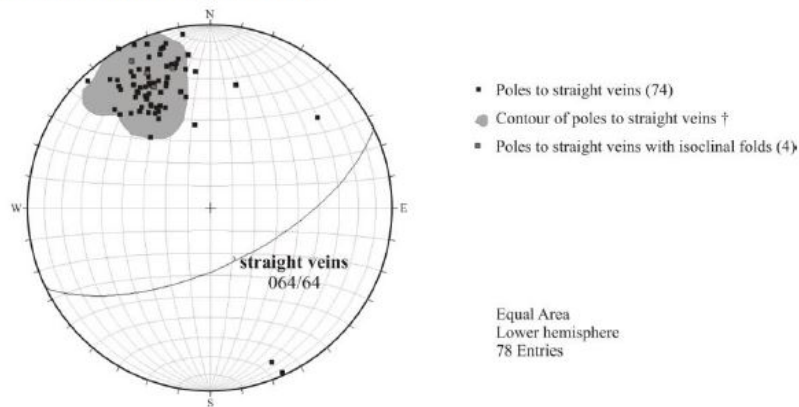
A: POLES AND CONTOUR PLOT OF POLES TO FOLIATION, STRETCHING LINEATIONS, AND FOLD AXES IN THE MAFIC VOLCANIC ROCKS



B: POLES TO EARLY AND LATE FAULTS AND SLICKENLINE LINEATIONS ON EARLY FAULTS



C: POLES AND CONTOUR PLOT OF POLES TO STRAIGHT ALBITE-CARBONATE-QUARTZ VEINS



D: POLES AND CONTOUR PLOT OF POLES TO FOLDED ALBITE-CARBONATE-QUARTZ VEINS

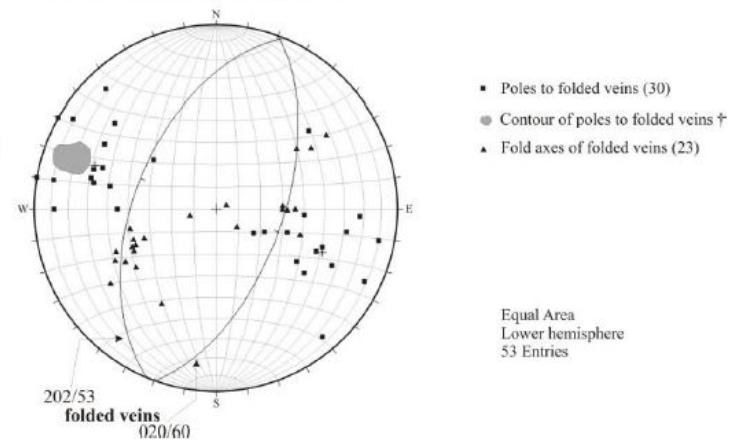


Figure 8: Stereographic representation of the structural features of the Barry deposit, surface trench. A) Poles and contour plot of poles to foliation, stretching lineations, and fold axes in the mafic volcanic rocks. B) Poles to early and late faults and slickenline lineations on early faults. C) Poles and contour plot of poles to straight albite-carbonate-quartz veins. D) Poles and contour plot of poles to folded albite-carbonate-quartz vein (source Kitney 2009). † indicates data collected by Tessier during mapping in 1996.



Three main vein types have been identified in the Barry deposit main zone based on their mineralogical composition (Figure 8, 9 and 10):

- a) Auriferous albite-carbonate-quartz, that exhibit three main geometries (straight, planar veins oriented N64°E dipping to the SE; straight veins with rootless isoclinal folding and/or transposition along the isoclinal fold hinge; folded veins oriented N20°E dipping 60° to the SE; and locally shallow veins).
- b) Barren quartz-carbonate and carbonate veins with different geometry (straight, folded, or sinuous) and irregular orientation. These veins are composed primarily of calcite and/or quartz, and locally contain traces of biotite and chlorite.
- c) Locally extensional quartz veins mainly filled by vitreous quartz. These veins locally crosscut the mafic volcanic rocks and the mineralized albite-carbonate-quartz veins but are generally found within the more competent early QFP dykes.



Figure 9: A) Folded auriferous albite-carbonate-quartz veins at the Barry deposit. B) Carbonate-quartz vein with visible gold (hole MB16-05).





Figure 10: Veins cross-cut QFP dykes filled by quartz cements (mainly vitreous quartz).



## 8. Deposit Model

The gold mineralization at the Barry property is structurally controlled. The gold mineralization is contained in a system of quartz-carbonate-albite-pyrite veins associated with sheared zones included in a wide deformation corridor at 60°/55 SE. The gold mineralization is mainly associated with 4 main mineralized zones: the Main Zone (Figure 11), Zone 45, Zone 48 and Zone 43 being located 80m south of the Main Zone. All these zones coincide with IP anomalies.

A geological model of the deposit was built by Metanor geologist using vertical sections and which indicates that the main zone is continuous over a distance of 200 m, with a true thickness of approximately 30 m, and that in this sector the gold mineralization associated with the main zone (on the footwall corridor strain) is mostly located between the surface and a vertical depth of 20 - 25 m.

The information acquired from the holes drilled between 2004 and 2006 offers a new perspective and a better understanding of the Barry I Main Zone Area mineralization and the Zones 43 and 45. The hanging wall of this principal E-W structure (southern part of the stripped area) comprises several mineralized areas (Figure 11, 12, 13 and 14). The mineralization in the hanging wall is composed of smaller irregular and cross-cutting veins and veinlets. These veins are mostly quartz-carbonate and pyrite. The alteration halo for these vein swarms is broader than the one observed around the major veins. These vein swarms were initially interpreted as flat lying mineralized envelopes at the top of a dome-shaped fold.

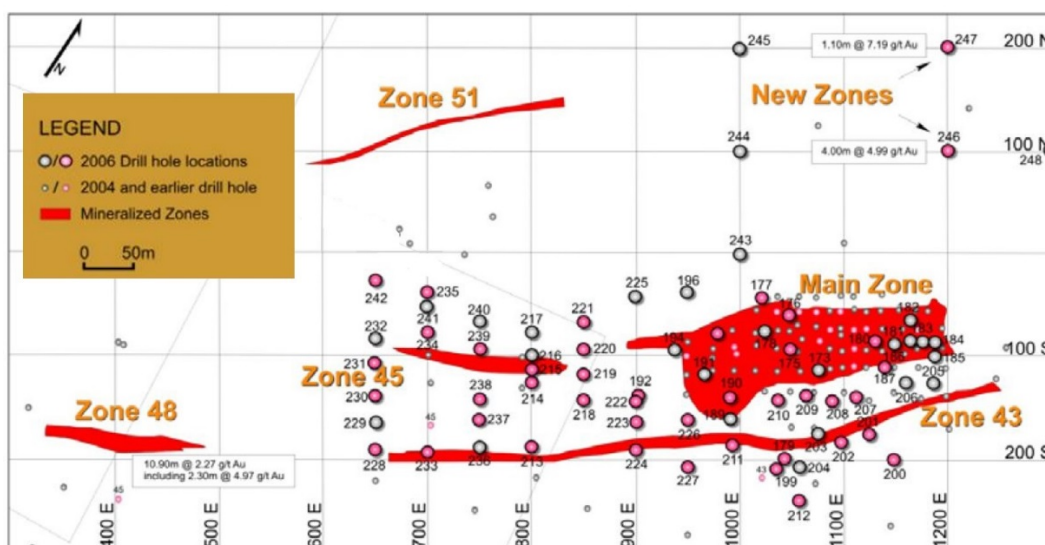


Figure 11: Localization of the mineralized zones at the Barry property (Source Metanor).



The hanging wall of this principal E-W structure (southern part of the stripped area) comprises several mineralized areas (Figure 11, 12, 13 and 14). The mineralization in the hanging wall is composed of smaller irregular and cross-cutting veins and veinlets. These veins are mostly quartz-carbonate and pyrite. The alteration halo for these vein swarms is broader than the one observed around the major veins. These vein swarms were initially interpreted as flat lying mineralized envelopes at the top of a dome-shaped fold.

All the mineralized zones and structures are cut by the quartz-feldspar intrusions.

The presumed sequence leading to the presence of gold mineralization is the following:

1. Lava deposition in a volcano-sedimentary environment;
2. First hydrothermal event during first deformation period: first sequence of quartz-carbonate-fuschite veins with ankerite alteration and silification. The gold was distributed within the quartz veins and in the host rocks. The gold is disseminated in fine-grained pyrite and coarse nuggets in quartz. The nuggets can reach up to 1 mm;
3. Intrusive event: quartz-porphyry complexes;
4. Second deformation event: shearing and set-up of the currently visible foliation. Deformation and folding of the first set of veins;
5. Second hydrothermal event: Silicification and set-up of the second set of milky quartz veins, none neither folded nor sheared, with possible remobilization of the gold.



Figure 12: QFP cutting the volcanic units.





Figure 13: Oxidized mineralization in the main E-W shear Zone, with coarse to fine-grained pyrite boxwork.





Figure 14: Main E-W subvertical structure with sheeted Quartz-Carbonate veins with fine-grained pyrite stringers.



## 9. Mineralization

Gold mineralization at the Barry property is constrained to zones containing 5-15% albite-carbonate-quartz veins and their associated hydrothermally altered wall rocks. In addition to albite, carbonate, and quartz, these veins locally contain trace biotite +/- sericite, chlorite (fine-grained anhedral), pyrite (fine-grained anhedral, or coarse-grained euhedral), pyrrhotite, rare euhedral magnetite, and fine-grained visible gold (Kitney, 2009).

The mineralized zones coincide with strong IP anomalies occurring in volcanic units throughout the property. These IP anomalies were detected in the eastern and western extensions of the Barry deposit, as well as in parallel volcanic units that are highly prospective for gold mineralization similar to the mineralization exposed in the Barry pit.

### - The Barry I Main Zone Area type mineralization

Gold mineralization on the property occurs for the most part in a system of veins and veinlets filled by quartz-carbonate (ankerite) - albite cements and with proximal alteration haloes of biotite-carbonate and disseminated pyrite. The gold occurs as inclusions or fracture infill in pyrite, or in sharp contact with carbonate crystals within veins and altered wall rocks, as well as along micro fractures in fine-grained pyrite (Lariviere, 1997; Kitney, 2009).

### - Quartz Veining

At the Barry property, gold-bearing veins consist of sheeted veins. Locally extensional quartz veins with free gold cut the pre-mineralization QFP dykes and auriferous albite-carbonate-quartz veins in the volcanic rocks. The dominant veins are oriented at 040° to 060°, parallel to the region foliation, and dip 62° to the SE (Tessier, 1996). The veins are frequently continuous in their thickness, which generally does not exceed 5 cm, yet at times, they extend for over 50 meters along strike.

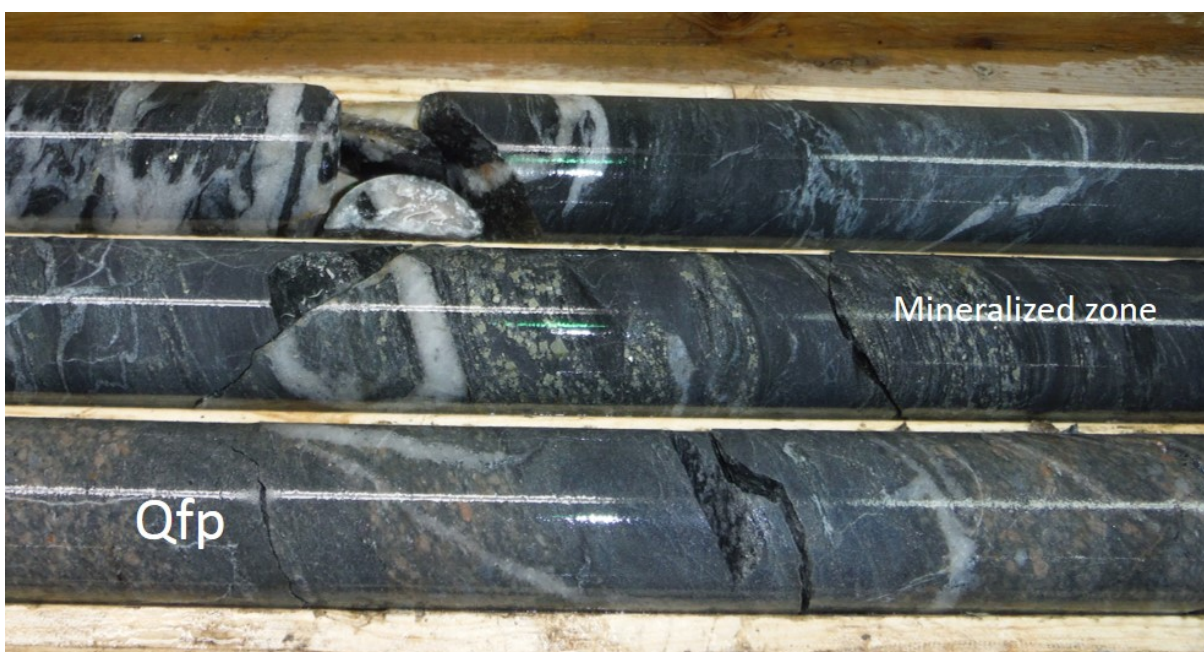
### - Timing of gold mineralization

The timing of gold mineralization at the Barry deposit was documented by Kitney (2009). The timing of gold mineralization at the Barry deposit is therefore well constrained by U-Pb zircon dating of pre-mineralization diorite and post-mineralization QFP dykes. Analyses of single zircon grains by thermal ionization mass spectrometry (TIMS) give concordant and overlapping data with indistinguishable ages, yielding an average age of  $2697 \pm 0.6$  Ma that is interpreted as the age of gold mineralization at



the Barry deposit (Kitney, 2009). This age shows that gold mineralization formed pre- to syn deformation (foliation and faulting), as well as coeval with arc-related, syn-collisional intermediate to felsic magmatism. The Barry gold mineralization is both spatially and temporally related to arc-type, intermediate to felsic intrusions and was probably at the same time as regional deformation and magmatism. The source of the mineralizing fluids can be deep-seated fluids transported along the regional and local shear zones/fractures, or hydrothermal magmatic fluids.

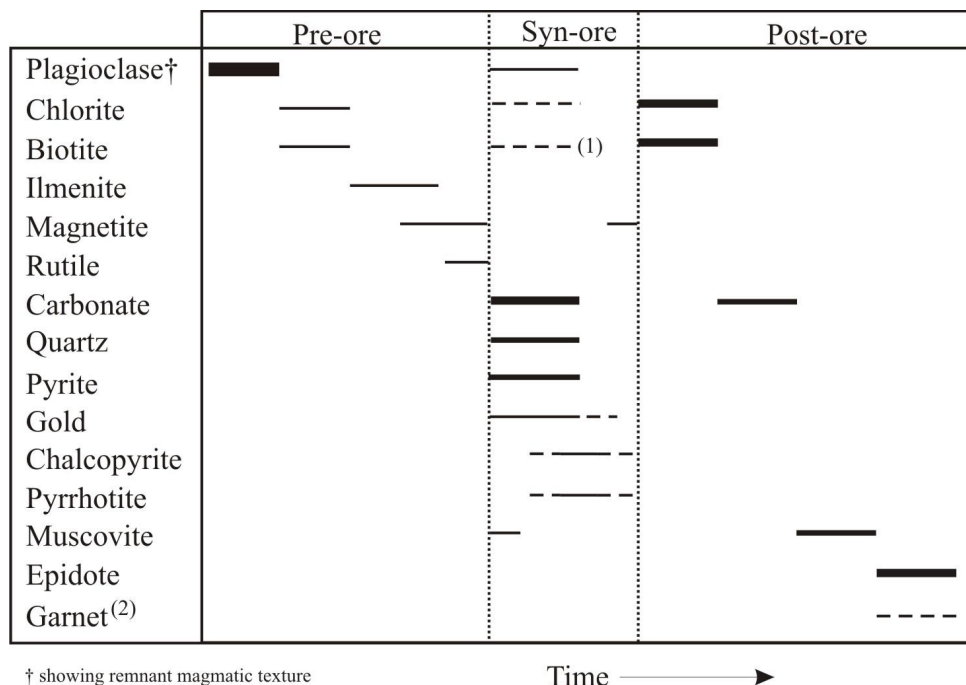
The majority of the mineralized zones are located within the silicified-carbonated basalts close to the contacts with the quartz-feldspar-porphyry (Figure 15). It is supposed that the emplacement of the quartz- feldspar-porphyry is significant in the ground preparation. The emplacement of the porphyry body is thought to have increased the fracture-induced permeability of the basalts and created the conducts necessary for gold bearing hydrothermal fluids to circulate (Lariviere, 1997).



**Figure 15: Core sample showing mineralized zone above the QFP unit.**

The interpreted paragenetic sequence was established to illustrate the timing of gold mineralization for the mafic volcanic rocks (Figure 16). The petrographic study and field observation indicates that gold mineralization is synchronous to pyrite and quartz precipitation.





**Figure 16: Paragenesis of the minerals that have undergone pre ore, syn-ore, and post-ore alteration at the Barry deposit. (1) abundant in zones of high strain, (2) at depth greater than 30m (Kitney, 2009).**

2016: The diorite controls the mineralization, it has been found and modelled that mineralization of higher grade is at the contact and near contact in the basalt/diorite interface (Figure 21). The intrusive Diorite and FP have played a major role in the 3D positioning of the mineralized zones. The validation drilling has confirmed GMG new model associated with Diorite where mineralisation is better developed near its contact and most of the diorite is dry in terms of economic gold grades.

In addition to the diorite intrusion into the basalts, a structural pattern of veining in corridor having up to 225m long en echelon exist and has been identified and confirmed by recent drilling as shown in next section. Hence the mineralization is earthier on top or bottom and/or aside of diorite and FP intrusions contact. The following figures present the diorite in green with mineralization around small sills and little to none in the massive intrusion. View is looking down South East.



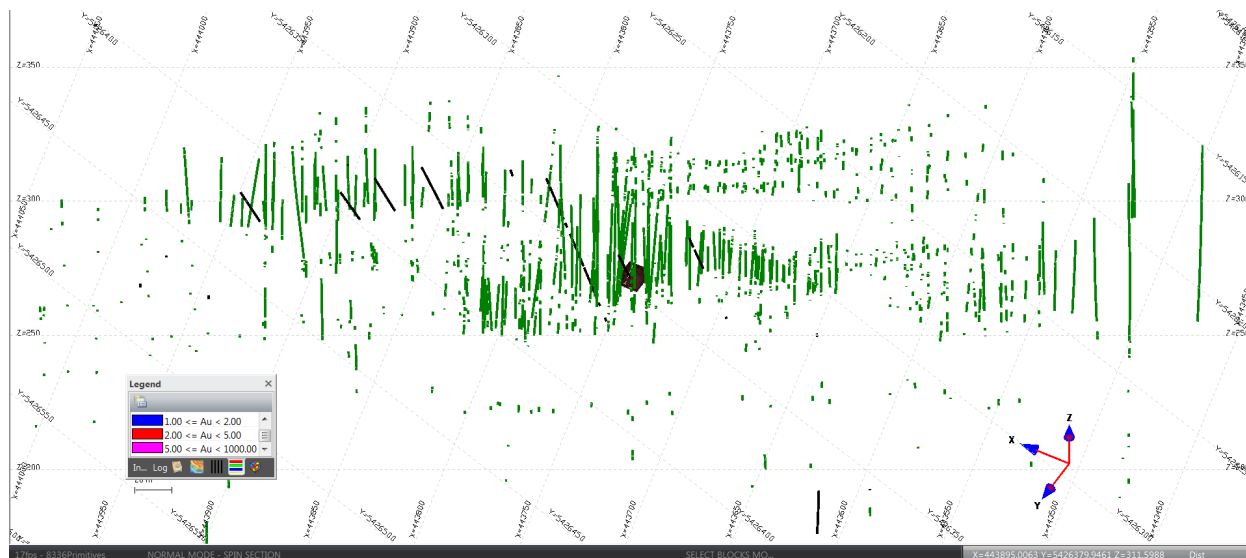


Figure 17: The distribution of the diorite (Green color) within the Barry property.

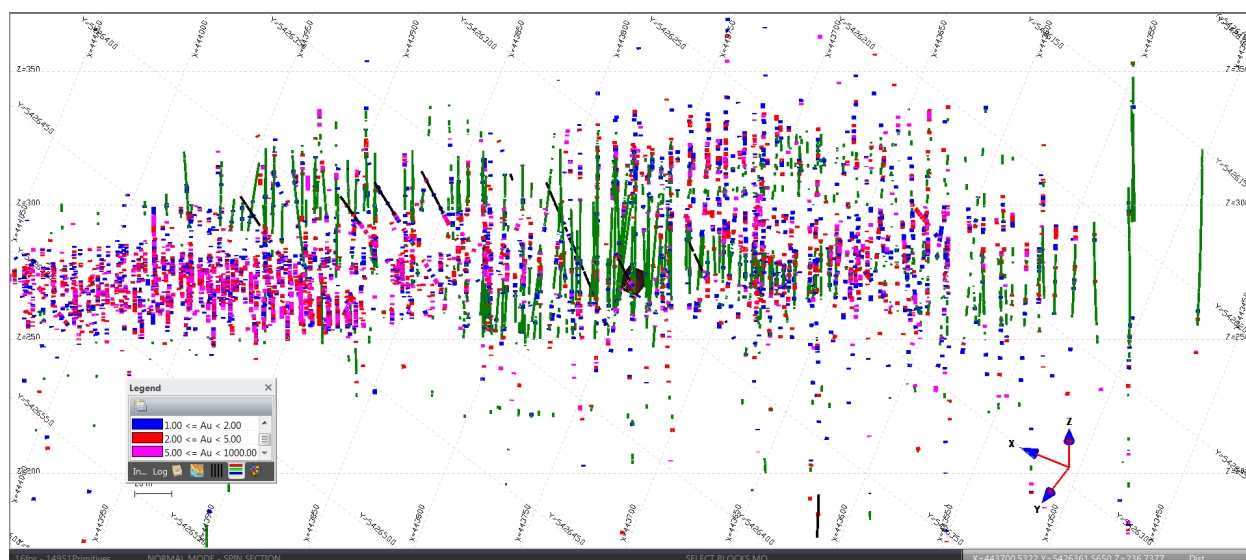


Figure 18: The distribution of the Diorite (Green color) and the Assays color coded by Au (g/t). The gold mineralization in between and upper the Diorite units.



## 10. Recent drilling works (2016)

Metanor retained GoldMinds Geoservices Inc. to provide a mineral resources update of Barry project. The mandate includes the identification of the drilling targets, the drilling supervision and the validation drilling of the high-grade zones with the study of the extensions of certain mineralized zones, for eventual open-pit mining.

The drilling campaign of 1,370 meters started on the 12<sup>th</sup> of April, 2016. The focus of this drilling program was to test the new mineralization model proposed by Claude Duplessis, Eng. GMG using GENESIS © software identify 3 stacked oreshoots plunging East at 19 degrees over 225 m strike length (open) inclined to the south at 49 degrees. These high grade zones are located in the south of the principal pit and also connect the center and south pits with the principal pit.

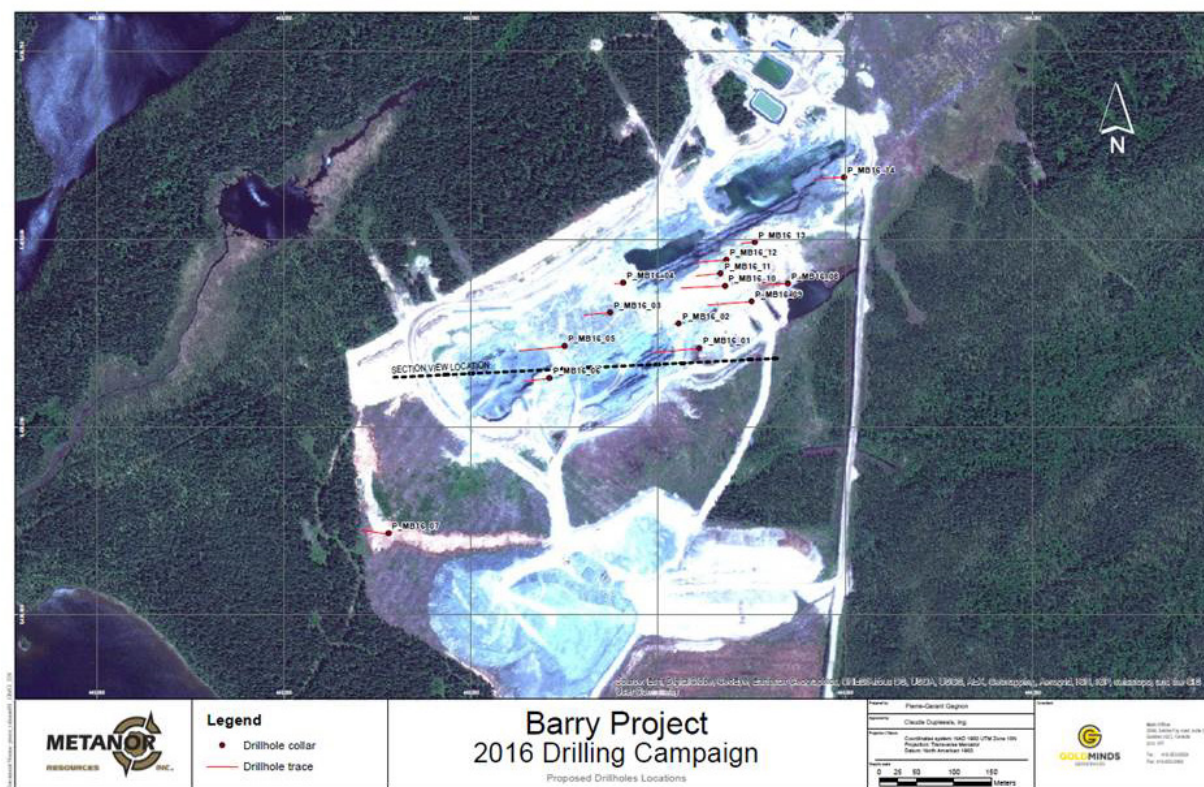
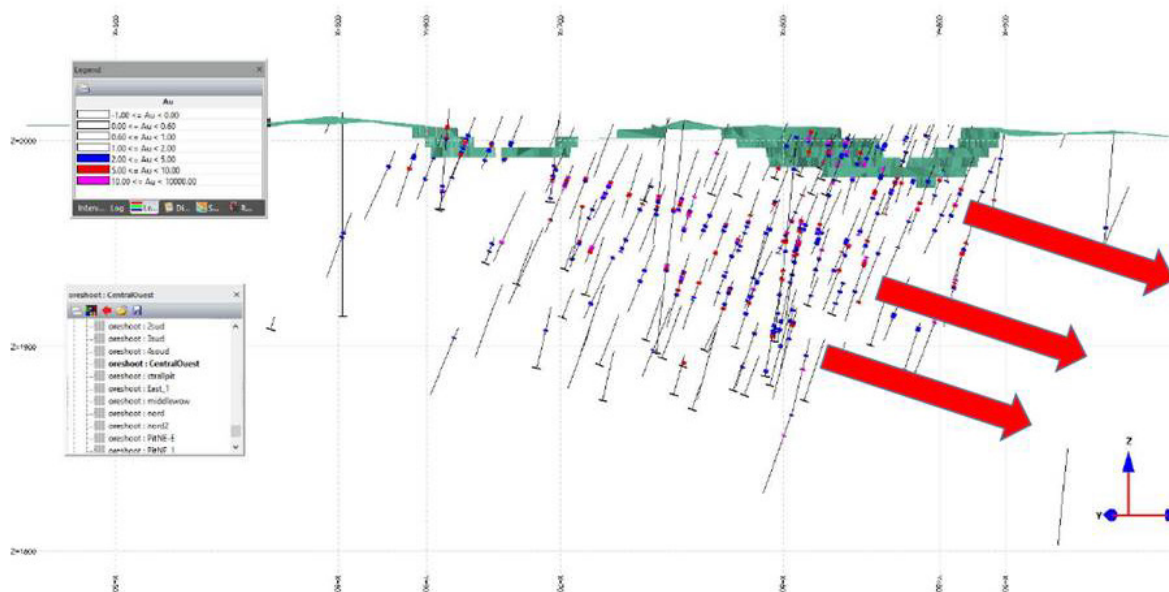


Figure 19: Localisation of the 2016 new drillholes, Barry property.



## Section view Looking north-west





cores (Figure 23, 24 and 25). Drillholes were stopped once the planned depth was reached. At the end of the drilling program, the exact position of the collar was resurveyed with DGPS.



**Table 6: Table 4: Locations and details of Diamond drillholes (2016 drilling campaign).**

Hole name	UTM - East	UTM - North	UTM - Elevation	Azimuth	Dip	Depth
MB16_01	443820.10	5426357.32	396.81	271	-68	186
MB16_02	443820.09	5426376.41	395.85	261	-76	51
MB16_03	443689.20	5426401.96	405.25	271	-66	87
MB16_04	443705.27	5426441.85	404.72	272	-63	27
MB16_05	443626.33	5426357.78	400.60	268	-50	99
MB16_06	443606.72	5426315.18	401.05	262	-55	60
MB16_07	443390.13	5426099.33	403.81	284	-59	78
MB16_08	443928.65	5426445.28	395.16	265	-70	102
MB16_09	443886.94	5426412.68	397.13	273	-70	171
MB16_10	443828.53	5426436.85	401.17	263	-65	95
MB16_11	443848.74	5426454.67	400.27	265	-60	90
MB16_12	443859.70	5426473.05	400.04	264	-56	75
MB16_13	443907.16	5426498.02	397.56	261	-60	54
MB16_14	444002.64	5426588.23	393.54	267	-53	63
MB16_15	443394.38	5426020.44	401.67	354	-50	132





Figure 21: Diamond drill set-up.



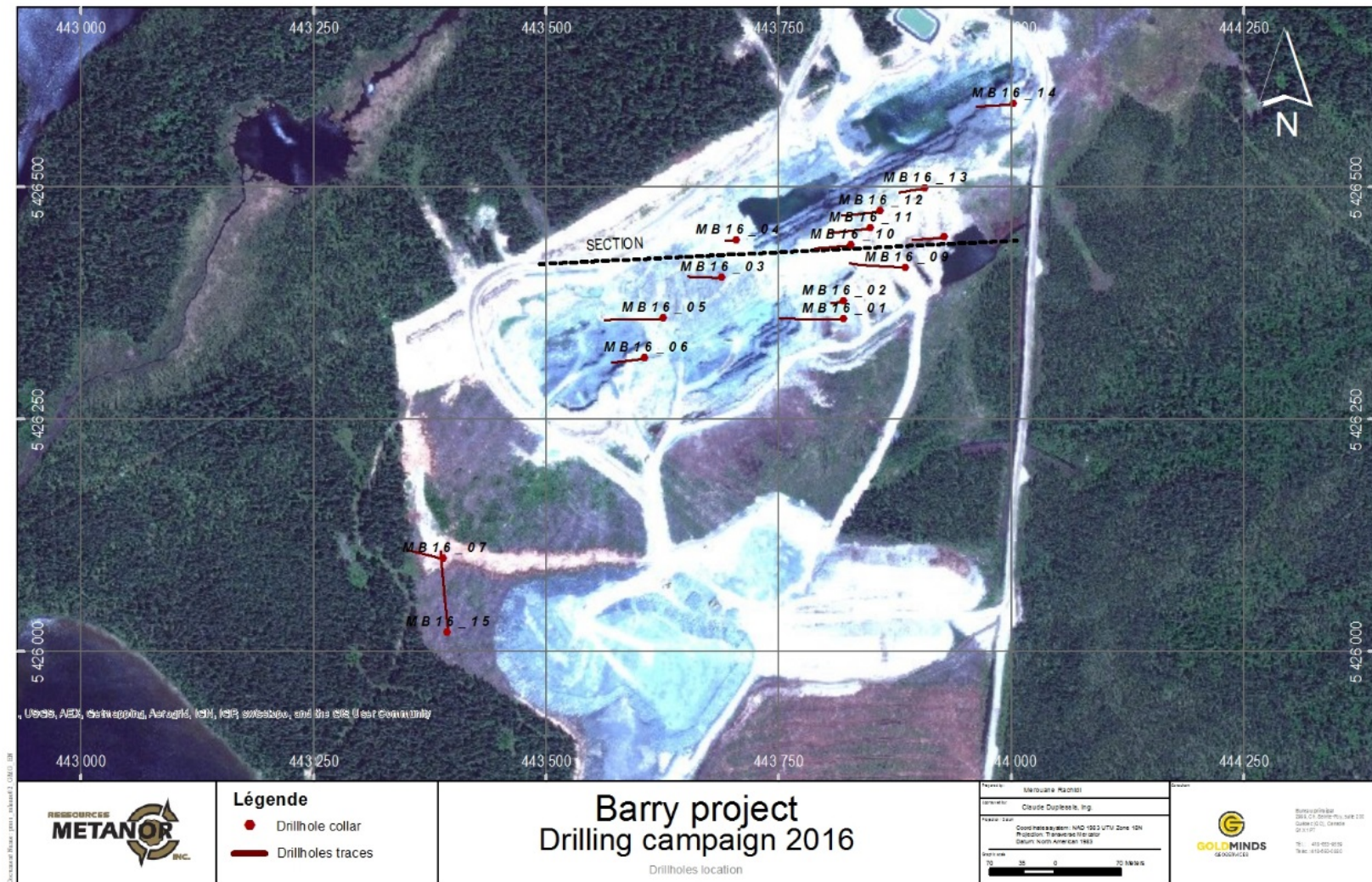


Figure 22: Drillholes locations at the Barry property.



Down hole dip and magnetic tests were taken using a Reflex multi-shot instrument (EZ-TRAC). The instrument was used and manipulated by the drillers. Reflex measurements were given at every end of the holes to the geologist using a program for automatic uploading of the data from the Reflex instrument to a computer. A magnetic deviation correction of  $-13^{\circ}$  was set on the Reflex measurements data.

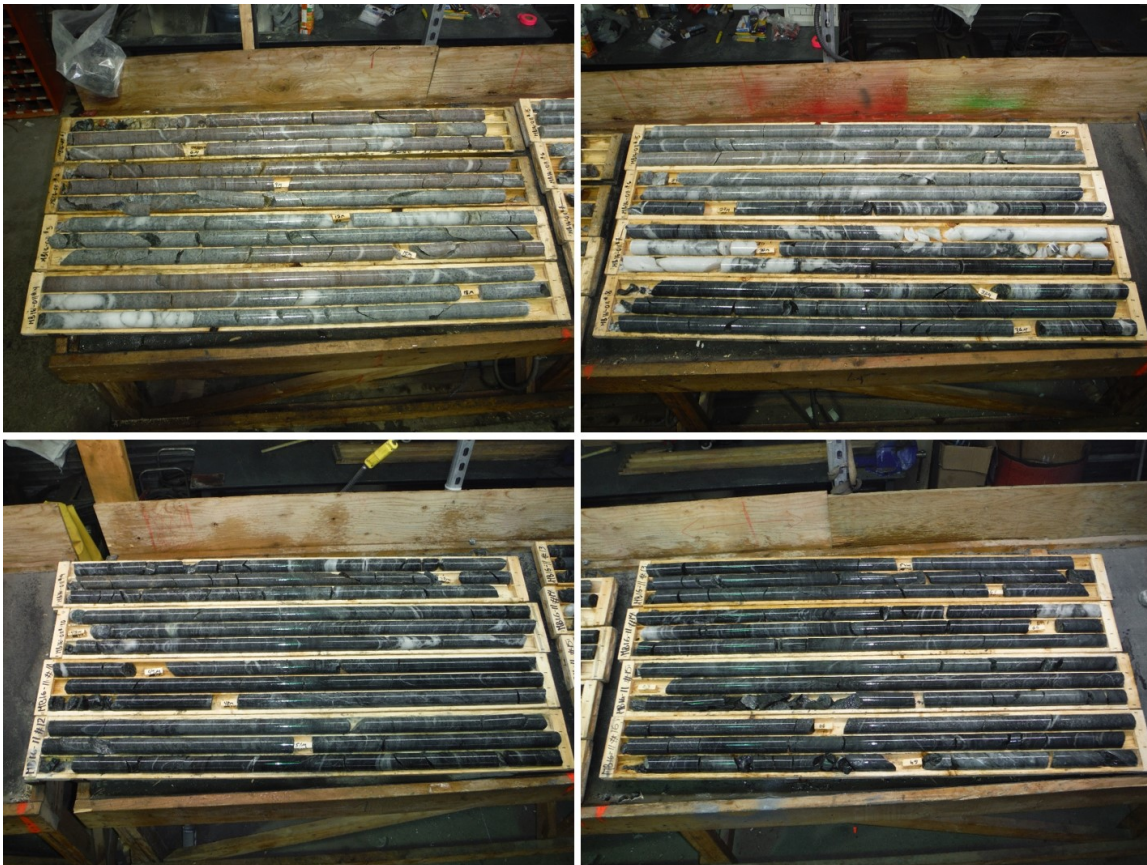


Figure 23: Photos of cores taken from hole MB-16-11.





Figure 24: Photos of cores taken from hole MB-16-14.

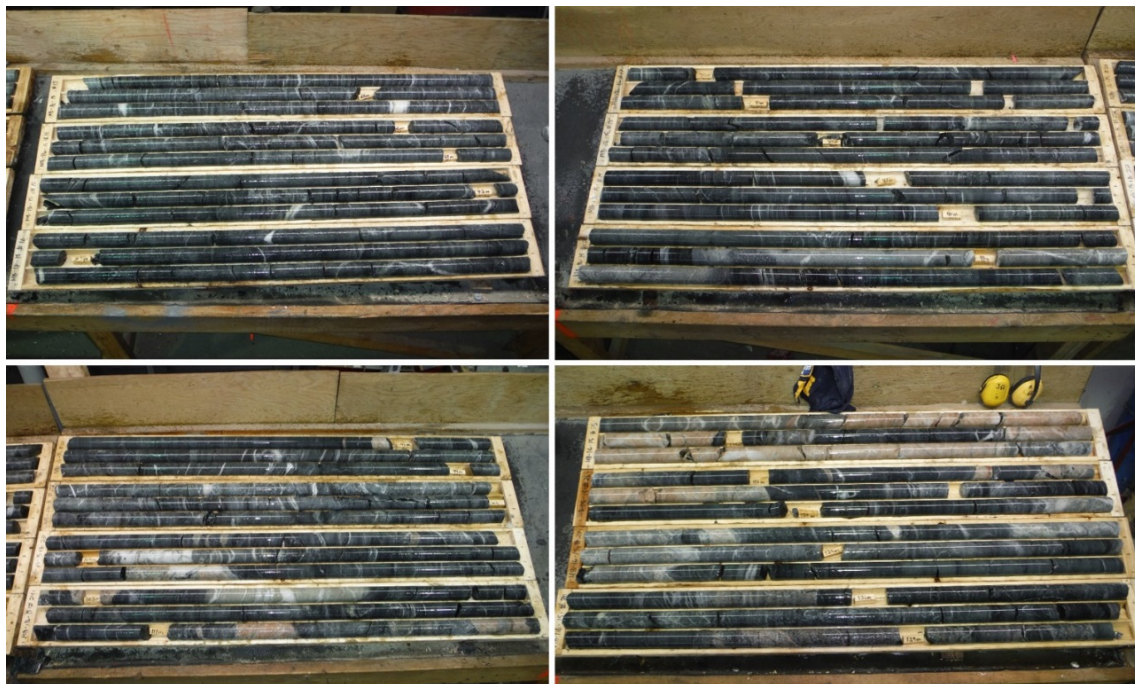


Figure 25: Photos of cores taken from hole MB-16-15.



## 11. Sample preparation, analyses and security

Several holes were diamond drilled on the Barry site and a rigorous QA/QC program was in place during the 2016 drilling campaign. This procedure includes the systematic addition of certified standards, blanks and duplicates. The sampling preparation described in the next section was done under the supervision of GMG (Figure 26 and 27). The independent quality control program of the assay results (QA/QC) adopted by GoldMinds consists of controlled core & assays (48 samples) being conducted by an independent ALS-certified assay laboratory in Val-d'Or, Québec.

### 11.1. Sampling approach and methodology

During the 2016 drilling campaign, a consistent methodology was used for the preparation of the samples. The core sampling protocol was established by GoldMinds Geoservices and is described below.

Once the drilling core was extracted, the sampling method was as follows:

- a) The geologist takes photos of dry and wet core boxes;
- b) If the core is oriented, the geologist matches the different pieces of the core to determine the direction of veins and faults;
- c) Once the geology is described, the geologist marks the beginning and the end of the sample directly onto the core with a yellow-colored wax crayon;
- d) The core is sampled over regular intervals of 1 m;
- e) A GoldMinds tag is placed at the beginning of each sample interval and the tag number is integrated within the database;
- f) Blanks and standards tags were inserted for each batch of 10 samples;
- g) Samples were cut or split into two parts at the Barry Mine site, one part of each sample was sent for analysis by fire-assay and the other part was stored on site for the archives.
- h) The half-core meter-long samples were placed in a plastic bags with there tag and closed (Figure 26). The remaining half of the cores were kept at the company's core-shack for future assay verification or any other further investigation;
- i) The plastic bags were placed into 25kg rice bags. Each rice bag was then sealed with a tie-wrap and identified prior to being transported to the laboratory (Figure 27);





Figure 26: Samples placed in plastic bags with tag.



Figure 27: Rice bags filled by samples ready to be shipped to the laboratory.



### **11.2. Sample preparation at Bachelor laboratory**

The procedure for samples processing at Bachelor laboratory to assay the gold content of each sample consists of:

- + Reception logging
- + Drying of samples
- + Crushing and grinding of the half core at 60% passing 8 mesh
- + Splitting
- + Pulverisation of 250 g to 400 g at 80% passing 200 mesh.
- + Split to take 30 grams for gold Fire Assay
- + Detection limit for the gold assay was established at 0.01ppm.

### **11.3. Quality assurance and Quality control**

A total of 63 blank samples were inserted for each batch of 10 samples and consist of coarse pure white quartz sand (Figure 28).



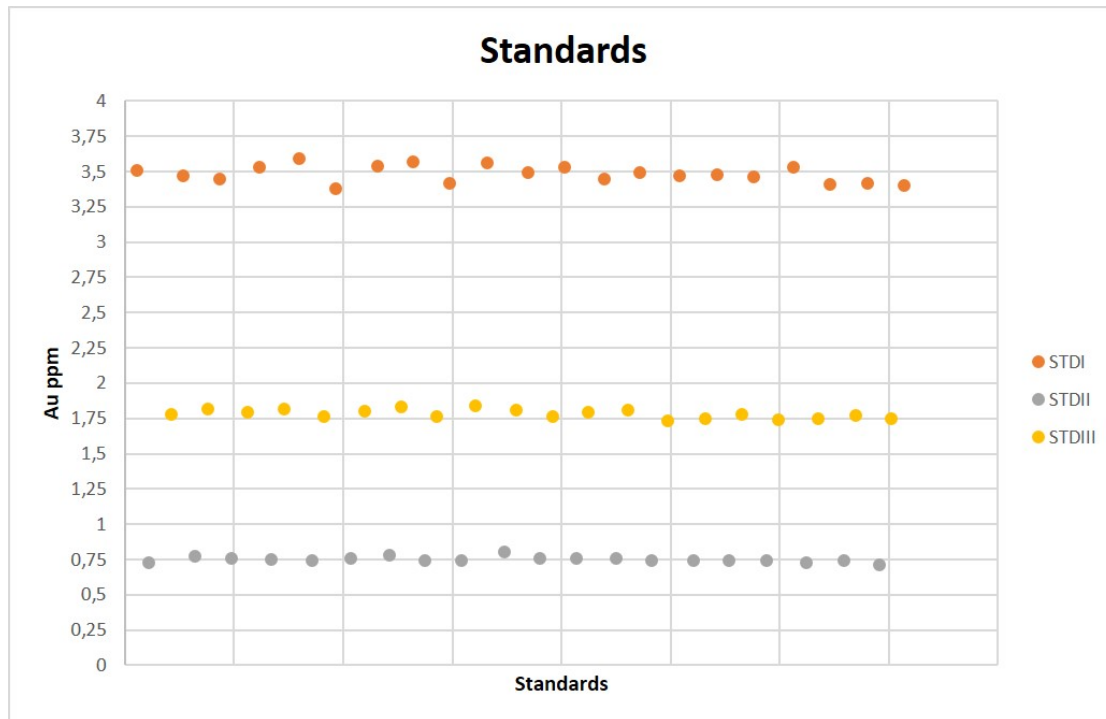


**Figure 28: Distribution of blank samples used for the 2016 drilling campaign (Au ppm).**

The results of assay blank samples showed that there are no anomalous values with values equal or less than 0.02 ppm (Figure 28).

Three types of standards were used (STDI, STDII and STDIII), (Figure 29). The author has sent a total of 61 standard samples to the Bachelor laboratory (Figure 29). STDI show a minimum value of 3.38 ppm and a maximum of 3.59 ppm Au with an average of 3.48 ppm. STDII show a minimum value of 0.71 ppm and a maximum of 0.80 ppm Au with an average of 0.75 ppm. STDIII show a minimum value of 1.73 ppm and a maximum of 1.84 ppm Au with an average of 1.78 ppm.

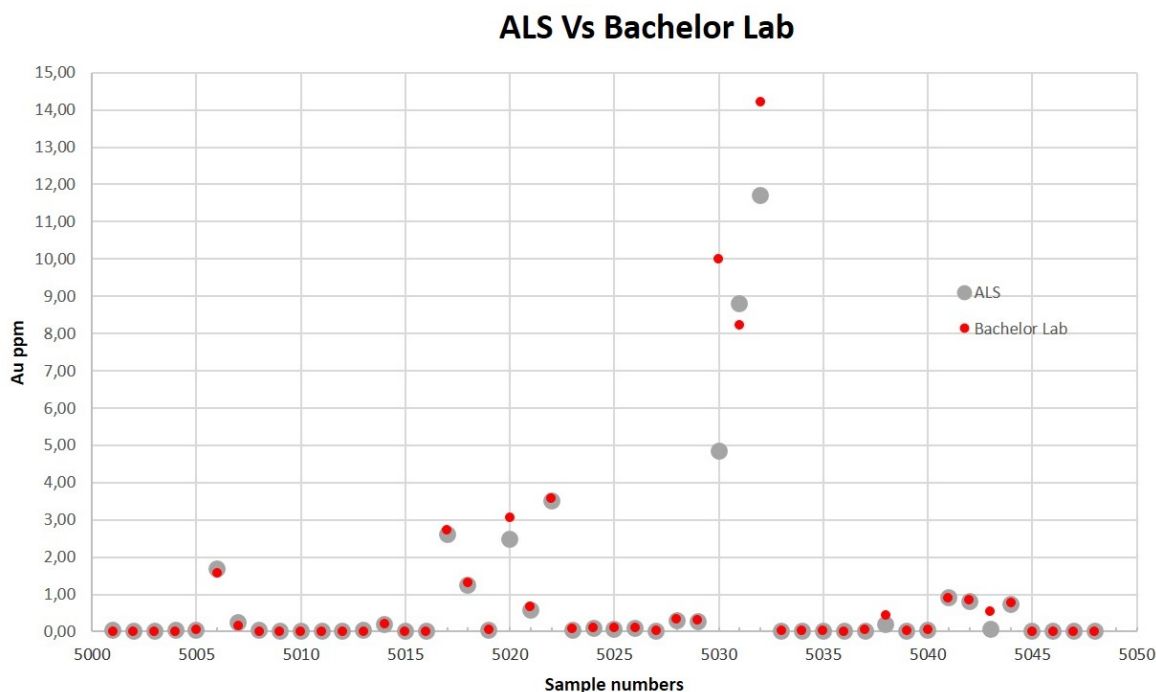




**Figure 29: Distribution of standards (Au ppm) used for the 2016 drilling campaign.**

In addition to blanks and standards, GMG has added an independent quality control program of the assay results (QA/QC) that consists of controlled core & assays (48 samples) carried out by an independent ALS-certified assay laboratory in Val-d'Or, Québec (Figure 29).





**Figure 30: Controlled assays in ALS laboratory versus Bachelor laboratory (Au ppm).**

Two samples (5030 ( $\Delta Au$  5.15) and 5032 ( $\Delta Au$  2.5)) show a significant difference between the assay results obtained from ALS and Bachelor laboratory (Table 7). GMG requested bachelor's laboratory team to reanalyze these two samples. The table below shows the results of this analysis. The reanalysis of the two samples (5030 and 5032) shows that there is a difference of 1.9 g/t for sample 5030 and 0.8 g/t for sample 5032.

**Table 7: Assay results (Au g/t) ALS versus Bachelor laboratory.**

		ALS	Bachelor Lab			
Hole name	Sample N	ALS_Au (g/t)	Dup1	Dup2	Dup3	Average
MB16_14	5030	4.85	8.05	6.07	6.31	6.81
MB16_14	5032	11.70	12.5	12.4	11.8	12.23

Sixty samples were also reanalyzed at SGS Lakefield laboratory to compare with the Bachelor and ALS laboratory. The results are shown in the table below (Table 8). Figure 30 show the comparison between SGS Lakefield and Bachelor laboratory. Three samples have shown a difference of more than 1 g/t (samples 5030, 5031 and 6054).



**Table 8: Comparative table of the assay results (Au g/t) SGS (Lakefield laboratory), Bachelor laboratory (MTO) and ALS laboratory (ALS).**

Sample ID	MR_ID	SGS	MTO	ALS	Sample ID	MR_ID	SGS	MTO
5016	1	0,00	0,00	0,01	6035	28	0,56	0,37
5017	2	2,85	2,73	2,62	6036	29	0,11	0,15
5018	3	1,03	1,30	1,25	6037	30	3,26	2,43
5019	4	0,06	0,04	0,05	6038	31	0,54	0,51
5020	5	2,75	3,05	2,47	6039	32	0,34	0,21
5021	6	0,48	0,66	0,57	6040	33	0,16	0,13
5023	7	0,06	0,08	0,05	6042	34	0,84	0,39
5024	8	0,07	0,09	0,09	6043	35	0,08	0,07
5025	9	0,10	0,10	0,07	6044	36	0,38	0,25
5026	10	0,07	0,09	0,08	6045	37	0,61	0,74
5027	11	0,02	0,03	0,02	6046	38	0,08	0,08
5028	12	0,35	0,33	0,29	6047	39	0,38	0,16
5029	13	0,26	0,31	0,27	6048	40	1,04	0,43
5030	14	6,16	10,00	4,85	6049	41	1,07	0,42
5031	15	9,51	8,21	8,79	6050	42	0,35	0,22
5032	16	14,60	14,20	11,70	6051	43	1,54	1,70
5034	17	0,00	0,03	0,02	6053	44	4,77	5,60
5035	18	0,00	0,02	0,01	6054	45	11,30	8,25
5036	19	0,00	0,01	0,01	6055	46	7,56	6,89
5037	20	0,02	0,04	0,01	6056	47	1,31	0,82
5038	21	0,17	0,44	0,18	6057	48	0,30	0,27
5039	22	0,00	0,03	0,01	6058	49	8,74	8,68
5040	23	0,00	0,04	0,04	6059	50	2,63	2,71
5041	24	0,84	0,90	0,92	6060	51	0,02	0,04
5042	25	0,89	0,84	0,80	6061	52	0,16	0,13
5043	26	0,06	0,53	0,07	6062	53	0,04	0,08
5045	27	0,00	0,01	0,01	6064	54	0,03	0,04
					6065	55	0,00	0,02
					6066	56	3,38	3,16
					6067	57	2,62	2,29
					6068	58	6,11	6,02
					6069	59	8,76	7,92
					6070	60	0,73	0,87



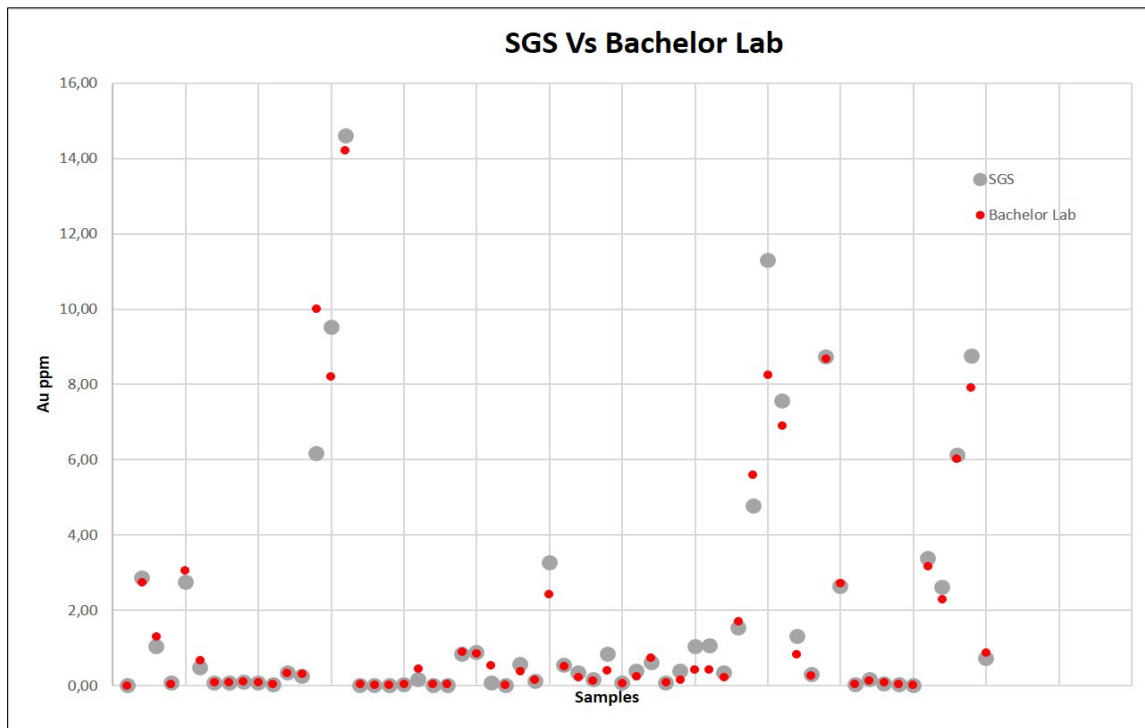


Figure 31: Controlled assays SGS Lakefield laboratory versus Bachelor laboratory (Au ppm).

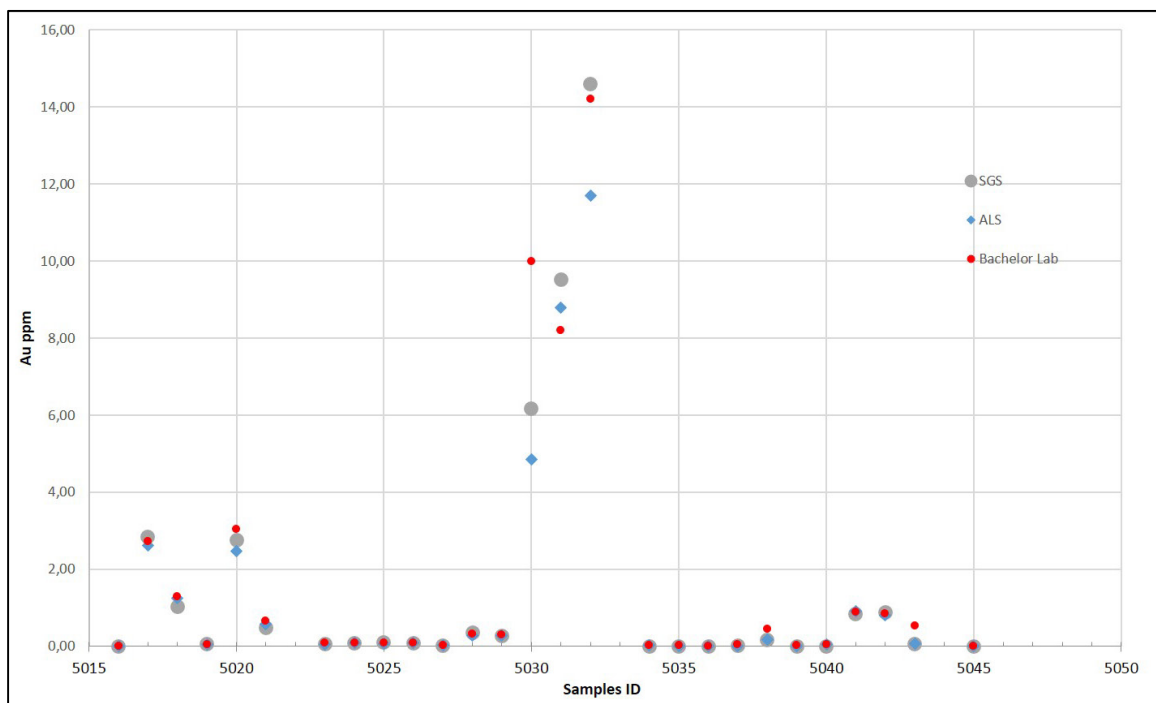


Figure 32: Controlled assays SGS Lakefield laboratory, Bachelor laboratory and ALS laboratory (Au ppm).



Figure 32, compares 27 samples analyzed within the three laboratories (SGS, Bachelor and ALS). This figure shows that samples with a gold content of more than 4 g/t displays more difference of the assay results (sample number 5030, 5031 and 6054). These assay differences from the same pulp can be related to the presence of coarse gold. For this reason, 39 samples were analyzed for metallic screen assay at SGS Lakefield laboratory.

A total of 39 samples from 4 drillholes (MB16\_14, MB16\_07, MB16\_05 and MB16\_12) were the subject of screen metallic (or pulp metallic) on 1 kg from each individual sample at SGS Lakefield laboratory. The table below shows the results.

**Table 9: Screen metallic results, SGS laboratory.**

Hole name	From	To	Sample	Bachelor Lab	Au met (g/t)	Au -150 Av. (g/t)	Au +150 Av. (g/t)	total wt (g)	wt +150 Av. (g)
MB16_14	52	53	5051	4.71	3.38	3.32	8.28	1938	24.8
MB16_14	53	54	5052	33.40	40.5	39.8	357	1849.7	4.26
MB16_14	54	55	5053	0.71	0.48	0.48	0.96	2143.7	22.87
MB16_14	55	56	5054	1.05	0.76	0.75	2.18	2171.5	19.46
MB16_14	56	57	5056	0.87	0.96	0.94	2.84	2065	20.14
MB16_14	57	58	5057	0.06	0.08	0.08	0.04	2078.2	18.7
MB16_14	58	59	5058	3.99	3.18	3.06	15.4	2078.2	18.75
MB16_14	59	60	5059	2.28	2.53	2.52	3.49	2025.4	29.76
MB16_14	60	61	5060	1.77	2.59	2.52	12.2	2013.8	13.77
MB16_14	61	62	5061	0.03	0.01	0.02	0.01	1941	29.3
MB16_07	58	59	5120	1.51	2.46	2.13	85.3	1690.7	6.6
MB16_07	59	60	5121	0.02	0	0.02	0	2358	19.28
MB16_07	60	61	5122	0.06	0.06	0.06	0.04	2236	29.88
MB16_07	61	62	5123	0.01	0	0	0	2128.7	10.32
MB16_07	62	63	5124	0.76	0.54	0.54	0.25	1973.8	1.0117
MB16_07	63	64	5125	2.25	2.18	2.18	1.53	2216.8	25.4
MB16_07	64	65	5126	0.06	0.04	0.04	0.02	2273.5	28.34
MB16_07	65	66	5127	0.08	0.06	0.06	0.02	2128.2	11.3
MB16_07	66	67	5129	0.02	0	0	0.01	2279.9	15.72
MB16_07	67	68	5130	0.68	0.8	0.79	1.36	2048.3	24.14
MB16_07	68	69	5131	0.40	0.39	0.39	0.62	2139.5	25.52
MB16_07	69	70	5132	1.29	1.25	1.24	3.26	2055.6	3.44
MB16_07	70	71	5133	1.05	1.02	1.01	1.46	2115.3	29.07



MB16_05	63	64	5271	1.76	1.69	1.65	4.42	1842.3	29.24
MB16_05	64	65	5272	0.03	0	0.02	0.01	1974	13.62
MB16_05	65	66	5273	0.97	0.84	0.83	1.44	2060.5	28.32
MB16_05	66	67	5274	0.01	0	0.01	0	2076.8	9.04
MB16_05	67	68	5275	0.02	0	0	0.02	2450.2	12.54
MB16_05	68	69	5276	0.01	0	0.01	0.02	1957.8	6.58
MB16_05	69	70	5277	0.40	0.53	0.51	3.32	2283.3	15.18
MB16_05	70	71	5278	10.50	12.6	12.26	529	2004.3	1.2935
MB16_12	22	23	6051	1.70	2.06	2.03	4.7	1842.7	21.96
MB16_12	23	24	6053	5.60	4.41	4.04	267	2210.2	3.18
MB16_12	24	25	6054	8.25	11.2	11	26.4	1607	21.82
MB16_12	25	26	6055	6.89	7.89	7.7	21	1969.9	27.82
MB16_12	26	27	6056	0.82	0.79	0.74	3.93	1676.6	25.51
MB16_12	27	28	6057	0.27	0.37	0.37	0.68	2160.6	26.07
MB16_12	28	29	6058	8.68	9.51	8.55	279	1772.2	6.26
MB16_12	29	30	6059	2.71	1.98	1.98	1.91	2215	9.84

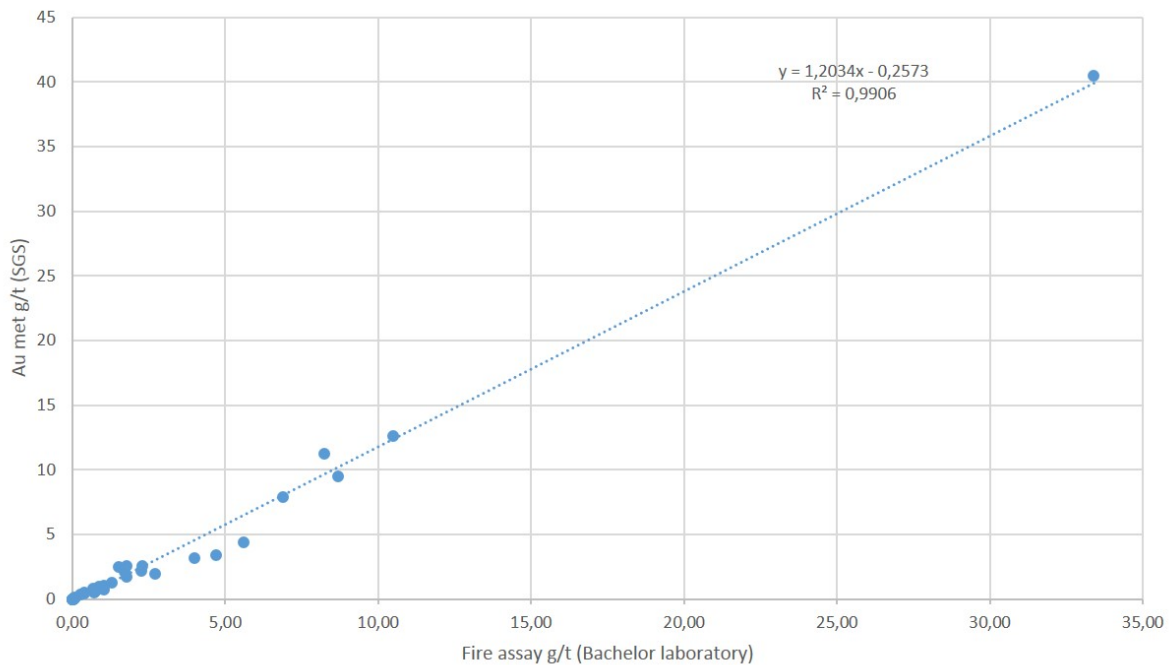


Figure 33: Correlation between Au met (SGS) versus Fire assay (Bachelor laboratory).



The correlation between Screen Metallic (Au met) and fire assay results has also been done. The slope of the regression lines is around 10% (Figure 33).

The table below shows the average of fire assay results and the metallic gold results (Au met) for each analyzed interval. The results from the metallic gold (Au met) are higher than the fire assay results with a minimum of 7.45% for MB16\_07 and a maximum of 14.31% for hole MB16\_05.

**Table 10: Average of fire assay results and Screen Metallic for the analyzed intervals.**

Hole name	Average Fire assay g/t	Average Au met g/t	Difference in %
MB16_14	4,887	5,45	11,46
MB16_07	0,63	0,68	7,45
MB16_05	1,7125	1,96	14,31
MB16_12	4,365	4,78	9,42

Based on these comparisons, it appears that the current Barry gold grade is underestimated and it could be 10% higher. GMG requires additional investigations for a better understanding of the mineral treatment of the Barry deposit.

In addition to the independent quality control program a duplicates analysis was added to the QA/QC program. A total of 28 duplicates were used for the QA/QC program during the 2016 drilling campaign (Figure 34). The slope of the regression lines and the correlation coefficient is very close to unity, indicating a good reproducibility of the results (Figure 35).



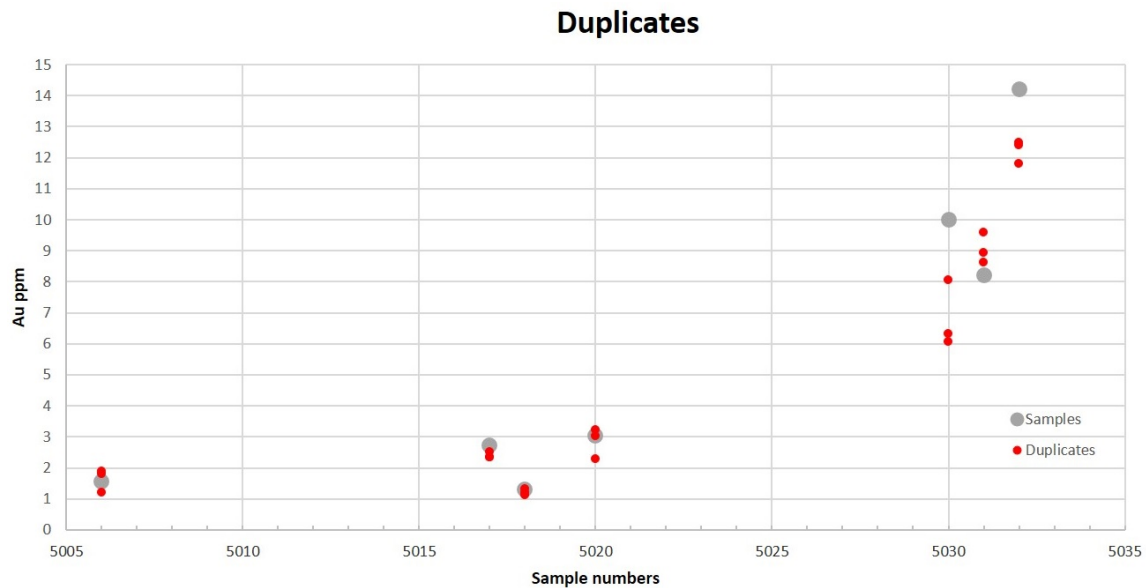


Figure 34: Distribution of duplicates (Au ppm) used for the 2016 drilling campaign (ALS laboratory).

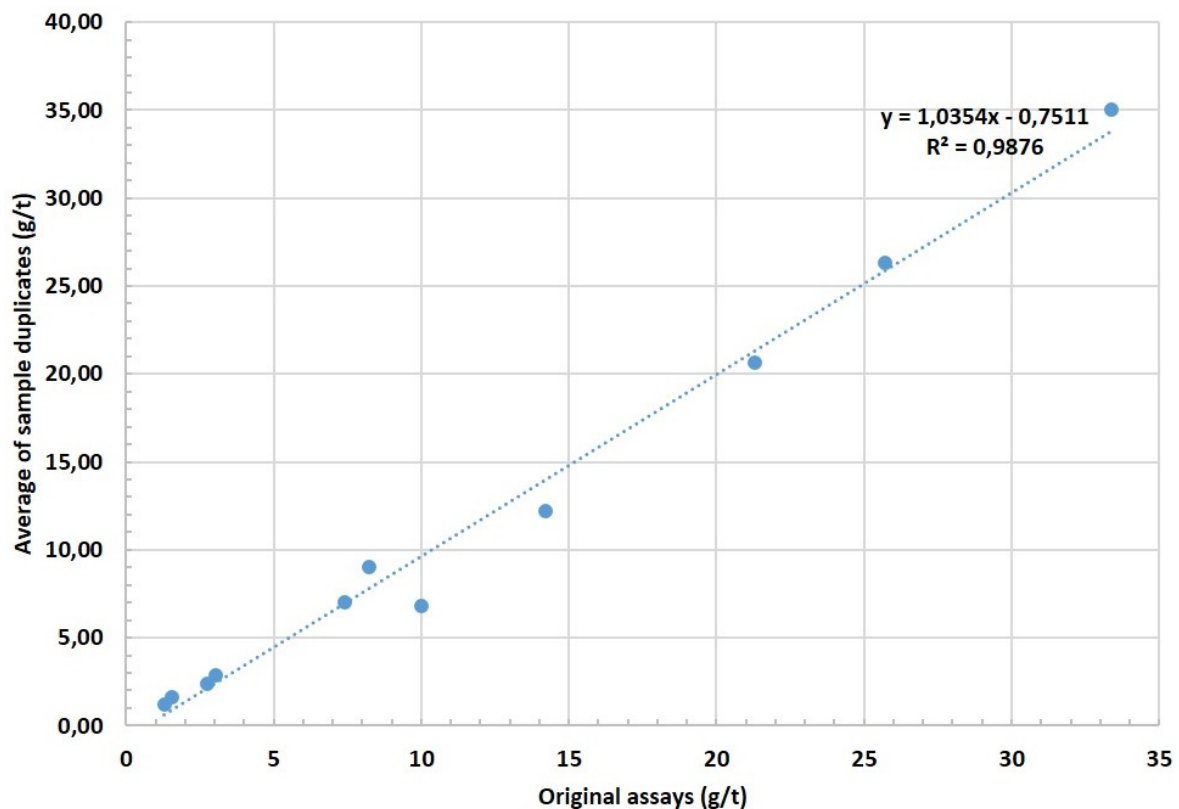


Figure 35: Average of sample duplicates versus original assays (Au ppm).



## **11.4. Security**

The integration of blank and standard samples by GMG allowed the verification of these fire assay analyses and no problems are reported for this component. The author has visited the Bachelor laboratory but did not visit the ALS laboratory in Val d'Or or SGS Lakefield laboratory. These laboratories have a good reputation and the work has been done in a professional way. The compilation of the blanks, standards, field duplicates and ALS QA/QC samples shows that Metanor Resources can rely on the provided results.

The GMG Geologist has taken all possible actions to ensure the integrity and security of the samples from the drill sites to the Bachelor laboratory. The samples and methods used by GMG's technical team, the laboratory analytical procedures and the management of the data are adequate and reliable.

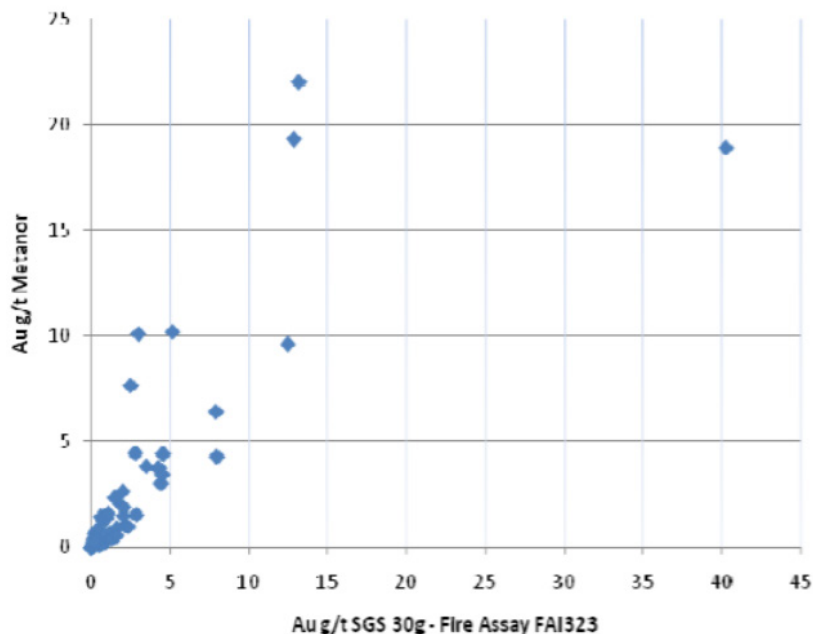
GMG is satisfied with the drilling operations and no incidents or errors related to his responsibilities have been identified.

## **12. Data verification**

### **12.1. Previous data verification (2009-2010)**

In 2009, SGS conducted an independent sampling program from 5 drillholes. A total of 59 control samples were assayed for the Barry I project. Mineralized intervals have been chosen by SGS and the sampling has been prepared by Metanor. These samples were sent to SGS Minerals services in Toronto, assayed with ICP-AES finish of 30 g (SGS code FAI323), (Figure 36).



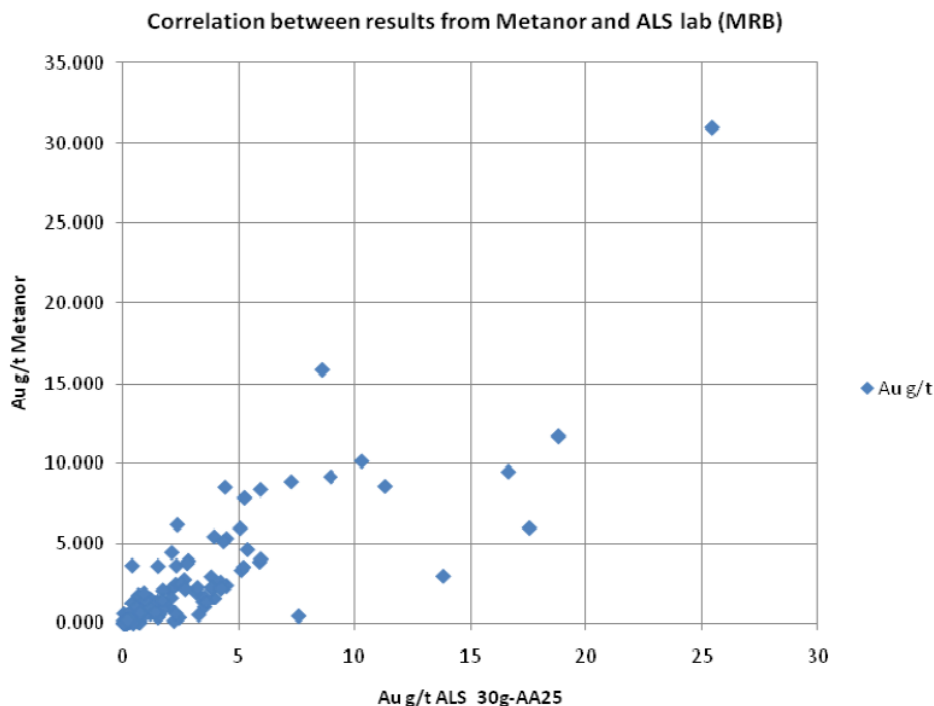


**Figure 36: Correlation of the gold values between Metanor and SGS laboratories.**

The correlation between the results from the Metanor and the SGS laboratories is 0.635 (Figure 37). In September 2010, MRB and Associates Geological Consultants (Martin Bourgoin, B.Sc., P.Geo) has been mandated by Metanor to carry out a resource estimation of the Barry 1 deposit. The study was not completed by MRB but the results of their data verification are discussed here.

The mineralized intervals have been chosen by Martin Bourgoin, B.Sc., P.Geo and Alex Horvat, P.Geo. and the sampling has been prepared by MRB. The 148 samples from twelve drillholes of 2008 and 2009 were sent to ALS Minerals in Val d'Or, Qc, to be analysed by fire assay.





**Figure 37: Correlation of the gold values between Metanor and MRB (ALS laboratory).**

The correlation between the results from the Metanor and the ALS laboratories (sampled by MRB) is 0.704 (Figure 37).

On these 148 samples analyses by fire assay with atomic absorption finish (AA) of 30 g (ALS code AA25), 30 samples have been also analysed by fire assay with a gravimetric finish for 30g (ALS code GRAV21) and 6 samples analysed by a 1000 g screen fire assay of 100  $\mu$ m and fire assay with atomic absorption finish (AA) of 30 g (ALS codes SCR21 and AA25). The results are presented in the next tables (Table 11 and 12). The Sign Test for the 30 analyses between the fire assays and the gravimetric finish concludes that the gravimetric finish gives bigger gold assays. The Test is:  $n+ 8$ ,  $n-22$ ,  $p \leq 0.0161$ .

The sign test for the 6 analyses between the fire assays and the screen metallics is not conclusive but very close to be. We cannot prove that screen metallics fire assay gives bigger gold values from this test. Nevertheless, since the test is close to being conclusive and with such a limited number of pairs, we believe that more pairs would have shown that screen metallics fire assay gives bigger gold values than straight fire assays. The test is:  $n+ 1$ ,  $n- 5$ ,  $p \leq 0.219$ .



Table 11: Assay results of core sampling From Metanor and MRB for data verification (part1).

Hole Name	From	To	Length	Metanor		ALS			
				Sample No	Au g/t	Sample No	Au g/t AA25	Au g/t GRA21	Au g/t SCR21
MB-08-265	37.5	39	1.5	243374	0.06	H678851	0.005		
MB-08-265	39	40.5	1.5	243376	1.37	H678852	1.4		
MB-08-265	40.5	42	1.5	243377	1.13	H678853	1.64		
MB-08-265	42	43.5	1.5	243378	8.93	H678854	9.18	8.61	
MB-08-265	43.5	45	1.5	243379	13.8	H678855	3.01		3.09
MB-08-265	45	46.5	1.5	243380	2.26	H678856	2.5		
MB-08-265	46.5	48	1.5	243381	0.35	H678857	0.44		
MB-08-265	48	49.5	1.5	243382	0.96	H678858	0.96		
MB-08-265	49.5	50.7	1.2	243383	3.15	H678859	1.98	2.59	
MB-08-265	50.7	51.5	0.8	243384	0.72	H678860	0.06		
MB-08-265	51.5	52.8	1.25	243386	17.5	H678861	6.01		8.6
MB-08-265	52.8	54	1.25	243387	2.63	H678862	2.78		
MB-08-265	54	55.5	1.5	243388	0.04	H678863	0.02		
MB-09-385	98	99.5	1.5	896004	0.06	H678864	0.06		
MB-09-385	99.5	101	1.5	896006	1.01	H678865	1.03		
MB-09-385	101	103	1.5	896007	1.48	H678866	1.46		
MB-09-385	103	104	1.5	896008	18.8	H678867	11.7		17.2
MB-09-385	104	106	1.5	896009	25.4	H678868	31		
MB-09-385	106	107	1.5	896010	4.44	H678869	2.41	3.4	
MB-09-385	107	108	0.9	896011	0.64	H678870	0.14		
MB-09-385	108	109	0.85	896012	0.29	H678871	0.64		
MB-09-385	109	110	1.4	896013	4.19	H678872	2.63	3.26	
MB-09-385	110	112	1.35	896014	0.03	H678873	0.03		
MB-08-261	39	40.5	1.5	242759	0.03	H678874	0.02		
MB-08-261	40.5	42	1.5	242761	0.14	H678875	0.01		
MB-08-261	42	43.5	1.5	242762	5.08	H678876	3.37	3.79	
MB-08-261	43.5	45	1.5	242763	2.04	H678877	2.17		
MB-08-261	45	46.5	1.5	242764	4.44	H678878	5.36	5.68	
MB-08-261	46.5	48	1.5	242766	1.19	H678879	1.58		
MB-08-261	48	49.5	1.5	242767	1.23	H678880	1.52		
MB-08-261	49.5	51	1.5	242768	0.41	H678881	0.19		
MB-08-261	51	52.5	1.5	242769	0.26	H678882	0.1		
MB-08-261	52.5	54	1.5	242770	0.07	H678883	0.005		
MB-09-368	33.5	35	1.5	7227	0.36	H678884	0.41		
MB-09-368	35	36.5	1.5	7228	5.34	H678885	4.66	5.78	
MB-09-368	36.5	38	1.5	7229	1.99	H678886	1.03		
MB-09-368	38	39.3	1.25	7230	3.79	H678887	2.97	3.82	

Hole Name	From	To	Length	Metanor		ALS			
				Sample No	Au g/t	Sample No	Au g/t AA25	Au g/t GRA21	Au g/t SCR21
MB-09-368	39.3	40.3	1	7231	5.17	H678888	3.58	3.37	
MB-09-368	40.3	41.5	1.2	7232	0.31	H678889	0.11		
MB-09-368	41.5	42.5	1.05	7233	0.02	H678890	0.16		
MB-09-368	42.5	43.9	1.4	7234	0.12	H678891	0.18		
MB-09-368	43.9	45	1.1	7236	2.07	H678892	1.68		
MB-09-368	45	45.8	0.83	7237	10.3	H678893	10.15		9.5
MB-09-368	45.8	47.3	1.5	7238	2.8	H678894	3.97		
MB-09-368	47.3	48.5	1.16	7239	1.76	H678895	1.33		
MB-09-368	48.5	50	1.51	7240	0.05	H678896	0.03		
MB-09-372	31	32	1	8817	0.35	H678897	0.28		
MB-09-372	32	32.9	0.9	8818	1.48	H678898	1.35		
MB-09-372	32.9	33.8	0.88	8819	0.27	H678899	0.38		
MB-09-372	33.8	35	1.22	8820	0.45	H678900	0.85		
MB-09-372	35	36.5	1.5	8821	7.22	H678901	8.87	6.92	
MB-09-372	36.5	38	1.5	8822	2.09	H678902	4.48		
MB-09-372	38	39.1	1.06	8823	3.92	H678903	1.64	2.52	
MB-09-372	39.1	39.9	0.85	8824	0.17	H678904	0.01		
MB-09-372	39.9	41	1.05	8826	5.03	H678905	5.99	6.45	
MB-09-372	41	42	1.04	8827	0.13	H678906	0.06		
MB-09-372	42	43	1	8828	0.67	H678907	0.08		
MB-09-372	43	44.5	1.5	8829	0.29	H678908	0.27		
MB-08-297	5	6.5	1.5	753303	0.44	H678909	0.005		
MB-08-297	6.5	7.5	1	753304	0.61	H678910	0.56		
MB-08-297	7.5	9	1.5	753306	3.84	H678911	2.27	2.99	
MB-08-297	9	10.5	1.5	753307	3.43	H678912	1.44	1.5	
MB-08-297	10.5	12	1.5	753308	3.19	H678913	2.29	2.55	
MB-08-297	12	13.5	1.5	753309	0.94	H678914	1.06		
MB-08-297	13.5	15.1	1.55	753310	0.16	H678915	0.51		
MB-08-297	15.1	16.5	1.45	753311	2.5	H678916	2.53		
MB-08-297	16.5	18	1.5	753312	0.04	H678917	0.04		
MB-08-301	28.5	30	1.5	241236	0.03	H678918	0.61		
MB-08-301	30	31.5	1.5	241237	7.54	H678919	0.46	0.47	
MB-08-301	31.5	33	1.5	241238	1.5	H678920	3.63		
MB-08-301	33	34.5	1.5	241239	0.39	H678921	3.67		
MB-08-301	34.5	36	1.5	241241	0.48	H678922	1.39		
MB-08-301	36	37.5	1.5	241242	3.91	H678923	5.47	6.03	
MB-08-301	37.5	39	1.5	241243	0.03	H678924	0.02		



Table 12: Assay results of core sampling From Metanor and MRB for data verification (part 2).

Hole Name	From	To	Length	Metanor		ALS			
				Sample No	Au g/t	Sample No	AA25	GRA21	SCR21
MB-09-355	45	46.5	1.5	896228	0.27	H678925	0.45		
MB-09-355	46.5	47.4	0.85	896229	1.17	H678926	0.59		
MB-09-355	47.4	48.2	0.8	896230	0.65	H678927	1.83		
MB-09-355	48.2	49.5	1.35	896231	0.37	H678928	0.16		
MB-09-355	49.5	51	1.5	896232	2.33	H678929	6.21		
MB-09-355	51	52.5	1.5	896233	0.11	H678930	0.04		
MB-09-355	52.5	54	1.5	896234	8.55	H678931	15.9	14.45	
MB-09-355	54	55.5	1.5	896236	0.19	H678932	0.3		
MB-09-355	55.5	57	1.5	896237	1.5	H678933	0.38		
MB-09-355	57	58.5	1.5	896238	0.09	H678934	0.11		
MB-09-355	58.5	60	1.5	896239	0.81	H678935	0.57		
MB-09-355	60	61.5	1.5	896240	0.15	H678936	0.06		
MB-09-355	61.5	63	1.5	896241	0.02	H678937	0.02		
MB-09-355	63	64.5	1.5	896242	2.41	H678938	0.36		
MB-09-355	64.5	65.6	1.05	896243	0.37	H678939	1.32		
MB-09-355	65.6	67.1	1.5	896244	5.86	H678940	3.9	5.09	
MB-09-355	67.1	68	0.95	896246	0.09	H678941	0.1		
MB-08-308	60	61.5	1.5	759258	0.16	H678942	0.29		
MB-08-308	61.5	63	1.5	759259	0.95	H678943	0.55		
MB-08-308	63	64.5	1.5	759260	0.28	H678944	0.5		
MB-08-308	64.5	66	1.5	759261	2.19	H678945	0.16		
MB-08-308	66	67	1	759262	2.67	H678946	2.21		
MB-08-308	67	67.5	0.5	759263	2.29	H678947	3.66		
MB-08-308	67.5	69	1.5	759264	3.8	H678948	2.3	2.34	
MB-08-308	69	70.5	1.5	759266	0.67	H678949	1		
MB-08-308	70.5	71.3	0.75	759267	0.83	H678950	0.74		
MB-08-308	71.3	72	0.75	759268	0.36	H678951	0.41		
MB-08-308	72	73.2	1.2	759269	1.71	H678952	2.13		
MB-08-308	73.2	74	0.8	759271	0.07	H678953	0.06		
MB-08-308	74	75	1	759272	0.02	H678954	0.04		
MB-08-308	75	76.5	1.5	759273	0.19	H678955	0.08		
MB-08-308	76.5	78	1.5	759274	0.02	H678956	0.01		
MB-09-349	20.5	22	1.5	6926	0.15	H678957	0.48		
MB-09-349	22	23.1	1.1	6927	0.45	H678958	0.23		
MB-09-349	23.1	24.1	1	6928	0.34	H678959	0.74		
MB-09-349	24.1	25.5	1.35	6929	5.9	H678960	8.39	8.55	
MB-09-349	25.5	26.4	0.9	6931	11.3	H678961	8.58		10.9

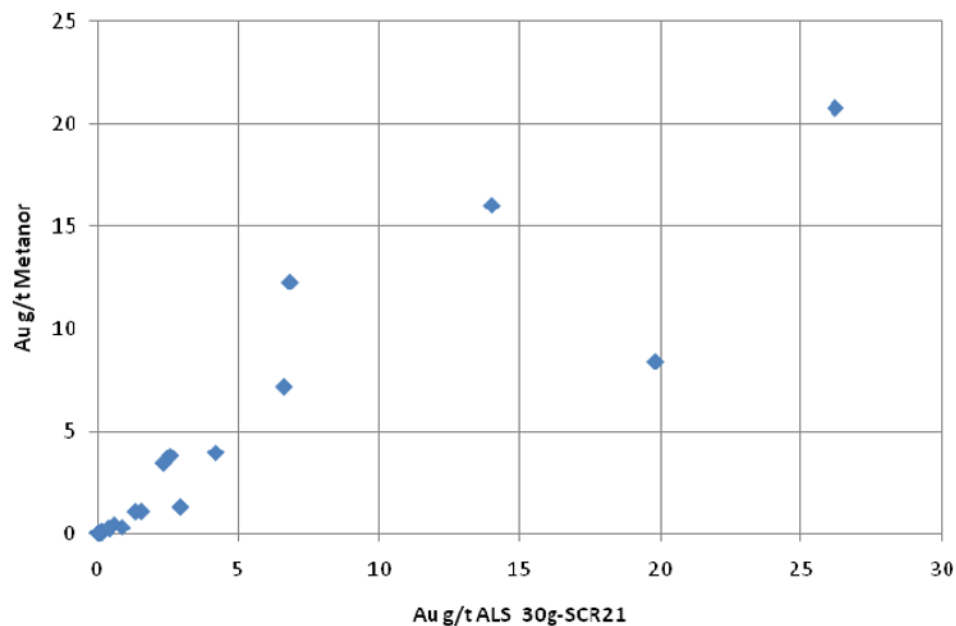
Hole Name	From	To	Length	Metanor		ALS			
				Sample No	Au g/t	Sample No	AA25	GRA21	SCR21
MB-09-349	26.4	27.3	0.9	6932	0.97	H678962	1.16		
MB-09-349	27.3	28	0.75	6933	1.57	H678963	0.56		
MB-09-349	28	29.5	1.5	6934	4.2	H678964	2.25	2.01	
MB-09-349	29.5	31	1.5	6936	4.31	H678965	5.16	5.12	
MB-09-349	31	32.5	1.5	6937	1.3	H678966	1.25		
MB-09-349	32.5	34	1.5	6938	0.18	H678967	0.09		
MB-09-349	34	35.5	1.5	6939	0.14	H678968	0.09		
MB-09-349	35.5	37	1.5	6940	0.69	H678969	1.78		
MB-09-349	37	38.5	1.5	6941	0.27	H678970	0.1		
MB-09-349	38.5	40	1.5	6942	0.02	H678971	0.04		
MB-08-271	30	31.5	1.5	240628	0.25	H678972	0.15		
MB-08-271	33	34.5	1.5	240629	1.13	H678973	1.03		
MB-08-271	34.5	36	1.5	240630	0.57	H678974	1.07		
MB-08-271	36	36.7	0.7	240631	3.5	H678975	1.04	1.19	
MB-08-271	36.7	37.5	0.8	240632	5.91	H678976	4.08	4.02	
MB-08-271	37.5	39	1.5	240633	3.51	H678977	1.72	1.78	
MB-08-271	39	40.5	1.5	240634	2.27	H678978	0.61		
MB-08-271	40.5	42	1.5	240636	0.05	H678981	0.02		
MB-08-271	42	43.5	1.5	240637	0.96	H678982	1.53		
MB-08-271	43.5	45	1.5	240638	0.04	H678983	0.02		
MB-08-271	45	46.5	1.5	240639	0.12	H678984	0.22		
MB-08-271	46.5	48	1.5	240641	0.04	H678985	0.02		
MB-08-271	48	49.5	1.5	240642	1.7	H678986	0.87		
MB-08-271	49.5	50.2	0.7	240643	0.73	H678987	0.65		
MB-08-271	50.2	51	0.8	240644	16.6	H678988	9.49		10.25
MB-08-271	51	52.5	1.5	240646	2.75	H678989	3.81		
MB-09-384	109	110	1	10422	0.41	H678992	0.06		
MB-09-384	110	110	0.88	10423	0.9	H678993	1.94		
MB-09-384	110	111	0.71	10424	4.38	H678994	8.53	10.2	
MB-09-384	111	112	1.35	10426	5.21	H678995	7.88	8.04	
MB-09-384	112	113	1	10427	1.67	H678996	1.49		
MB-09-384	113	115	1.46	10428	1.38	H678997	0.68		
MB-09-384	115	116	1.1	10429	0.22	H678998	0.27		
MB-09-384	125	127	1.5	10437	0.33	H678999	0.26		
MB-09-384	127	128	1.5	10438	3.25	H679000	0.54	0.6	
MB-09-384	128	130	1.5	10439	3.58	H679001	1.39	1.36	
MB-09-384	130	131	1.5	10440	0.19	H679002	0.2		

On September 2010, SGS (by Claude Duplessis Eng.) carried out an independent sampling program and an analytical check of the samples for the holes drilled in 2009. A total of 22 control samples from 3 drillholes (MB-09-373, MB-09-440, MB-09-444) were assayed for the Barry I project. Mineralized intervals have been chosen by Claude Duplessis Eng., and the sampling has been prepared by SGS Geostat. The 22 samples were sent to ALS Minerals in Val d'Or, Qc, to be analysed by screen fire assay (Table 13).



**Table 13: Assay results of the core sampling by SGS Geostat from the 2009 drilling campaign.**

Hole Name	From	To	Length	Metanor (fire assay 30 g)		SGS Au-SCR21	
				Sample No	Au_g/t	Sample No	Au_g/t
MB-09-440	36.8	37.6	0.8	178604	0.59	14551	0.48
MB-09-440	37.6	38.5	0.9	178606	0.03	14552	0.03
MB-09-440	38.5	40	1.5	178607	6.83	14553	12.3
MB-09-440	40	41.5	1.5	178608	6.63	14554	7.18
MB-09-440	41.5	42	0.45	178609	19.8	14555	8.42
MB-09-440	42	43.3	1.3	178610	0.88	14556	0.32
MB-09-440	43.3	44.5	1.25	178611	2.93	14557	1.31
MB-09-440	44.5	46	1.5	178612	0.07	14558	0.03
MB-09-440	46	47.5	1.5	178613	0.03	14559	0.03
MB-09-440	47.5	49.2	1.65	178614	0.13	14560	0.03
MB-09-440	49.2	50.2	1.03	178616	0.41	14561	0.22
MB-09-440	50.2	50.5	0.32	178617	0.02	14562	0.06
MB-09-444	31.5	32.4	0.9	178986	1.54	14563	1.1
MB-09-444	32.4	33	0.6	178987	2.35	14564	3.45
MB-09-444	33	34.5	1.5	178988	26.2	14565	20.8
MB-09-444	34.5	36	1.5	178989	0.13	14566	0.16
MB-09-373	19	20.5	1.5	8712	0.005	14567	0.03
MB-09-373	20.5	21.5	1	8713	14	14568	16.05
MB-09-373	21.5	22.4	0.88	8714	2.58	14569	3.81
MB-09-373	22.4	23.2	0.84	8716	4.19	14570	3.96
MB-09-373	23.2	24	0.73	8717	1.34	14571	1.09
MB-09-373	24	25	1.05	8718	0.37	14572	0.31



**Figure 38: Correlation between Metanor and ALS laboratories.**



The correlation between the results from the Metanor and the ALS laboratories (sampled by SGS) is 0.816 (Figure 38). There are 12 differences where Metanor>ALS, 2 null results, and 8 differences where ALS>Metanor, so the result is 59%.

## **12.2. Historical database verification**

The historical database is composed by surface channels, trenches and diamond drillholes. All were compiled by Metanor resources Inc.

The GMG geologist verified the database assay table and did not find any major errors. Extensive verification by colleagues of the Author also took place.

The collar locations, azimuths, dips, holes lengths, assay values, and assay lengths were checked. Available historical cross sections were reviewed and compared with on-screen equivalent cross sections.

Independent core samples (48 samples) were taken at the beginning of the drilling campaign by the Author and QP, Mr. Claude Duplessis. He supervised with Mr. Rachidi P Geo., the preparation and sampling protocol and sent the samples to the ALS Laboratory in Val d'Or.

## **12.3. Goldminds Geoservices Database (2016 drilling campaign 2016)**

The GMG has verified and integrated assay table results of ALS/Bachelor analyses and created a database of the 2016 drilling campaign.

The diamond drillholes collar locations, were surveyed by Corriveau JL & Assoc Inc. using Total-station. Azimuths and holes dips were measured by the GMG geologist during the drilling campaign.

Geotic Log software was used to create individual log databases. Geology, sampling and coordinates data were entered in individual Geotic log database tables by the geologist logging a specific drillhole. A master database was created which combined all of the 15 drillholes into one file. Results from the laboratory were only entered into the master database by the GMG geologist (Merouane Rachidi P. Geo. Ph. D.).



## 13. MINERAL PROCESSING AND METALLURGICAL TESTING

In 2009, SGS Geostat has been mandated by Metanor to carry out a prefeasibility study on the Barry deposit and the Bachelor mill. The study has not been completed; during the autumn of 2009, the needs of Metanor have changed since it was declared an exploration company by the Autorité des Marchés Financiers (AMF). Metanor has completed an exploration drilling program on the Barry property while continuing mining and processing at Bachelor Lake company's mill.

The following information is not verified and is provided to the reader as presented to SGS at that time by Metanor. Since this report is a resource report, this part is not included in the mandate.

A bulk sample of 50,000 metric tons was first completed and a stage of pre-production began on the East zone of the Barry deposit with an aim of evaluating certain mining parameters of the mineralized zones and the profitability of mining these zones according to the choice of mining methods. Given the lack of information at a shallow depth on many sections, the advance in the open pit continued towards the west on several benches at the same time in order to check the continuity at depth of mineralized zones.

Previous metallurgical tests made on Barry samples have given a recovery rate of 94%.

From July 2008 to October 10th, 2010, a total of 617,489 metric tons of ore have been processed at the Bachelor mill, and 123 gold bars totalling 43,682 oz of gold and 5,727 oz of silver have been sold to Royal Canadian Mint. Consequently, the average grade for that period was of 2.2 g/t Au. GoldMinds Geoservices could not get the average recovery for the whole period, but from July 2008 to May 2009, a total of 487,970 tonnes of ore was processed at the Bachelor mill for an average head grade of 2.38 g/t Au and an average gold recovery of 92.55%.

### 13.1. Leach test work (innovat method)

The main objective of the test was to investigate alternative means of leaching ore directly at the Barry deposit, which is restrained by the remote location of resources from any power grid and which is characterized by low ore grades. Innovat's Continuous Vat Leaching method (CVL) was suggested as an alternative to conventional cyanidation methods, i.e., heap and/or tank leaching, primarily for the purpose of minimizing power and heavy transportation costs to the Bachelor mill.

- Test work observation



Two samples, identified as Sample A and B, were fire assayed to 1.45 g/t and 1.24 g/t Au grades respectively. Size distribution analysis gave the following results.

**Table 14: Barry ore size distribution analysis.**

PRODUCT	CUM WEIGHT RETAINED	CUM ANALYSIS CALCULATED Au g/t	CUM DISTRIBUTION RETAINED Au %	CUM WEIGHT RETAINED	CUM ANALYSIS CALCULATED Au g/t	CUM DISTRIBUTION RETAINED Au %
Plus 10 m	49.99	1.21	41.4	45.99	0.71	26.4
Plus 48 m	78.71	1.35	73.0	74.95	1.08	65.6
Plus 200 m	87.99	1.41	85.6	86.42	1.16	80.9
Minus 200 m	12.01	1.75	14.4	13.58	1.74	19.1
TOTAL	100.00	1.45	100.00	100.00	1.24	100.00

Leaching of both samples was tried at a crush size of -1/4" for 48 hours. Although reagent consumption was very low, recovery achieved in both samples was 55%, with the leach curves showing that the leaching had ceased at the end of the time period.

As expected, analysis of the recovery by size fraction has shown that the losses occur in the coarse fractions and that the gold particles, though fine, are more or less evenly scattered.

Because the crushing method was conventional coarse particles were impervious to the cyanide solution. For this reason, high pressure grind rolling (HPGR) was tried. HPGR is reputed to be of lower cost than SAG milling. In some case, it has been proven to induce micro cracks in the mineral particles, permitting the cyanide solution to have capillarity accesses to the gold trapped inside the ore.

An HPGR preparation of Sample A was crushed to 2.59 mm (versus 6.35 mm with standard jaw crushing) yielding a jump in recovery to 69.4% at 48 hours leach time.

Further HPGR crushing to 0.75 mm brought the recovery to 83.3% after 96 hours leaching time<sup>1</sup>.

### **13.2. An investigation into the determination of total gold in three composite samples from the Barry deposit (SGS Canada Inc.)**

The purpose of the metallurgical test program was to determine the head grade of three composite samples from Ressources Métanor Inc.'s Barry project and incidentally determine the possible gold

<sup>1</sup> It is the opinion of Golminds that the increase in gold recovery had less to do with the crushing-grinding machinery than with the fineness of the mineralized material coupled to the leaching time



recovery. The samples were processed using gravity separation followed by cyanide leaching of the gravity tailings. An overall gravity separation plus cyanidation metallurgical gold balance was performed to calculate the head grade of each sample. A summary of the testwork results is shown in Table 15 below.

**Table 15: Overall results summary.**

Sample	Overall Gold Recovery (%)			CN Residue Au Assay (g/t)	Calculated Heas Grade Au (g/T)
	Gravity	Cyanidation	Gravity + CN		
Comp A	30.4	63.4	93.8	0.20	3.22
Comp B	17.7	77.2	94.8	0.11	2.13
Comp C	22.8	71.4	94.2	0.04	0.69

- Metallurgical testwork

The objective of the metallurgical testwork program was to determine the head grade of each sample by subjecting the entire sample to gravity concentration of the coarse gold followed by cyanide leaching of the gravity tailings.

This test protocol was used in order to avoid the potential discrepancies in the calculation of the head grades due to the coarse gold “nugget” effect. An overall (gravity + cyanidation) gold metallurgical balance was performed to calculate the head grade of each sample.

a) Gravity separation testwork

Each sample was ground in a laboratory rod mill to a target grind size of 80% passing 75 microns. The mill discharge was processed through a Falcon laboratory concentrator operating under standard lab conditions. The Falcon concentrate produced was upgraded on a Mozley (C-800) Laboratory Mineral Separator. The target Mozley concentrate weight percentage, based on the feed weight, was 0.05 – 0.1%. The Mozley concentrate was assayed to extinction for gold. The Mozley and Falcon tailings were combined, subsampled for duplicate assays, and a 1 kg subsample was submitted for cyanide leaching. The feed sizes (P80, µm) ranged from 67 to 75 microns.

b) Gravity tailing cyanidation testwork

Each 1 kg of the subsamples of combined Falcon/Mozley tailings was subjected to cyanide leaching under the following conditions:



Pulp density: 40% solids (w/w)

Pulp pH: 10.5 – 11.0 (maintained with lime)

Cyanide concentration: 1.0 g/L as NaCN (maintained)

Lead nitrate addition: 0.1 kg/t

Retention time: 72 hours

Cyanide consumption range: 0.08 to 0.20 kg/t

Lime consumption range: 0.49 to 0.55 kg/t

Upon completion of the test, the pulp was filtered and the final pregnant leach solution (PLS) was collected and assayed for gold. The filter cake was washed with DI water and dried. Duplicate 30 gram cuts per sample were riffled out for a determination of gold content by fire assay.

Note: Cyanidation are underway on the total tails of the gravity of composite 1, 2 & 3. Results will be provided due time once received and interpreted.



## 14. MINERAL RESOURCES ESTIMATES

Metanor Resources Inc. engaged Goldminds Geoservices Inc. to prepare an updated Mineral Resource Estimation with the integration of the new drilling data from the 2016 drilling campaign.

This mineral resources update was carried out using existing drilling data (561 holes totalling 73,317 meters, and 524 of sampling channels totalling 4367 meters). The new drilling campaign of 2016 is located on the Barry property (15 holes, totalling 1,370 meters).

GMG carried out the update of the resources estimation of the Barry project. This section presents the methodology used and the results of the mineral resources estimation. Two resources models were produced by GMG (Claude Duplessis, Eng., and Isabelle Hébert, Jr. Eng.) using model with blocks dimensions of 05 m (EW) x 05 m (NS) x 05 m (Z) and 03 m (EW) x 03 m (NS) x 03 m (Z).

### 14.1. Previous Mineral Resource Estimate

Metanor was exploiting gold from the Barry property until 2009. On September 21<sup>st</sup> 2010, SGS Geostat have publicly disclosed the resource statement of the Barry property (Table 14).

**Table 16: Mineral resources of Barry property published in 2010 by SGS Geostat.**

Class	Tonnes	Au g/t	Ounces Au
Indicated	7,701,000	1.25	309,500
Inferred	10,411,000	1.41	471,950

The resources reported are compliant with current standards as outlined in the National Instrument 43-101. The reported resources above with a cut-off grade of 0.5 g/t, and capping at 35 g/t Au on assays.

SGS Geostat decided to keep only indicated and inferred resources due to some difficulties to verify the location of drillholes and the uncertainties about the precision of the topographic surface.



## 14.2. Exploration Database

The database used for this report is composed by Metanor database compiled until 2010. This database was delivered by SGS as Access database named 'Barry\_New2010\_7 (Isa1)'. The database of the 2010 and 2014 drilling campaigns was delivered by Mr. Claude Gobeil, P. Geo. (Director of Geology and Exploration at Metanor Resources Inc.). The last modification/correction of the database took place at the office of Geoservices Goldminds on May 17th 2016.

The database until 2009

- 504 drillholes and 524 sampling channels;
- Total drilled length 54162 meters with 4367 meters of trenches;
- 42 391 assays (Au g/t);
- 2 938 deviation data;
- 6 071 lithological descriptions;

The database (2010-2014 drilling campaign)

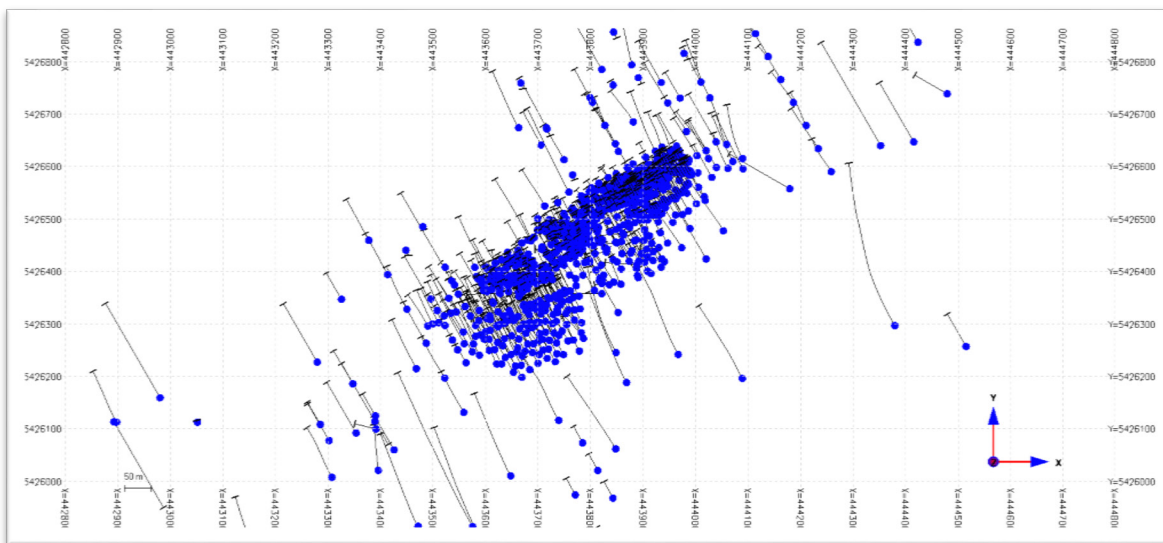
- 57 drillholes;
- Total drilled length is 19 155 meters;
- 7 732 assay results (Au g/t);
- 199 deviation data;
- 907 lithological description records;

The new database (2016 drilling campaign)

- 15 drillholes;
- Total drilled length is 1 370 meters;
- 1 316 assay results (Au g/t);
- 307 deviation data;
- 171 lithological description records;



All coordinates (Figure 39) are given in UTM (NAD83). The surface used in this resource calculation is not a topography surface but rather the top of the bedrock.



**Figure 39: Localization of drillholes and sampling channels collars on the Barry property.**

### 14.3. Specific gravity data

Specific gravity measurements were taken from the NI 43-101 report published on November 2010 on the Barry property by SGS Geostat. The specific gravity measurements were performed on drill cores. In this calculation of the mineral resource estimate, a fixed specific gravity of 2.8 t/m<sup>3</sup> is used to convert volume into tonnage.

### 14.4. Resource model 1 (block size of 3x3x3) final for public disclosure

#### - Introduction

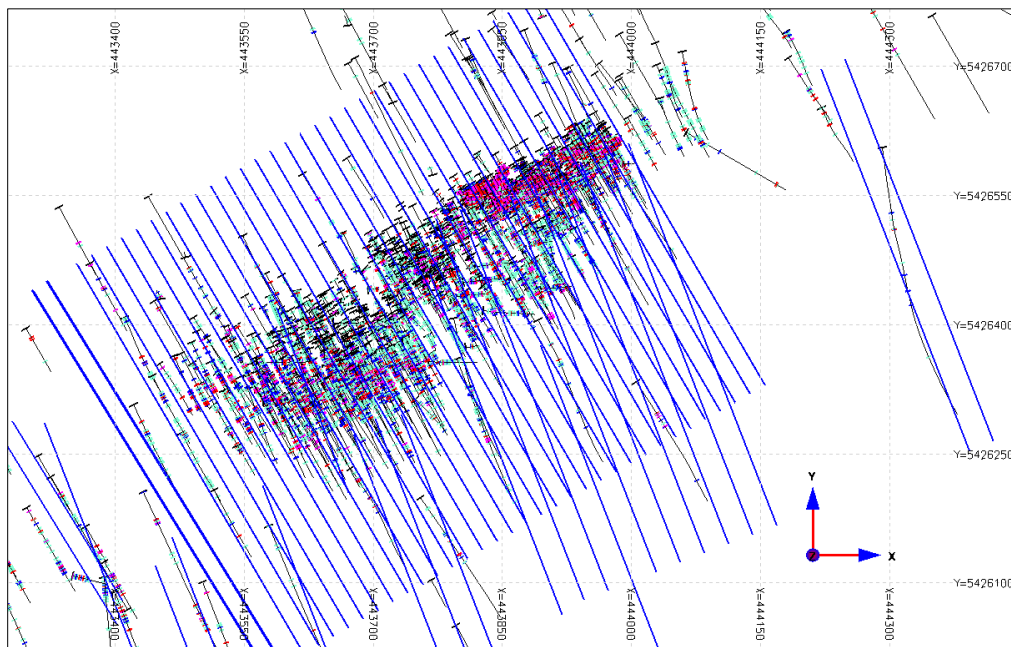
The first model corresponds to a mass model including low grade material using block dimensions of 3 (E) x 3 (N) x 3 (Z)m. The envelopes of waste were built around specific lithology and subtracted from the mass envelope.

#### - Modeling

After the verification/validation of the Barry database. GoldMinds Geoservices conducted mineralization interpretation and modelling of the 3D wireframe envelopes of the gold mineralization.



The first step was to create the mass envelope. Several sections (36 sections, azimuth 60 and 8 sections, azimuth 70; both facing northeast) were created using all drilling results (Figure 40). The interpretation was first completed on sections to define mineralized vertical projection contours called prisms (polygon interpretation) in Genesis© software using assays (Figure 41 and 42).



**Figure 40: Plan view of the sections and localization of prism and collars, Barry property (color coded by Au ppm).**

A total of three envelopes were created following the behavior of two specific lithologies presenting no mineralization from the rest of the deposit. These envelopes were constructed by connecting defined lithology prisms from each section (Figure 41 and 42). The first envelope is focused on the unmineralized quartz and feldspar porphyry intrusions (QFP) lithology, it is present throughout five (5) sections from 0.50 to 3.50. The other two envelopes were created in order to delimit the unmineralized granodiorite (Figure 43 and 44). They are visible on eleven (11) sections, from section -02 to 07 and on twenty (20) sections from 12 to 31.



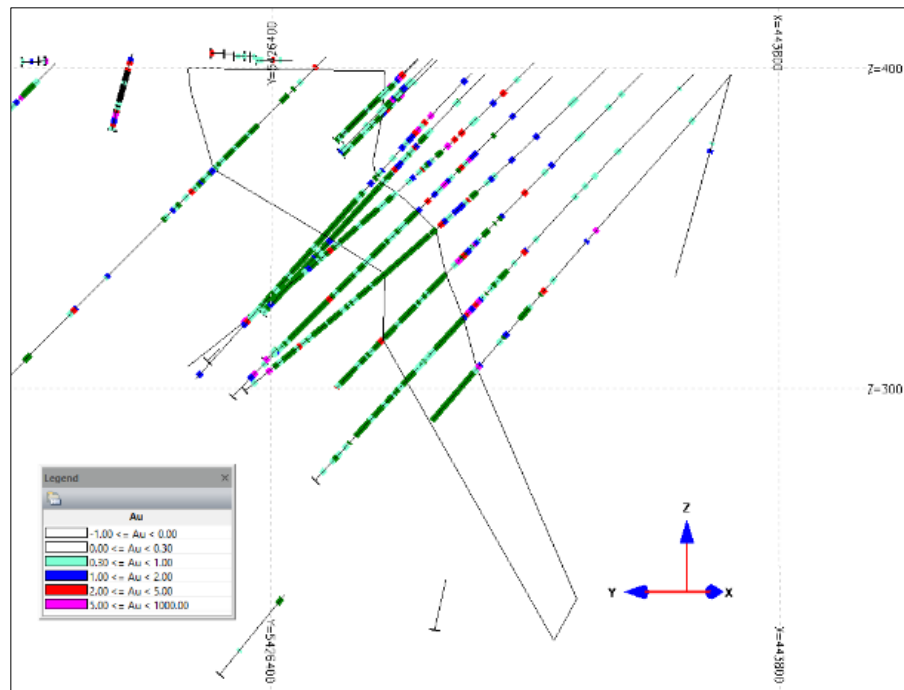


Figure 41: Section (IH: 15) NW-SE showing prism and envelope built around unmineralized granodiorite/diorite.

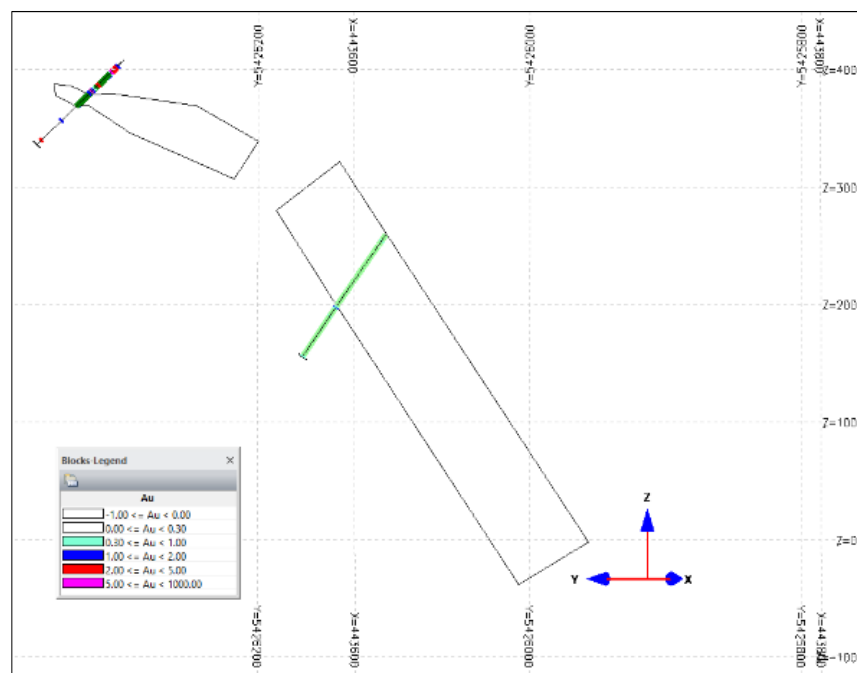


Figure 42: Section (IH: 03) NW-SE showing prism and envelope built around unmineralized QFP.



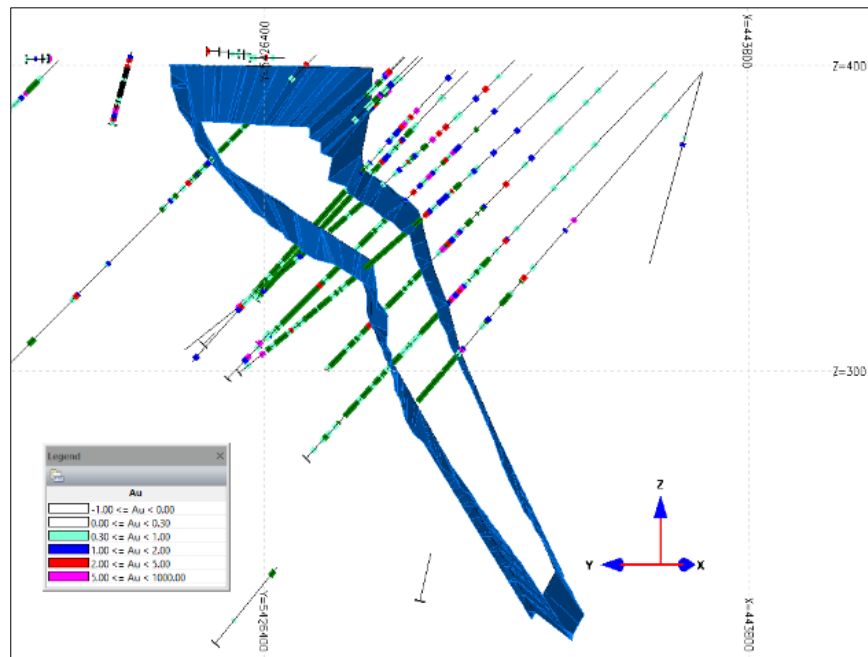


Figure 43: Section (IH: 15) NW-SE showing prism and envelope built around unmineralized diorite.

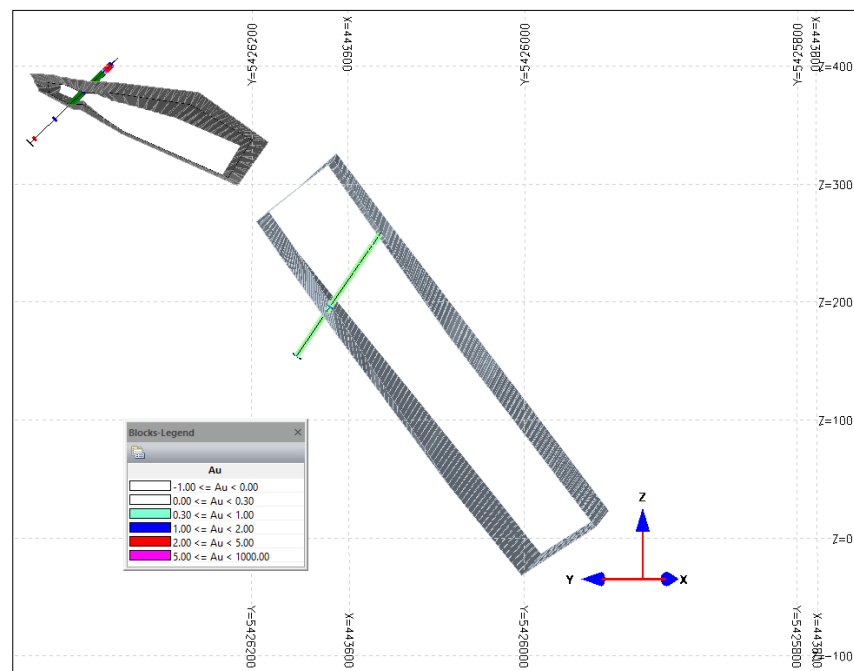
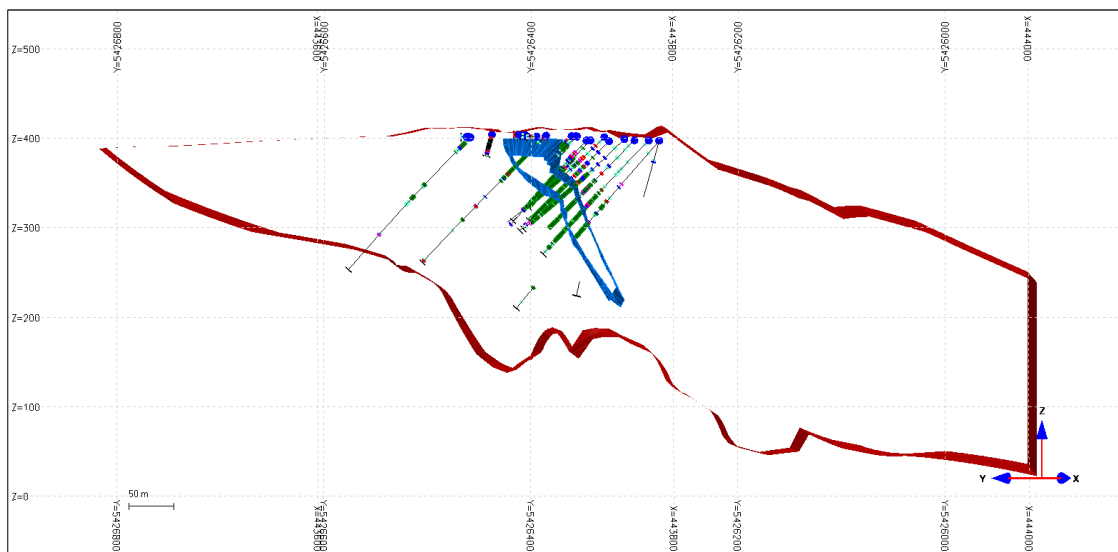


Figure 44: Section (IH: 03) NW-SE showing prism and envelope built around sterile granodiorite and granodiorite and QFP.

At last, the three lithology envelopes were subtracted one at a time from the mineralized envelope (Figure 45) before generating the blocks model.





**Figure 45: Section (IH: 15) NW-SE showing mass envelope and one granodiorite envelope to be subtracted.**

#### - Compositing of assay intervals

Before assigning grades to dimensionless “points” in the 3D space (the composite centers) in the block grade interpolation, it is necessary to standardize the length of the grade “support” through numerical compositing.

Compositing Settings	
+/- A.Z Col Load Save	
<b>Settings</b>	
Mode	Regular
Min Sample Length	0.1
Length of intervals	3
Min intervals length	0.1
Round	Round Closest
<b>Dilution</b>	
Using Dilution	Yes
<b>Capping Being Used</b>	
Au	35
OK Cancel	

**Figure 46: Compositing parameters.**

Each composite has a length of 3 meters, created from the beginning of each mineralized interval (Figure 46). Compositing is done downhole from the start of the mineralized intersection. Missing assays and unsampled length are assumed to be zero grade. At the end of the mineralized intersection, the last retained composite is the last with a minimum length of 0.1 meters. It is important to mention



that only composites within the mineralized envelopes have been used to estimate the mineral resources. A capping of 35 Au g/t on assays was applied (Figure 46).

#### - The block model

##### Block model definition

Estimations were performed with the software Genesis for the modeling and the resource estimation.

The origin of the block model is located in the lower left corner of the mine (442950E, 5425800N, -60Z). The block size has been defined in order to respect the complex geometry of the envelopes. The mineral resource estimate was carried out with a block size of twenty-seven cubic meters (03 m (EW) x 03 m (NS) x 03 m (Z)), (Figure 47).

	X	Y	Z
Block Model Origin	442950	5425800	-60
Block Size	3	3	3
Block Discretization	1	1	1

	X	Y	Z
Starting Coordinates	444600	5427102	423
Starting Block Indices	551	435	162
Ending Coordinates	444603	5427105	426
Ending Block Indices	552	436	163

Transformation  
☐ Transform    Set Transformation..

OK    Cancel

**Figure 47: BlockModel settings.**

One block model was generated from the mass Envelope (Figure 48). The main envelopes (lithologies envelopes subtracted) were filled by regular blocks and only the composites within envelopes were used to estimate the block grades. A total of 14850 composites were created.

The average Au ppm grades is computed for each block using interpolation according to the inverse of the distance from the nearest composites. Interpolation parameters were based on drill spacing, envelope extension and orientation.

The blocks model was then cut by overburden/rock surface and the topography prior to estimation.



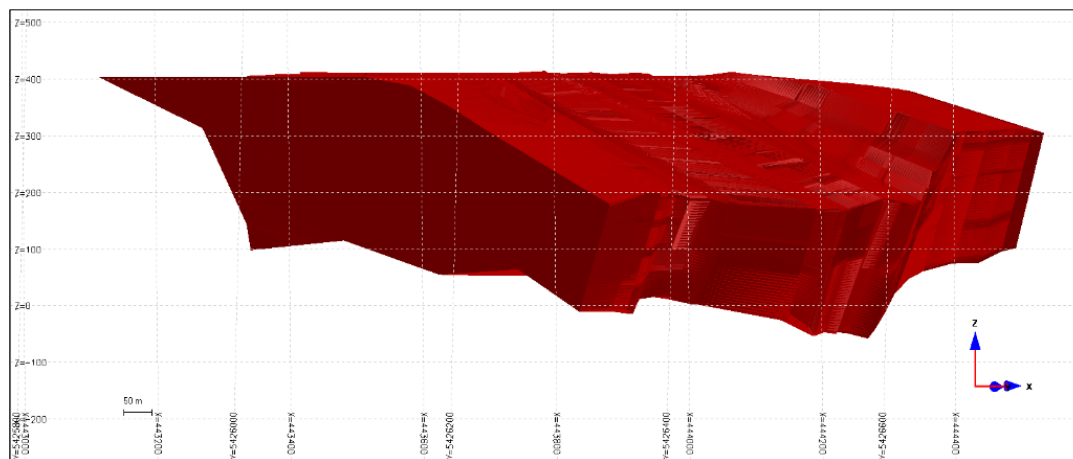


Figure 48: Mass envelope, Barry property.

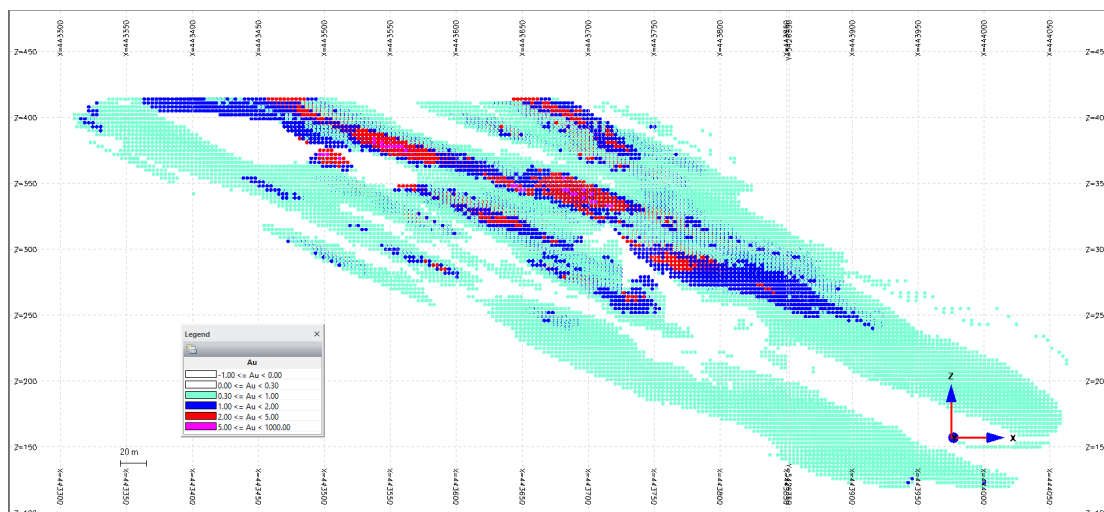


Figure 49: Blocks Model (3m x 3m x 3m).

### Ellipsoid parameters and interpolation

For the mineral resource estimation, three runs were used. For runs one (1) and two (2), a number of composites limited to twelve (12) with a minimum of six (6) and a maximum of three (3) composites from the same drillhole were used. For run three (3), a number of composites limited to twelve (12) with a minimum of one (1) and a maximum of three (3) composite per drillhole were established.

A search ellipsoid following the geological interpretation trends was used for the grade estimation. The subsequent table (Table 15) shows the size of the variable ellipsoid used to generated the mineral resource estimation.



**Table 17: Search ellipsoid parameters and estimation parameters.**

Run	Azimuth	Dip	Spin	X (m)	Y (m)	Z (m)	Minimum Samples per Block	Maximum Samples per Block	Maximum per Drillhole
1	84	-19	45	50	10	5	6	12	3
2	84	-19	45	75	15	10	6	12	3
3	84	-19	45	150	50	25	1	12	3

- Mineral resources classification

The classical method was used to classify the deposit where one defined class is used by ellipsoid. A total of three ellipsoids and three runs were used. In run one (measured) and run two (indicated), a maximum of twelve (12) and a minimum of six (6) composites were established per block and a limit of three (3) composites per drillhole. In the third run (inferred) a maximum of twelve (12) and a minimum of one (1) composites were established per block and the limit of three (3) composites per drillhole was also used. The parameters are listed in the following table.

**Table 18: Search ellipsoids parameters for mineral resource classification.**

Resources classification	Azimuth	Dip	Spin	X (m)	Y (m)	Z (m)	Minimum Samples per Block	Maximum Samples per Block	Maximum per Drillhole
Measured	84	-19	45	50	10	5	6	12	3
Indicated	84	-19	45	75	15	10	6	12	3
Inferred	84	-19	45	150	50	25	1	12	3

- Mineral resources estimation

The measured and indicated resources were evaluated at 8,4 million tonnes averaging 1.13 g/t Au with 209,400 oz of measured resources and 95,700 oz of indicated resources. Furthermore, there are 31.9 million tonnes averaging 1.02 g/t Au containing 1 million oz of inferred resources. The cut-off grade was 0.5 g/t and capping was 35 g/t. The results are listed in the table below.



**Table 19: Mineral resources estimation using a cut-off grade of 0.5 g/t Au (rounded numbers).**

Resources classification	Tonnes (t)	Au g/t	Au oz
Measured	5,383,000	1.21	209,400
Indicated	3,037,000	0.98	96,000
Indicated + Measured	8,420,000	1.13	305,000
Inferred	31,919,000	1.02	1,046,000

The measured and indicated resources were also evaluated at 3.4 million tonnes averaging 1.74 g/t Au with 141,660 oz of measured resources and 50,900 oz of indicated resources. Furthermore, there are 10.3 million tonnes averaging 1.69 g/t Au with 561,000 oz of inferred resources. The cut-off grade was 1.0 g/t and capping was 35 g/t. The results are listed in the table below.

**Table 20: Mineral resources estimation using a cut-off grade of 1.0 g/t Au (rounded numbers).**

Ressource classification	Tonnes (t)	Au g/t	Au oz
Measured	2,421,000	1.82	141,900
Indicated	1,022,000	1.55	51,000
Indicated + Measured	3,443,000	1.74	193,000
Inferred	10,325,000	1.69	560,000

The measured and indicated resources were evaluated at 2.3 million tonnes averaging 2.03 g/t Au with 116,400 oz of measured resources and 37,500 oz of indicated resources. Furthermore, there are 6.5 million tonnes averaging 2.01 g/t Au containing 423,700 oz of inferred resources. The cut-off grade was 1.25 g/t and capping was 35 g/t. The results are listed in the table below (Table 19).

**Table 21: Mineral resources estimation using a cut-off grade of 1.25 g/t Au.**

Ressource Class	Tonnes (t)	Au g/t	Au oz
Measured	1,708,000	2.12	116,300
Indicated	644,000	1.81	37,500
Indicated + Measured	2,352,000	2.03	153,800
Inferred	6,557,000	2.01	424,000



These resource estimations includes Metanor's 2016 drilling campaign as well as the historical drillholes and excludes the pit excavation updated in July 2015.

#### **14.5. Resource model 2 (block size of 5x5x5)**

##### **- Introduction**

This model is the replica of the first model in regards to the dimension and the position of the envelopes. The differences between them are the block dimensions and the estimation parameters. This model was created in order to evaluate the effect of block size dimension on the mineral resources estimation.

##### **- Modeling**

The model 2 was established using the same database and envelopes as model 1.

##### **- Compositing of assay intervals**

The same compositing parameters used in model 1 were used in this model. Each composite has a length of 3 meters, created from the beginning of each mineralized interval. A capping of 35 Au g/t on assays was applied.

##### **- The block model**

##### **Block model definition**

Estimations were performed with the software Genesis for the modeling and the resource estimation using the same origin as model 1 (Figure 50).



**Figure 50: Blocks model settings.**

### Ellipsoid parameters and interpolation

Three runs were used to estimate the mineral resource. In runs one (1) and two (2), a number of composites limited to ten (10) with a minimum of five (5) and a maximum of two (2) composites from the same drillhole were used. For run three (3), a number of composites limited to ten (10) with a minimum of two (2) and a maximum of two (2) composite from the same drillhole were established as parameters.

A search ellipsoid following the geological interpretation trends was used for the grade estimation. The subsequent table shows the selected parameters (Table 20) of the ellipsoid used to generate the mineral resource estimation.

**Table 22: Search ellipsoids and estimation parameters.**

Pass	Azimut	Dip	Spin	X (m)	Y (m)	Z (m)	Minimum Samples per Block	Maximum Samples per Block	Maximum per Drillhole
1	84	-19	45	50	15	10	5	10	2
2	84	-19	45	75	25	15	5	10	2
3	84	-19	45	150	50	25	2	10	2

- Mineral resources classification



The classical method was used to classify the deposit where one defined class is used by ellipsoid. A total of three ellipsoids and three runs were used. In run one (measured) and run two (indicated), a maximum of ten (10) and a minimum of five (5) composites per block and a limit of two (2) composites per drillhole were established. In the third run (inferred), a maximum of ten (10) and a minimum of two (2) composites were established per block and the limit of two (2) composites per drillhole was also used. These parameters are listed in the table below.

**Table 23: Search ellipsoids and classification parameters.**

Resource category	Azimuth	Dip	Spin	X (m)	Y (m)	Z (m)	Minimum Samples per Block	Maximum Samples per Block	Maximum per Drillhole
Measured	84	-19	45	50	15	10	5	10	2
Indicated	84	-19	45	75	25	15	5	10	2
Inferred	84	-19	45	150	50	25	2	10	2

- Mineral resources estimation

The measured and indicated resources were evaluated at 9.2 million tonnes averaging 1.12 g/t Au with 250,000 oz of measured resources and 82,100 oz of indicated resources. Furthermore, there are 27.6 million tonnes averaging 1.13 g/t Au with 1 million oz of inferred resources. The cut-off grade was 0.5 g/t and capping was 35 g/t. The results are listed in the table below.

**Table 24: Mineral resources estimation using a cut-off grade of 0.5 g/t Au.**

<b>Ressource classification</b>	<b>Tonnes (t)</b>	<b>Au g/t</b>	<b>Au oz</b>
Measured	6,533,000	1.19	250,100
Indicated	2,659,000	0.96	82,000
Indicated + Measured	9,192,000	1.12	332,100
Inferred	27,638,000	1.13	1,003,800

The measured and indicated resources were evaluated at 3.6 million tonnes averaging 1.76 g/t Au with 166,000 oz of measured resources and 41,800 oz of indicated resources. Furthermore, there are 10.4 million tonnes averaging 1.83 g/t Au with 615,800 oz of inferred resources. The cut-off grade was 1.0 g/t and capping was 35 g/t. The results are listed in the table below.



**Table 25: Mineral resources estimation using a cut-off grade of 1.0 g/t Au.**

Resource Class	Tonnes (t)	Au	
		g/t	oz
Measured	2,837,000	1.82	166,200
Indicated	844,000	1.54	42,000
Indicated + Measured	3,681,000	1.76	208,200
Inferred	10,466,000	1.83	616,000

The measured and indicated resources were evaluated at 2.5 million tonnes averaging 2.06 g/t Au with 135,400 oz of measured resources and 30,700 oz of indicated resources. Furthermore, there are 6,9 million tonnes averaging 2.20 g/t Au with 491,700 oz of inferred resources. The cut-off grade was 1.25 g/t and capping was 35 g/t. The results are listed in the table below.

**Table 26: Mineral resources estimation using a cut-off grade of 1.25 g/t Au.**

Resource Class	Tonnes (t)	Au	
		g/t	oz
Measured	1,987,000	2.12	135,700
Indicated	530,000	1.80	30,700
Indicated + Measured	2,517,000	2.06	166,400
Inferred	6,952,000	2.20	490,800

#### 14.6. Pit Optimization procedure and parameters

This section presents five pit optimization results with different parameters (Gold price, mineralized material mining cost, waste mining cost, processing cost and different types of resources included). The parameters were estimated by GoldMinds Geoservices based on the knowledge of similar operations. No economic study was produced for this project, therefore the resources presented below have not shown economic viability but present a reasonable prospect of economic extraction as per CIM definition. The difference between pit 1 and pit 2 optimization relies in the type of resource included in the parameters. In the first optimization, inferred, indicated and measured resources are included and in the second pit only indicated and measured resources are included. The price of gold in Can\$ is increased from 1460 \$/t in the two first pits to 1650 \$/t in pit number three to five.



Resources included in pit four are indicated and measured. Finally, the parameters used in pit five are established as if the material was treated on the site project (gold price, ore mining cost and waste mining item cost are different from the other pit optimizations). The ultimate pits were produced in MineSight software using the Lerchs-Grossmans algorithm. Furthermore, a mining recovery of 100% and a mining dilution of 0% were used as these optimizations were produced to give an idea of the potential of the project and not to produce reserves. The following table enumerates the chosen parameters selected for each pit optimization (Table 25).



**Table 27: Pit optimization parameters.**

	Item	Units	Value
<b>Pit 1</b>	Gold price	\$/oz.	1450
	Ore Mining cost	\$/t	5.25
	Waste mining cost	\$/t	4.75
	Processing cost	\$/t	36.25
	Gold recovery	%	95
	Resource included	Inferred, indicated & measured	
<b>Pit 2</b>	Gold price	\$/oz.	1450
	Ore Mining cost	\$/t	5.25
	Waste mining cost	\$/t	4.75
	Processing cost	\$/t	36.25
	Gold recovery	%	95
	Resource included	Indicated & measured	
<b>Pit 3</b>	Gold price	\$/oz.	1650
	Ore Mining cost	\$/t	5.25
	Waste mining cost	\$/t	4.75
	Processing cost	\$/t	36.25
	Gold recovery	%	95
	Resource included	Inferred, indicated & measured	
<b>Pit 4</b>	Gold price	\$/oz.	1650
	Ore Mining cost	\$/t	5.25
	Waste mining cost	\$/t	4.75
	Processing cost	\$/t	36.25
	Gold recovery	%	95
	Resource included	Indicated & measured	
<b>Pit 5</b>	Gold price	\$/oz.	1650
	Ore Mining cost	\$/t	4.00
	Waste mining cost	\$/t	4.00
	Processing cost	\$/t	20.00
	Gold recovery	%	95
	Resource included	Inferred, indicated & measured	

- Pit Optimization results

The following table presents the resources obtained in the five ultimate pits (Table 26).



**Table 28: Optimization results.**

Optimisation #	Mineralized material			Waste		Total	
	Tonnes	Au	Au	Tonnes	Au	Tonnes	Stripping ratio
	Tonnes	g/t	oz	Tonnes	g/t	t	
1	3,262,278	2.07	216,625	7,779,305	0.20	11,041,582	2.38
2	2,340,037	1.70	128,009	6,461,031	0.22	8,801,068	2.76
3	4,190,889	1.84	248,253	9,141,354	0.17	13,332,242	2.18
4	3,073,718	1.55	152,871	7,413,207	0.19	10,486,926	2.41
5	13,762,523	1.25	553,943	50,767,294	0.09	64,529,817	3.69

The next figures shows the five pit optimization generated by MineSight software. Figure 51 regroups the five pit optimisation in one plan where each color represents the outline of the pit. Then Figures 52 and 53 illustrates the longitudinal cross section A-A' looking southeast of the deposit without and with the block model. Figures 54 and 55 represents the vertical section B-B' looking northeast without and with the block model, in those figures, the same color code as the one used in Figure 53 is used to identify each optimization.



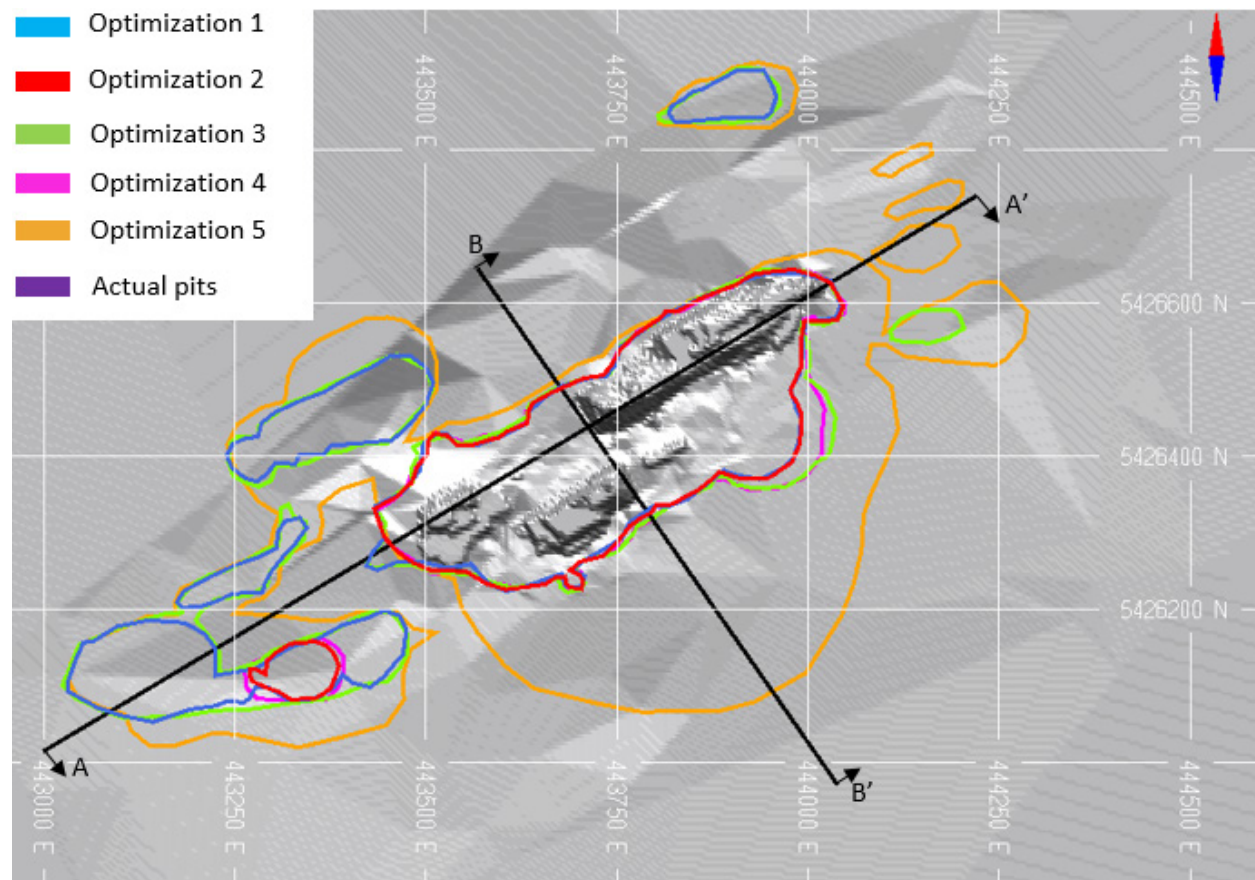


Figure 51: Optimization daylight.

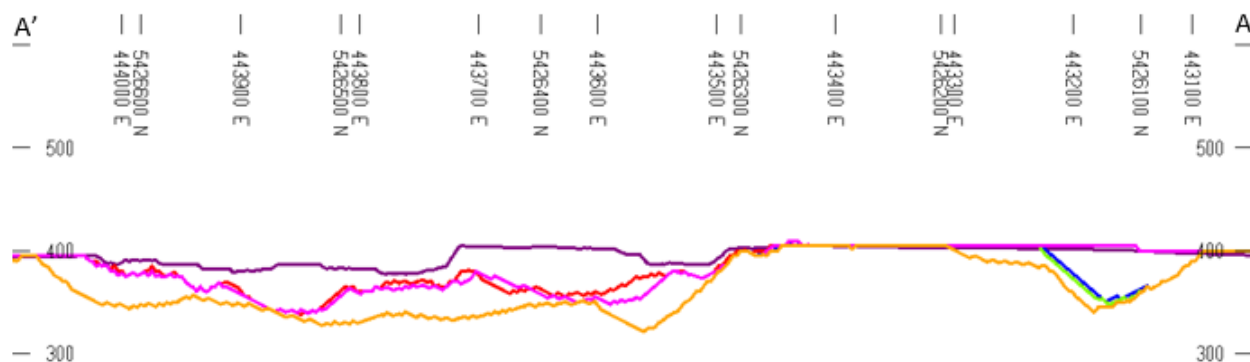


Figure 52: Longitudinal A-A', looking southeast.



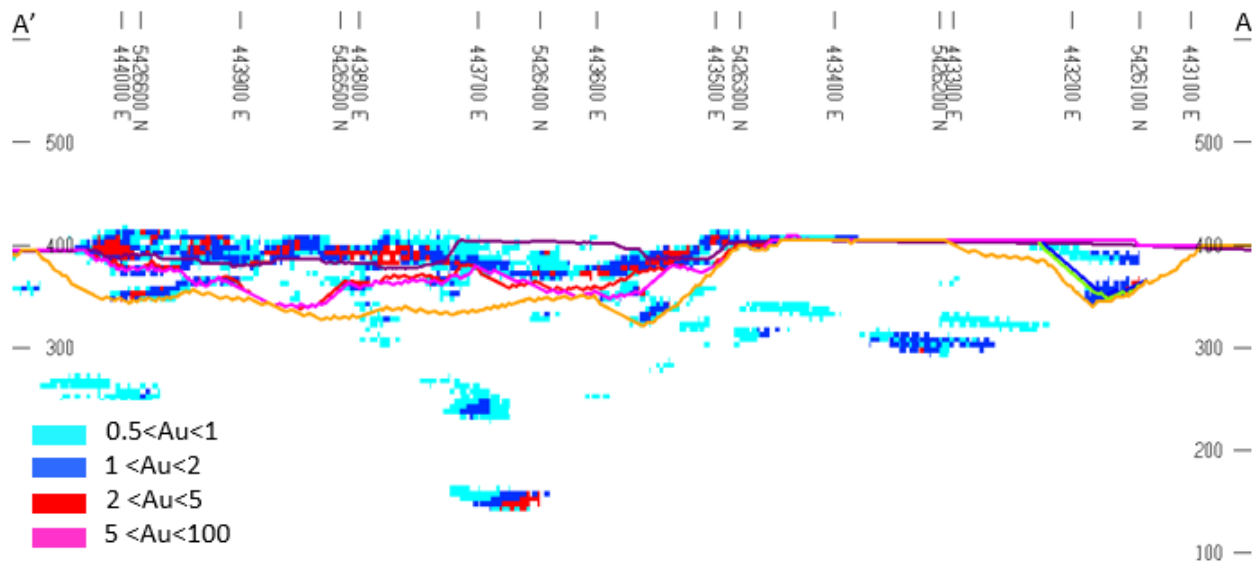


Figure 53: Longitudinal A-A', looking southeast with block models (Au g/t).

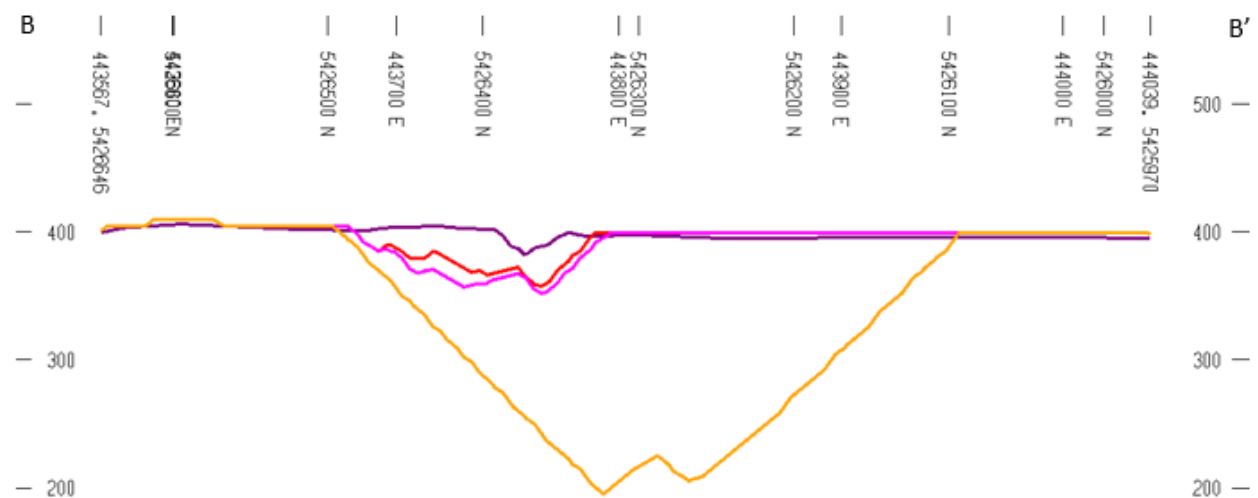


Figure 54: Section B-B', looking northeast.



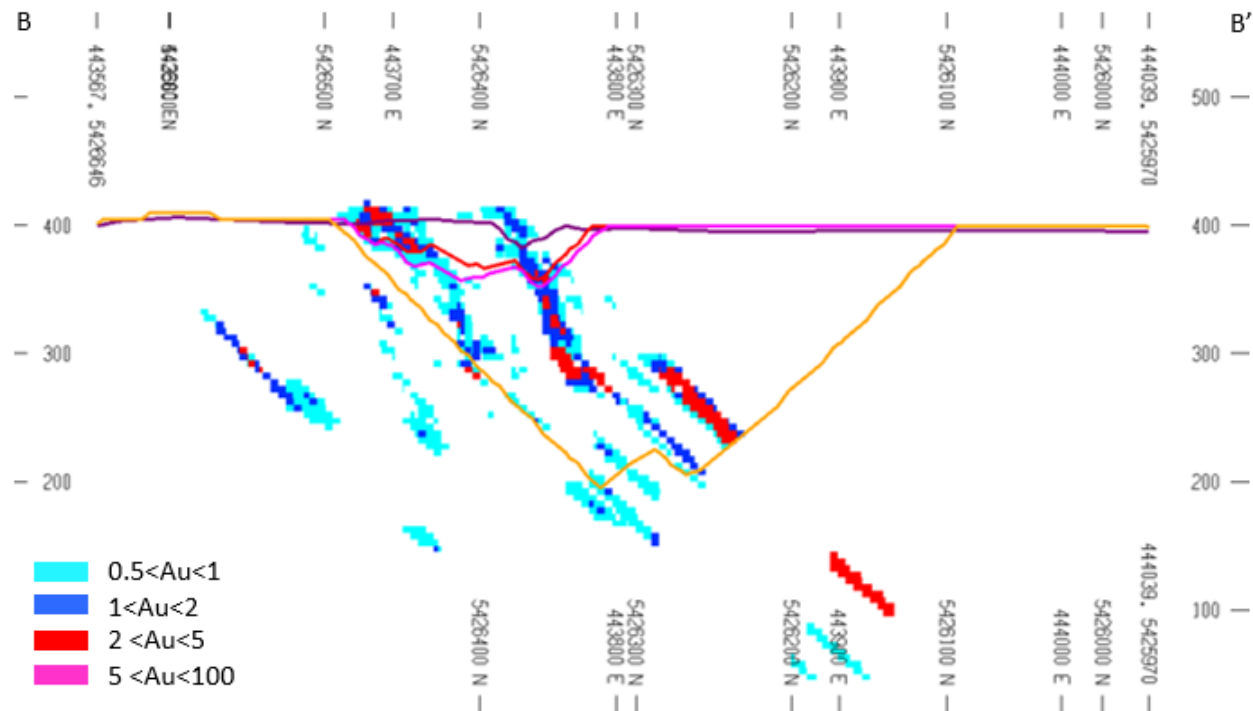
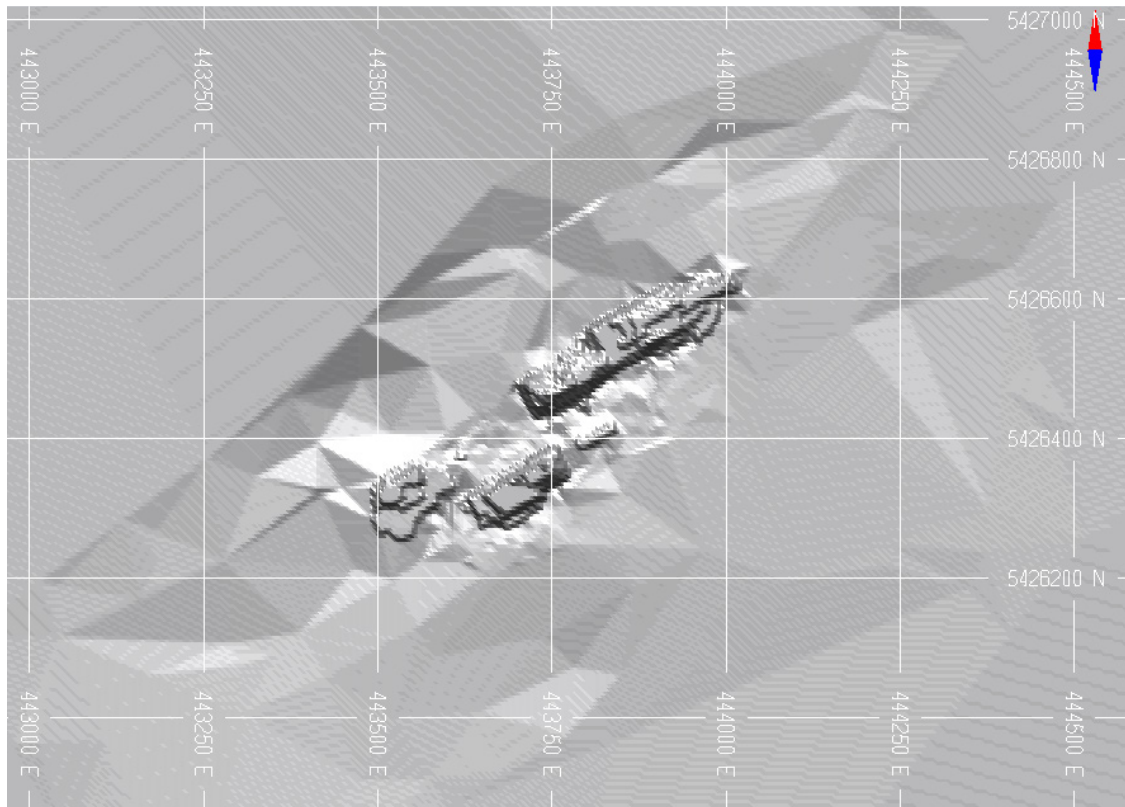


Figure 55: Section B-B', looking northeast.

#### - Pit results

The pit design was produced in MineSight with the parameter established for each pit optimization. Figure 56 presents the plan view of the actual pit and Figures 57 to 61 presents five plan view of the pit optimization mentioned above.





**Figure 56: Actual pits.**



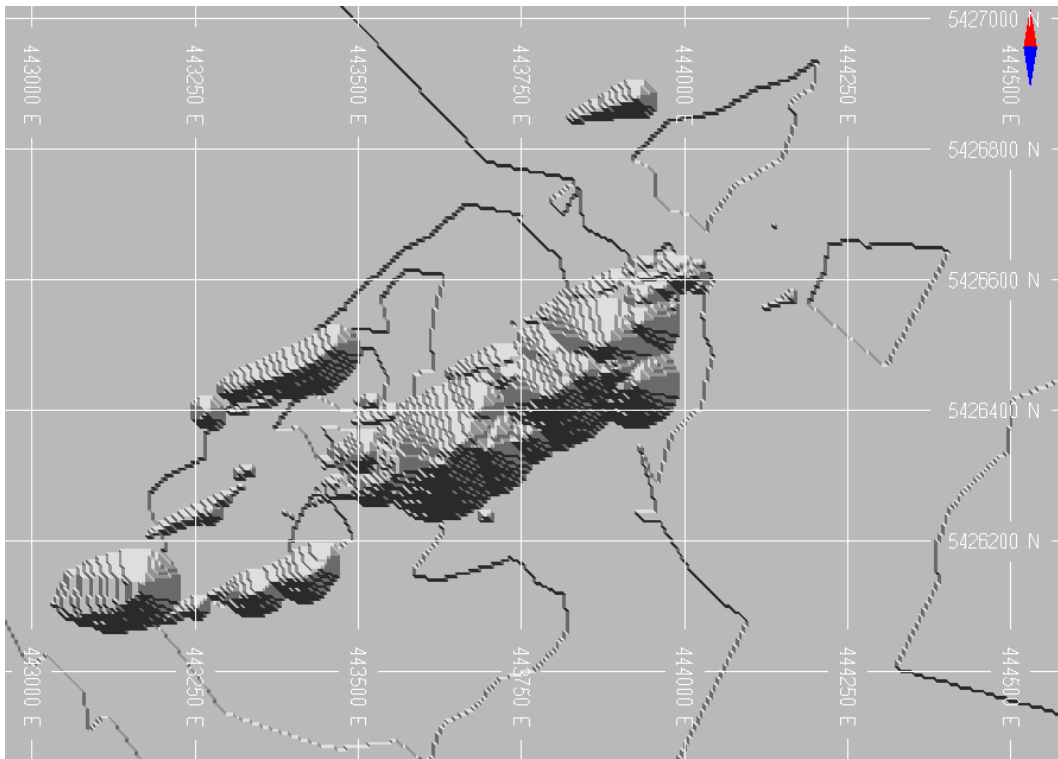


Figure 57: Optimization #1.

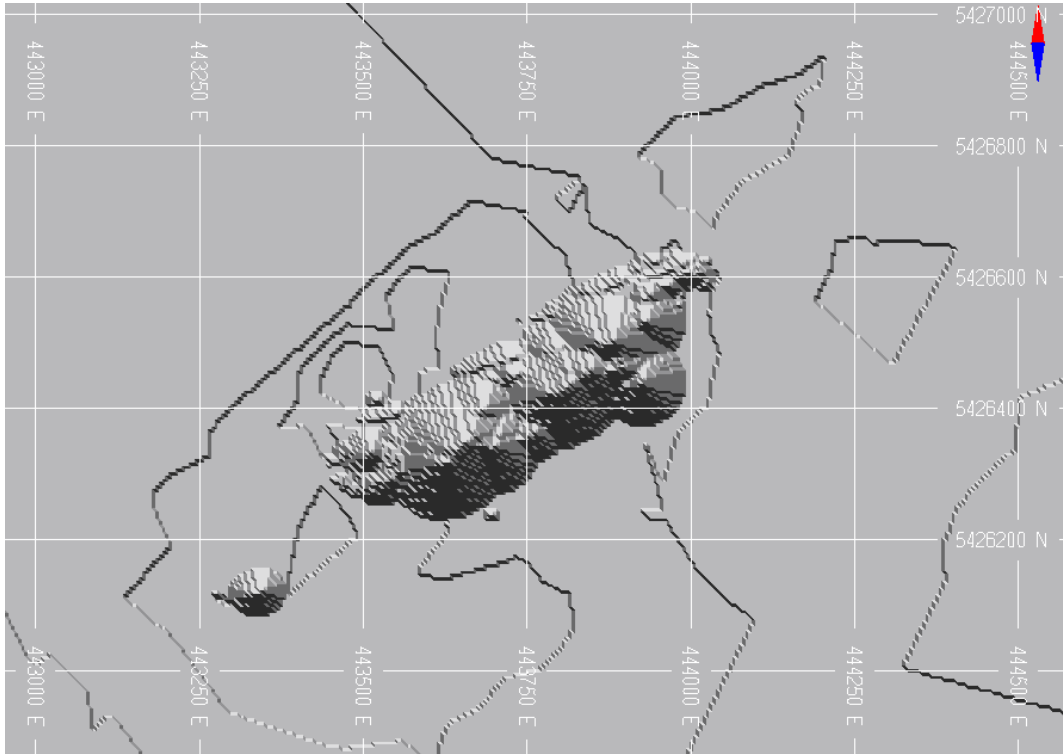


Figure 58: Optimization #2.



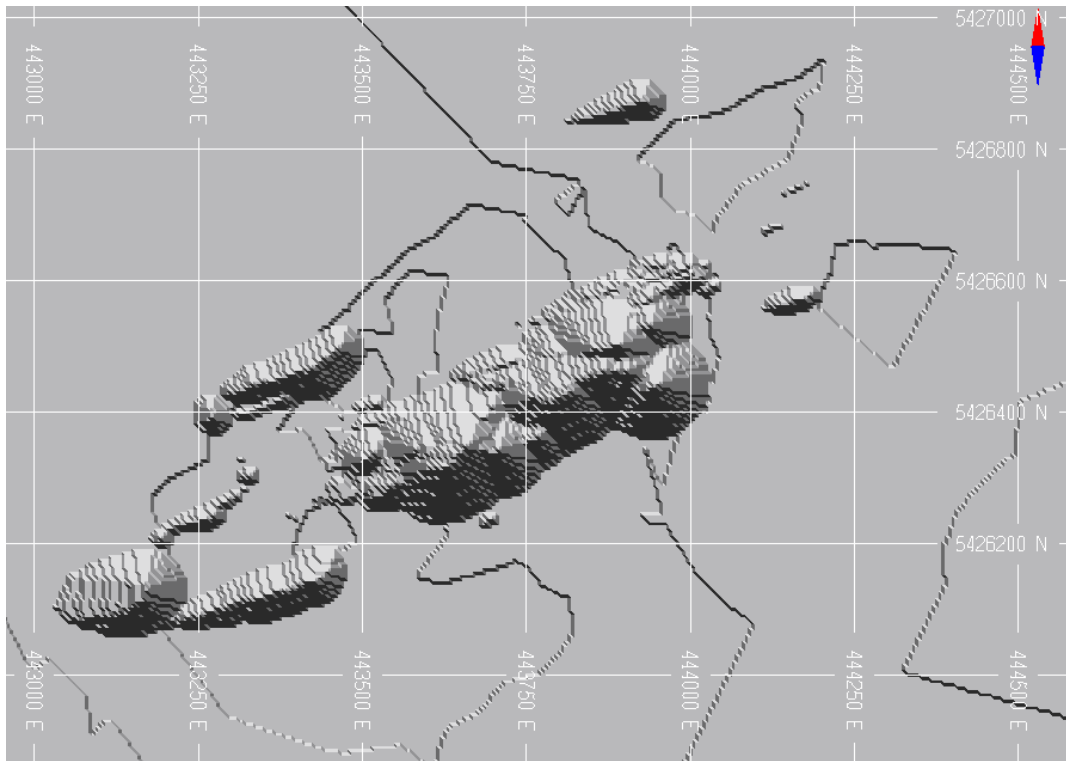


Figure 59: Optimization #3.

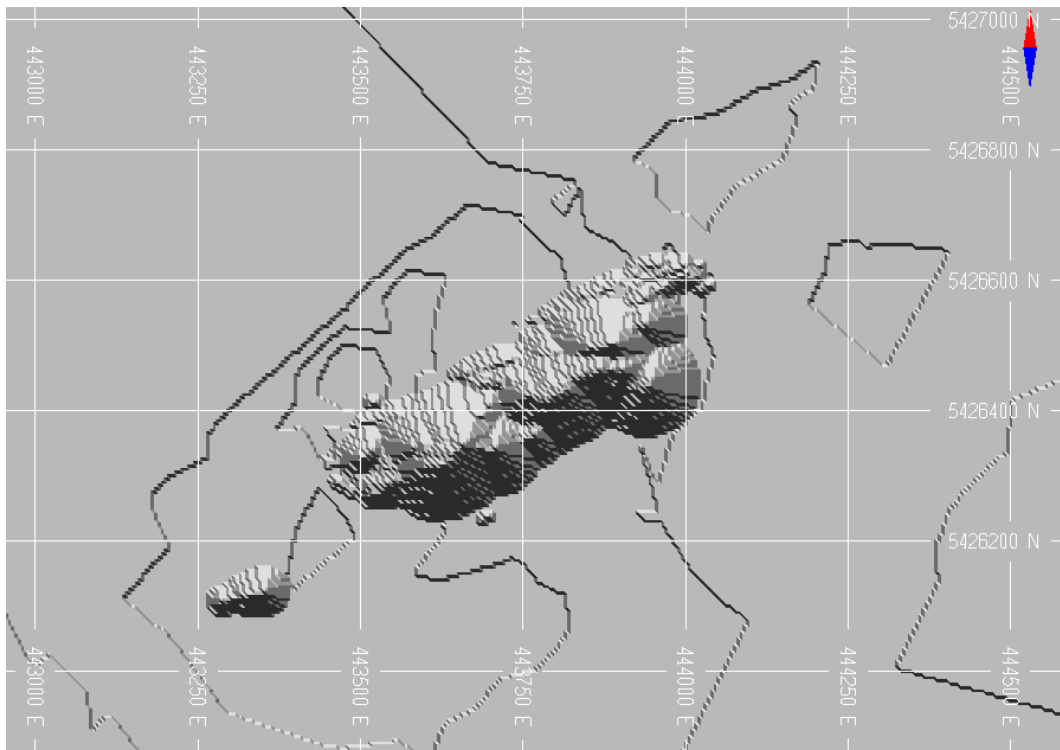
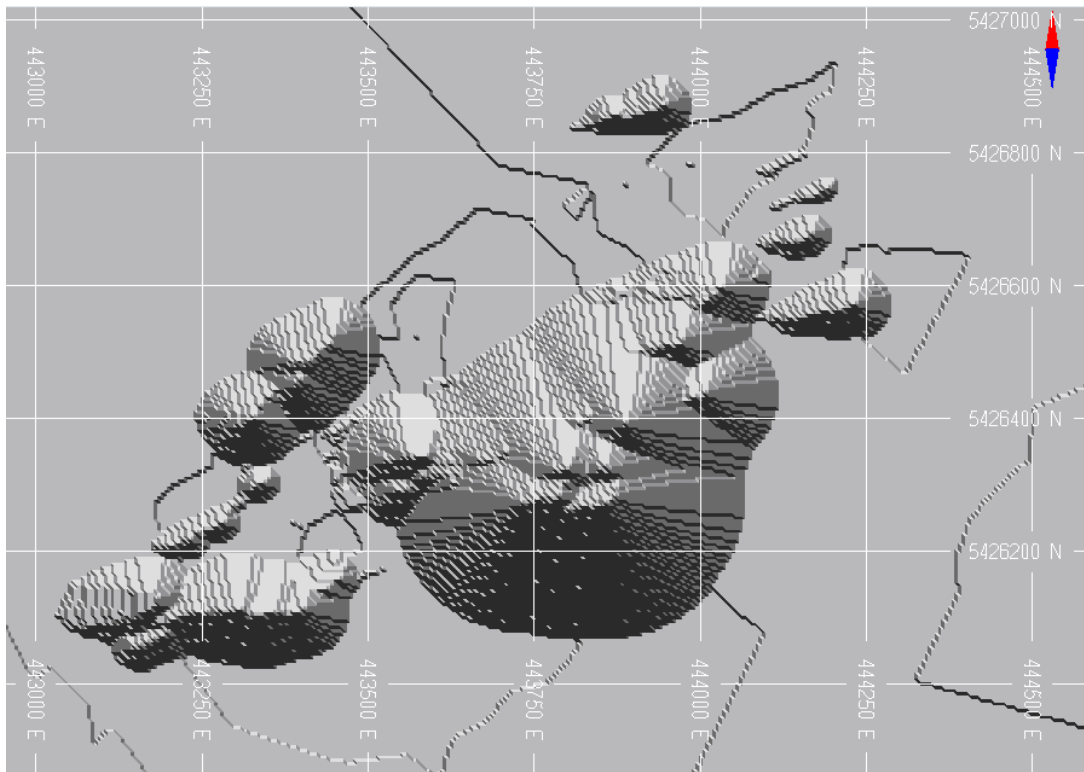


Figure 60: Optimization #4.





**Figure 61: Optimization #5.**

#### **14.7. Final pit**

A pit design was produced from pit number 3 (Table 26) in MineSight software. This optimization was chosen due to the fact that its parameters are judged to be more likely near the value of the parameters that could be used in the Preliminary Economic Assessment and assist in the next drilling program.

One main pit and four satellite pits were proposed in the optimization #3. Table 27 presents the pit design parameters. A double-lane haul ramp is used due to the depth of the pit and the expected traffic. A safety berm of 10 m is located at every second bench.



**Table 29: Pit design parameters.**

Parameters	Unit	Value
Maximum Ramp Gradient	%	12
Ramp Width	m	19
Overall Slope Angle	°	45
Batter Angle	°	85
Bench height	m	5
Safety Berm Width	m	10

The results from optimization number 3 are listed in Table 28 and a 3D perspective view of the pit design was created on Figure 62 and 63.

**Table 30: Optimisation no3.**

Optimisation #	Mineralized Material			Waste		Total	
	Tonnes	Au g/t	Au oz	Tonnes	Au g/t	Tonnes t	Stripping ratio
3	4,793,642	1.76	271,068	18,707,985	0.15	23,501,627	3.90



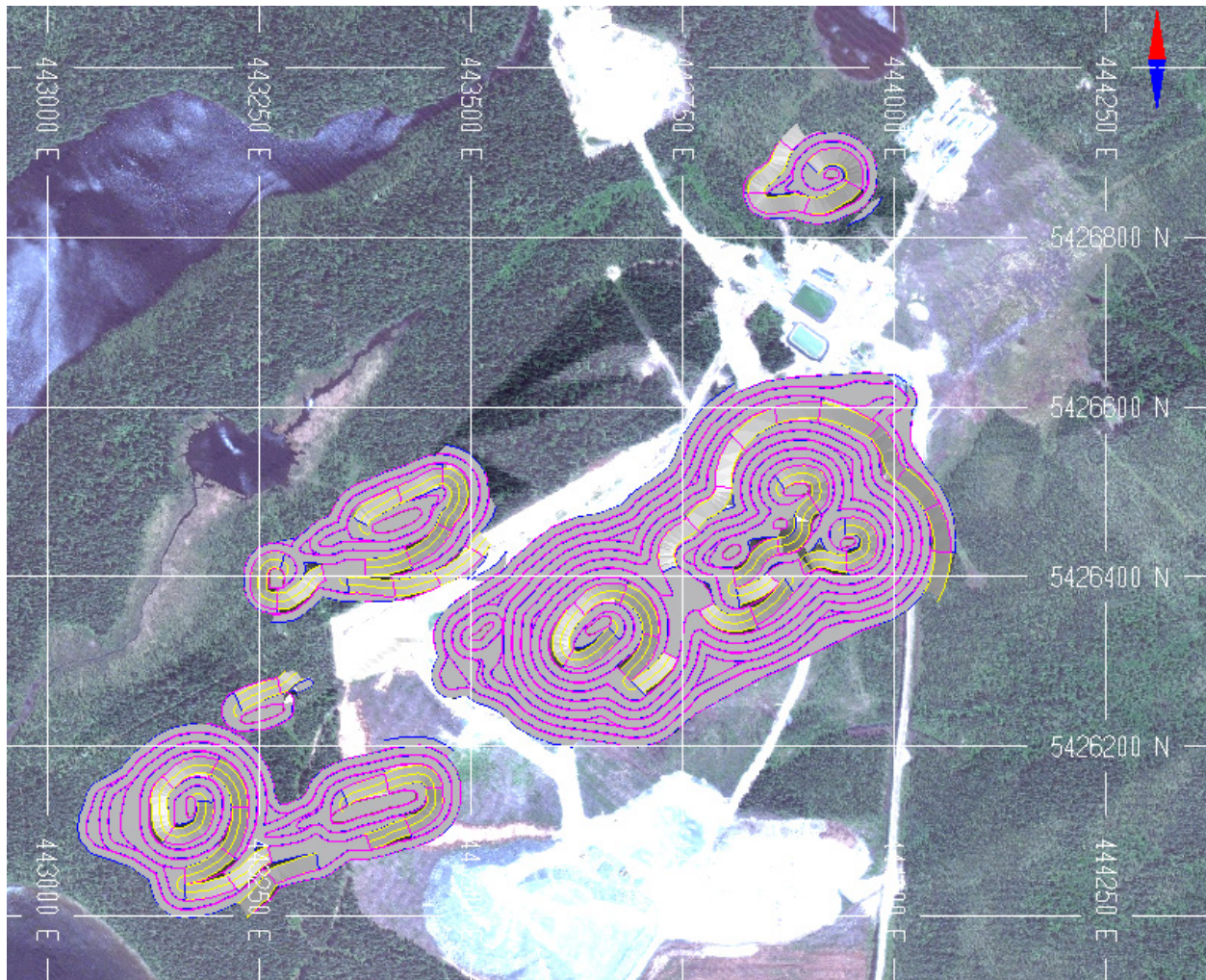


Figure 62: Optimization #3, preliminary pit design.



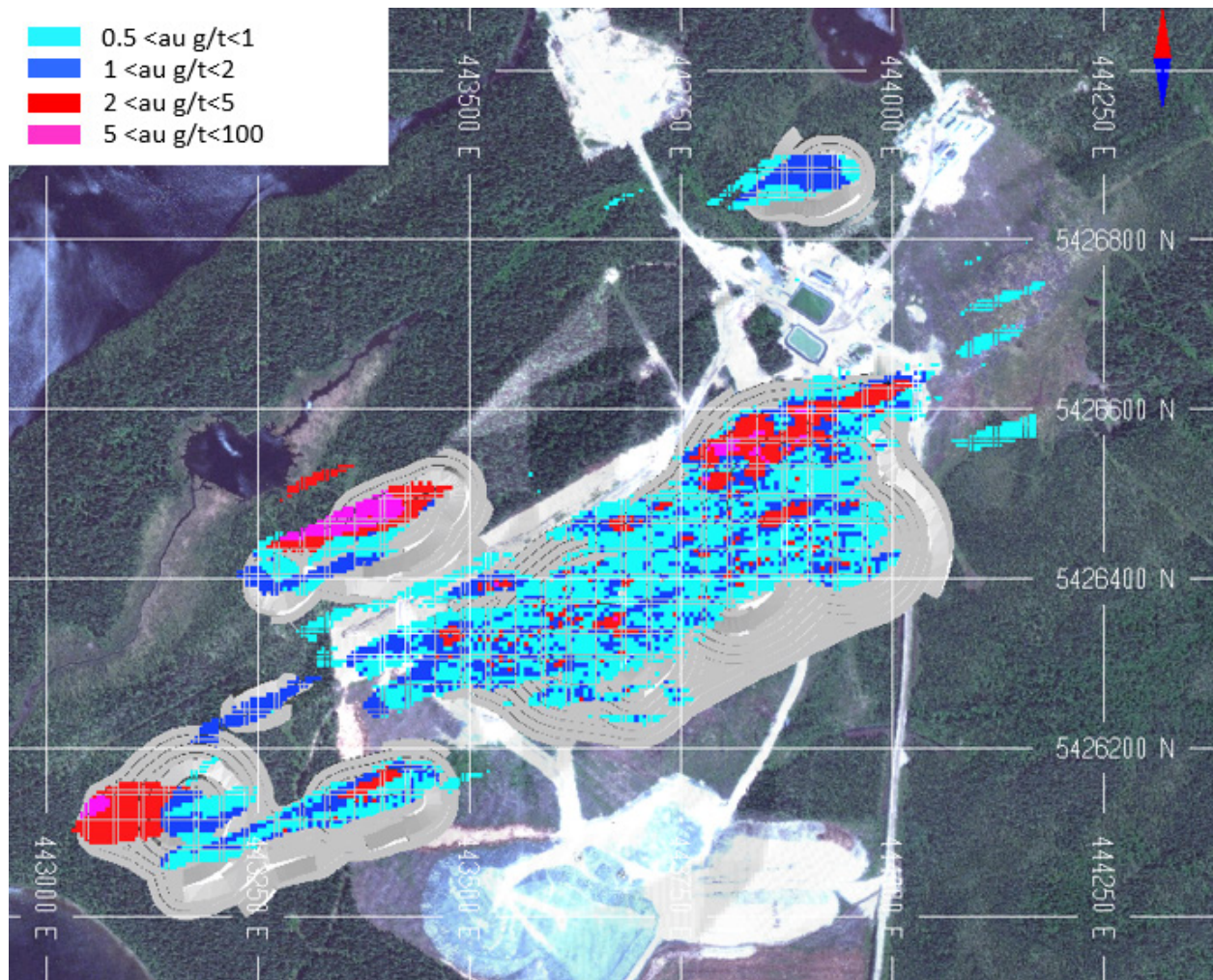


Figure 63: Optimization #3, preliminary pit design with block model.



## 15. Mineral Reserve Estimates

There are no NI 43-101 compliant reserves at Barry, a Feasibility Study or Preliminary Feasibility Study is required to define mineral reserves. Section **16, 17, 18, 19, 20, 21 and 22** are voluntarily omitted as it is a mineral resource report.

## 23. Adjacent Properties

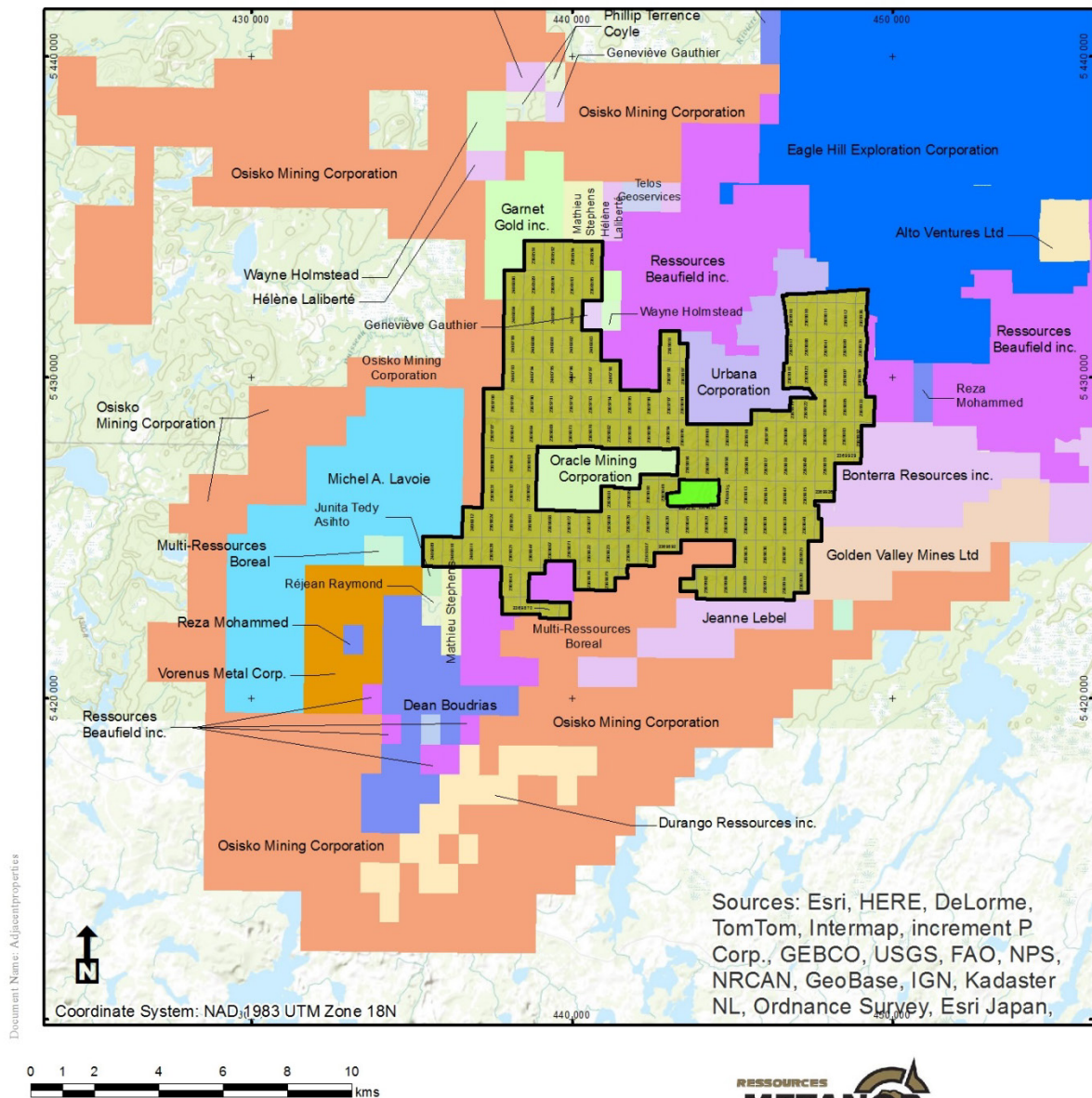
The Urban-Barry sector has been gaining interest since 2006 after the publication of the spectacular drill results published by Noront Resources (now Oban Mining, OBM) on the Windfall project with 800.1 to 1,792.9 g/t Au over 4.8 m and 27.3 g/t Au over 14.4m. Oban mining is currently starting a drilling campaign of 55,000m drilling campaign. Figure 64 show the adjacent properties to the Barry gold deposit.

Osisko Mining Corporation is located at the northeast of the Barry property. Ressources Beaufield and Urbana Corporation are located at the north of the Barry property. Beaufield is currently conducting a drilling campaign of 4,000m on their Urban property.


Bonterra Resources has discovered on the property immediately to the east of Barry, a wide gold bearing zone which returned an intersection of 0.73 g/t Au over 169.10m including 2.84 g/t Au over 31m (PR August 08, 2011). In 2015, the company drilled 4 holes totalling 1,707 m. BonTerra Resources is highly invested in the exploration of its property. BonTerra resources declared 4,337,000 tonnes grading 3.53 g/t. BonTerra Resources planned a multi-phase drill programs in 2016, totalling up to 25,000 meters.

Golden Valley entered in an agreement with BonTerra Resources granting BonTerra 85% interest in the Lac Barry Prospect property.





### Legend

-  Metanor Claim (CDC)
-  Metanor Mining lease

PROJECT:

### NI43-101 Mineral Resources Barry Project

Senneterre, Québec



Figure 64: Adjacent properties.



## 24. Other Relevant Data and Information

Addition cyanidation on tails of gravity test composite 1, 2, 3 are ongoing. Moreover, kinetic cyanidation tests are ongoing as well as work index. Once received, results will be analysed, compiled, and disclosed.

The author is aware that ongoing trench works on the western portion are on-going and have uncovered quartz veins and typical alteration similar to the main deposit zone.

## 25. Interpretation and Conclusions

GoldMinds Geoservices has conducted an extensive validation of the historical database and the supervision of the new drilling campaign. GoldMinds Geoservices has updated the mineral resources for the Barry gold property. Metanor resources has within the Barry property, the potential for the discovery of additional resources and may, with further study, be potentially economic.

GoldMinds Geoservices considers the resource estimate to have been reasonably prepared and conform to the current CIM standards and definitions for estimating resources, as required under NI 43-101 “Standards of Disclosure for Mineral Projects”. Therefore, GoldMinds accepts the public disclosure of the resource estimate as the basis for ongoing exploration at the Barry property. However, the reader should be cautioned that mineral resources that are not mineral reserves do not have demonstrated economic viability.

GoldMinds believes that the Barry property is highly prospective. The new drilling campaign (holes MB-16-07 and 15) confirmed a new mineralized zone located a further 250m west from the existing western pit. The mineralization in this sector is located in the basalt, above the quartz feldspar porphyry (QFP). An old channel sample from trench (141.7E) located near 500m to the west reveals gold at surface and could be the extension of this zone, additional works needs to be done in the sector to confirm mineralization extension. This western new zone deserves additional drilling to define its size and increase its level of confidence as well as extension of mineralization around the existing pit and other targets on the property.

At the Barry property, the mineralized fluids have circulated in the major shear. Additional exploration and geological works are required to increase level of knowledge of the mineralization model in order



to better define the high grade zone laterally in association to the latest geophysical survey. A proposed drilling program for further exploration on the Barry project is described in the section below for the discovery of additional resources.



## 26. Recommendations

### 26.1. Geology and Mineral Resources

There is potential in the Barry deposit to increase the mineral resource in addition to the increase of its lateral extension.

The recent drilling at the Barry property has significantly increased the inferred resources and in order to convert these inferred mineral resources to indicated or measured it is necessary to plan a surface drilling campaign on the property.

GMG has proposed a drilling program to Metanor director of exploration (Mr. Claude Gobeil). Thirty-three (33) sections were created, each fifty (50) meters in the north and south axes facing west through the deposit. On those sections, fifty-eight (58) drill holes are proposed for a total of 4773 meters.

The proposed drillholes are localised in two zones and a priority number (from 1 to 4) has been assigned for each drillhole depending on the order of importance (Figure 65 and 66). The first zone corresponds to the Barry deposit within the lease mining. A total of 55 drillholes are proposed, totalling 4128 meters. These proposed holes will help for the validation of the optimized pits (Section 14) and provide more information on their dimensions.

The second zone is considered as an exploration zone, located NNE from the Barry lease mining with 3 proposed drillholes (Explo\_2016\_01NNE, Explo\_2016\_02NNE and Explo\_2016\_01NNE) totalling 645 meters (Figure 65 and 67). This zone is located seven (7) kilometers north-northeast of the central pit. GoldMinds Geoservices proposes to use the same collar as the existing holes: MB-14-22, M13-03 and M13-0221. These new drilling holes will help validate the continuity of the mineralization and its direction.

The GMG proposed drilling program on the Barry property can be subject to change depending on the access on the field and the funding.



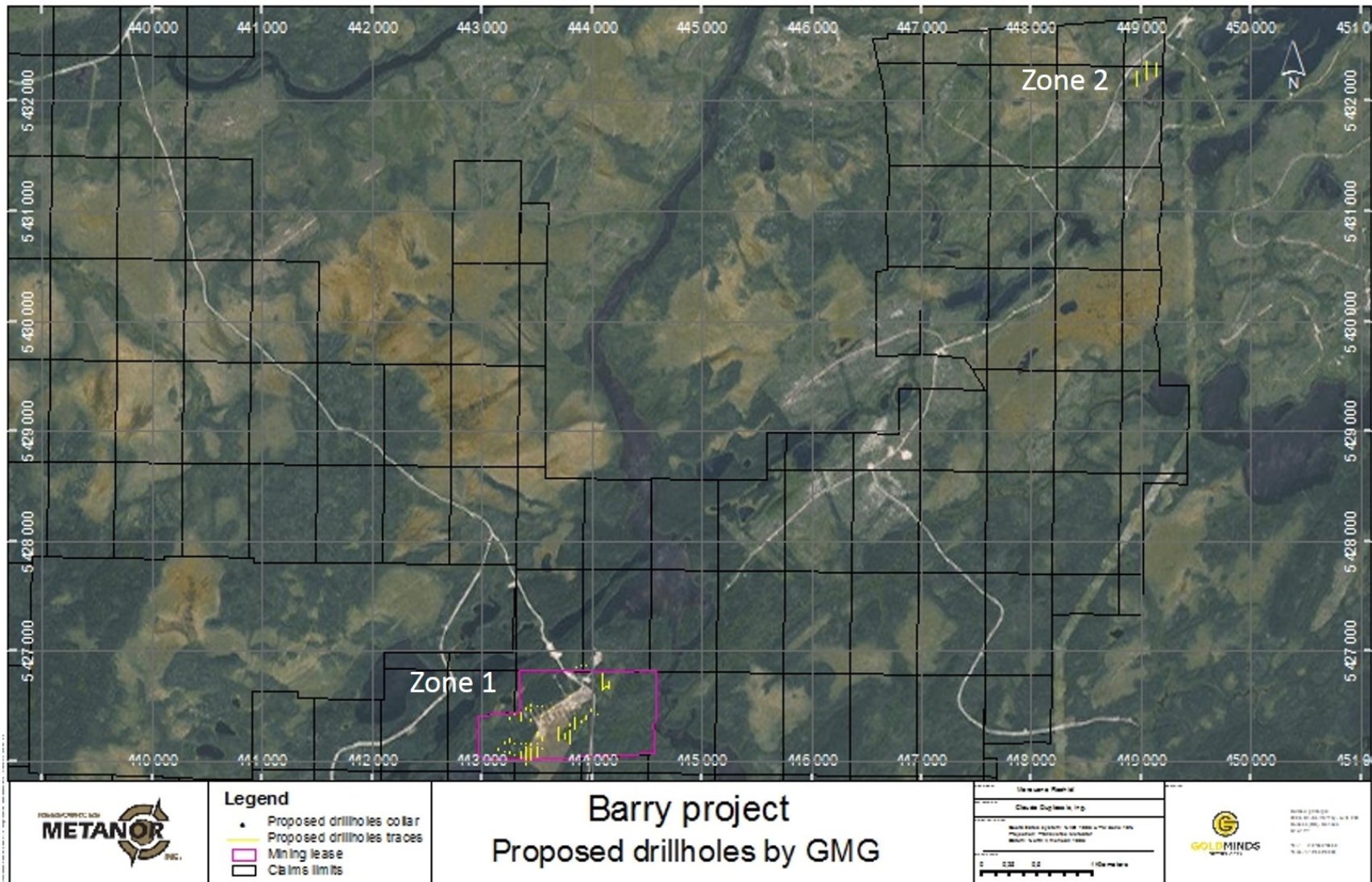


Figure 65: Localization of the proposed drillholes by GMG.



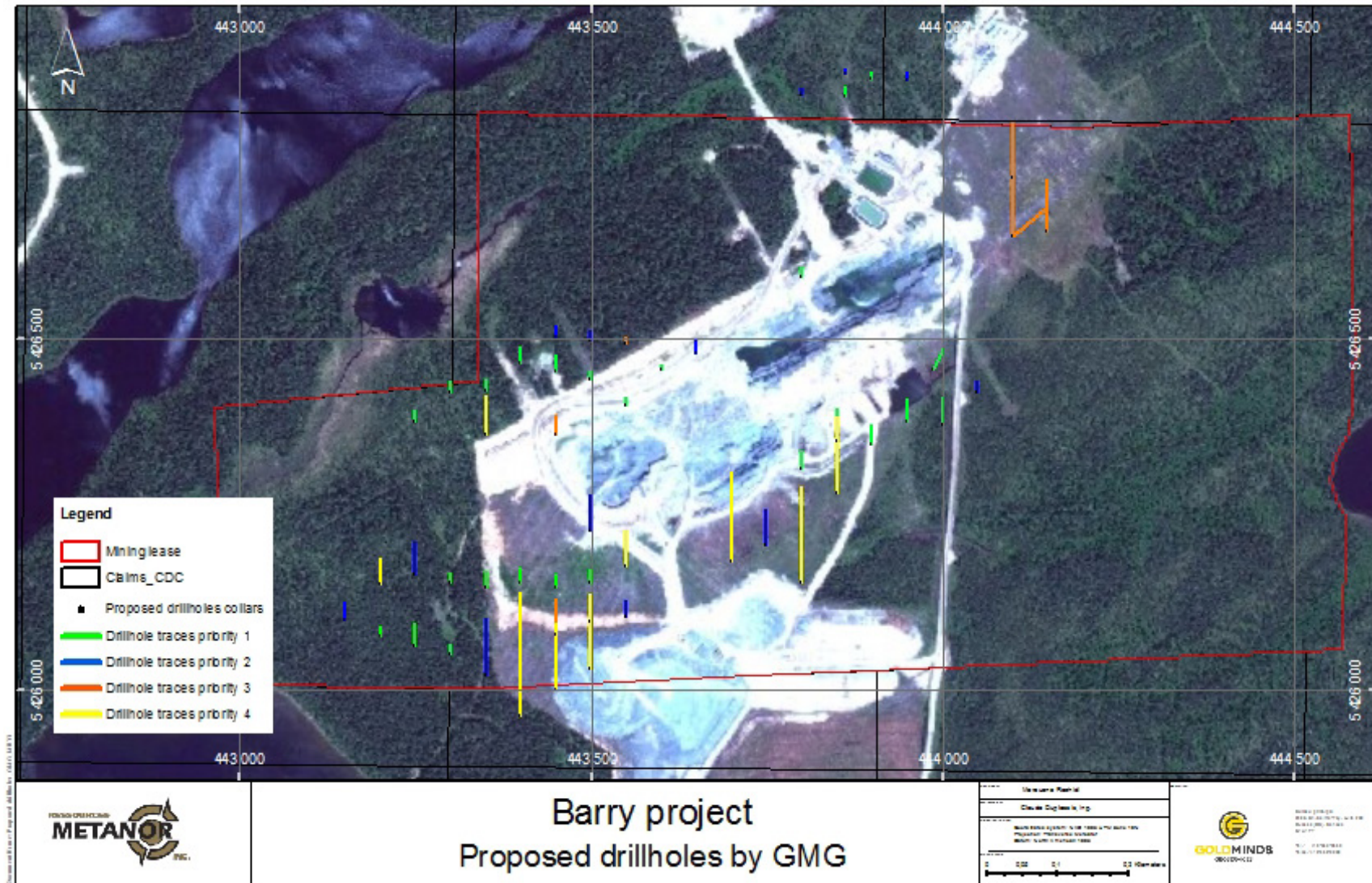
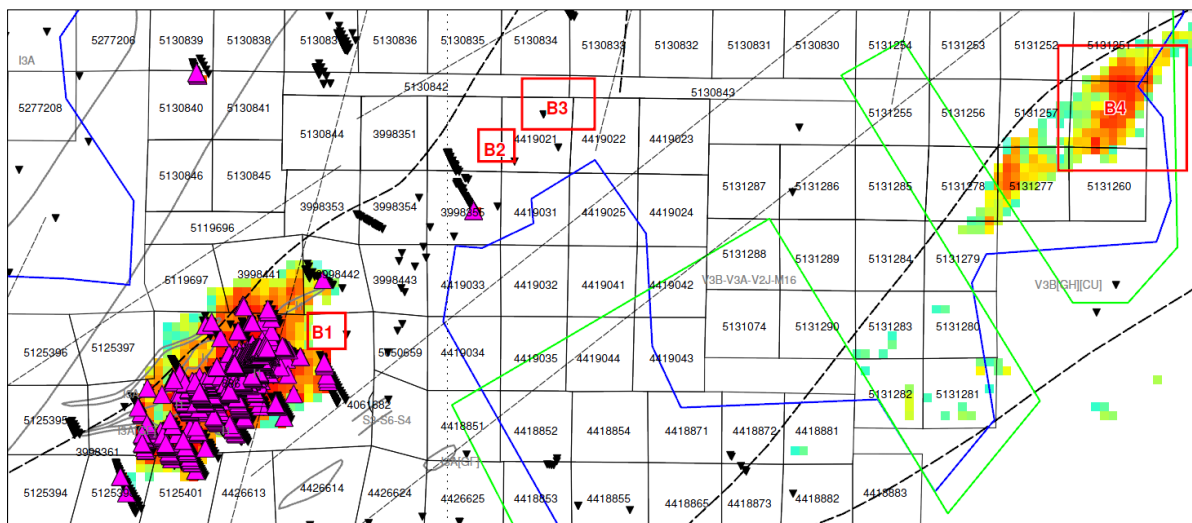


Figure 66: proposed drillholes within zone 1 (Barry property).





The drilling program expenditure is estimated as follows:

- Diamond drilling 4800 m for	\$1,150,000 (all included)
- Consulting fees	250,000
- Manpower	75,000
- Other project expenses	100,000
<b>- Total costs estimated</b>	<b>1,575,000</b>

GMG has prepared the current resource estimate update for the Barry project and makes the following additional recommendations:

- A topographic surface survey (Airborne LIDAR survey) on the entire Barry property;
- Dewater the pits in order to carry out a detailed survey of the pit bottom topography;
- Geological and detailed structural mapping of the Barry property with a focus on the IP anomalies for a better understanding of the structural system bearing gold;
- Conduct further specific gravity testing to define the specific gravity for the various mineralized lithologies to a greater degree;
- The author also recommends to carry out a Preliminary Feasibility Study for the Barry property. The PEA will target an open-pit scenario with the mineralized material shipped to the Bachelor mill.



## **26.2. Mineral Processing and Metallurgical Testing**

If the Barry mineralized material is shipped to the Bachelor mill, no additional laboratory study is needed because the mill already processed this material achieving an average recovery of 92.54%. However, the mill will need to be upgraded to receive this additional material as the current capacity is 1,200 tpd.

Furthermore, the possibility to build a new mill at the Barry site should be studied to allow a well-informed decision between the haulage of material to the Bachelor mill, and the construction of a new mill.



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