Éléonore Operations
Quebec, Canada
NI 43-101 Technical Report

Report Effective Date:

31 December, 2015.

Prepared for Goldcorp Inc. by:

Ms Christine Beausoleil, P.Geo.

Mr Denis Fleury, P.Eng.

Mr Andy Fortin, P.Eng.

Mr Luc Joncas, P.Eng.

CERTIFICATE OF QUALIFIED PERSON

I, Christine Beausoleil, P.Geo., am employed as the Exploration Manager with Les Mines Opinaca Ltée., a wholly-owned subsidiary of Goldcorp Inc.

This certificate applies to the technical report titled "Éléonore Operations, Quebec, Canada, NI 43-101 Technical Report" that has an effective date of 31 December, 2015 (the "technical report").

I am a member of the Ordre des Géologues du Québe (OCG #656) and of the Association of Professional Engineers and Geoscientists of the province of British Columbia (APEGBC #36156). I graduated from Université du Québec à Montréal with a BSc. in Geology in 1997.

I have practiced my profession for 19 years since graduation. I have been directly involved with the Éléonore Operations full time since February 20th, 2012 as Resources Geologist, Chief Geologist and presently as Exploration Manager.

As a result of my experience and qualifications, I am a Qualified Person as defined in National Instrument 43–101 *Standards of Disclosure for Mineral Projects* (NI 43–101).

I have worked at the Éléonore Operations since 2012, and this familiarity with the operations serves as my scope of personal inspection.

I am responsible for Sections 1.2, 1.3, 1.4, 1.6, 1.7, 1.8, 1.9, 1.10, 1.12, 1.22, 1.23; Sections 2.2, 2.3, 2.4, 2.5, 2.6; Section 3; Section 4; Section 5; Section 6; Section 7; Section 8; Section 9; Section 10; Section 11; Section 12; Section 14; Section 23; Sections 25.1, 25.2, 25.3, 25.4, 25.6, 25.15; Section 26, Section 27 and Appendix A of the technical report.

I am not independent of Goldcorp Inc. as independence is described by Section 1.5 of NI 43–101.

I have been involved with Eleonore Operations since 2012, and I have previously co-authored the following technical report on the operations:

- Beausoleil, C., Fleury, D., Fortin, A., Brisson, T. and Joncas, L., 2014: Éléonore Project, Quebec, Canada, NI 43-101 Technical Report: Technical Report prepared by Goldcorp Inc., effective date 26 January 2014;

I have read NI 43–101 and the sections of the technical report for which I am responsible have been prepared in compliance with that Instrument.

As of the effective date of the technical report, to the best of my knowledge, information and belief, the sections of the technical report for which I am responsible contain all scientific and technical information that is required to be disclosed to make those sections of the technical report not misleading.

Dated: 23 March, 2016

"Signed and sealed"

Christine Beausoleil, P.Geo.

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GOLDCORP

CERTIFICATE OF QUALIFIED PERSON

I, Denis Fleury, P.Eng., am employed as the Chief Engineer with Les Mines Opinaca Ltée., a wholly-owned subsidiary of Goldcorp Inc.

This certificate applies to the technical report titled "Éléonore Operations, Quebec, Canada, NI 43-101 Technical Report" that has an effective date of 31 December, 2015 (the "technical report").

I am a member of the Ordre des ingénieurs du Québec (OIQ 40177). I graduated in 1984 from Ecole Polytechnique de Montreal with a Bachelor's degree in Mining Engineering and pursued post-graduate studies in rock mechanics until May 1986.

I have practiced my profession for almost 30 years. I have been directly involved in Mineral Reserves evaluation for 13 years in Canada and six years in Australia (JORC Code). I have experience in a number of commodities, including gold (12 years), silver, lead and zinc (8 years), copper (8 years) and diamonds (2 years)) and experience in several underground mining methods, including longitudinal (14 years), transverse (14 years) and block caving (2 years).

As a result of my experience and qualifications, I am a Qualified Person as defined in National Instrument 43–101 *Standards of Disclosure for Mineral Projects* (NI 43–101).

I have worked at the Éléonore Operations since mid-2013, and this familiarity with the operations serves as my scope of personal inspection.

I am responsible for Sections 1.1, 1.13, 1.14, 1.15, 1.17, 1.18, 1.20, 1.22; Section 2; Section 15; Section 16; Section 18; Section 21; Section 24; Sections 25.7; 25.8, 25.10, 25.13, 25.15, and Section 27 of the technical report.

I am not independent of Goldcorp Inc. as independence is described by Section 1.5 of NI 43–101.

I have been involved with the Eleonore Operations since mid-2013 and I have previously co-authored the following technical report on the operations:

- Beausoleil, C., Fleury, D., Fortin, A., Brisson, T. and Joncas, L., 2014: Éléonore Project, Quebec, Canada, NI 43-101 Technical Report: Technical Report prepared by Goldcorp Inc., effective date 26 January 2014;

I have read NI 43–101 and the sections of the technical report for which I am responsible and have been prepared in compliance with that Instrument.

As of the effective date of the technical report, to the best of my knowledge, information and belief, the sections of the technical report for which I am responsible contain all scientific and technical information that is required to be disclosed to make those sections of the technical report not misleading.

Dated: 23 March, 2016

"Signed and sealed"

Denis Fleury, P.Eng.

GOLDCORP

CERTIFICATE OF QUALIFIED PERSON

I, Andrew (Andy) Fortin, P.Eng., am employed as the Manager, Process and Surface Operations with Les Mines Opinaca Ltée., a wholly-owned subsidiary of Goldcorp Inc.

This certificate applies to the technical report titled "Éléonore Operations, Quebec, Canada, NI 43-101 Technical Report" that has an effective date of 31 December, 2015 (the "technical report").

I am a member of the Ordre des ingénieurs du Québec (OIG #118805). I graduated with a Bachelor of Science degree in Metallurgy from University Laval in 1995.

I have practiced my profession for 21 years, and have participated in gold mineral processing, through three gold mine projects and two process plant expansions. I have held a number of supervisory positions, including Chief Metallurgist, Operations General Foreman, Project Manager and Process Plant Manager. I have developed expertise in process plant start-up and gold mineral processing. I have worked at a senior manager level for a total of 13 years.

As a result of my experience and qualifications, I am a Qualified Person as defined in National Instrument 43–101 *Standards of Disclosure for Mineral Projects* (NI 43–101).

I have worked at the Éléonore Operations since 2011, and this familiarity with the operations serves as my scope of personal inspection.

I am responsible for Sections 1.11, 1.16, 1.19, 1.20, 1.22; Sections 2.2, 2.3, 2.4, 2.6; Section 3; Section 13; Section 17; Section 19; Sections 20.4, 20.5; Section 21; Sections 25.5, 25.9, 25.11, 25.13, 25.15; and Section 27 of the technical report.

I am not independent of Goldcorp Inc. as independence is described by Section 1.5 of NI 43–101.

I have been involved with the Eleonore Operations since 2011 and I have previously co-authored the following technical reports on the operations:

- Beausoleil, C., Fleury, D., Fortin, A., Brisson, T. and Joncas, L., 2014: Éléonore Project, Quebec, Canada, NI 43-101 Technical Report: Technical Report prepared by Goldcorp Inc., effective date 26 January 2014;
- Michaud, C., Chen, E., Simoneau, J., Fortin, A., and Belanger, M., 2012: Éléonore Project, Quebec, Canada, NI 43-101 Technical Report: Technical Report prepared by Goldcorp Inc., effective date January 26, 2012;

I have read NI 43–101 and the sections of the technical report for which I am responsible have been prepared in compliance with that Instrument.

As of the effective date of the technical report, to the best of my knowledge, information and belief, the sections of the technical report for which I am responsible contain all scientific and technical information that is required to be disclosed to make those sections of the technical report not misleading.

Dated: 23 March, 2016

"Signed and sealed"

Andy Fortin, P.Eng.

GOLDCORP

CERTIFICATE OF QUALIFIED PERSON

I, Luc Joncas, P.Eng., was employed at the effective date of the technical report as the Mine Manager with Les Mines Opinaca Ltée., a wholly-owned subsidiary of Goldcorp Inc. I am currently an employee of Goldcorp Inc.

This certificate applies to the technical report titled “Éléonore Operations, Quebec, Canada, NI 43-101 Technical Report” that has an effective date of 31 December, 2015 (the “technical report”).

I am a member of the Ordre des ingénieurs du Québec (OIQ #117137). I graduated with a mining engineering diploma from Laval University in 1994.

I have practiced my profession for 21 years. I have previously been involved with mine designs, mine planning, mine project economic evaluations, mine operations and mine construction for precious metals and base metals, in Ontario, New-Brunswick and Quebec.

As a result of my experience and qualifications, I am a Qualified Person as defined in National Instrument 43–101 *Standards of Disclosure for Mineral Projects* (NI 43–101).

I have worked at the Éléonore Operations since 2010, and this familiarity with the operations serves as my scope of personal inspection.

I am responsible for Sections 1.5, 1.14, 1.15, 1.17, 1.18, 1.20, 1.21, 1.22; Sections 2.2, 2.3, 2.4, 2.6; Section 3; Section 16; Section 18; Section 20; Section 21; Section 22, Sections 25.8, 25.10, 25.12, 25.13, 25.14, 25.15, and Section 27 of the technical report.

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- Beausoleil, C., Fleury, D., Fortin, A., Brisson, T. and Joncas, L., 2014: Éléonore Project, Quebec, Canada, NI 43-101 Technical Report: Technical Report prepared by Goldcorp Inc., effective date 26 January 2014;

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As of the effective date of the technical report, to the best of my knowledge, information and belief, the sections of the technical report for which I am responsible contain all scientific and technical information that is required to be disclosed to make those sections of the technical report not misleading.

Dated: 23 March, 2016

"Signed and sealed"

Luc Joncas, P.Eng.

IMPORTANT NOTICE

This report was prepared as a National Instrument 43-101 Technical Report by Goldcorp Inc. The quality of information, conclusions, and estimates contained herein are based on: i) information available at the time of preparation, ii) data supplied by outside sources, and iii) the assumptions, conditions, and qualifications set forth in this report. Except for the purposes legislated under Canadian provincial securities law, any other uses of this report by any third party is at that party's sole risk.

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1.0 SUMMARY

1.1 Introduction

Ms. Christine Beausoleil, P.Geo., Mr. Denis Fleury, P.Eng., Mr. Andy Fortin, P.Eng., and Mr. Luc Joncas, P.Eng. (the Qualified Persons or QPs) prepared this Technical Report (the Report) for Goldcorp Inc. (Goldcorp) on the wholly-owned Éléonore Gold Operations (the Éléonore Operations or the Project) located in Quebec, Canada.

The Éléonore Operations host the Roberto gold deposit, which consists of the Roberto, East Roberto, and Zone du Lac lenses. Following a four-year development period, the first doré bar was poured from the underground mine in October 2014. Commercial production was declared in April 2015. The production rate forecast for 2016 is about 5,000 t/d. Ramp up will continue in 2017, and it is expected that the full production rate of 7,000 t/d will be reached in about mid-2018.

This Report supports the disclosure of updated Mineral Resources and Mineral Reserves for the Project. Goldcorp will be using the Report in support of its 2015 Annual Information Form (AIF) filing.

The operating entity is Les Mines Opinaca Ltée., a wholly-owned subsidiary of Goldcorp Inc. For the purposes of this Report, “Goldcorp” is used to refer interchangeably to the parent and subsidiary companies.

Currency is expressed in American (US$) or Canadian dollars (C$) as identified in the text.

1.2 Location, Climate, and Access

The Éléonore Operations are located in the Ell Lake area, in the northeastern part of the Opinaca Reservoir of the James Bay region, in the province of Quebec, Canada. The mine is located approximately 350 km north of the towns of Matagami and Chibougamau, and 825 km north of Montreal.

The mine area is characterized by cold winters and short, cool summers. Precipitation varies throughout the year, reaching an average of 2 m annually.

1.3 Mineral Tenure and Surface Rights

Goldcorp acquired the then Éléonore Project from Virginia Gold Mines Inc. (Virginia) in 2005, under a plan of arrangement.

The Éléonore Operations comprise 369 contiguous claims totalling 19,037.17 ha, in addition to a granted mining lease (289.4 ha), for a total tenure holding of 19,326.57 ha.

The claims are 100% owned by Les Mines Opinaca Ltée (Opinaca), an indirectly wholly-owned Goldcorp subsidiary

Mining Lease #1009A was granted by Quebec government in February 2014.

In the opinion of the responsible QP, information from legal experts and Goldcorp experts support that the mineral tenure held is valid and sufficient to support the disclosure of Mineral Resources and Mineral Reserves.

Surface rights in the Project area are classified as Category III provincial territories as per the James Bay and Northern Quebec Agreement, which gives certain hunting and fishing rights to the First Nation communities of the region.

In the opinion of the responsible QP, there are no pre-existing surface rights which are in conflict with the mining operations.

1.4 Agreements and Royalties

A royalty is payable to Osisko Gold Royalties Ltd. (Osisko Gold; formerly Virginia Gold Mines Inc.). The royalty is a sliding scale royalty calculated as function of ounce production and gold price, and can vary between 2.00% and 3.5% of net smelter return.

An annual payment is required to the Cree Nation under a confidential Cree Collaboration Agreement.

1.5 Environment, Permitting and Socio-Economics

The Éléonore Operations currently hold all required permits to operate, including environmental permits.

1.6 Geology and Mineralization

The Roberto deposit is a clastic sediment-hosted stockwork-disseminated gold deposit.

It is hosted in Archaean-age rocks of a volcano–sedimentary greenstone belt developed near the contact between the Opinaca and La Grande Subprovinces of the Superior Province.

Rock units belonging to the La Grande Subprovince west of the Opinaca–La Grande contact comprise most of the Project area and host the Roberto deposit. The Roberto deposit is hosted in polydeformed greywacke units in contact with aluminosilicate-bearing greywacke and thin conglomerate units. The 1.9 km long crescent shape of the deposit is the result of F2 folding. To date, mineralization has been intersected to a vertical depth of 1,400 m. Gold-bearing zones are generally 5–6 m in true thicknesses, varying from 2 m to more than 20 m locally. All zones remain open at depth.

Information from production drilling and underground mapping has shown that folding in the southern area edge of the main shoot is tighter than previously interpreted. The close folding that resulted in increased mining dilution during 2015 seems to be limited to within a 50 m corridor.

The numerous subparallel mineralized zones are characterized by gold-bearing quartz–dravite–arsenopyrite veinlets, contained within quartz–microcline–biotite–dravite–arsenopyrite–pyrrhotite auriferous replacement zones. Sulphide concentrations within the auriferous zones vary from 2% to 5%, with the main sulphides being arsenopyrite, löllingite ($FeAs_2$), pyrrhotite, and pyrite.

Each mineralized zone was interpreted and modelled in three dimensions (3D) for resource estimation purposes.

Relationships between the nearby diorite and pegmatite intrusions and the gold mineralization event are still unknown.

Exploration targets have been identified around the Roberto deposit, including the Old Camp, Hanging Wall Veins (HWV), the North Zone (NZ) and the 494 area. Additional surface mapping and prospecting in the area of the Éléonore Operations is planned. Most of the claims have yet to be significantly explored.

In the opinion of the responsible QP, the knowledge of the deposit setting and lithologies, and of the mineralization style and its structural and alteration controls, is sufficient to support Mineral Resource and Mineral Reserve estimation. Prospects and targets are at an earlier stage of exploration, and the lithologies, structural, and alteration controls on mineralization are currently insufficiently understood to support estimation of Mineral Resources.

1.7 Exploration and History

Exploration in support of mine development has included prospecting, gridding, mapping, ground induced polarization (IP) and magnetic surveys, a Hummingbird electromagnetic (HEM) survey, grab and rock chip sampling, soil sampling, trench and channel sampling, core drilling, metallurgical testwork, Mineral Resource and Mineral Reserve estimates, baseline environmental, geotechnical and hydrological studies, and technical studies.

In the opinion of the responsible QP, the exploration programs completed to date are appropriate to the known mineralization style. There is considerable remaining exploration potential in the vicinity of the current mining operations.

1.8 Drilling

At the end of 2015, a total of 940,516 m has been drilled in 4,613 core holes on the Property since 2004. Of these, a total of 351 holes (105,635 m) were completed by Virginia and 4,262 holes (834,881 m) by Goldcorp.

Standardized logging forms and geological legends were developed for the Project. Geotechnical logs were completed in sequence prior to geological logging. Geological logging used standard procedures and collected information on mineralization, lithological breaks, alteration boundaries, and major structures. All drill core is photographed. Core recovery is acceptable for all drill programs.

Upon completion of a hole, surface drill hole collars were surveyed using a differential global positioning system (GPS) instrument by a registered surveyor. Underground drill holes are surveyed using a Leica TS15 robotized station.

Downhole surveys were carried out by the drill contractor for dip and deviation using a Reflex instrument.

Drill data are typically verified prior to Mineral Resource and Mineral Reserve estimation by running a software program check.

Sample intervals were determined by the geological relationships observed in the core and vary between 0.3 m and 1.25 m. An attempt was made to terminate sample intervals at lithological and mineralization boundaries.

Specific gravity (SG) data were collected by Goldcorp personnel. The specific gravity database contains 11,923 specific gravity results that were determined on core samples. An SG of 2.77 was used for all veins. The SG database is currently sufficient to provide a reliable assessment of the variability of the specific gravity across the deposit and across the various rock types.

In the opinion of the responsible QP, the quantity and quality of the lithological, geotechnical, collar, and down-hole survey data collected during the exploration and infill drill programs completed by Virginia and Goldcorp are sufficient to support Mineral Resource and Mineral Reserve estimation.

1.9 Sample Analysis and Security

Exploration and infill core samples were analyzed by independent laboratories using industry-standard methods for gold analysis. A number of different laboratories have been used. Since April 2014, exploration and infill sample preparation and assay are performed by Accurassay Laboratories Inc. in Rouyn-Noranda, Québec, which is accredited for ISO 17025. The in-house laboratory operated by Goldcorp started operation in February 2014 and begin to process muck, chips and definition drilling samples at a rate of 180 samples/day. Overflow and other production samples were sent to ALS Laboratories (ALS). Between January 2007 and April 2014, ALS in Val-d'Or in Quebec was the primary laboratory, and holds ISO 17025 and 9001/2008 certifications.

Metallurgical testwork has been done at a number of laboratories, but was primarily performed by SGS.

Sample preparation for samples that support Mineral Resource and Mineral Reserve estimation has followed a similar procedure for all Virginia and Goldcorp drill programs. The preparation procedure is in line with industry-standard methods for a clastic sediment-hosted stockwork-disseminated gold deposit in an orogenic setting.

ALS sample preparation comprised drying and crushing to 70 to 90% passing 2 mm and pulverizing to 85% passing 75 µm. Gold assays were performed by standard fire assay with an atomic absorption spectroscopy (AAS) finish. For assay results equal or above 3.0 g/t gold, samples are re-assayed with a gravimetric finish. ALS Chemex reports an upper limit of 10 g/t gold and a detection limit of 0.01 g/t gold for AAS analyses. No other elements were routinely requested for assay.

Sample preparation at the internal laboratory consists of crushing to 75% <10 mesh and pulverising to 85% passing 200 mesh. Gold assays are performed by using a 30 g fire assay with a microwave plasma–atomic emission spectrometry (MP-AES) finish. For assay results above 34.0 g/t gold, samples are re-assayed with a gravimetric finish. The internal laboratory reports an upper limit of 34 g/t gold and a detection limit of 0.001 g/t gold for MP-AES analyses.

The Accurassay sample preparation procedure consisted of drying and crushing to 85% <10 mesh, followed by pulverizing to 85% passing <200 mesh. Gold assays are performed by standard fire assay with an AAS finish. Accurassay reports an upper limit of 10 g/t gold and a detection limit of 0.01 g/t gold for AAS analyses. No other elements are routinely assayed.

The collected sample data adequately reflect deposit dimensions, true widths of mineralization, and the style of the deposits.

Virginia and Goldcorp maintained a quality assurance and quality control (QA/QC) program for the Project. This comprised the submission of analytical standard reference materials (SRMs), duplicates and blanks. QA/QC submission rates meet industry-accepted standards of insertion rates. No material sample biases were identified by the QA/QC programs.

The results of the QA/QC programs did not indicate any problems with the analytical programs, therefore Goldcorp concludes that the drill core gold analyses are acceptably accurate and precise to support Mineral Resource and Mineral Reserve estimation.

Sample security has relied upon the fact that the samples were always attended or locked in the logging facility. Chain-of-custody procedures consisted of filling out sample submittal forms that were sent to the laboratory with sample shipments to make certain that all samples were received by the laboratory. Current sample storage procedures and storage areas are consistent with industry standards.

The responsible QP is of the opinion that the quality of the gold analytical data are sufficiently reliable to support Mineral Resource and Mineral Reserve estimation and that sample preparation, analysis, and security are generally performed in accordance with exploration best practices and industry standards.

1.10 Data Verification

A number of data verification programs and audits have been performed over the Project's history by independent consultants in support of technical reports and by Goldcorp personnel in support of mining studies. Goldcorp has also performed its own internal validations. Data verification checks were performed as follows:

- G.N. Lustig Consulting Ltd (2006): review of sampling and assay data on the Project; no material biases or errors noted;
- G.N. Lustig Consulting Ltd (2008): review of check assays performed by SGS Laboratories on 3,285 pulp samples originally assayed by ALS; the laboratories were considered to have satisfactory agreement;
- Smee Associates (2007): review of QA/QC program and sampling procedures; observations concluded that the sampling and quality control programs were running smoothly and were compliant with mineral exploration best practices;
- Goldcorp (2006 to date): database validation checks, laboratory inspections; no material biases or errors noted.

A reasonable level of verification has been completed, and no material issues would have been left unidentified from the programs undertaken. Data verification programs completed on the data collected from the Project adequately support the geological interpretations, and the quality of the analyses and the analytical database, and therefore support the use of the data in Mineral Resource and Mineral Reserve estimation.

1.11 Metallurgical Testwork

Metallurgical testwork has included chemical analyses, acid neutralization potential tests, semi-qualitative petrography, X-ray diffraction (XRD) study, comminution testwork (including standard Bond, crushing work index (CWi), abrasion index (Ai) and ball mill work index (BWi) tests), bench-scale flotation tests, Knelson/Laplante gravity-recoverable gold testwork, grade variability recovery testwork, establishment of a reagent suite, evaluation of intensive cyanide leach processing of flotation concentrates, cyanide leach tests on gravity tailings, cyanide backfill tests.

Samples selected for testing were considered to be representative of the various types and styles of mineralization within the Roberto and Zone du Lac zones. Samples were selected from a range of depths within the deposit. Samples were taken to ensure that tests were performed on sufficient sample mass.

Crushing and grinding testwork was completed on three different batches by SGS Lakefield Research Limited (SGS). The samples came from the Roberto, Roberto East and Zone du Lac zones. The Bond ball mill work index values increase with depth from 16.7 kwh/t to 20.6 kwh/t, and the abrasion index falls between the 78th and 80th percentiles compared to the SGS database at 0.466. Éléonore ore is considered moderately hard and abrasive.

Ore from the Éléonore Operations contains iron sulphides such as arsenopyrite. Most of the rock will have a net acid generating potential and will also leach arsenic when in contact with neutral pH water. Under these conditions, the waste rock and the process tailings will have to be managed within an engineered containment system, as required by Directive 019 from the Quebec Environment and Sustainable Development Ministry.

Overall, circuit recovery will vary with the gold feed grade, with a weighted-average recovery of 92.5% projected over the life-of-mine (LOM) based on current economic assumptions.

1.12 Mineral Resource Estimate

The Mineral Resources are based on a total of 2,931 core drill holes and 142 surface channels, for a total of 394,861 assay results collected between September 2004 and 22 October, 2015 (the date of the database closeout for estimation purposes).

The mineralized zones were interpreted based on alteration, mineralization, structures and assay results. Major lithologies and alteration styles were also interpreted on section and plan views. The interpretations consist of four principal zones (5010, 5050, 6000 and 7000) and 39 secondary zones. Five of the secondary zones are hanging wall zones.

For all of mineralized solids, the 2015 interpretation was updated using newly-available information. The interpretation of the geology and mineralized zones was first completed on a series of level plans spaced 15 m apart, and then reconciled on cross-section views spaced 15 m apart. A minimum width of 2.5 m and cutoff grades of 1 g/t gold (LG) and 3 g/t gold (HG) were used. The dilution envelope was created at approximately 30 m around the LG zones.

A top cut varying from 30 g/t to 100 g/t gold (6.5 g/t gold for the dilution envelope) was applied to assay grades prior to compositing.

Top-cut drill hole samples were composited inside the mineralized solids into equal 2 m down-hole length intervals. For HG and LG composites, residuals were retained in the database since Vulcan allows composites to be weighted by length during the interpolation. Composites were calculated by length-weighted averaging of gold assays within each interval.

Variography was completed using the 2 m gold grade composites for the four main mineralized zones and the main hanging wall zone (500). The results of the variographic investigations are consistent with the geological features of the deposit.

Sample search ellipsoid sizes and orientation were established using a combination of variogram ranges, drill hole distribution, and geological understanding. Ordinary kriging (OK) was used to estimate all the mineralized zones. Inverse distance weighing to the third power (ID3) was used to estimate the dilution envelope.

Visual inspection confirmed that the block model respected the drill hole data. A nearest-neighbour (NN) model using 5 m composites and an inverse distance weighting to the second power (ID2) model were produced to check the global and local bias of the Mineral Resource model; results indicated that the global means of the resource model matched well with the verification models, with differences within acceptable limits in most of the main HG veins; swath plots indicated that the mineralization trends were adequately reproduced.

Estimated blocks were classified into the Measured, Indicated and Inferred categories. Classification was based, depending on confidence category, on the distance to the nearest adjacent drill hole, with different numbers of drill holes required depending on the level of confidence. Measured Mineral Resources also had to be within, or closely proximal to, underground development.

Considering the geometry and shape of the orebody, the Roberto deposit is considered to be amenable to underground mining using long-hole stoping methods. Based on the pre-feasibility work, a metallurgical recovery of 92.5% and an operating cost of approximately US$100.42/t (comprising the following costs: mining: US$45.60/t; processing: US$31.22/t; general and administrative (G&A): US$23.60/t) were considered reasonable. Using a gold price of US$1,300/oz with a C$/US$ exchange rate of 1.20, the cutoff grade required to support reasonable prospects of eventual economic extraction is approximately 2.8 g/t gold. A minimum true thickness of 2.5 m was applied.

Mineral Resources take into account geological, mining, processing and economic constraints, and have been confined within geological boundaries; they can therefore be classified in accordance with the 2014 CIM Definition Standards for Mineral Resources and Mineral Reserves (CIM 2014).

The QP for the Mineral Resource estimate is Christine Beausoleil, P.Geo, an employee of Goldcorp.

The Mineral Resources (exclusive of Mineral Reserves) for the Éléonore Operations are summarized in Table 1-1. The estimate has an effective date of 31 December, 2015.

Table 1-1: Mineral Resource Estimate

Category	Tonnes (Mt)	Au Grade (g/t Au)	Contained Gold (M oz)
Measured	0.94	6.84	0.21
Indicated	3.65	5.14	0.60
Total Measured and Indicated	***4.58***	***5.49***	***0.81***
Inferred	9.97	7.11	2.28

Notes to Accompany Mineral Resource Table:

1. Ms Christine Beausoleil, P.Geo., a Goldcorp employee, is the Qualified Person for the estimate. The estimate has an effective date of 31 December, 2015.
2. The Mineral Resources are classified as Measured, Indicated and Inferred Mineral Resources, and are based on the 2014 CIM Definition Standards.
3. Mineral Resources are exclusive of Mineral Reserves. Mineral Resources are not known with the same degree of certainty as Mineral Reserves and do not have demonstrated economic viability.
4. A minimum true thickness of 2.5 m was applied for all Mineral Resource estimates, using the grade of the adjacent material when assayed, or a value of zero when not assayed.
5. A top cut varying from 30 g/t to 100 g/t gold (6.5 g/t gold for the dilution envelope) was applied to assay grades prior to compositing grades for interpolation into model blocks using ordinary kriging (OK) and inverse distance weighting to the third power (ID3) methods, and was based on 2 m composites within a block model made of 5 m long x 5 m wide x 5 m high blocks. Average specific gravity (SG) is 2.77.
6. Mineral Resources are reported using a 2.8 g/t gold cut-off grade, which is based on assumptions of a US$1,300 per ounce gold price, long-hole stoping underground mining methods, an exchange rate of C$/US$1.20, a life-of-mine metallurgical recovery of 92.5%, and a total mining cost of US$100.42/t (comprising the following cost: mining: US$45.60/t; processing: US$31.22/t; G&A: US$23.60/t).
7. Numbers may not sum due to rounding.

Key areas of uncertainty that may materially impact the Mineral Resource estimate include: geological complexity including folding and faulting of vein material between drill hole intercepts, commodity price assumptions; metal recovery assumptions; hydrological constraints; and rock mechanics (geotechnical) constraints.

There is upside potential for the estimates if mineralization that is currently classified as Inferred can be upgraded to higher-confidence Mineral Resource categories. Core drilling is currently underway in support of potential confidence category upgrades.

1.13 Mineral Reserve Estimate

Mineral Resources classified as either Indicated or Measured were considered during conversion to Mineral Reserves. The requirements for Mineral Resources to be converted to Mineral Reserves are:

- Only Measured and Indicated Mineral Resources can be included;
- Dilution is included in the Mineral Reserve estimate;
- Mining recovery of 95% has been accounted for;
- Mineral Reserves are supported by an economic mine plan.

The QP for the Mineral Reserve Estimate is Denis Fleury, P.Eng., an employee of Goldcorp. Mineral Reserves are reported at a gold price of US$1,100/oz gold, a cutoff grade of 3.17 g/t gold, an exchange rate of C$/US$1.20, and have an effective date of December 31, 2015. Mineral Reserves are summarized in Table 1-2.

Currently no Mineral Resources that fall within the area of the surface crown pillar (from surface to 65 m depth) are included in the Mineral Reserves. A complete pre-feasibility study of the potential recovery of the surface pillar will be necessary to support the conversion of these Mineral Resources to Mineral Reserves. This study is planned to be completed during 2016.

Factors that can affect the Mineral Reserve estimates are: geological complexity causing under estimation of dilution, low recovery at the mill because of a possible change in the hardness of the rock or mineralogical characteristics; more water infiltration from the surface or underground than expected; in situ stress in the rock; rock burst; deviations in drill holes necessary to support production may cause more dilution; paste backfill strength; stope dilution and recovery factors that are based on assumptions that will be reviewed after mining experience; stope stability is also an important factor with some stopes having considerable span and thickness; and changes in commodity price and exchange rate assumptions.

1.14 Mine Plan

The mine plan was developed by Goldcorp personnel.

Open stope mining (down-hole drilling) and longitudinal retreat with consolidated backfill (paste backfill mixed with crushed waste rock) is utilized. A transverse open stope approach is used where the mineralized lenses are wider than 7 m.

For mine scheduling purposes, the vertical extent of the orebody is subdivided into two parts: the upper part of the orebody located between 65 m and 650 m below surface (Upper Mine), and the lower part of the orebody located between 650 m and 1,190 m below surface (Lower Mine). Dividing the orebody into two mining sectors and four horizons has accelerated the production start-up.

Mining started from two horizons, the 440 mLv and the 650 mLv, and is ramping-up to mining from four mining horizons on the 230 mLv, 440 mLv, 650 mLv and 800 mLv. At this stage, it is expected that all the ore and waste of horizon 1 (80 mLv to 230 mLv) will be trucked to the surface; the ore and waste of horizons 2, 3 and 4 (230 mLv to 800 mLv) will be either dumped down an ore pass or trucked to the 650 mLv and hoisted by the exploration shaft.

Table 1-2: Mineral Reserve Estimate

Category	Tonnes (Mt)	Au Grade (g/t Au)	Contained Gold (M oz)
Proven	4.17	6.49	0.87
Probable	24.15	5.76	4.48
Total Proven + Probable	***28.32***	***5.87***	***5.35***

Notes to Accompany Mineral Reserve Table:

1. Mr. Denis Fleury, P.Eng., an employee of Goldcorp is the Qualified Person for the estimate. The estimate has an effective date of 31 December 2015.
2. The Mineral Reserves are classified as Proven and Probable Mineral Reserves, and are based on the CIM Definition Standards. Proven Mineral Reserves include stockpile material.
3. Based on a gold price of US$1,100 per ounce, an economic function that includes variable operating costs and metallurgical recovery of 92.5%, and an exchange rate of C$/US$1.20.
4. Global cut-off grade of 3.17 grams per tonne. Total average US$ operating costs are $100.40/t (mining: US$45.60/t; processing: US$31.20/t; G&A: US$23.60/t).
5. An overall dilution of 10% is applied to the stopes using the grade of the adjacent material when assayed or a value of zero when not assayed. An additional 10% dilution is added to areas with more complex and folded veining, which comprises approximately 10% of the Mineral Reserves.
6. Mineral Reserves take into account a 95% mining recovery.
7. Numbers may not sum due to rounding.

Studies to increase and sustain the production rate will be conducted as more drilling information becomes available. Based on the current Mineral Reserves, the planned operation has a 12-year mine life.

The production shaft excavation is completed to 1,190 m depth, and the surface decline is progressing well. The exploration shaft (Gaumond shaft) has been completed to a depth of 715 m.

The ramp is currently used as the air exhaust and will continue to do so when completed. The main ventilation raise is the Gaumond shaft. From the shaft, the air is distributed into two internal ventilation raises, one located in the north zone and one in the south zone, each of which will bring fresh air to work places. Currently, ventilation on demand (VOD) is partly operational.

The permanent pumping system is designed to be upgradable depending of the total water infiltration in the mine and also the mine plan. The system is designed to pump dirty water to the stations above and finally reach the surface. It consists of two main pumping stations (on the 400 mLv and 650 mLv).

Stope widths vary between 2.5 m and 20 m. Stopes have an average length of 25 m, a maximum length of 50 m, and can reach 30 m in height. Ground support consists of various combinations of rebar bolts, friction bolts, cables, screen and shotcrete depending on the rock quality and particular requirements of each heading.

Stopes are backfilled with paste fill. Unconsolidated backfill is used wherever is possible in order to avoid hoisting waste rock to the surface. The current paste backfill mixture consists of 70% mill tailings, 25% fine sulphide concentrate, and between 4% to 7% binder. The sulphide tailing concentration can be up to 25% without having effect on the paste strength. During the latter part of 2016, 15% crushed waste will be added to the fill, so the percentage of the mill tailings used will decrease.

A fully-mechanized mining equipment fleet is used. Equipment includes scoop trams, dump trucks, mine service and personnel vehicles, jumbo drills, bolting platforms, scissor lifts, land cruiser and forklifts.

The mine and fleet designs are appropriate for the Mineral Reserves defined and the selected throughput rate.

There is potential to extend the mine life and potentially sustain the 7,000 t/d throughput rate if some or all of the Inferred Mineral Resources identified within the LOM production plan (LOMP) can be upgraded to higher confidence Mineral Resource categories, and eventually to Mineral Reserves. Mineralization remains open at depth, with the deepest drill hole encountering mineralization at 1,400 m depth; the current mine plan extends to 1,190 m depth.

As part of day-to-day operations, Goldcorp will continue to undertake reviews of the mine plan and consideration of alternatives to and variations within the plan. Alternative scenarios and reviews may be based on ongoing or future mining considerations, evaluation of different potential input factors and assumptions, and corporate directives.

1.15 Future Development Strategy

The Gaumond exploration shaft has a nominal 4,000 t/d ore-hoisting capacity, and a maximum hoisting capacity of 7,000 t/d (20 hrs/day). Goldcorp is excavating a second shaft at Éléonore (the production shaft), which will have a nominal 8,500 t/d hoisting capacity (17 hrs/day). The objective is to transfer all of the ore handling systems to the production shaft, once the shaft is completed at the end of 2016.

The current plant is designed for an average throughput about 5,000 t/d in 2016, with a ramp-up period from 2016 to mid-2018 to reach 7,000 t/d, which is commensurate with the current Mineral Reserves. However, Goldcorp has designed the plant to be able to expand to 7,000 t/d earlier in the production mine life if sufficient Mineral Resources can be upgraded to Mineral Reserves and incorporated in the mine plan.

1.16 Process Plant

The mill is designed to operate at 7,000 t/d (2.55 Mt/a) for 365 days per year. The comminution circuit consists of three stages of crushing followed by a single stage of ball mill grinding. The primary crusher (jaw crusher), the secondary crusher (standard cone crusher), and the tertiary crushers are located at surface. Two short head cone crushers are needed to handle a 7,000 t/d daily throughput. The fine-crushed ore is ground using a single-stage ball mill connected in a closed circuit with cyclones.

A portion of the cyclones underflow is be directed to a gravity concentration circuit consisting of a Knelson concentrator and an Acacia reactor to recover liberated native gold.

Cyclone overflow (grinding circuit product) is directed to the flotation cells to separate the sulphides into a low-mass sulphur concentrate. A thickener controls the density of the flotation tail slurry. Flotation tails are leached with cyanide for 36 hours while going through five leach tanks. Flotation concentrate is thickened and reground so that 80% (P80) is smaller than 10 µm using a fine grinding mill; then it is pre-aerated with oxygen for 18 hours prior to being leached with cyanide for 48 hours in five additional leach tanks. The gold in solution is recovered in carousel carbon-in-pulp (CIP) circuits (one for each leach circuit).

The carbon from each CIP circuit is stripped as required in a Zadra process, and the gold recovered from that final stage of the mineral processing circuit is poured into gold bars at regular intervals. The carbon is regenerated and returned to the CIP circuits for reuse.

The tails from each leaching circuit are detoxified in a conventional cyanide destruction circuit (SO_2/air), and then filtered. Finally, tailings can be added to the paste backfill. Non-sulphides tailings are stored in a covered shed before being transported by hauling truck to the tailings management facility.

The tailings facilities are completely lined, and all water touching the tailings is collected and treated. The exposed surface of the tailings is kept to a minimum, made possible by the choice of filtered tailings that allows for progressive reclamation. The tailings design envisages a storage capacity of 26 Mt. This is sufficient for the current LOM.

In the opinion of the responsible QP, the process design is based on a conventional gold plant flowsheet. Reagents, power and consumable requirements have been appropriately estimated and are included in the operating costs.

1.17 Support Infrastructure

The permanent camp can accommodate 400 people.

A permanent road with two permanent bridges extends from the Sarcelle hydroelectric facility to the Éléonore Operations. The Sarcelle station can be reached via a 40 km long gravel road, starting at the 396 kilometre marker along the James Bay Highway. Material, supplies, and food are transported along this access route.

Workers are mobilized to the site via a year-round air strip.

The Éléonore Operations are fed through a 120 kV overhead electrical power line supplied and installed by Hydro-Québec from the existing distribution point at the Eastmain power generation substation. A 120/25 kV substation on site distributes the power required for the mining infrastructure. The power infrastructure can support the planned production rate increase.

1.18 Infrastructure

Surface infrastructure includes: an airport terminal and gatehouse; a concrete plant; the main camp; an administration building; a service garage for surface and mine; warehouse facilities; an assay laboratory; process and water treatment plants; an oxygen plant; fuel and propane storage areas; the Gaumond shaft; a tailings storage facility; a waste/ore rock storage area; and the surface ramp.

At full production, mining-related infrastructure will comprise the Gaumond shaft, a circular production shaft, a 7 km long access ramp, a shaft loading station, ore and waste passes, ore and waste storage bins, a rock breaker/grizzly arrangement, a transfer drift, an exhaust raise, and a mine dewatering system.

The main process infrastructure consists of a jaw crusher, a secondary cone crusher, tertiary crushers, a single-stage ball mill, cyclones, a Knelson concentrator, an Acacia reactor, flotation and leach tanks, carousel CIP circuits, a Zadra stripping circuit, and a refinery. Completing the process infrastructure are the following: an Actiflo installation (water treatment plant); a water pumping station; tailings filter presses; and a paste backfill system.

1.19 Markets and Contracts

Goldcorp's bullion is sold on the spot market by Goldcorp's in-house marketing experts.

The terms contained within the existing sales contracts are typical and consistent with standard industry practices, and are similar to contracts for the supply of doré elsewhere in the world.

1.20 Capital and Operating Cost Estimates

Capital and operating cost estimates were prepared by Goldcorp staff. Capital costs are based on the latest mine construction data and budgetary numbers/quotes provided by suppliers.

Exploration expenditures were not included in the financial analysis.

Capital cost estimates were based on a combination of quotes, vendor pricing, and experience with similar-sized operations. The total life-of-mine capital estimate is US$514 million, comprising US$416 million of sustaining capital, and US$98 million of expansionary capital.

Operating costs are based on the 2015 LOM budget which includes estimates from first principles for major items, and includes allowances or estimates for minor costs. An average overall unit cost of US$100.42/t was estimated, comprising US$31.22/t for processing, including backfill and tailings treatment and transportation, US$45.60/t for mining, and US$23.60/t for G&A.

1.21 Financial Analysis

Goldcorp is using the provision for producing issuers, whereby producing issuers may exclude the information required under Item 22 for technical reports on properties currently in production.

Mineral Reserve declaration is supported by a positive cashflow.

1.22 Interpretation and Conclusions

Under the assumptions in this Report, the Éléonore Operations show a positive cash flow over the life-of-mine and support Mineral Reserves. The mine plan is achievable under the set of assumptions and parameters used.

1.23 Recommendations

Recommendations put forward are for a single-phase work program.

In order to continue with development and prepare for the production phase, intensive exploration and delineation drilling must be performed. The first objective of the drilling will be to support potential conversion of Mineral Resources to Mineral Reserves. Drilling at depth and laterally is also required to identify mineralization that may support estimation of additional Mineral Resources.

The suggested program involves a rate of approximately 25,000 m per year of exploration drilling to test deposit extensions and provide sufficient drill spacing to potentially support Mineral Resource estimates, another 50,000 m per year of infill drilling (at 25 m spacing) to potentially support conversion of Indicated Mineral Resources to Probable Mineral Reserves, and approximately 100,000 m per year of final delineation or definition drilling (production drilling at 12.5 m spacing) for stope delineation. This amounts to a total of 175,000 m of drilling per year, representing an estimated annual budget of US$18.75 million.

In parallel, exploration drilling in three areas of interest is recommended, as described below:

- In the HWV area, 8,000 m of surface drilling is proposed at a total cost of US$1.0 million, to support a potential Mineral Resource estimate of the mineralization in the exploration ramp. The HWV shear and alteration zones were identified near the shaft, and the zones may become accessible during mine development activities;

- In the NZ area, mineralization crops out at surface and may represent a potential open pit target. Additional drilling is warranted, totalling an estimated US$1.5 million for 10,000 m;
- In the 494 area, 8,000 m of underground drilling is proposed at a total cost of US$1.3 million to drill-test a potential mineralized corridor located between the 494 area and a surface showing (Trench #10) with similar mineralized features.

2.0 INTRODUCTION

2.1 Introduction

Ms. Christine Beausoleil, P.Geo., Mr. Denis Fleury, P.Eng., Mr. Andy Fortin, P.Eng., and Mr. Luc Joncas, P.Eng. (the Qualified Persons or QPs) prepared this Technical Report (the Report) for Goldcorp Inc. (Goldcorp) on the wholly-owned Éléonore Gold Operations (the Éléonore Operations or the Project) located in Quebec, Canada. The general location of the operations is indicated in Figure 2-1.

The Éléonore Operations host the Roberto gold deposit, which includes the Roberto, East Roberto, and Zone du Lac lenses. Following a four-year development period, the first doré bar was poured from the underground mine in October 2014. Commercial production was declared in April 2015. The production rate forecast for 2016 is about 5,000 t/d. Ramp up will continue in 2017, and it is expected that the full production rate of 7,000 t/d will be reached in about mid-2018.

2.2 Terms of Reference

This Report supports the disclosure of updated Mineral Resources and Mineral Reserves for the Project. Goldcorp will be using the Report in support of its 2015 Annual Information Form (AIF) filing.

The operating entity is Les Mines Opinaca Ltée., a wholly-owned subsidiary of Goldcorp Inc. For the purposes of this Report, "Goldcorp" is used to refer interchangeably to the parent and subsidiary companies.

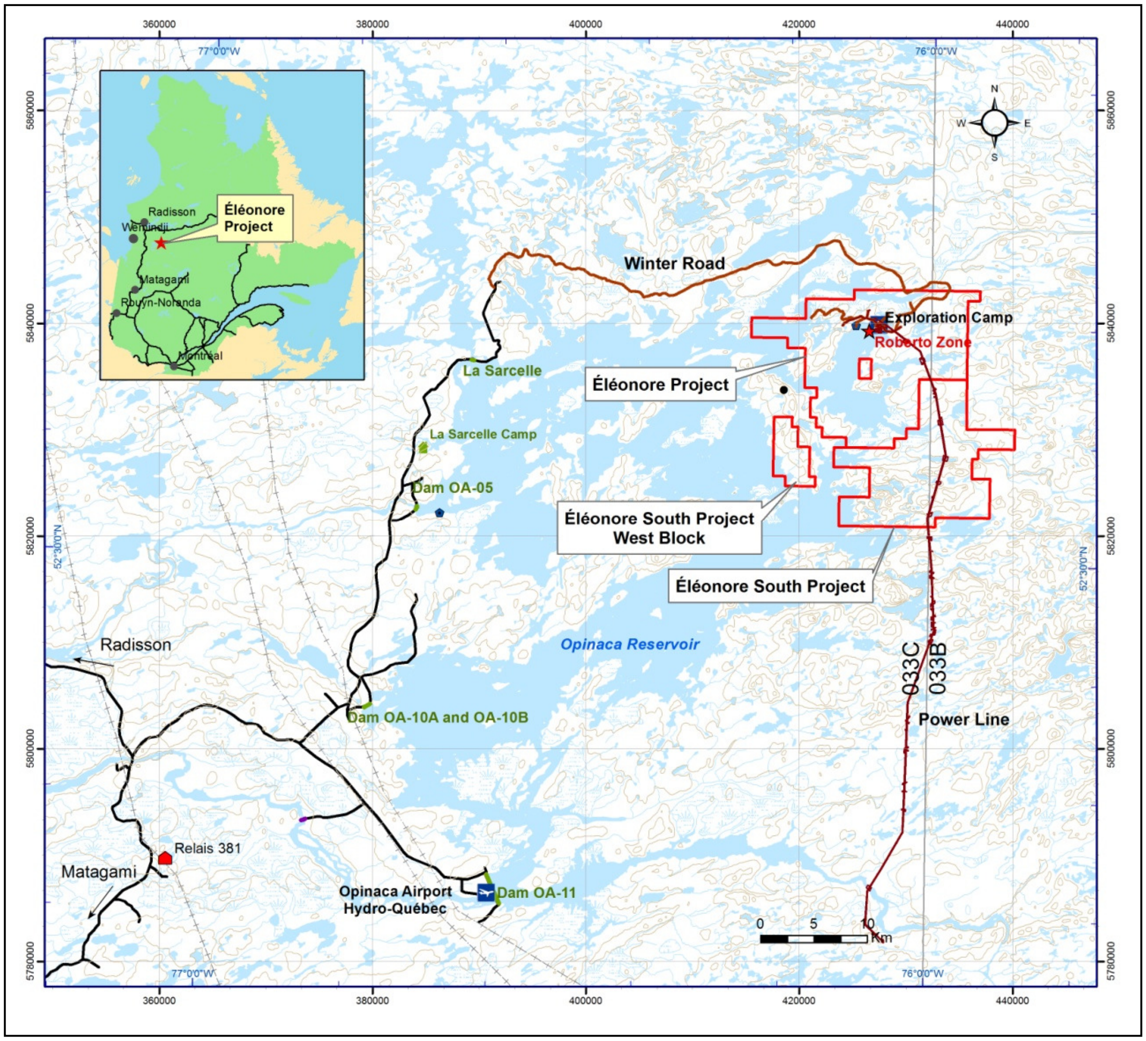
All measurement units used in this Report are metric unless otherwise noted, and currency is expressed in American (US$) or Canadian dollars (C$) as identified in the text.

2.3 Qualified Persons

This Report has been prepared by the following QPs:

- Ms. Christine Beausoleil, P.Geo., Exploration Manager, Les Mines Opinaca Ltée;
- Mr. Denis Fleury, P.Eng., Chief Engineer, Les Mines Opinaca Ltée;
- Mr. Andy Fortin, P.Eng., Manager, Process and Surface Operations, Les Mines Opinaca Ltée;
- Mr. Luc Joncas, P.Eng., Mining Manager, Les Mines Opinaca Ltée.

Figure 2-1: Location Plan



Note: Goldcorp figure prepared in 2012.

2.4 Site Visits and Scope of Personal Inspection

The Qualified Persons who are employees of Goldcorp all work at the Éléonore Operations, and this familiarity with the active mining operations serves as their QP scope of personal inspection.

Ms Beausoleil has worked at the Éléonore Operations since 2012. In her role as Exploration Manager, she has inspected drill core, visited drill platforms and sample cutting and logging areas; discussed geology and mineralization with Éléonore staff; reviewed geological interpretations with staff; supervised and reviewed modeling efforts, supervised mineral resource estimates; audited and reviewed on-site data including reviews of budgets, modelling programs and sample results; visited the underground workings; and viewed the locations of key infrastructure.

Mr Fleury has worked at the Éléonore Operations since mid-2013. In his role as Chief Engineer, he has overall responsibility for the engineering activities at the Project site including mine technical services (geology, geotechnical, mine, planning and scheduling), shaft development, underground mining, and mining-related maintenance and associated support services.

Mr Fortin has worked at the Éléonore Operations since 2011. In his role as Manager, Process and Surface Operations, he has managed and directed metallurgical testwork programs, and has overall responsibility for the process-related activities at the Project site including the process plant and associated maintenance and support services.

Mr Joncas has worked at the Éléonore Operations since 2010, and was working at the site at the Report effective date. In his role as Mine Manager, he has the overall responsibility for the operational activities at the Project site including mine development plans, underground mining, processing, maintenance, technical services, environmental and social responsibilities, and financial planning. He has participated directly in all aspects associated with the execution of annual business plans; has performed detailed reviews of operational performance, process plant efficiencies, mining technical designs and financial performance; and has participated in discussions and decision processes associated with long-term strategic planning.

2.5 Effective Dates

The Report has a number of effective dates as follows:

- The closeout date for the database used in the estimation is 22 October 2015;
- The effective date for the Mineral Resource estimate is 31 December 2015;
- The effective date of the Mineral Reserve estimate is 31 December 2015.

The overall effective date of this Report is the effective date of the Mineral Reserves and is 31 December, 2015.

2.6 Information Sources and References

This Report is based in part on internal company reports, maps, published government reports, and public information, as listed in Section 27 of this Report. Specialist input from Goldcorp employees in other disciplines, including legal, process, geology, geotechnical, hydrological and financial, was sought to support the preparation of the Report. Information used to support this Report is also derived from previous technical reports on the property.

All figures were prepared by Goldcorp personnel for the Report unless otherwise noted.

2.7 Previous Technical Reports

Goldcorp has previously filed the following technical reports for the Project:

- Beausoleil, C., Fleury, D., Fortin, A., Brisson, T. and Joncas, L., 2014: Éléonore Project, Quebec, Canada, NI 43-101 Technical Report: Technical Report prepared by Goldcorp Inc., effective date 26 January 2014;
- Michaud, C., Chen, E., Simoneau, J., Fortin, A., and Belanger, M., 2012: Éléonore Project, Quebec, Canada, NI 43-101 Technical Report: Technical Report prepared by Goldcorp Inc., effective date January 26, 2012;
- Simoneau, J., Prud'homme, N., Bourassa, Y., and Couture, J-F., 2007: Mineral Resource Estimation, Éléonore Gold Project, Quebec: Technical Report prepared by SRK Consulting Inc. for Goldcorp Inc., effective date 9 August 2007.

Prior to Goldcorp's interest in the Project, Virginia Gold Mines Inc. had filed the following reports on the Project:

- Cayer, A., Savard, M., Tremblay, M., Ouellet, J. F., and Archer, P., 2006: Technical Report and Recommendations, Summer and Fall 2005, Exploration Program, Éléonore Property, Québec: Virginia Gold Mines Inc. GM 62341;
- Savard, M., and Ouellette, J.-F., 2005: Technical Report and Recommendations May 2005 Drilling Program, Éléonore Property, Québec: Virginia Gold Mines Inc. GM 62117;
- Cayer, A., and Ouellette, J.-F., 2005: Technical Report and Recommendations, June 2004 – February 2005 Exploration Program, Éléonore Property, Québec: Virginia Gold Mines Inc. GM 61851;
- Cayer, A., and Ouellette, J.-F., 2004: Technical Report and Recommendations, June 2003 – May 2004 Exploration Program, Éléonore Property, Québec: Virginia Gold Mines Inc., June 2004.

3.0 RELIANCE ON OTHER EXPERTS

This section is not relevant to the Report as information on areas outside the QPs' experience was sourced from Goldcorp experts as noted in Section 2.6.

4.0 PROPERTY DESCRIPTION AND LOCATION

The Éléonore Operations are located in the Ell Lake area, in the northeastern part of the Opinaca Reservoir of the James Bay region, in the Province of Quebec, Canada. The mine is located approximately 350 km north of the town of Matagami and 825 km north of Montreal.

The Roberto deposit is situated at approximately UTM Zone 18N (NAD83) 5839829 N and 427470 E.

4.1 Project Ownership

Goldcorp acquired the then Éléonore Project from Virginia Gold Mines Inc. (Virginia) in 2005, under a plan of arrangement.

The operating entity for the operations is a wholly-owned subsidiary of Goldcorp Inc., Les Mines Opinaca Ltée.

4.2 Mineral Tenure

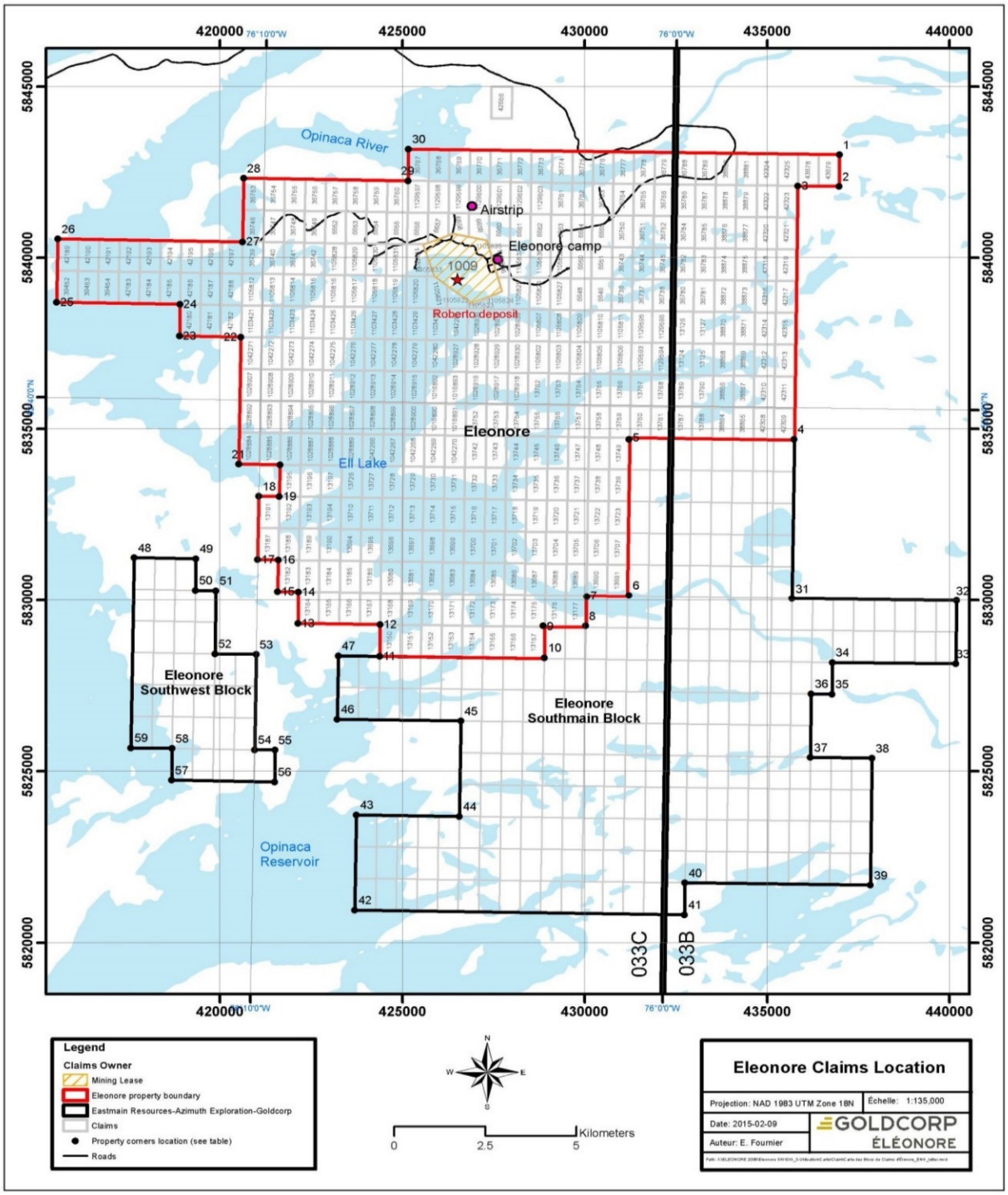
The Éléonore Operations consist of 369 contiguous claims (Figure 4-1; Appendix A) totalling 19,037.17 ha, in addition to a granted mining lease of 289.4 ha for a total of 19,326.57 ha. The claims are 100% owned by Les Mines Opinaca Ltée. Claim details are included in Appendix A. All claims are in good standing. Claims have expiration dates that range from 2016 to 2034.

Mining Lease #1009, covering the Roberto deposit, was granted by the Quebec government in February 2014. The lease is valid for a 20-year period with annual fees payable of C$46/ha for an annual total of C$13,312.40.

Contiguous with the operations area are claims that are part of a tripartite joint venture between Eastmain Resources Inc., Azimut Exploration Inc. and Goldcorp, and which form the Éléonore South and Éléonore Southwest properties (refer to Figure 4-1). These 282 claims cover a total area of 14,664 ha. The properties are not considered to be part of the Éléonore Operations as the properties are independent projects that are being managed by Eastmain Resources.

The perimeter of the property has not been legally surveyed. Under Quebec law, claims in the James Bay area are map-staked.

Figure 4-1: Mineral Tenure Plan



Note: Goldcorp figure prepared in 2015.

4.3 Surface Rights

The Éléonore Operations are located entirely in Cree territory, or Eeyou Istchee, on Category III lands belonging to the Quebec government and subject to the James Bay and Northern Quebec Agreement (JBNQA). Infrastructure for the mining operation required the acquisition of surface leases issued by the Ministry of Natural Resources (MNR).

Surface leases were obtained for all infrastructure. Water leases have also been obtained. These leases and permits are summarized in Table 4-1.

With the completion of the road to site, no additional authorizations or permit renewals for the road are required.

As applicable, non-exclusive leases (BNE) or exclusive leases (BEX) were obtained for all pits and quarries that are currently in operation. Renewals can be obtained as required.

The operations are also in the territory of the Municipality of James Bay (MBJ). The following uses are permitted:

- Industry (I);
- Leisure and recreation (L);
- Resources (R);
- Conservation (C).

4.4 Royalties and Encumbrances

A net smelter return (NSR) royalty is payable to Osisko Gold Royalties Ltd. (Osisko Gold; formerly Virginia Gold Mines Inc.). The amount is calculated as a percentage based on a combination of actual mine production and the prevailing gold price (Table 4-2). The royalty is applicable to the entire Éléonore property.

An example of the royalty calculation is provided below:

- Mine production of 5,250,000 gold ounces would require payment of a 2.75% royalty based on production, being 2% on the first 3 Moz of gold produced, then successive 0.25% interest payments on each next 1 Moz of gold produced, i.e. 2%+ 0.25% + 0.25% + 0.25% = 2.75%. Assuming the ounces were sold at a gold price of US$670/oz, then the final total royalty would be 3.025% (2.75% + (2.75 x 0.1));
- The maximum royalty percentage is fixed at 3.5%. Advance payment to Osisko Gold of royalties of $US100,000 per month commenced on April 1, 2009.

Table 4-1: Miscellaneous Leases and Permits

Identification	Area (M^2)	# Permit	Renewal Date
Mining Lease	2,894,000	1009	1-Feb-16
Clay stockpile	84,800	001173 10 000	1-Feb-16
Peat Stockpile	142,800	001174 10 000	1-Feb-16
Land Fill	243,605	001396 10 000	1-Feb-16
Taillings	1,411,698	001171 10 000	1-Feb-16
"La Sarcelle" Camp	132,800	822461 00 000	1-Apr-15
C-11 Quarry	16,820	001189 10 000	1-May-15
Lake Usage Lease	4,358	2014-033	8-Apr-15
Opinaca Bridge Lease	2,019	2014-034	8-Apr-15
Pitkaaschihu Bridge Lease	2,340	2014-035	8-Apr-15
Communication Tower	2,500	822018 00 000	1-Jun-15
Land Strip + Weather tower	402,060	000020 10 000	1-Jun-15
Waste Rock Stockpile	198,946	000527 10 000	1-Jun-15
Drinking Water Wells	28,820	001859 10 000	1-May-15
A-08 Storage	28,774	001324 10 000	1-Aug-15
Global Lease	2,229,250	000880 10 000	1-Oct-15
Pounder Magazine	34,000	000815 10 000	1-Oct-15
Total:	***7,859,590***		

Table 4-2: Royalties Payable, Based on Production and Gold Price

Percentage Payable, Based on Production and Gold Price	
Percentage	Number of gold ounces produced
+2.00%	On first 3 Moz of gold
+0.25%	On ounces produced between 3 Moz and 4 Moz of gold
+0.25%	On each additional 1 Moz of gold
Percentage Adjustment Based on Market Gold Price	
Percentage	Number of gold ounces produced
-10%	If ≤$US350/oz Au
-5%	If >$US350/oz Au but ≤$US400/oz Au
0%	If >$US400/oz Au but ≤$US450/oz Au
+5%	If >$US450/oz Au but ≤$US450/oz Au
+10%	If >$US500/oz Au

4.5 Property Agreements

Goldcorp entered into a confidential agreement on February 21, 2011 with the Grand Council of the Crees (Eeyou Istchee), the Cree Regional Authority and the Cree Nation of Wemindji, which is termed the Opinagow Collaboration Agreement. Under this agreement, an annual payment is made.

The responsible QP has reviewed the agreement and there are no terms in the agreement that would have a negative impact on the Project. The annual payment is incorporated into the Project financial model.

4.6 Permits, Environment and Social Licence

The current status of the environment permitting and study status, community consultation and the social licence to operate is discussed in Section 20.

4.7 Comments on Section 4

The responsible QP notes:

- Goldcorp holds 100% of the Éléonore Operations. The Project comprises 369 contiguous claims totalling 19,036 ha and a mining lease totalling approximately 289 ha for a total of 19,325 ha;
- Additional ground in the Éléonore South and Éléonore Southwest properties is held under joint venture, and because the joint venture is managed by a third-party, the properties are not considered to be part of the Éléonore Operations;
- Surface rights are held by Les Mines Opinaca;
- A sliding-scale NSR royalty is payable to Osisko Gold, and is capped at 3.5%. Advance royalty payments commenced in April 2009;
- An annual payment is required to the Cree Nation under the Opinagow Collaboration Agreement;
- Permits obtained by Goldcorp to explore and conduct mining operations are sufficient to ensure that activities are conducted within the regulatory framework required by the local, Provincial, and Federal governments;
- To the extent known, there are no other significant factors and risks known to Goldcorp that may affect access, title, or the right or ability to perform work on the Project.

5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE, AND PHYSIOGRAPHY

5.1 Accessibility

The closest towns to the operations are Matagami and Chibougamau.

The mine is accessed via a road that extends from the Sarcelle hydroelectric facility to the Éléonore site. The Sarcelle hydroelectric station can be reached via a 40 km long gravel road starting at the 396 km marker along the James Bay Highway (Route de la Baie-James).

A permanent year-round air strip is used for personnel transport.

5.2 Climate

The climate is typical of Northern Canada and is a temperate to sub-arctic climate.

Mining activities are conducted year-round. Exploration activities are currently conducted year-round, but can be temporarily halted during spring thaw and fall freeze-up.

5.3 Local Resources and Infrastructure

Matagami and Chibougamau offer extensive community, health, and transportation services. Matagami is located on the James Bay Highway.

The James Bay area is surrounded by extensive hydroelectric facilities and associated infrastructure, the closest of which are the Sarcelle hydroelectric facility on the Opinaca Reservoir, and the Eastmain Dam located 70 km to the south.

Infrastructure supporting mining operations is discussed in Section 18.

5.4 Physiography

The physiography of the region is typical of the Canadian Shield and includes many lakes, swamps and rivers. Outcrop is limited, due to the presence of the swamps and overlying glacial deposits.

The area is characterized by a gently undulating peneplain relief. The elevation of the few hills of this rolling landscape varies between 215 m and a maximum of 300 m above sea level. The area is drained by Ell Lake, which is itself part of the Opinaca reservoir.

Vegetation is typical of taiga, and includes sparse spruce forests separated by large swampy areas devoid of trees.

5.5 Comments on Section 5

The responsible QP notes:

- Personnel access is currently via aircraft; goods are transported via a permanent road that links to the James Bay highway;
- Mining activities are conducted year-round;
- In the immediate vicinity of the Roberto deposit, and within the Goldcorp ground holdings, there is sufficient area for the mining operation, including sufficient space for an underground mine, process facilities, mining-related facilities such as workshops, offices and roads, and tailings and waste facilities.

6.0 HISTORY

The first recorded exploration in the Éléonore area was undertaken by Noranda Inc. (Noranda), in 1964. Noranda identified a copper showing located within the Ell Lake diorite intrusion; this showing is located approximately 6 km southwest of the Roberto deposit.

From 2001 to 2004, Virginia conducted regional reconnaissance grab and channel sampling, ground magnetic and inverse polarization (IP)/resistivity, IP/resistivity (94 line-km), magnetics (81 line-km) and Hummingbird electromagnetic (HEM; 26 line-km) geophysical surveys, a soil geochemical Modified Mercalli Intensities (MMI) survey (949 samples), and trenching. The Roberto deposit was located toward the end of 2003. Work completed subsequent to the discovery included a helicopter-borne, detailed magnetic survey (45 line-km on two 50-m line-spaced grids), additional trenching, core drilling of 351 core holes (105,635 m), 125.5 km of grid lines, 226.3 line-km of IP geophysical survey, and B-horizon soil sampling (1,244 samples).

An in-principle agreement to acquire the Project was reached between Goldcorp and Virginia in November 2005, followed by a buyout offer shortly thereafter. Goldcorp took control of the Éléonore property on March 31, 2006.

Since acquisition, Goldcorp has performed till sampling, lake-bottom sediment sampling, surface mapping and trenching, additional core drilling, Mineral Resource and Mineral Reserve estimation, engineering studies, and mine permitting activities. Mine construction commenced in November 2011, and the first gold pour occurred on October 1, 2014.

To December 31, 2015, a total of 268,270 ounces of gold have been produced.

7.0 GEOLOGICAL SETTING AND MINERALIZATION

7.1 Regional Geology

The Roberto deposit is located in Archean rocks of the Superior Province of Canada in the transition zone between the Opinaca Subprovince and the La Grande Subprovince (Figure 7-1). The contact between the two subprovinces is not well known, and generally corresponds to regional-scale deformation zones and a sharp change in the metamorphic gradient. In some areas, the contact is masked by late intrusions of one or the other subprovinces (Bandyayera et al., 2010).

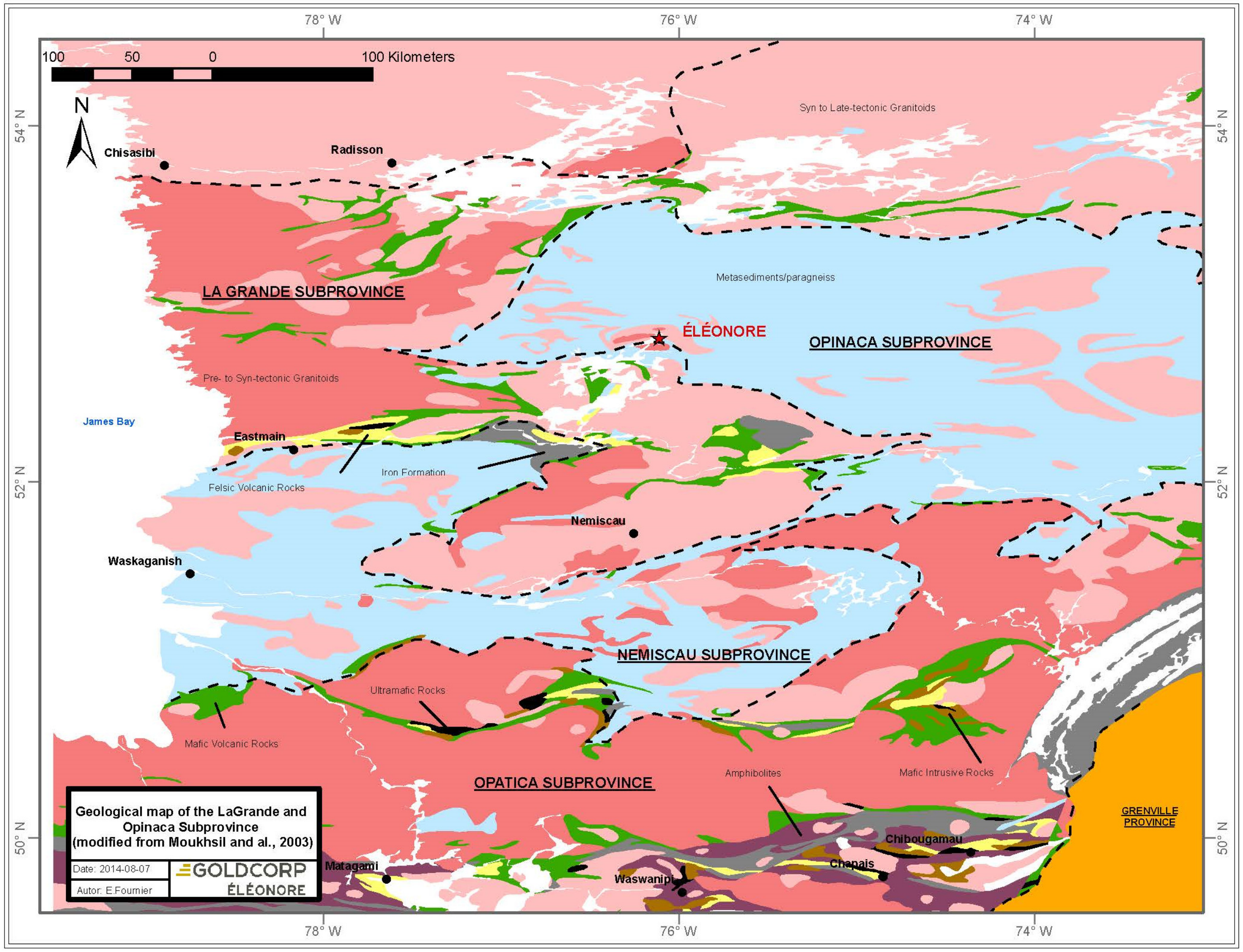
The Opinaca Subprovince basin is a sedimentary basin dominated by migmatized paragneisses and diatexites from the Laguiche Complex and intruded by syn to post-tectonic tonalite, granodiorite, granite and pegmatite intrusions from the Janin and Boyd intrusive suites. The metamorphic grade increases from amphibolites facies near the margins to granulite facies toward the center of the basin (Moukhsil et al., 2003). The paragneisses are strongly metamorphosed and folded rocks that retained few of their original structures (Bandyayera et al., 2010). Unit ages vary between 2,844 Ma (similar to the La Grande basement rock ages), and 2,672 Ma and 2,647 Ma (corresponding to paragneiss fusion episodes; Goutier et al., 2002; David et al., 2010).

The “s-shaped” La Grande Subprovince surrounds the Opinaca Subprovince on its west and north sides, spanning a distance of 450 km in the east–west direction and 250 km in the north–south direction. The La Grande Subprovince is an assemblage of volcano–plutonic rocks composed of 85% intrusive rocks and 15% volcano–sedimentary units, the latest forming the volcano–sedimentary units of the La Grande River and Eastmain River greenstone belts (Gouthier et al., 2001; Hocq, 1994). These assemblages overlay an older tonalitic basement (2.79 to 3.39 Ga). Metamorphic grade increases from the greenschist facies to the amphibolites facies toward the contact with the Opinaca Subprovince (Gauthier and Larocque, 1998; Moukhsil, 2000).

The Project area is underlain by rocks of the Eastmain Group of the La Grande Subprovince (Figure 7-2). At its base, the Eastmain Group consists of the Bernou Formation (2,722 Ma) and the Kasak Formation (2,704 Ma), which are composed of basalts and intermediate to felsic tuff (Moukhsil et al., 2003; Bandyayera et al., 2010).

Discordantly overlying these two formations are the Pilipas and Low Formations, consisting of conglomerate, greywacke and wacke. This volcano-metasedimentary sequence is intruded by synvolcanic and syn- to late-tectonic tonalite, granodiorite and diorite intrusions.

Figure 7-1: Regional Geology Plan



Note: Goldcorp figure prepared in 2014.

Some intrusions dated between 2,709–2,704 Ma could be synvolcanic with the Kasak Formation while others in the 2,710–2,769 Ma range are considered syn-tectonic intrusions (Moukhsil et al., 2003; Bandyayera et al., 2010).

Regional faults are mainly present in the La Grande Subprovince and are oriented north–south, east–west, northwest–southeast, and northwest–southeast. In outcrop, the faults can be recognized by either a strong tectonic banding or by the presence of intense shear zones with mylonitization. In the Opinaca Subprovince, faults and shear zones are mainly located along fold limbs. Outcrop within the two subprovince areas has been extensively eroded by repeated glaciations.

7.2 Project Geology

The Éléonore property straddles the contact between the Opinaca and La Grande Subprovinces (refer to Figure 7-2). The contact is located in the northeast corner of the property along a northwesterly trend that is defined by a strong shear zone, a change in the magnetic grain, and an increase in the metamorphic gradient (Bandyayera et al, 2010).

7.2.1 Opinaca Subprovince Units

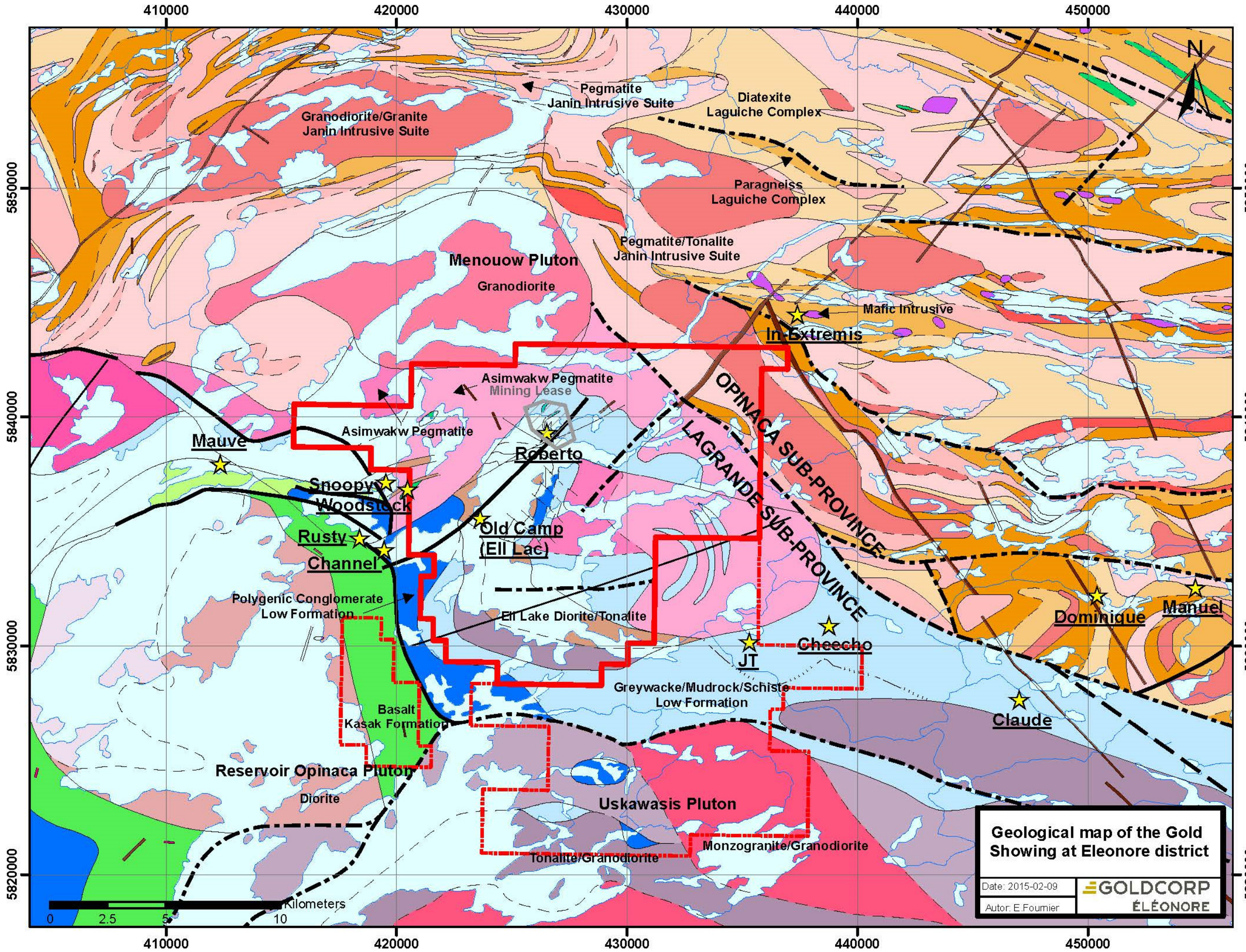
Rock units from the Opinaca Subprovince occur in the northeastern corner of the Project. Lithologies are dominated by granite, granodiorites, and heterogeneous assemblages of pegmatites, tonalites, and granites from the Janin Intrusive Suite, intermixed with partially migmatized paragneiss from the Laguiche Complex. The structural grain is oriented in a northwesterly direction evolving to an east–west grain toward the eastern part of the Project area.

7.2.2 La Grande Province Metasedimentary Units

The La Grande Subprovince rock units make up most of the Project area west of the contact between the Subprovinces and host the Roberto deposit. Lithologies are dominated by metasedimentary units of the Low Formation. Various types of conglomerates, either clast-supported or matrix-supported with monomictic to polymictic clast composition, make up the base of the Low Formation and can reach significant thicknesses. The units form large outcrops along the west side of the property border.

The upper part of the Low Formation is made up of massive, finely- to thickly-bedded greywacke; greywacke that contains aluminosilicate porphyroblasts; conglomeratic greywacke; conglomerates; local arenites; mudstone; and cherty units. Immediately outside the western Project limits, rock units consist of basalts and intercalated intermediate to felsic tuff units attributed to the Kasak Formation. The Low Formation is interpreted to be in discordant contact with the Kasak Formation.

Figure 7-2: Project Geology Map



Note: Goldcorp figure prepared in 2014. The Woodstock showing indicated on the plan is on ground that is not held by Goldcorp. Thick red solid lines indicate Goldcorp tenure boundaries. Broken lines indicate tenure where Goldcorp is not operator.

7.2.3 La Grande Province Intrusive Units

The crescent-shaped Ell Lake diorite intrusion is 10 km long and occupies the centre of the Project. Few observations of the contact between the Ell Lake diorite intrusion and the Low Formation have been recorded.

Asimwakw pegmatites, as named by Bandyayera in 2010, intrude the metasedimentary units and dominate topographic highs. The pegmatites generally have a northeasterly trend that does not appear to be solely the results of preferential erosion during periods of glaciation.

Large granodiorite, granite and pegmatite intrusive units are located on the southeastern side of the property. The Uskawasis pluton, consisting of monzonite, granite, and granodiorite, is located just south of the Project boundary.

Proterozoic diabase dikes that have a northeasterly orientation transect the Project area.

7.2.4 Structure

Metasedimentary units appear to form an open fold with a northeasterly-trending axis. A large mylonitic high-strain zone that also trends to the northeast roughly follows this fold axis. A large northwest-trending, subvertical regional fault, observed both in drill core and in outcrop, is located just east of the Roberto deposit. A 1 km dextral displacement is interpreted for this fault from aeromagnetic data. The aeromagnetics also indicate the presence of a number of additional faults within the Project boundaries.

Rock units in the operations area have been deformed by three deformation phases of which D2 was the principal phase and formed a penetrative regional foliation. This deformation is expressed differently in the two subprovinces, being regular with an east-west trend of domes and basins in the Opinaca Subprovince (Remick, 1977) and with volcano-sedimentary units deformed around the resistant intrusions in the La Grande Subprovince. A strong east–west to northwest–southeast schistosity and a mineral foliation in intrusive rocks is visible in the La Grande Subprovince units.

D1 deformation is more visible in the volcano–sedimentary units of the La Grande Subprovince, and is expressed by P1 folds with a north northeast–south–southwest axis. The folds are locally refolded by D2 folds with northwest–southeast axes. In the Opinaca Subprovince units, this deformation is faint and expressed by mineral lineations. D3 deformation is discrete in both subprovinces and appears as folding of S2 and as crenulation cleavages.

7.3 Roberto Deposit

7.3.1 Geology

The Roberto deposit has historically been divided into the Roberto, Roberto East, Zone du Lac, North and Hanging Wall Zones. This nomenclature is based on their geographical location and the main alteration types observed. All of the zones are made up of many individual mineralized lenses.

The host rock of the mineralized zones is typically a thinly-bedded greywacke (bed thickness approximately 10 cm) near the contact with a massive greywacke unit, and locally, with a thin conglomerate unit (Figure 7-3). A section through the deposit showing the geology and mineralized zones (displayed in red) is presented in Figure 7-4. The steeply east-dipping Roberto East fault, marked by a thin black tourmaline marker band, forms the eastern limit of the mineralized vein cluster.

The structural hanging wall of the mineralized zones is characterized by a greywacke containing centimetre-scale aluminosilicate porphyroblasts overlain by a thin conglomerate unit. The aluminosilicate-bearing greywacke and the conglomerate appear tightly folded, with axes generally oriented in the east–west direction and refolded by the F2 event. This folding is in sharp contrast with the generally north–south-trending bedding in the mineralized zones. The structural footwall of the mineralized zones is characterized by greywacke, locally exhibiting a higher metamorphic grade, which contains a higher amount of pegmatite dikes and quartz veins.

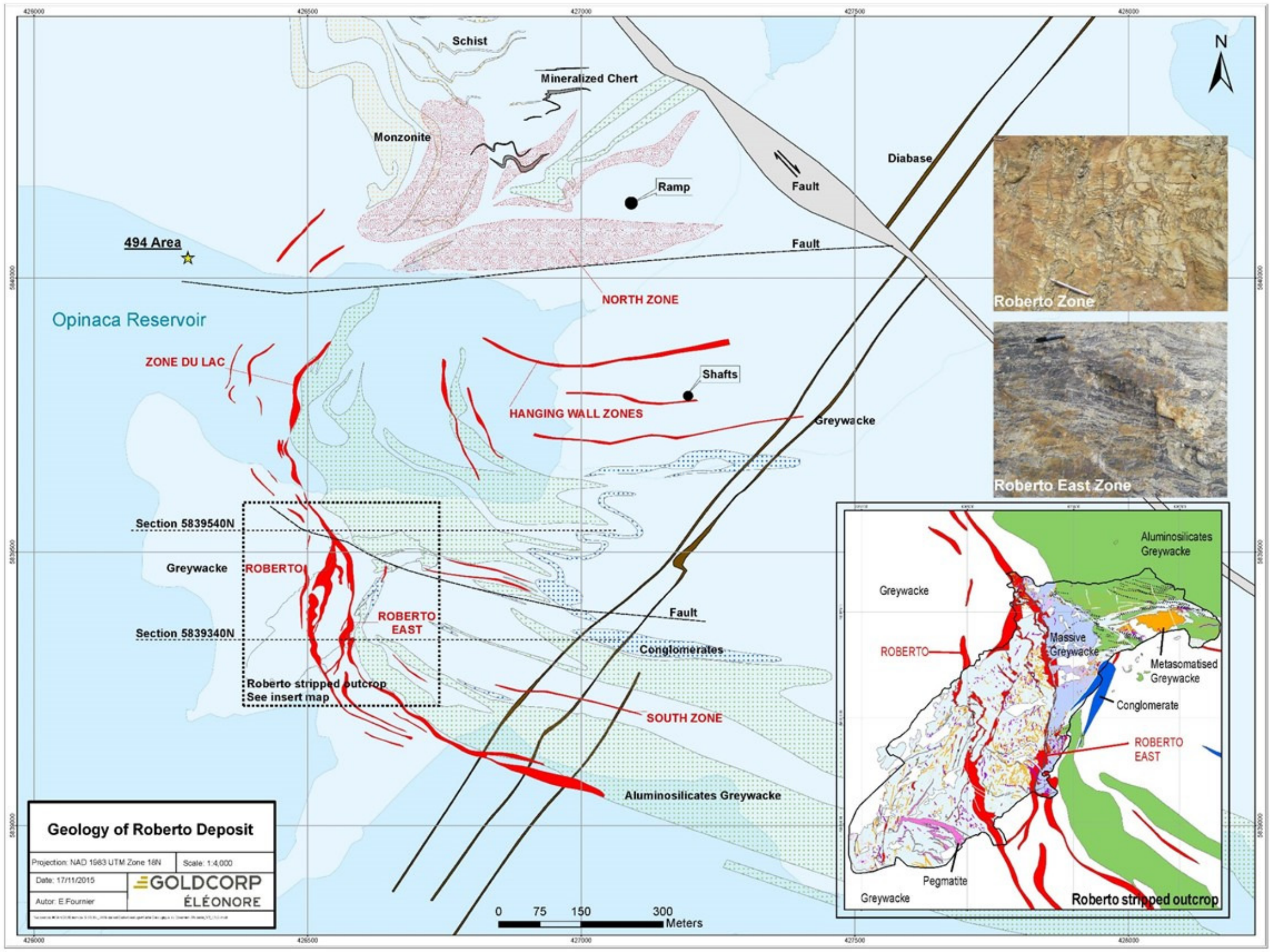
The bulk of the gold mineralization at the Roberto deposit includes a wide range of mineralization styles (Fontaine et al., 2015a):

- Stockwork of quartz, dravite veinlets with microcline, phlogopite, and sulphides;
- Replacement zones (microcline, phlogopite, dravite) with traces of pyrrhotite, arsenopyrite, and rare löllingite ($FeAs_2$; Roberto zone);
- Quartz, diopside, schorl, arsenopyrite veins (East Roberto zone);
- Atypical mineralized zones in quartz–feldspathic veinlets, high-grade quartz veins, high-grade paragneiss (North Zone and Hanging Wall zone).

Mineralization shows variable proportions of disseminated arsenopyrite, löllingite, and pyrrhotite. Traces of pyrite, sphalerite, bornite, and chalcopyrite are also locally present.

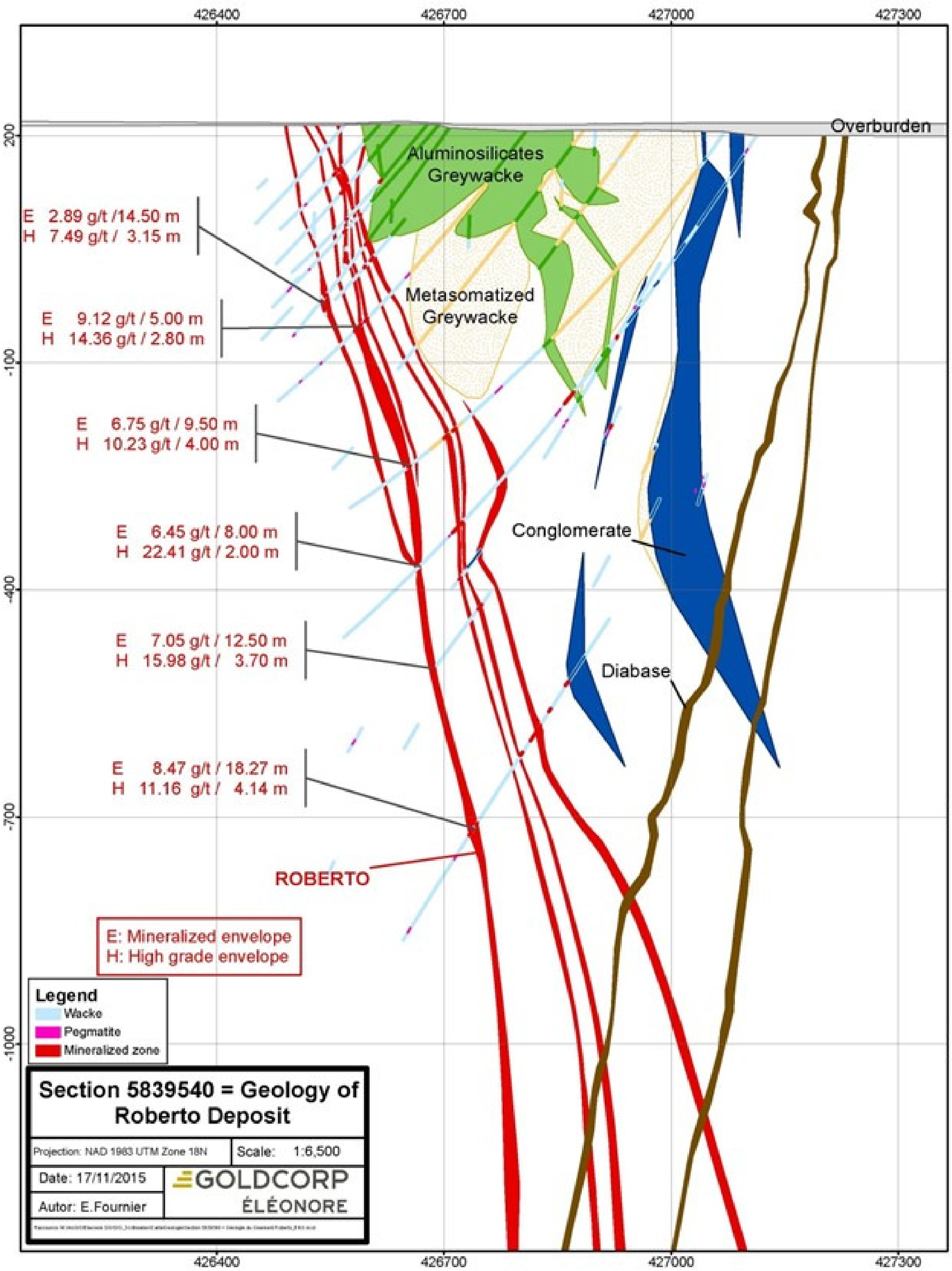
The sulphide concentration within the mineralized zones varies between 1% and 5%, and primarily consists of arsenopyrite, löllingite, pyrrhotite and pyrite. The "waste" rock may contain sulphides, usually pyrrhotite, but this is in lesser amounts, from trace to 2%, and occurs mostly in the structural hanging wall.

Figure 7-3: Geology Map of the Roberto Deposit



Note: Goldcorp figure prepared in 2015.

Figure 7-4: Roberto Deposit Section View, Looking North (vein envelopes are based on drilled thicknesses)



Note: Goldcorp figure prepared in 2015.

The mineralized zones are generally 5 m to 6 m in true thickness, varying between 2 m and more than 20 m locally. Mineralization is considered to pre-date the final deformation phase (Ravenelle et al, 2010).

The mineralized zones are folded with increased thicknesses in the hinge of the folds while limbs are fairly straight and continuous. Transposition of the sedimentary beds post-mineralization may also explain some of the thickening of the mineralized zones.

The Roberto gold zones dip steeply to the east and rake (plunge) steeply to the northeast. All zones remain open at depth and along strike.

7.3.2 Close Folding

Up to and including 2014, the Roberto zone was interpreted as a steeply-dipping, generally gently open, folded zone. This interpretation was based on information from drill holes on 25 m x 25 m spacing, which is the drill spacing used for support of Indicated Mineral Resources. Since then, production has started on a very high-grade ore shoot located at the intersection of the Roberto zone and an east–west-trending deformation zone. Information from production drilling and underground mapping showed that folding in the southern area of the main ore shoot is tighter than previously interpreted. Observations so far are of folding with an amplitude and a frequency of 5 to 10 m. As a result, mining internal dilution in this area is significantly higher than anticipated.

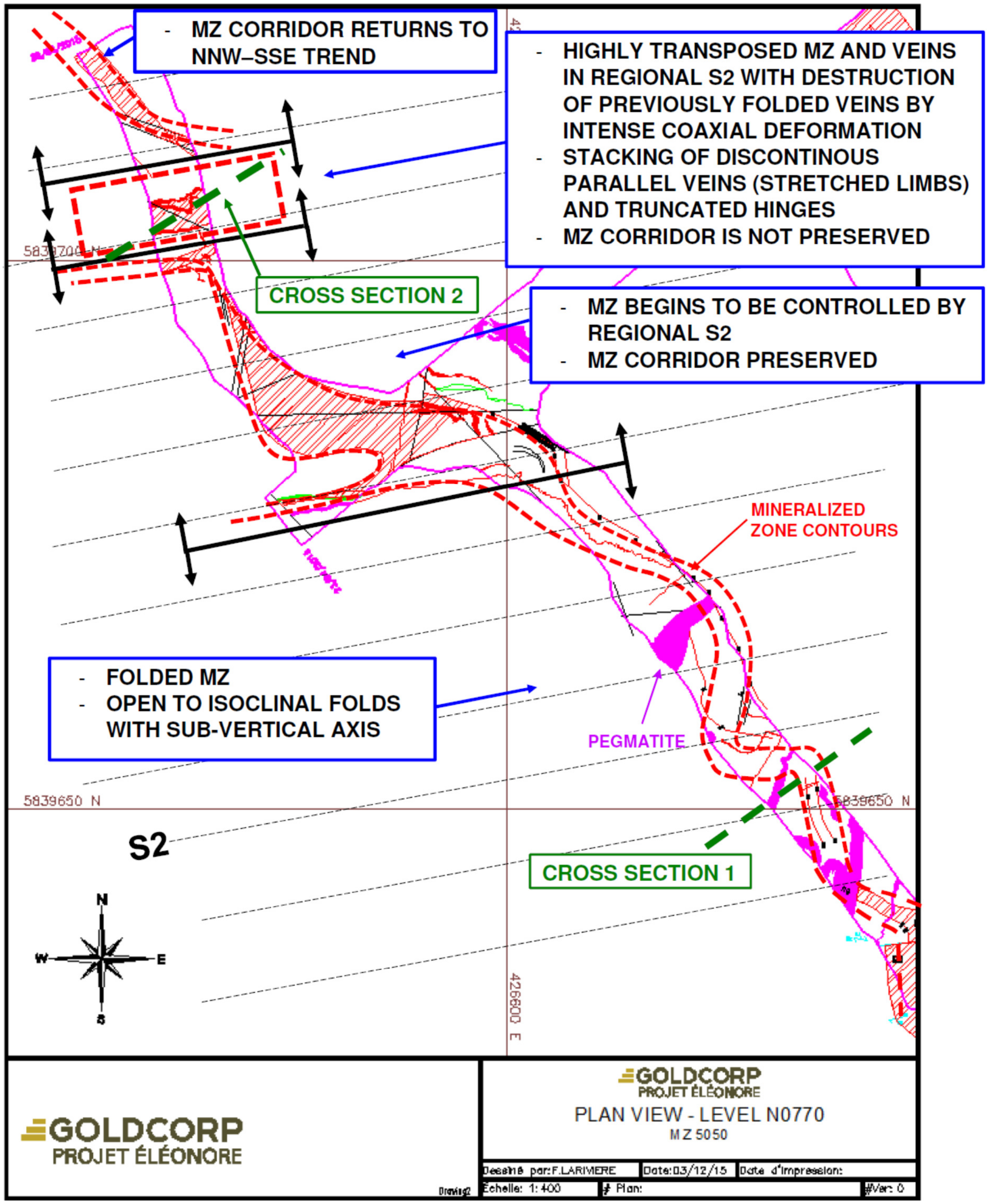
Figure 7-5 is a plan view of the north–northwest–south–southeast-trending Roberto zone (MZ 5050) at level N0770 showing close folding as the mineralized zone approaches the southern edge of the main ore shoot.

The plan view (Figure 7-5) and cross section No. 1 (Figure 7-6) show that once 12.5 m x 12.5 m spaced drilling and back mapping are available, the close folded mineralized zone can be accurately defined as a single well defined sub-vertical folded zone. However, there are areas where 12.5 m x 12.5 m spaced drilling and back mapping are available and where folding cannot be interpreted, such as where cross section No. 2 is located (Figure 7-5 and Figure 7-7) where the mineralized zone is transposed into the S2 orientation.

The close folding resulting in increased mining dilution seems to be located on the limits of the main ore shoot within a 50 m corridor.

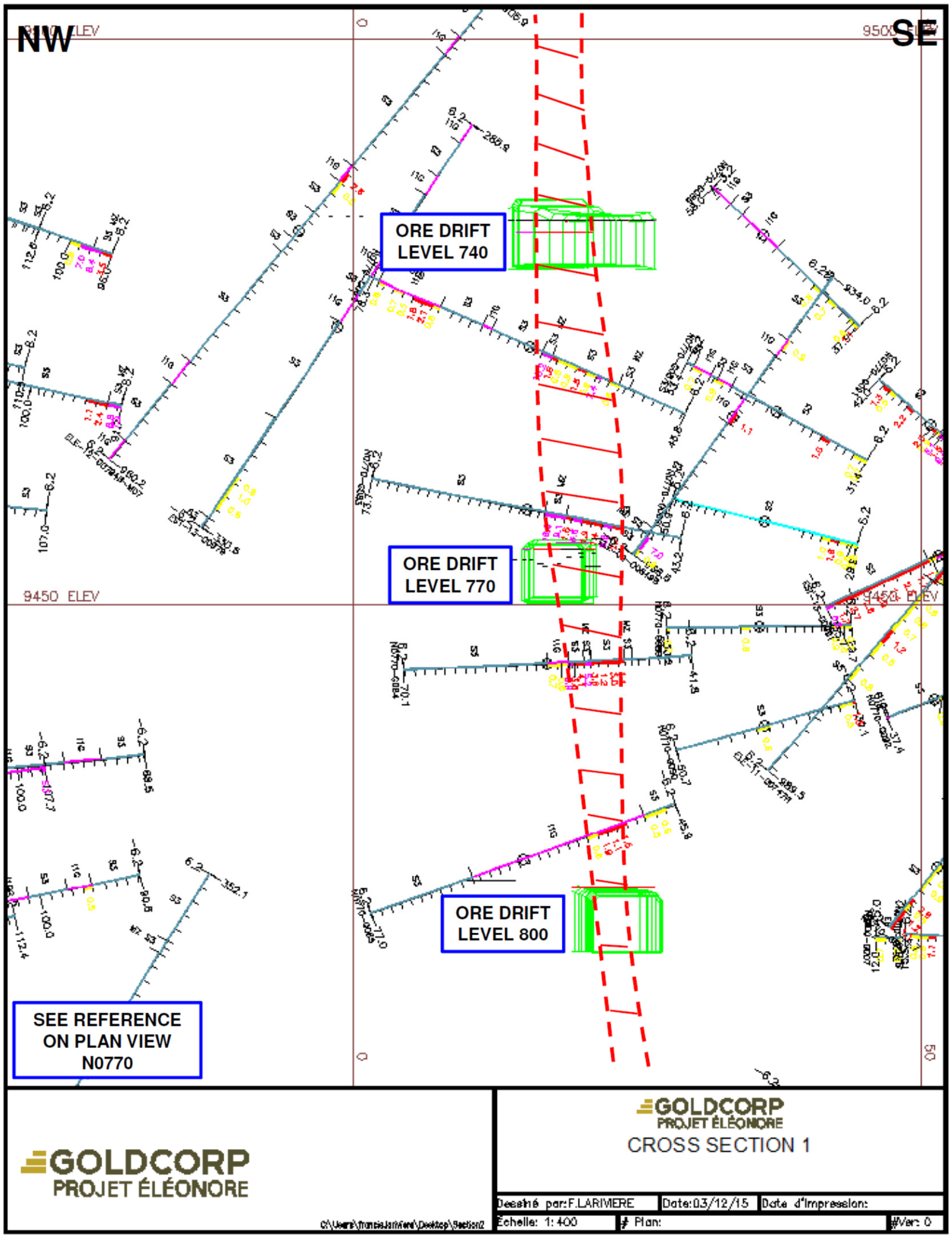
The Roberto mining horizon 4 has been drifted and geological mapping has identified a pervasive tight folding that can be traced up to the mining horizons above. Underground mapping has demonstrated a variation in the angle between ore veinlets and D2 schistosity. It is now part of the standard logging process to document this relationship. Since this new understanding has been gained, another folded corridor has been interpreted in the south oreshoot. This oreshoot, however, is not yet accessible through underground openings to validate the hypothesis.

Figure 7-5: Geological Mapping Plan View of Level N0770 – Roberto Zone (MZ 5050)



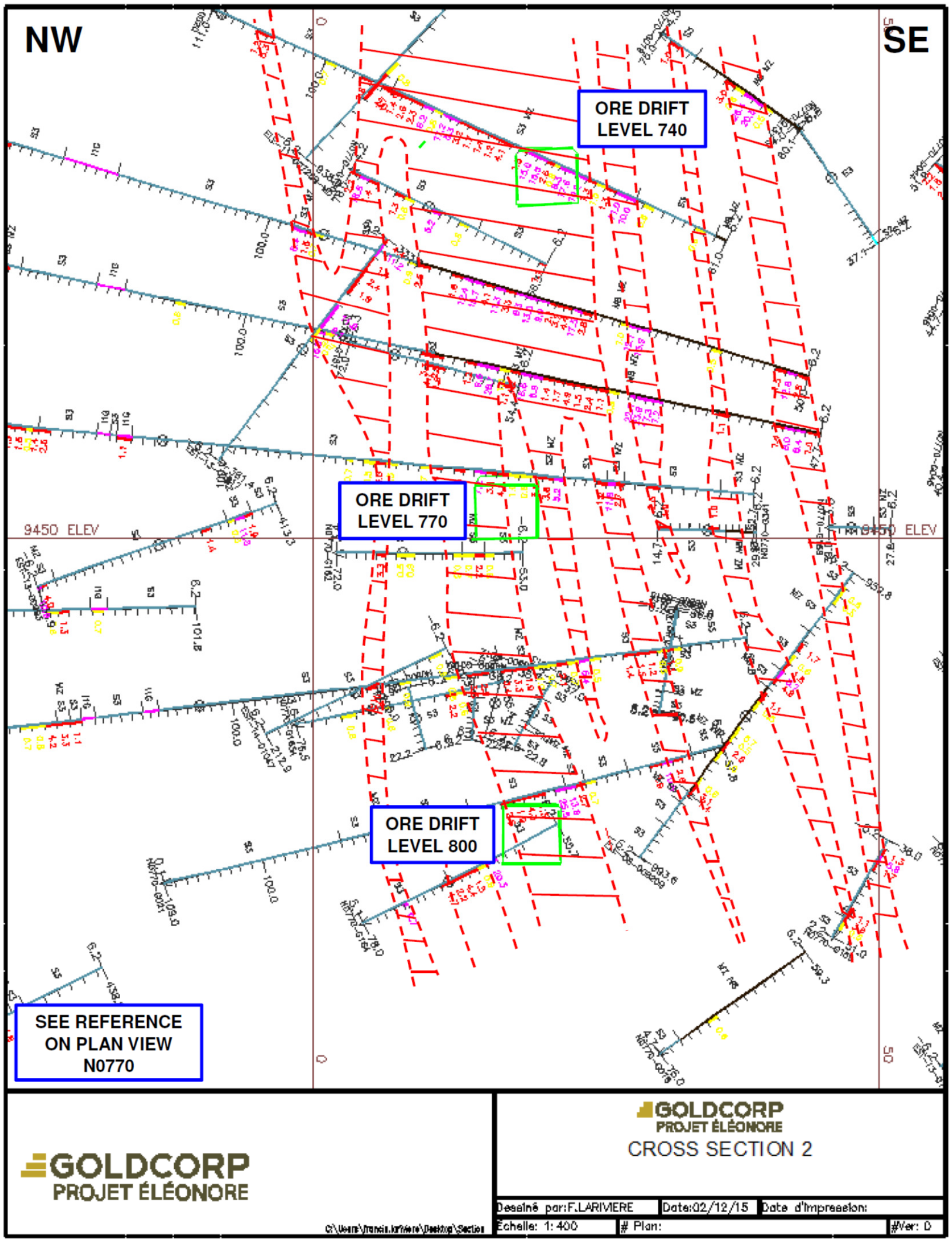
Note: Goldcorp figure prepared in 2015.

Figure 7-6: Cross Section #1 in Folded MZ 5050 – Single Well Defined Sub-Vertical MZ Corridor



Note: Goldcorp figure prepared in 2015.

Figure 7-7: Cross Section #2 in S2 Controlled MZ 5050 – Multiple Small Sub-Vertical Discontinuous Transposed MZ In in Highly Deformed Wacke



Note: Goldcorp figure prepared in 2015.

Local, impressive, apparent thickness is caused by drill holes drilled parallel to east–west MZ lenses with gold mainly hosted within small veins.

7.4 Prospects

Outside the Roberto deposit area, exploration is being undertaken on the Old Camp showing located in the Project area, 5 km south-west of the Roberto deposit (refer to Figure 7-2). In this location, shear zones that carry pyrite, arsenopyrite and chalcopyrite and are associated with quartz–tourmaline veins are located in the Ell Lake diorite near the contact with the metasedimentary units. Grab samples have returned anomalous high-grade gold values. Similar gold values and settings are observed on the east side of the Ell Lake intrusion.

The 494 area is interpreted as being a lateral and deep (>1,050 m) extension of the main Roberto deposit 5050 zone (refer to Figure 7-3). It consists of a silicified, high-grade zone developed in a schist, and is characterized by numerous centimetre-size laminated quartz veins that display visible gold in places. Arsenopyrite and pyrrhotite contents can reach as much as 3%. Some late pegmatite veins cross-cut the zone.

The North Zone (NLG; refer to Figure 7-3) is an area of low-grade gold mineralization, hosted in a silicified metasomatized greywacke, which is in contact with a monzonite dike. The zone ranges in sulphide content from 1–5%, primarily consisting of arsenopyrite, pyrrhotite and pyrite. Quartz veinlets can make up 1% of the rock.

The Hanging Wall Zone (HWZ) is defined by a set of quartz veinlets that host visible gold and are surrounded by a silica and microcline alteration halo (refer to Figure 7-3). The sulphide concentration varies between 1% and 5%, and primarily consists of arsenopyrite and pyrrhotite.

7.5 Comments on Section 7

The knowledge of the deposit setting, lithologies, mineralization style and setting, and structural and alteration controls on mineralization is sufficient to support Mineral Resource and Mineral Reserve estimation.

8.0 DEPOSIT TYPES

The Roberto deposit is considered to have many aspects in common with classic greenstone-hosted quartz–carbonate vein deposits, but represents a clastic sediment-hosted stockwork-disseminated end member. Canadian end-member examples of greenstone and clastic-hosted quartz–carbonate vein deposits include Pamour and Timmins.

The following description is based on Dubé and Gosselin (2007).

Greenstone-hosted quartz–carbonate vein deposits are a subtype of lode gold deposits, and are defined as structurally controlled, complex epigenetic deposits that are hosted in deformed and metamorphosed terranes. They are distributed along major compressional to trans-tensional crustal-scale fault zones in deformed greenstone terranes of all ages, but are more abundant and significant, in terms of total gold content, in Archaean terranes.

Although dominantly hosted by mafic metamorphic rocks of greenschist to locally lower amphibolite facies, deposits can be hosted in metamorphosed sediments.

Greenstone-hosted quartz–carbonate vein deposits are typically associated with iron–carbonate alteration. The relative timing of mineralization is syn- to late-deformation and typically post-peak greenschist-facies or syn-peak amphibolite-facies metamorphism.

Deposits consist of simple to complex networks and arrays of gold-bearing, laminated quartz–carbonate fault-fill veins in moderately to steeply dipping, compressional brittle-ductile shear zones and faults, with locally associated extensional veins and hydrothermal breccias. Individual vein thickness varies from a few centimetres to as much as 5 m, and their length varies from 10 m to as long as 1,000 m. The vertical extent of the known deposits is commonly greater than 1 km and may reach as much as 2.5 km.

Gold is mainly confined to the quartz–carbonate vein networks but may also be present in significant amounts within iron-rich sulphidized wall rock. Sulphide minerals typically constitute less than 5 to 10% of the volume of the mineralized zones. The main minerals are native gold with, in decreasing amounts, pyrite, pyrrhotite, and chalcopyrite, and occur without any significant vertical mineral zoning. Arsenopyrite commonly represents the main sulphide mineral in clastic-hosted deposits. The gold:silver ratio typically varies from five to 10.

8.1 Comment on Section 8

The Roberto deposit is the first example of a greenstone- and clastic-hosted quartz–carbonate vein deposit identified in the La Grande Subprovince.

Features of the deposit that indicate it is part of the greenstone-hosted quartz–carbonate vein deposit continuum include:

- Spatially associated with major crustal features developed in deformed greenstone rocks; mineralization is considered to pre-date the final deformation phase;
- Associated with large, district-scale carbonate alteration;
- Gold mineralization hosted in laminated fault-fill quartz–carbonate veins of varying thicknesses;
- Association of gold with arsenopyrite, löllingite, pyrrhotite and pyrite.

Features of the Roberto deposit that are atypical of the general greenstone-hosted quartz–carbonate vein deposit continuum include the fact that it is characterized by stockwork and replacement-style mineralization hosted in amphibolite facies turbiditic metagreywacke and paragneiss.

The mineralization timing may also not be typical of the syn- to late-deformation assumed for most greenstone-hosted quartz–carbonate vein deposits. Tomkins (2001) has observed that the presence of löllingite may be an indicator of a pre-existing gold deposit having undergone metamorphism.

The greenstone-hosted quartz–carbonate vein deposit model is a valid model for exploration in the Eleonore Operations area.

9.0 EXPLORATION

The main focus of the exploration activities have been to advance the Roberto deposit to a development decision, and therefore the greater Éléonore Operations area outside the area now incorporated in the mining licence has not been subject to significant exploration work in the last seven years. However, high-quality exploration targets exist, both near the Roberto deposit and on other parts of the concession, and these warrant further investigation. Table 9-1 summarizes exploration activities other than drilling. More detailed information on the exploration programs can be found in the technical reports listed in Section 2.6.

9.1 Grids and Surveys

The coordinate system used for all of the exploration, drilling and support of Mineral Resources and Mineral Reserves is the Universal Transverse Mercator (UTM) coordinate system using the North American datum of 1983 (NAD 83). The UTM Zone is Zone 18 North. Data acquired prior to Goldcorp's acquisition of the project were also in UTM coordinates, however the datum was NAD 27, and in order to be converted the following translation had to be calculated:

- Conversion to NAD 83: North = +228.407 m, East = +22.643 m and Elevation= -4.423 m;
- The global positioning system (GPS) survey data were directly downloaded into the operations' acQuire database;
- In 2006, an air photo/light detection and ranging (LiDAR) survey was completed over the property by XEOS of Quebec. The survey covered two areas:
  - Sector A covered the entire Éléonore claim group at 60 cm resolution, with 4 m topographic contours;
  - Sector B covered the Roberto area at 25 cm resolution, with 1 m topographic contours.

In 2008, an air photo survey was conducted over the northern portion of the property to provide better topographic information for infrastructure planning. The survey was conducted by Haut-Mont during the summer of 2008.

Table 9-1: Summary of Exploration Work Performed at the Éléonore Operations

Year	Type	Survey	Area	Company	Amount	Comment/Result
2006	Air Photo		Éléonore	XEOS		Northern Area: 1 m topography contours. Property: 4 m contours
	Geophysics	VTEM	Éléonore	Geotech	3,123.5 km	MAG + EM. Anomalies associated with Iron Formation. No significant anomalies associated with Roberto.
2007	Geophysics	Induced polarization	Roberto	TMC	5.7 km	Survey was completed by Geosig following year
	Trenching	Outcrop stripping	Roberto	Goldcorp		Roberto Outcrop was stripped of the overburden over an area of 400 m by 175 m, exposing the main zones of the deposit.
	Geochemistry	Field mapping	Éléonore	Goldcorp	772 samples	Only outcrops observed, no anomalies
	Geochemistry	Photo interpretation	Éléonore	Inlandsis		Interpretation of the glacial cover and potential dispersion trends over the property.
2008	Geophysics	Induced polarization	Roberto	Geosig	15.6 km	Strong chargeability anomaly associated with Roberto deposit.
	Geochemistry	Till sampling	Éléonore	Inlandsis	496 samples	5 district anomalous sectors identified, for which additional work is recommended.
	Air photo		Roberto	Haut-Mont		Air photo of northern part of Éléonore.
	Trenching		Roberto North	Goldcorp	9 trenches	A series of trenches in the North area to help understand geological controls on mineralization.
2010	Geochemistry	Field mapping	Éléonore	Goldcorp	306 samples	Only boulders sites observed, no anomalies
	Geochemistry	Lake sediment sampling	Éléonore	Inlandsis	653 samples	Northern half of the reservoir was sampled. Anomalies associated with Roberto and Old Camp.
2011	Geochemistry	Lake sediment sampling	Éléonore	Goldcorp	319 samples	Southern half of the reservoir were sampled. No anomalies
2014	Geochemistry	Core	Roberto	Goldcorp	567 samples	Initiated to develop geochemical signature for property and regional exploration.
	Geochemistry	Field mapping	Éléonore	Goldcorp	650 samples	Outcrops as well as boulder sites observed, no anomalies.
2015	Geochemistry	Field mapping	Éléonore	Goldcorp	1,047 samples	Outcrops as well as boulder sites observed, gold anomalies in boulders in the east side of the property.

9.2 Research Studies

In 2013, J.-F. Ravenelle completed a doctoral (PhD) study funded through a Natural Sciences and Engineering Research Council (NSERC) industry grant, the Institut National de la Recheche Scientifique (INRS), the Geological Survey of Canada (GSC), Goldcorp, and Virginia, entitled:

- Ravenelle J.-F., 2013: Amphibolite Facies Gold Mineralization: An Example from the Roberto Deposit, Éléonore Property, James Bay, Quebec: Doctoral thesis, Institut National de la Recherche Scientifique, Centre Eau Terre Environnement, 283 p.

Mr. Arnaud Fontaine started a new PhD study in 2013 that was funded through a collaboration between NSERC, INRS, GSC and Goldcorp, with the title:

- "Genesis of the Roberto World Class Gold Deposit, Superior Province, Quebec, Canada".

9.3 Exploration Potential

Exploration potential remains at depth in the Roberto deposit. Mineralization has been drill tested to 1,400 m, in the deepest drill hole to date. Since 2013, the Gaumond shaft and the ramp have provided drill bases for additional work on the deposit at depth. The completion of the production shaft will allow Goldcorp to test the continuity of mineralization below 1,400 m depth.

Other targets have been identified around the Roberto deposit, including the HWV, the NLG and the 494 area (see also descriptions in Section 7.4).

The HWV are part of the alteration zones surrounding the Roberto deposit. The veins are generally small and erratic, but include alteration haloes which can range in width from 1 to 5 m wide. Because these zones are close to infrastructure, the HWV may be a potential future source of additional mill feed for the Project if additional drilling supports higher-confidence Mineral Resource estimates that can be converted to Mineral Reserves for the veins. A drilling program that started in 2014 delineated an east–west-oriented hanging wall structure named HW500 located below the 650 mLv. This zone is open at depth, and has been included in the Mineral Resource estimate.

The NLG is a wide alteration zone found near-surface. With additional drilling and evaluation, there is also potential for this zone to support Mineral Resource estimates.

The 494 area, discovered in 2007, is located north of the Roberto deposit, and represents the upper extension of a high-grade zone located 1,000 m below surface.

Limited exploration has been undertaken outside the immediate Roberto deposit area, and the remaining claims retain good exploration potential.

9.4 Comments on Section 9

The exploration programs completed to date are appropriate to the style of the deposits and prospects within the Project. The exploration and research work supports the genesis and affinity interpretations.

10.0 DRILLING

At the end of 2015, a total of 4,613 surface and underground drill holes (approximately 940,516 m) had been completed by Virginia and Goldcorp. Details of the various drilling programs are summarized in Table 10-1. Drilling includes 883,510 m of exploration and delineation drilling; 41,064 m of geotechnical drilling; 1,281 m for hydrological/water bore purposes; and 1,119 m for metallurgical purposes. Condemnation drilling as well as drilling to support the locations of planned infrastructure was completed from May 1, 2010 to October 31, 2012, for a total of 13,542 m. Drill location plans are included in Figure 10-1 and Figure 10-2.

Exploration drilling in 2015 aimed to better define the mineralized zones between 650 m and 1,200 m below surface. This drilling was ongoing at the Report effective date. Results of the drilling appear to confirm the continuity of the geological model as interpreted. Since January 2013, exploration and delineation drilling has been exclusively done from underground infrastructures.

10.1 Drilling Methods

All core diamond drilling completed consists of wireline diamond drilling recovering NQ size (47.6 mm) drill core, except for underground definition drilling where BQ size (36.4 mm) is used.

Chibougamau Diamond Drilling Ltd has been the sole surface core diamond drilling contractor since the beginning of the Project. The numbers of rigs in different programs have varied from one to six. Since the beginning of underground drilling in 2012, Machines Roger International Inc in partnership with Tawich Development Corporation, has been the sole underground core diamond drilling contractor, using one to 10 electrical drill rigs. The companies responsible for the geotechnical drilling are AlXtreme, Forages Giroux, Forages SL Inc. and Technic-Eau.

Since the end of 2012, all drilling has been carried out from the nearest underground infrastructure.

10.2 Field Procedures

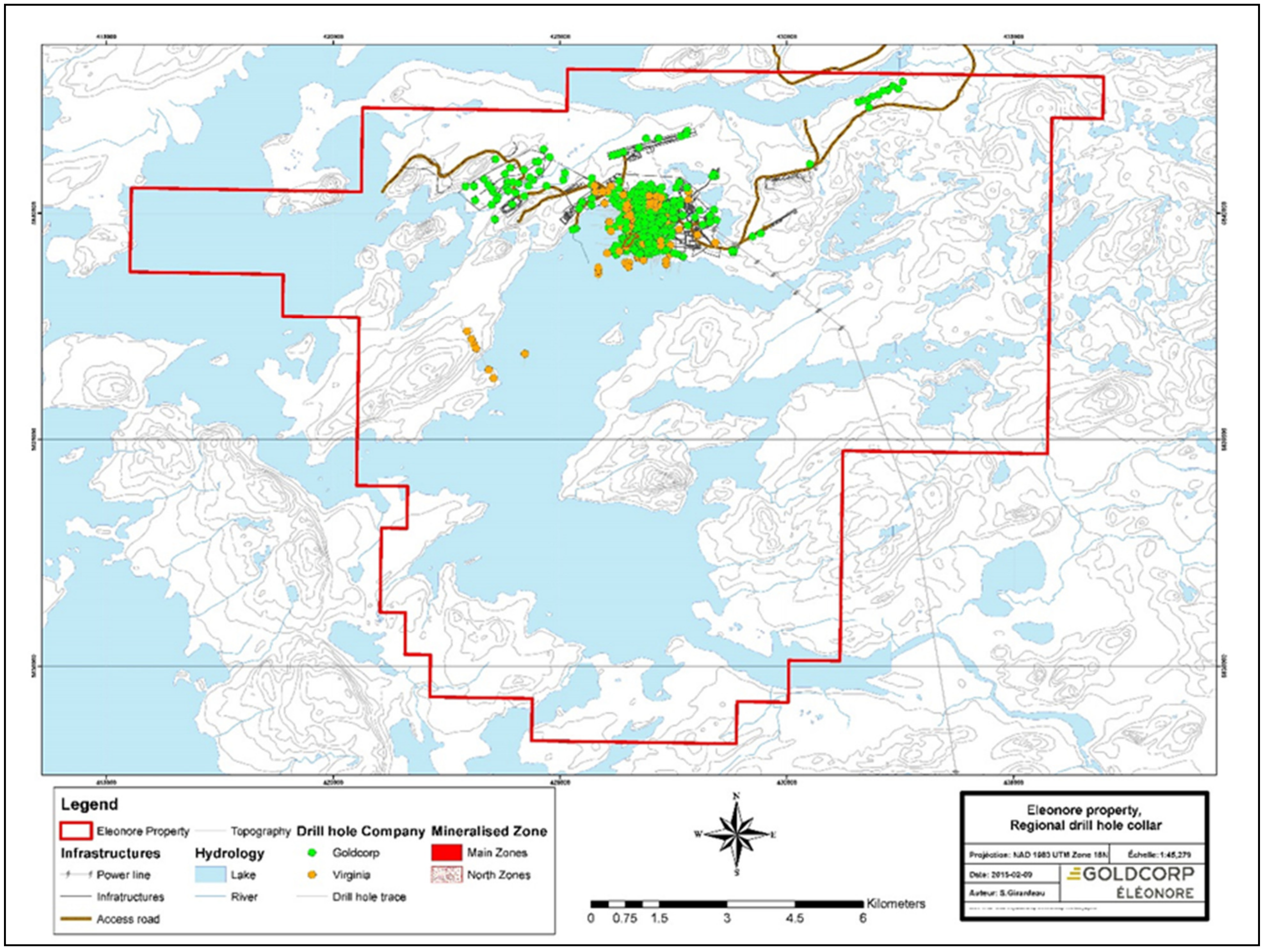
Drill core is placed into wooden core boxes at the drill site. The core boxes are labelled and closed with metal wire or rubber bands by the drilling contractor.

If required, an orientation device, either an Acetool or Corient, is attached to the tube of some drill rigs. The core base is marked by the drillers, based on the tool readings. This technique allows orientation of the core in real space and provides structural measurements that represent actual ground conditions.

Table 10-1: Drill Hole Summary Table

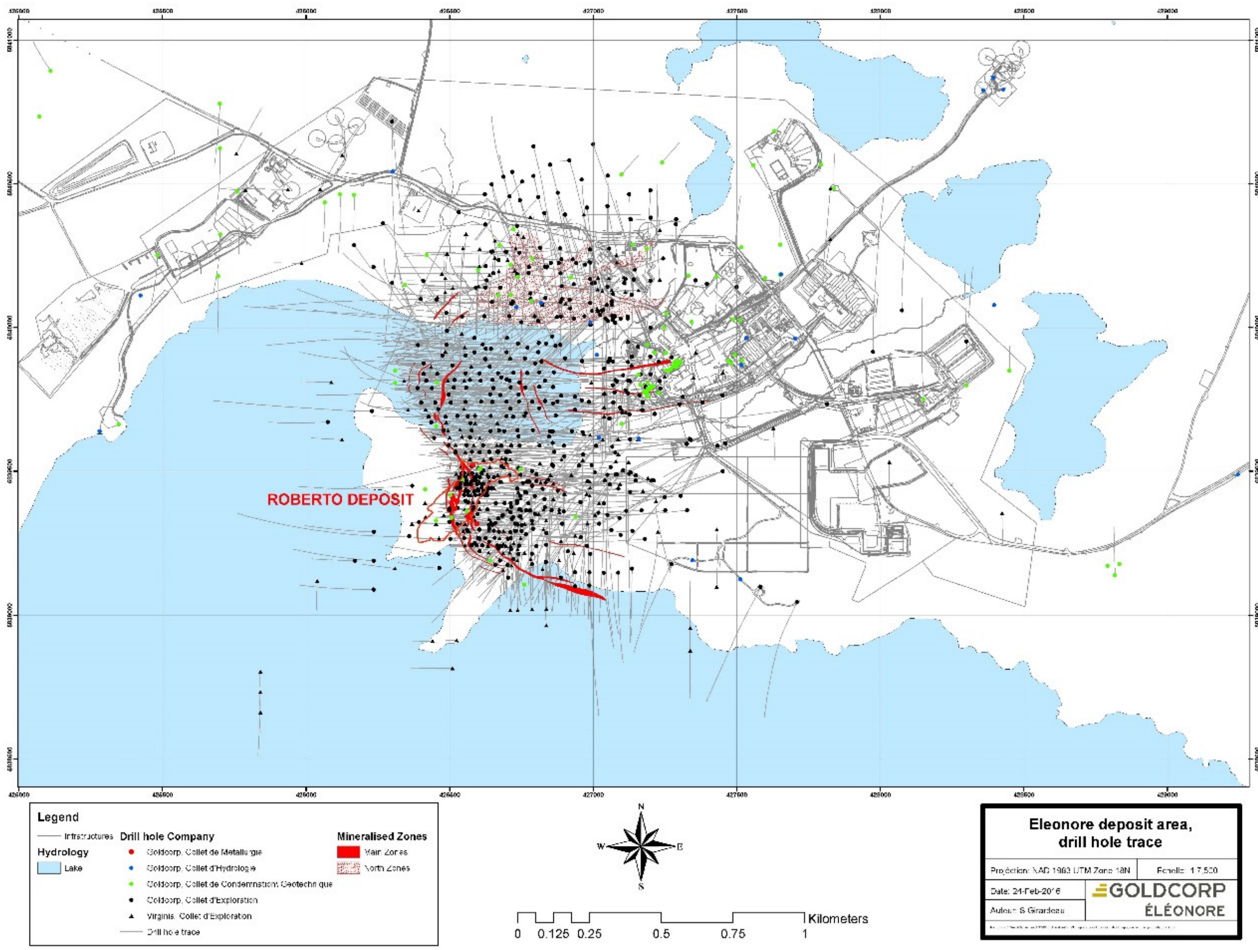
Company	Date	Core Holes Completed	Length (m)
Virginia*	September 2004 to March 2006	351	105,635
Opinaca	April 2006 to December 2006	143	56,652
Opinaca	2007	160	76,496
Opinaca	2008	179	89,640
Opinaca	2009	36	19,773
Opinaca	2010	96	29,851
Goldcorp	2011	214	52,891
Goldcorp	2012	257	59,661
Goldcorp	2013	464	111,086
Goldcorp	2014	1,256	185,093
Goldcorp	2015	1,457	153,737
Total		***4,613***	***940,516***

Figure 10-1: Regional Drill Hole Location Plan



Note: Figure prepared by Goldcorp, 2015

Figure 10-2: Drill Hole Location Plan



Note: Figure prepared by Goldcorp, 2015

Drill core is retrieved at the end of every shift from each drill site either by Goldcorp employees or drill contractor personnel. Core boxes are placed onto racks located in front of the logging core shack. To avoid mixing drill hole data, each drill rig has its own well-labelled storage racks.

10.3 Geological Logging

Core boxes are opened immediately upon arrival at the core shack, and the geologist responsible for that drill rig logs a summary description of the drill core (Quick Log). This information is then plotted on the corresponding drill section together with the drill hole deviation in order to facilitate tracking of drilling progress within the drill hole.

Geotechnical logging records core recovery, rock quality designation (RQD) and the number of fractures per metre.

Core boxes are permanently labelled using aluminum tags that include the drill hole number, box number and the depth interval start and end points.

Once geotechnical measurements are completed and the core is oriented, the drill core is geologically logged with a geologist recording a detailed description of the lithologies, structures, mineralization, alteration, and veining directly into acQuire software.

After completion of the core description, the geologist is responsible for marking the samples on the core. Photos of the core for the entire drill hole length are then taken, with four boxes photographed per picture. When required, specific gravity (SG) measurements and point load testing are carried out before the core boxes are moved to the core-cutting facilities.

Once the core samples have been cut, the boxes containing the remaining core halves are placed in an outside permanent core rack.

10.4 Core Recovery

Core recovery and RQD are measured and calculated for each core. Core losses are recorded in the drill log. Rock units intersected by drilling are generally solid, yielding an effective core recovery of 99.96%.

10.5 Collar Surveys

Until December 2005, surface drill hole collars were surveyed using Garmin hand-held global positioning system (GPS) instruments, or were chained from already-completed boreholes.

In January 2006, a land surveyor was contracted to install a Trimble TSC1-V7.50 GPS fitted with differential correction from a base station located on site. Measurement precision is 2 cm, both in the horizontal and vertical axes.

Procedures for drill hole collar surveys include paper tracking of final collar surveys that must be signed by the surveyor.

Underground drill holes are surveyed using a Leica TS15 robotized station.

10.6 Downhole Surveys

Downhole surveying has been performed routinely on every drill hole since Project inception. Until mid-2011 a FlexIt SmartTool electronic instrument was used, at which time a switch was made to a Reflex electronic instrument.

10.7 Geotechnical and Hydrological Drilling

These holes were logged and sampled as per standard Goldcorp procedures.

10.8 Metallurgical Drilling

All the metallurgical core samples from drilling are identified in appendices of SGS Lakefield Research Limited (SGS) metallurgical testwork reports. The drill samples represent the Roberto and Zone du Lac zones, from surface to 750 m depth with various gold head grades, ranging from 2–20 g/t gold.

10.9 Condemnation Drilling

Drilling was completed on the construction site in areas where infrastructure was planned to be built to confirm the low potential for economic mineralization. These holes were logged and sampled as per normal procedures.

10.10 Drill Spacing

Drilling has been conducted over the Roberto deposit on a 1,500 m by 1,500 m area. The drilling pattern was designed to sample the deposit orthogonally to the interpreted strike and dip of the gold mineralization. The majority of the core holes were drilled with an inclination varying between 0° to -65°. Typical drill hole orientations are as shown in Figure 7-4 in Section 7.

All core holes were drilled on sections spaced approximately 25 m apart in most parts of the deposit. Drill hole spacing of 25 m by 25 m occurs over the bulk of the orebody to a depth of approximately 1,100 m below surface. Below 1,100 m, down to approximately 1,200 m, a core hole spacing of 100 m by 100 m is usually observed. Only a few drill holes have been drilled below 1,200 m. The deeper boreholes intersected the mineralized horizons at a depth of approximately 1,400 m below surface. For definition drilling, drill hole spacing is generally 12.5 m by 12.5 m inside the existing 25 m drill spacing, as permitted by the mine development schedule.

10.11 Drill Sample Length/True Thickness

True thickness interval lengths are defined as being perpendicular to the strike and dip of the mineralization at the point of bore hole intersection. It is the shortest distance between the hanging wall and the footwall points of intersection of the bore hole with respect to the strike and dip of the mineralization. Due to the irregular shape of the orebody, there is no predetermined angle for this. Typically drill intersection lengths are greater than true width.

10.12 Comment on Section 10

In the opinion of the responsible QP, the quantity and quality of the lithological, geotechnical, collar and downhole survey data collected in the exploration and infill drill programs completed by Virginia and Goldcorp are sufficient to support Mineral Resource and Mineral Reserve estimation as follows:

- Core logging meets industry standards for gold exploration;
- Collar surveys have been performed using industry-standard instrumentation;
- Downhole surveys were performed using industry-standard instrumentation;
- Recovery data from core drill programs are acceptable;
- Geotechnical logging of drill core meets industry standards for underground mining operations;
- The drilling pattern provides adequate sampling of the gold mineralization for the purpose of estimating Mineral Resources and Mineral Reserves;
- Drilling is ideally perpendicular to the strike of the mineralization. Depending on the dip of the drill hole, and the dip of the mineralization, drill intercept lengths are typically greater than true widths;
- Drill orientations are shown in the example cross-section included in Section 7 as Figure 7-4, and can be seen to appropriately test the mineralization;
- Drill hole intercepts demonstrate that sampling is representative of the gold grades in the deposit area, reflecting areas of higher and lower grades;
- No material factors were identified with the data collection from the drill programs that could affect Mineral Resource or Mineral Reserve estimation.

11.0 SAMPLE PREPARATION, ANALYSES, AND SECURITY

11.1 Sampling Methods

Sampling methods other than drilling are summarized in Table 11-1.

11.1.1 Drill Sampling

Core sample collection used by Virginia is similar to the procedure currently used by Goldcorp. Virginia's method is described below; the only difference was the use of a hydraulic splitter to split the core from country rocks adjacent to mineralized zones.

Since mid-2007, exploration drill cores have been systematically sampled from top to bottom. For in-fill drilling with 25 m spacing or below, sampling is systematically done on the complete mineralized envelope with 7.5 m closure on each side of the envelope. Sampling is designed to reflect the general geology, all significant alterations and significant mineralization found in the Project.

Prior to 2013 sample lengths in mineralization varied between 0.3 and 1.0 m and samples in un-mineralized rock were collected over 0.5 to 1.5 m widths. Starting in 2013 the minimum length for samples in mineralization was increased to 0.5 m, and includes dilution if a mineralized interval is narrower than this.

Sample intervals are marked on the cores using a red marker. The geologist draws a red line on the core marking where it needs to be cut. The geologist also inserts the sample tag, and marks the corresponding sample number on the core.

All exploration drill cores are cut using a diamond saw. One half of the core is put into a plastic bag along with a portion of the sample tag and the other half of the core is left in the core boxes. When cutting the core, the sampling technician must always follow the red line and must also always sample the same side of the core. The BQ size definition drilling cores are whole-core sampled and sent to the internal laboratory following the same protocol as the exploration core.

Sample tags are pre-stamped, indicating where standard reference materials (SRMs), blanks, duplicates and quarter splits should be inserted. Tags for sample SRMs are inserted in the core box beside the previous sample tag. This procedure alerts the sample technician that there is an SRM, a blank, a duplicate or a quarter split should be inserted into or taken from the core boxes.

The sample bags are closed in such a way as to avoid losing any material. The bags are pre-labelled by the sampling technician. Samples are then put into sequence on a table so that standards and blanks may be inserted into the boxes, under the supervision of the senior technician, and they are readied for shipping.

Table 11-1: Surface Sampling Methods Summary

Sample Type	Comment
Till samples	Processed using a shaking table to extract 150 g to 250 g of dense minerals. The dense fraction was submitted for analyses by fire assay for Au and ICP-MS for 54 elements
Channel samples	Collection of channel samples was done using a rock saw whereby two cuts approximately 8 cm apart and 8 cm deep were made. The material between the cuts was then removed with a hammer and chisel. Processed in the same manner as drill samples

The geologist enters the required sampling information in the acQuire database, as well as in the sample booklets.

11.2 Metallurgical Sampling

Core samples were crushed to pass 6 mesh. A designed mass was riffled out of each -6 mesh sample and combined according to zone and elevation. Approximately 6 kg was riffled out of each blended elevation composite and submitted for standard Bond ball mill grindability testing. The balance of each -6 mesh elevation composite was further crushed to pass -10 mesh and was separately rotary split onto 1 kg test charges for metallurgical testing and head and chemical analysis.

Whole and half-core PQ-size core was specifically designated for the comminution testing.

One kilogram samples were submitted for screen metallics protocol analysis for gold and silver at ±150 mesh (106 µm). The entire screen oversize (3–5% mass) was fire assayed to extinction. Duplicate 25 to 30 g aliquots were riffled from each screen undersize and submitted for fire assay for gold and silver.

11.3 Specific Gravity Determinations

Specific gravity data collection was initiated after Project acquisition by Goldcorp and continued until 2013. The protocol used is as follows.

Once the geological logging is completed and before the core was sampled, pieces of about 10 cm are measured, weighed dry and then weighed wet. Data are recorded in the acQuire logging database, and specific gravity is automatically calculated. If the calculated measurement is above the limits set for the Éléonore rocks, then the system flags the entry and the measurement is taken again.

A total of 15,369 specific gravity measurements have been completed. A measurement was taken in the middle of each mineralized zone greater than 1 m and at 3 m and 6 m from the host rock. The average specific gravity of the rock types at Éléonore is 2.77.

Point load tests were also taken on the same samples as well as every 50 m along the borehole length.

11.4 Analytical and Test Laboratories

The laboratories used for surface samples were:

- From 2006 to 2013 surface samples were prepared and analyzed by ALS Laboratories (ALS) in Val d'Or, Quebec. The laboratory is accredited under ISO 17025 and 9001/2008;
- In 2014 and 2015 surface samples were prepared and analyzed by Activation Laboratories Ltd (Actlabs) in Ancaster, Ontario. The laboratory is accredited under ISO 17025 for specific registered tests or certification to ISO 9001:2008.

Laboratories used during the various exploration, infill and step-out drill analytical programs were:

- From 2004 to December 2006, core samples were prepared and analyzed at Laboratoire Expert (Expert) in Rouyn-Noranda as the primary laboratory. This laboratory was not certified before 2006;
- From January 2007 to April 2014, preparation and sample assays were performed by ALS Laboratories (ALS) in Val d'Or, Quebec. The laboratory is accredited under ISO 17025 and 9001/2008;
- Since April 2014, exploration and infill sample preparation and assay have been performed by Accurassay Laboratories Inc. (Accurassay) in Rouyn-Noranda, Québec, which is accredited under ISO 17025;
- The Goldcorp-operated in-house laboratory started operation in February 2014 and begin to process muck, chips and definition drilling samples. The laboratory has a total capacity of approximately 500 samples per day including ~250 core samples, ~100 mine chip and muck samples and ~150 mill samples, with allocation depending on priority. If the on-site laboratory is busy, overflow drill samples are currently sent to Accurassay;
- Until June 2010, SGS Laboratory (SGS) in Rouyn-Noranda acted as the secondary (umpire) laboratory for both the Expert and ALS programs. The laboratory has ISO9001 certification and holds a certificate of accreditation under ISO 17025. All samples selected by Virginia for multi-element analysis were sent to Actlabs Laboratory in Toronto.

Metallurgical testwork has been completed at a number of laboratories, but primarily at SGS Lakefield Research Limited (SGS). Metallurgical laboratories are not typically accredited or certified for sample analysis and preparation.

All laboratories other than the Goldcorp-operated in-house laboratory are independent of Goldcorp.

11.5 Sample Preparation and Analysis

11.5.1 Expert Sample Preparation Procedures

At the laboratory, samples were received and sorted on the floor, manually recorded, and later entered in an Excel spreadsheet and a partial laboratory information management system (LIMS, using GEMS software). Labels were printed out for pulp bags. Drill core was dried, if it was judged to be necessary, in an oven without temperature control.

Samples were reduced to about 6 mm in a Denver jaw crusher and then reduced again to 2 mm in a roll crusher. Crushed samples were placed in an aluminium pan and into a riffle splitter. The split sample weight was about 200 g and the sample split was then pulverized in a TM ring and puck pulverisers. A 30 g aliquot was weighed and about 125 g of flux and litharge added in the crucible. The sample was fused in a 28-pot electric furnace. The fused samples were poured in moulds and lead buttons are separated from the slag by hammering.

11.5.2 ALS Chemex Sample Preparation Procedures

Upon arrival at the laboratory, samples were sorted on benches or on the floor, logged into the ALS database tracking system (GEMS), and identified with a bar code. Most of the procedures are tracked by the GEMS software. Samples were then dried in a forced air dryer under controlled temperature conditions.

Samples were reduced with “TM Engineering Rhino & Terminator” crushers in a single pass or in multiple passes to obtain a primary crushed material that was better than 70 to 90% passing 2 mm. Crushed samples were placed in an aluminum pan and fed into a riffle splitter.

Split samples were pulverized in TM 300 g or LM-2 pulverisers with greater than 85 of the pulverized sample passing through a 75 µm screen.

A 50-gram aliquot was used and 200 g of flux was added to the sample. Samples were fused in 84-pot auto-pour fusion furnaces fitted with a digital temperature control system. Lead buttons were separated from the slag in a template.

11.5.3 Actlabs Sample Preparation Procedures

Samples are first dried and then the entire sample is crushed to 90% passing -10 mesh. A 250 gram subsample is taken by riffle splitter and pulverized to 95% passing -150 mesh.

A 0.5 g sample undergoes a lithium meteorite/tetra borate fusion. The resulting molten bead is rapidly digested in a weak nitric acid solution. The fusion ensures that the entire sample is dissolved.

11.5.4 Accurassay Sample Preparation Procedure

Sample numbers are first entered into Accurassay Laboratories' LIMS.

The samples are dried, if necessary, and then jaw crushed to 85% <10 mesh and a 250 to 500 g sub-sample is normally taken for analysis. For pulp metallic analysis, a 1,000 g sub-sample, or the entire sample in cases where less than 1,000 g is available, is taken.

The sub-sample is pulverized to 85% <200 mesh and then matted to ensure homogeneity. The homogeneous sample is then sent to the fire assay laboratory or the wet chemistry laboratory depending on the analysis required. For pulp metallic analysis, the sample is pulverized and screened with the >150 mesh material being re-pulverized and re-screened until approximately 50 g remains.

Samples of the <150 mesh pulp and all of the >150 mesh portion are sent for fire assay (or acid digestion).

Non-silica based sand is used to clean out the pulverizing dishes between each sample to prevent cross contamination.

11.5.5 In-house Laboratory Sample Preparation Procedure

Samples are dried, and then jaw crushed to 75% <10 mesh and a 400 to 500 g sub-sample is normally taken to be pulverizing. A preparation duplicate is taken every 19 samples for preparation validation. Samples are pulverized to 85% passing 200 mesh.

11.5.6 Expert Analytical Procedures

Gold assays were performed by standard fire assay with an atomic absorption spectrometry (AAS) finish using a Varian instrument. For assay results equal to or above 3.0 g/t gold, samples were re-assayed with a gravimetric finish. Before Goldcorp's Project interest, Virginia was routinely analyzing every sample above 500 ppb gold by gravimetric finish.

Expert reported a detection limit of 5 ppb gold for AAS determination, and 0.03 g/t gold for gravimetric analyses.

No other elements were routinely assayed.

11.5.7 ALS Analytical Procedures

Gold assays were performed by standard fire assay on a 50 g sample with an AAS finish. For assay results equal or above 3.0 g/t gold, samples were re-assayed with a gravimetric finish. ALS reported an upper limit of 10 g/t gold and a detection limit of 0.005 g/t gold for AAS analyses. No other elements were routinely assayed.

11.5.8 Actlabs Analytical Procedures

For Virginia samples, Actlabs used a Perkin Elmer Optima 3000 Radial ICP for a 30 element suite.

For Goldcorp samples from 2014 and 2105, gold assays are performed by standard fire assay with an AAS finish. Trace and whole rock elements are determined using inductively-coupled plasma mass spectrometry (ICP)-MS.

11.5.9 Accurassay Analytical Procedures

Gold assays are performed by standard fire assay on a 50 g sample with an AAS finish. For assay results equal or above 3.0 g/t gold, samples are re-assayed with a gravimetric finish. Accurassay reports an upper limit of 10 g/t gold and a detection limit of 0.005 g/t gold for AAS analyses.

No other elements are routinely assayed.

11.5.10 In-house Laboratory Analytical Procedures

Gold assays are performed by using a 30 g fire assay with a microwave plasma atomic emission spectroscopy (MP-AES) finish. For assay results above 34 g/t gold, samples are re-assayed with a gravimetric finish. Éléonore reports an upper limit of 34 g/t gold and a detection limit of 0.01 g/t gold for MP-AES analyses.

11.6 Quality Assurance and Quality Control

11.6.1 Expert

At Expert, no quality assurance or quality control (QA/QC) was performed during sample preparation. The monitoring of gold accuracy included the insertion of one RockLabs SRM per 28 samples, one pulp duplicate every 12 samples, and one analytical blank in each batch of 28 samples. SRMs were rejected if the analysis was at two standard deviations from the mean. SRM and blank data were reported in the certificates of analysis.

11.6.2 ALS

Quality control samples were automatically inserted into the sampling queue by the GEMS system. Sample preparation quality control included a sizing of the crusher and pulp products at the beginning of each shift for each machine and QC data were captured and plotted on charts. Each batch of 84 fusion samples contained one analytical blank, three pulp duplicates, and two RockLabs SRMs for gold accuracy monitoring. Results were reported in the assay certificates and imported into the Project acQuire database.

11.6.3 Actlabs

A matrix standard and blank was run every 13 samples. A series of United States Geological Survey (USGS) geochemical standards were used as controls.

11.6.4 Accurassay

Accurassay employs an internal quality control system that tracks certified reference materials (CRMs) and in-house quality assurance standards. Accurassay uses a combination of reference materials, including reference materials purchased from CANMET and other CRM vendors, standards created in-house by Accurassay and tested by round-robin analysis with laboratories across Canada, and ISO-certified calibration standards purchased from suppliers. Should any of the standards fall outside the warning limits (± two standard deviations); reassays are performed on 10% of the samples analyzed in the same batch and the reassay values are compared with the original values. If the values from the reassays match original assays the data are certified, if they do not match the entire batch is reassayed. Should any of the standards fall outside the control limit (± three standard deviations) all assay values are rejected and all of the samples in that batch are reassayed.

11.6.5 In-house Laboratory

The Éléonore mine laboratory uses in-house standards and RockLabs standards that are inserted randomly in batches of 24. All QC data are validated using a ± two standard deviation warning limit. If the QC samples are out of the ± two standard deviations range, the laboratory re-assays those samples that contain significant values. Results are exported from the LIMS into a database that is validated by Geology prior to being imported into the acQuire database. The laboratory has twice participated in a Proficiency Testing Program for Mineral Analysis Laboratories (PTP-MAL) round robin from CANMET, and on each occasion, has received a Certificate of Successful Participation in Proficiency Tests.

11.6.6 Virginia

From August 2004 to December 2005, Virginia was inserting approximately one SRM and one blank in every batch of 50 samples, and randomly inserting a supplementary standard and blank for each mineralized zone. From November 2004, a quarter split of 10% of all samples from mineralized zones were sent to SGS in Rouyn-Noranda for analysis and the pulps were re-assayed by Expert.

11.6.7 Goldcorp

Each sample batch of 50 submitted to ALS contained two SRMs, two blanks, two duplicates and one quarter-split sample. Each sample batch of 24 submitted to Accurassay contains one SRM, one blank and one duplicate, with one quarter-split sample inserted for every two batches. Additionally pulps have been submitted to a second accredited laboratory for check (umpire) assay.

Between 2004 and June 2006, SRMs from RockLabs were used. They were gradually replaced by standards from Canadian Resource Laboratories (CDN) of Langley, B.C.

Three sets of site-specific standards have been prepared by CDN for use at Éléonore. In 2007, five SRMs were created from Éléonore sample rejects, and in 2008 and 2013 two additional sets of five SRMs were created from surface PQ drill core from the Roberto Zone. All three sets contained SRMs with similar values over a similar gold grade range including approximate values of 0.6 g/t, 2.5 g/t, 5.0 g/t., 8.0 g/t and 13.0 g/t gold. The SRMs were bagged in 120 g pouches by CDN. All standards went through a round-robin analysis process, and have been certified by Smee & Associates Consulting Ltd (Smee).

Blank material consists of commercially-available marble chips used for landscaping.

Duplicate samples are used at every stage of the sampling protocol. A sampling duplicate, a coarse reject duplicate, and a pulp duplicate are inserted in the sample stream.

Digital assay certificates received from the laboratory are imported through a built-in routine in the acQuire software on a daily basis. Control sample graphs are automatically displayed during the import process and SRM, blank or duplicate failures are flagged in red. The database manager analyzes the graphs and takes the decision whether or not to import or not the assay results based on a set of fixed rules. If the batch fails the QA/QC rules, the laboratory is requested to re-run the batch.

When importing batches into acQuire, if adjacent SRMs fall between two and three standard deviations on the same side of the mean in the immediate group of SRMs (either preceding or following), the SRMs are classified as failures. SRMs are accepted within three standard deviations for a single standard failure, and blanks within 50 ppb gold.

11.6.8 Goldcorp Quality Assurance and Quality Control Results

Éléonore site staff maintain the QA/QC data in acQuire and are able to produce charts for any time period or laboratory for data assessment.

Results from all three sets of site specific SRMs indicate very good assay precision. Results for the 2013 medium-grade SRM (3NMG) show a slight low bias from ALS.

Accurassay and the on-site laboratory show a slight low bias for all 2013 SRMs except for the low-grade SRM (LG3N). Biases shown by a primary laboratory relative to expected SRM values are not unusual and the degree of bias shown is not of concern.

Analysis of blanks by ALS typically returned values of less than 15 ppb gold, well below the applied failure threshold of 75 ppb gold. Generally most of blank results from Accurassay are 25 ppb gold and lower; however, in 2015 there have been an increasing number of blank results with gold values from 25 to 50 ppb. This suggests the possibility of weak contamination in some samples; however, the amounts are small at approximately 25 ppb gold, and there would be no material effect with respect to Mineral Resource estimation.

Sampling duplicates show considerable variability on an individual sample basis but the global dataset shows no bias. This is to be expected from deposits where coarse gold is present. Results for reject duplicates show less scatter than the sampling duplicates indicating better assay precision and pulp duplicates, representing the final sample preparation stage, show good assay precision (repeatability).

Available results for check assay at SGS indicate good assay accuracy between primary and umpire laboratories.

QA/QC results do not indicate any significant or systematic problems with sample analysis.

11.7 Databases

The main Project database is acQuire. Geological, assay, downhole survey and drill collar location data are uploaded in electronic format to the database.

Upon completion of drill hole logging, geologists are responsible for verifying the survey and logging data and have to sign off that all data have been entered in acQuire. Data entry is double-checked by the database manager who then locks the drill hole once assay data have been imported. The drill hole is then flagged as “finalized” in the database. Assay and survey data are uploaded from laboratories and surveyors respectively in electronic format (Access, Excel or LIMS) to the acQuire database.

Once the drill hole is “finalized”, no changes can be made to the drill hole data, unless the database manager or a senior geologist changes the status of the drill hole. Any changes to finalized drill holes are documented and kept on record. Only the database manager or a senior geologist can perform this step.

11.8 Security

11.8.1 Sample Security

From the moment the core boxes are delivered to the core logging facility by the drilling contractor and up to their delivery to the laboratory, the samples remain in the custody of personnel under the direct supervision of either Virginia (2004 to 2006) or Goldcorp (2007 to present) personnel.

11.8.2 Sample Storage

Rejects and pulps from assay sample preparation are archived in a well-organized, secured facility in Rouyn-Noranda that is supervised by Goldcorp personnel.

Drill core is stored on site in core racks organized by drill hole number.

11.9 Comments on Section 11

The responsible QP has made the following observations:

- Sample preparation for samples that support Mineral Resource estimation has followed a similar procedure for all Virginia and Goldcorp drill programs. The preparation procedure is in line with industry-standard methods;
- Exploration and infill core samples were analysed by independent laboratories using industry-standard methods for gold analysis;
- Drill programs include the insertion of blank, duplicate and SRM samples;
- QA/QC submission rates meet industry-accepted standards for insertion rates.
- The QA/QC program results do not indicate any problems with the analytical programs, therefore Goldcorp concludes that gold analyses from the core drilling are reliable and suitable for inclusion in Mineral Resource and Mineral Reserve estimation;
- Data that were collected were subject to validation, using in-built program triggers that automatically checked data on upload to the database. Verification is performed on all digitally-collected data on upload to the main database, and includes checks on surveys, collar coordinates, lithology data, and assay data. The checks are appropriate, and consistent with industry standards. Independent data audits have been conducted, and indicate that the sample collection and database entry procedures are acceptable;
- Sample security has relied upon the fact that the samples were always attended or locked in appropriate storage facilities. Chain-of-custody procedures consist of filling

out sample submittal forms that are sent to the laboratory with sample shipments to make certain that all samples are received by the laboratory;

- Current sample storage procedures and storage areas are consistent with industry standards;
- The specific gravity database contains a sufficient number of determinations to provide a reliable assessment of the variability of the specific gravity across the gold deposit and the various rock types. The data support the values used in tonnage estimates;
- The quality of the gold analytical data is sufficiently reliable to support Mineral Resource and Mineral Reserve estimation. Sample preparation, analysis, and security are generally performed in accordance with exploration best practices and industry standards.

12.0 DATA VERIFICATION

12.1 Smee (2007)

Smee and Associates Consulting Ltd. was retained by Goldcorp in February, 2007 to review core handling, data collection, QC protocols and database design. No items of concern were noted as a result of the review, and a number of recommendations were made to improve current practices.

12.2 SRK Consulting (2007)

During preparation of a technical report on the Project in 2007, SRK used Gemcom software to review the Project database, primarily for items such as missing or overlapping intervals, and intervals that were longer than the drill hole depth.

SRK personnel also interviewed project personnel on all aspects of the field program, and visited several outcrop exposures to ascertain the geological setting of the project area and to witness the location of exploration work.

SRK also reviewed drill core from several boreholes intersecting gold mineralization in all areas of the gold deposits. The purpose of this review was to ascertain the geological and structural controls on the distribution of the gold mineralization and to verify the geological descriptions.

The review concluded that the data evaluated were suitable to support Mineral Resource estimation.

12.3 G.N. Lustig Consulting Ltd (2007)

All borehole sample and assay data collected from the first 2004 borehole to December 2006 was verified by G.N. Lustig Consulting Ltd (GNL). The verification performed by GNL was done by re-creating the database from the original documents. Sample numbers and intervals were entered directly from the sample tags in a Microsoft Excel spreadsheet and merged with assay results imported from the original digital assay certificates obtained directly from the laboratory.

The resulting database was cross-checked with the acQuire database. A list of errors, such as missing samples, overlaps, gaps, or wrong assay results, was provided to Goldcorp and the errors were corrected.

12.4 G.N. Lustig Consulting Ltd (2008)

In July 2007, 3,285 drill core pulp samples representing approximately 20% of the year to date 2007 program were sent to SGS, who acted as an external check for the primary analyses performed by ALS Chemex. GNL reviewed the results and concluded that there was no overall relative bias between the two laboratories.

12.5 Goldcorp

Upon the acquisition of the Éléonore Project by Goldcorp, drilling information was reviewed in-house. A data-management system (acQuire) was installed to help standardize and verify data collected in the field on an ongoing basis. A set of procedures was established for finalizing and validating geological logs, assays and QA/QC data.

12.6 Comment on Section 12

Goldcorp has established internal controls and procedures on their mining operations and exploration programs, which are periodically reviewed for effectiveness. These are considered by the QP to be supportive of data verification.

The process of data verification for the Project has been performed by external consultancies and Goldcorp personnel. Goldcorp considers that a reasonable level of verification has been completed, and that no material issues would have been left unidentified from the programs undertaken.

The QP, who relies upon this work, has reviewed the appropriate reports, and is of the opinion that the data verification programs undertaken on the data collected from the Project adequately support the geological interpretations, the analytical and database quality, and therefore support the use of the data in Mineral Resource and Mineral Reserve estimation, and in mine planning:

- Inspection of all laboratories are undertaken on a regular basis to ensure that they are well maintained and that all procedures are being followed properly. Deficiencies or concerns are reported to the laboratory manager;
- QA/QC data are monitored closely and detailed reports are prepared on a monthly basis. Assay data needs to be approved before import in to the database;
- Drill data including collar co-ordinates, down hole surveys, lithology data, and assay data are typically verified prior to Mineral Resource and Mineral Reserve estimation by running program checks in both database and resource modelling software packages;
- External reviews of the database have been undertaken in support of acquisitions, support of feasibility-level studies, and in support of technical reports, producing independent assessments of the database quality. No significant problems with the database, sampling protocols, flowsheets, check analysis program, or data storage were noted.

13.0 MINERAL PROCESSING AND METALLURGICAL TESTING

The metallurgical test program has been overseen by Goldcorp's metallurgical team.

Extensive metallurgical studies were carried out on samples taken from the various Éléonore ore zones. Most of the metallurgical testwork was completed during 2006–2010 as part of engineering studies. Additional paste backfill testing was performed in 2013. Further testwork was conducted in 2015 to investigate the recovery issues experienced during ramp-up.

13.1 Metallurgical Testwork

A summary of the metallurgical testwork performed to support the process design follows.

13.1.1 Metallurgical Testwork 2006

The 2006 samples were composited over three vertical intervals, in the absence of a geological model that could explain the likely lithological controls that could impact the metallurgical response. Representative head samples were removed from each of the 27 composites during the sample preparation phase.

Composite samples from the Roberto and the Roberto East lenses showed no appreciable differences in their gold to sulphur and gold to arsenic ratios. The total sulphur content was 50% higher in the Roberto lens than in the Roberto East lens. The proportion of non-sulphide sulphur, presumably as sulphate, was found to be close to 32% in both lenses.

The nature of the elevated non-sulphide sulphur content in samples, which otherwise showed little visible evidence of oxidation, was considered to require additional analysis, using fresh samples.

Other than the elevated arsenic levels, ICP and heavy metal analyses showed no evidence of any potentially-significant contaminants such as mercury, cadmium, lead, or antimony.

The acid neutralising potential (NP) of the rock was found to be low, despite a relatively high paste pH, typically around 9.7. The zone-weighted net NP was about -25 kg calcium carbonate/kt, so the potential for acid generation from the ore and tailings was considered to be high.

Elevation composite samples from the Roberto and Roberto East ore zones were submitted to semi qualitative petrographic and X-ray diffraction (XRD) examination. The results were:

- Pyrite, pyrrhotite and arsenopyrite are present in approximately equal amounts in both ore zones, and this ratio does not appear to change with depth;
- The chemical analysis of the Roberto East zone showed a slightly lower arsenopyrite content;
- There is no obvious difference in the sulphide mineral liberation characteristics between the Roberto and Roberto East ore zones; and there seems to be no appreciable change with depth;
- Fine gold inclusions, less than 5 µm in size, were observed within the sulphides.

13.1.2 Metallurgical Testwork 2007

Samples representing approximately 20 m of PQ size drill core from the Roberto and Roberto East zones were submitted to physical testing. The samples were taken at depths ranging from surface to 200 m below surface.

Samples representing approximately 400 kg of NQ size drill core spread across the orebody strike length were used to complete an optimisation study and to define the Bond Ball mill grindability index.

These samples were composited over three vertical intervals and, within these intervals, were also composited over seven grade ranges for variability testing.

The optimization study and Bond Ball mill grindability index were completed on composites from the Roberto and the Roberto East zones, and on composites made of a combination of ores from these two zones.

The grade composites for and elevation for the Roberto and the Roberto East zones were selected for variability test work.

13.1.3 Metallurgical Testwork 2008

Two types of samples were used in the metallurgical analysis: PQ core samples (boxes) and samples taken from the Roberto outcrop (pails). The bulk PQ core and pail samples represented the Roberto, Roberto East and Zone du Lac zones of the Éléonore Operations.

The Roberto and Roberto East PQ core samples were used in the pilot plant test work to produce enough concentrate for the cyanidation process tests. The Zone du Lac PQ core samples were not included in the bulk pilot-plant composite but portions of the cores were used in a series of comminution tests.

The bulk pilot-plant composite included 90 boxes of Roberto PQ core samples and 15 boxes of Roberto East PQ core samples. These were combined, blended and crushed to -6.35 mm. In total, approximately 1,400 kg of samples were available for the pilot-plant run.

The Zone du Lac PQ core samples were used in several standard comminution tests. Samples from 18 pails and three boxes were used for the metallurgical test program.

The Roberto 2008 gravity-recoverable gold (GRG) and the Roberto East 2008 GRG head grades were significantly higher than those determined in the 2007 test program.

Additional samples from the Roberto and Roberto East GRG composites were also submitted for S-2 analysis (proportion of sulphur available as sulphides) in order to confirm their sulphide contents. A sub-sample of the Zone du Lac composite was submitted for arsenic, sulphur, S-2, and semi-quantitative ICP scan analysis.

13.1.4 Metallurgical Testwork 2015

During the production ramp-up period, the Éléonore Operations experienced problems with unexpectedly high slurry temperatures (exceeding 60ºC) causing depletion of dissolved oxygen (DO) in the leach train. The low DO levels, in turn, hampered gold recovery and also resulted in excessive cyanide consumption. Extensive testing was conducted during 2015 to explore various proposed solutions. The strategy selected is to reduce oxygen addition rates in the pre-aeration stages with a view to limiting the rise in slurry temperature brought on by the exothermic oxidation reactions. Initial indications are that the DO levels in the downstream leach section are improving since this change has been implemented. Recovery numbers are also increasing and will continue to improve as further optimisation is performed for 2016.

13.1.5 Comminution Tests

Crushing and grinding testwork was completed on three different batches by SGS. The samples came from the Roberto, Roberto East, and the Zone du Lac deposits. All samples were submitted for standard Bond tests, crushing work index (CWi) tests, abrasion index (Ai) tests and ball mill work index (BWi) tests.

Bond ball mill work index values increase with depth. Zone du Lac ore yielded a BWi of 16.7 for samples taken between 0 and 250 m below surface, and 20.6 for samples taken at depth greater than 750 m. The BWi of the Roberto ore ranged between 18.2 for samples taken between 0 and 250 m below surface, and 19.5 for samples taken at depth greater than 750 m.

The 2008 data indicated significantly harder ores (compared with the database) when using the non-standard closing screen size of 200 mesh (75 µm). There is a clear trend indicating that the ore becomes harder with depth. The Roberto ore BWi ranged between 18.2 for samples taken between 0 and 250 m below surface and 19.5 for samples taken at depth greater than 750 m below surface. The Zone du Lac BWi ranged between 16.7 for samples taken between 0 and 250 m below surface and 20.6 for samples taken at depth greater than 750 m.

In terms of the crushing work index, a CWi of 14.1 obtained from the Zone du Lac ore appears to be significantly harder than both the SGS crushing work index database average of 10.3, the Roberto ore at 8.9 and the Roberto East ore at 9.5. When compared to other values in the SGS database, the Roberto and the Roberto East ores fall at the 54th and 57th percentile respectively, while the Zone du Lac ore falls at the 79th percentile.

The Zone du Lac Ai was 0.4223, slightly less abrasive than the Roberto and the Roberto East Ai of 0.4659 and 0.4668 respectively. The Éléonore ores exhibit similar degrees of abrasiveness and fall between the 78th and the 80th percentile when compared with other values in the SGS abrasion index database.

13.1.6 Gravity

Knelson/Laplante GRG tests were conducted on the Roberto, Roberto East and Zone du Lac composite samples during 2006 and 2008. The GRG response indicated that a large proportion of the gold was liberated/recovered at a primary grind size finer than ~570 µm and coarser than ~123 µm.

The ores of the Éléonore Operations were shown to contain various amounts of gravity-recoverable gold, and testwork indicated that a gravity recovery process was required to minimize losses in either a flotation process or a cyanidation process.

13.1.7 Flotation

Collector Suite Optimisation

Conventional bench-scale flotation tests were completed using ground ore that had been processed for gravity gold recovery. Three different reagents, combined in various proportions, were used in the flotation tests done by SGS in 2008.

The use of potassium amyl zanthate (PAX) on its own and PAX + Cytec R208 (dithiophosphate) essentially yielded identical results. PAX + 3418A (phosphine-based collector) yielded a slightly higher mass pull and marginally better gold recovery. However, given the marginally better results and the cost of the 3418A compared to that of the R208 (approximately three times higher), and given that the flotation tailings were planned to be cyanide-leached, it was decided to continue with the PAX + R208 for the remaining tests in this program.

Grind Size Optimisation

Grind optimisation tests were completed on both the Roberto and the Roberto East Zone composites. A marked improvement in gold recovery was noted at a grind of

P80 = 64 µm when compared with results of tests completed at coarser grinds. Finer grinding appears to yield a significant increase in rougher mass recovery: 8.6% at 48 µm compared with 5.2% at 64 µm, with no corresponding improvement in gold recovery. Hence, a flotation grind target of P80 = 65 µm was selected for the grade variability recovery tests undertaken in this program.

Flotation Test Work Results

At 77%, the flotation gold recovery achieved from the Zone du Lac (2008) gravity tailings compares very well with the Roberto (2007) and Roberto East (2007) test results of 82% and 78% respectively. Overall gravity + rougher flotation gold recovery from the Zone du Lac ore, at approximately 80%, was only slightly lower than the Roberto (2007) at 82.3% and the Roberto East (2007) at 83.2%.

Sulphide sulphur recoveries were similar in all three ores ranging between about 93% from the Roberto East ore to about 96% from both Roberto and Zone du Lac ores.

13.1.8 Cyanidation

Cyanidation Test Work on Flotation Concentrates

A series of tests was completed, from the metallurgical test work done in 2007, 2008, 2009 and 2010 by SGS to assess the potential of using intensive cyanide (NaCN) leach processing of flotation concentrates generated from the Éléonore ore.

The mineralogical characterization of the concentrate consisted of 65% gangue minerals, 23% pyrrhotite (hexagonal), 9.6% arsenopyrite, 2.2% pyrite and 0.08% chalcopyrite with trace amounts of galena (0.05%) and sphalerite (0.03%).

The rougher flotation concentrate generated from the flotation tests was used. The Gekko Systems test protocol was applied in all cases.

Regrinding the flotation concentrate prior to cyanidation resulted in a significant increase in gold extraction. Gold extraction was about 81% after 48 hours without regrinding (P80 = 40 µm) and about 96% after 48 hours after regrinding (P80 = 11 µm). Cyanide consumption was generally high. Pre-aerating in Test CN-40 resulted in a drastic decrease in cyanide consumption; from 48 kg NaCN/t of leach feed at 11 µm without pre-aeration in Test CN-26 to about 18 kg NaCN/t of leach feed at 11 µm with pre-aeration in Test CN-40.

Cyanidation Test Work on Gravity and Flotation Tailings

A series of cyanide leach tests was completed, from the metallurgical test work done in 2007, 2008 on the gravity tailings generated from tests completed on the Roberto Composite (2007) and the Roberto East Composite (2007) respectively. A grind size range between about 190 µm and about 65 µm was assessed.

There was a clear correlation between cyanidation feed grind size and gold extraction for both test work on gravity and flotation tailings. There was a marked improvement in gold recovery with finer grind. The cyanide consumption of the flotation tailings cyanidation was negligible compared to the gravity tailing cyanidation test work due to the gold/sulphides removal by flotation.

13.1.9 Process Flowsheet Development

At the outset of the program, it was decided to evaluate three basic flowsheet configurations:

- Option 1: Gravity separation + cyanidation of the gravity tailings;
- Option 2: Gravity separation + flotation of the gravity tailings + cyanidation of the flotation concentrate;
- Option 3: Gravity separation + flotation of the gravity tailings + cyanidation of the flotation tailings + regrind and intensive cyanidation of the flotation concentrate.

The Option 3 flowsheet is referred as flowsheet 2 (FS-2) and included essentially the same gold recovery unit processes as FS-1 but in a different order. In FS 1, cyanidation followed gravity separation, and flotation followed gravity tailing cyanidation. This scenario included cyanide detoxification between cyanidation and flotation and had the flotation concentrate ultra-fine regrind and re-leaching operations placed at the end of the circuit.

Gold recovery obtained with both flowsheets was similar, ranging between 92.4% and 93.1% recovery. At this level, the only valid distinction that could be made on recovery concerned the grade of the tails. The combined tail of FS-1 was 1.12 g/t gold, as compared with 1.01 g/t gold for FS-2.

Goldcorp considered FS-1 to be somewhat more complex in terms of operation than FS-2, because the cyanide detoxification step is placed within the gold recovery circuit. It could also run the risk of sulphide depression (by surface oxidation) prior to flotation.

While there is some evidence suggesting that sulphide recovery kinetics may in fact be somewhat delayed using FS-1 as compared with FS-2, due to oxidation occurring in the cyanide leach and detoxification circuits; in FS-1, the effect appears to have been sufficiently overcome by the introduction of sulphide activator (copper sulphate and/or sodium sulphide) in the subsequent flotation. Consequently, FS-2 was selected as the flowsheet option for the Éléonore Operations.

13.1.10 Cyanide Detoxification

The tailings pulp from each of the cyanidation tests (CN-5 and CN-7) from FS-1 and (CN-6 and CN-8) from FS-2 were individually subjected to a preliminary cyanide detoxification evaluation.

At the end of each cyanide detoxification test, a solution sample was taken for analysis of cyanide (via the cyanide-nitroprusside test (CNT) and CN_{WAD}) and the critical metals of interest (copper and iron).

The responsible QP notes that it is critical that the residual cyanide levels in the process tailings stream be reduced below the threshold prescribed under regulations prior to placing the tailings into a tailings storage facility. SO_2/air and copper sulphate are used to break down the cyanide complexes as they are discharged with the slurry to the filtration plant. Water is reclaimed from the filtration plant and the tailings storage facility for re-use in the process facilities.

13.1.11 Sedimentation and Filtration Tests on Tailings

Samples of flotation tails were sent to FLSmidth (FLS) in 2010 to carry out dewatering tests. FLS performed settling tests as well as filtration tests to determine the dewatering characteristics of the flotation tails and size the equipment that would be required for the various dewatering options.

13.1.12 Thickening Tests

Flocculant screening showed that an anionic polyacrylamide flocculant with a high molecular weight and low–medium-charge density produced the best settling rates and overflow clarity. HyChem AF-306 was used for this test campaign. The test results showed that the thickener feed solids concentration should be 12.5 wt% solids to achieve the best flocculation response. The necessary feed dilution in the full scale thickener can be accomplished internally using an FLS E-Duc feed dilution system.

FLS recommended using a minimum unit area of 0.03 m^2/Mt/d, and an underflow density of 70–72 wt% solids. The thickener underflow will be used as feed to the filter. The minimum diameter for a thickener able to treat the output of a 3,500 t/d mill was determined to be 11.6 m. This diameter increases to 16.4 m for an expandable mill throughput of 7,000 t/d.

13.1.13 Filtration Tests

Two filtration options were tested.

Vacuum filtration testing indicated that the sample could be filtered as produced with a FLS horizontal belt filter or low submergence drum filter. The results showed that vacuum filtration produces a filter cake with 15 wt% residual moisture at a rate of

1,134 kg/m^2/hr. For a 3,500 t/d mill, a total of 130 m^2 of filtration area would be required. Disk filters cannot be used due to their fast cake formation and geometry limitations.

Recessed chamber pressure filtration testing indicated that the sample can be filtered as produced using a FLS automatic recessed chamber filter press with 15 wt% residual cake moisture and a dry cake bulk density of 1,478 kg/m^3. Two pressure filtration options were proposed for dewatering the gold tailings stream:

- Pressure Filtration Option 1: 2020 x 2020 filter press;
- Pressure Filtration Option 2: 1500 x 1500 filter presses.

The advantage of Option 2 was that one filter press could be operational during maintenance.

PneumaPress pressure filtration testing indicated that the gold tailings stream can be filtered as produced using a FLS PneumaPress filter with 15 wt% residual cake moisture at a filtration rate of 2,369 kg/m^2/hr. For a 3,500 t/d mill throughput, a total of 67 m^2 of filtration area would be required. This does not include any safety factor.

13.1.14 Paste Backfill

In 2010, Golder PasteTec (Golder) performed a series of paste backfill tests on two new samples provided by Goldcorp. These samples were characterized for size distribution and mineralogy. Other rheological tests were done including a water bleed, yield stress over time tests and a plug yield stress analysis.

Two series of unconfined compressive stress (UCS) testing were completed to define the composition of the backfill. The first series was used to study various parameters such as the type of binder and the impact of adding sand to the backfill. These tests were conducted using 5% binder and a constant 175 mm slump. The results showed that the most beneficial factor for the UCS were the use of blast furnace slag (BFS) and the addition of sand.

In the second series of tests, blends of BFS and normal Portland cement (NPC) were used, as well as unblended NPC with different binder contents (2.5% and 3.5%) and unblended sand. The NPC binder gave slightly higher resistance in the early days, but the binder with high BFS contents gave a much higher resistance after 28 days when compared with the other options.

Long-term effect of sulphides was recommended to be tested prior to selecting the final paste backfill composition. The increased addition of sand improved the backfill strength. Golder did, however, recommend not exceeding 50% of the blend to maintain the non-segregating properties of the paste.

Paste Backfill Constituent Evaluation

In 2013, Golder was retained to test the tailings. The results of the previous testing programs were presented in 2010, in which the dewatering, rheological and UCS properties of the tailings were assessed.

The 2013 testing program consisted of expanding on the UCS testwork, providing additional information with which to optimize the paste backfill mix recipes by varying the constituents (binder (90/10), flotation tails, fine sulphide concentrate and aggregate). In addition, rheological characterization and a small flow loop test were added to assess the anticipated flow properties of a paste aggregate fill (PAF) mixture.

This program demonstrated that the aggregate addition in the paste has a positive impact on the binder consumption when compared with the fine sulphide concentrate where more binder is required beyond 15% to get an UCS of 0.5 MPa after 28 days of cure. The paste backfill composition was recommended to be optimized during operations, but the results established an initial paste backfill composition of 17.5% aggregate, 12% fine sulphide concentrate, and 3.5% flotation tails.

13.2 Recovery Estimates

Grade variability recovery test work was conducted with 37 grade variability composites. The tests followed the gravity separation + gravity tailing flotation + flotation tailing cyanidation + flotation concentrate regrind and intensive cyanidation flowsheet.

The overall gold recovery from the 37 grade variability composites ranged between 90% and ~97%, averaging 92.6%. There was no obvious correlation between head grade and gold recovery.

Overall, gravity separation contributed 20% of the total gold recovery while intensive cyanidation of the flotation concentrate yielded 61.2% and cyanidation of the flotation tailing gave an additional 11.4%.

Based on a review of all test data generated in this program, the best opportunity to increase overall gold recovery may lie in further optimisation of the intensive cyanidation and the gravity circuits.

For this reason, Goldcorp expected to obtain an overall gold recovery ranging between 93 and 94% during the operations phase.

During the ramp-up period actual recoveries achieved have fallen slightly short of these levels, primarily due to the problems experienced with low dissolved oxygen levels in the concentrate leaching section. Various remedial actions have been tested, and initial indications are that the corrective measures implemented to date are having a positive effect.

13.3 Metallurgical Variability

Samples selected for testing were representative of the various types and styles of mineralization at Éléonore. Samples were selected from a range of depths within the deposit. Sufficient samples were taken to ensure that tests were performed on sufficient sample mass.

13.4 Deleterious Elements

Other than elevated arsenic levels, ICP and heavy metal analyses showed no evidence of any potentially-significant contaminant elements such as mercury, cadmium, lead or antimony.

13.5 Comments on Section 13

In the opinion of the responsible QP, the following interpretations and conclusions are appropriate:

- Metallurgical testwork and associated analytical procedures were performed by recognized testing facilities, and the tests performed were appropriate to the mineralization type;
- Samples selected for testing were representative of the various types and styles of mineralization at Éléonore. Samples were selected from a range of depths within the deposit. Sufficient samples were taken to ensure that tests were performed on sufficient sample mass;
- Testwork has established the most appropriate grind size for plant design. A grind size of 65 µm is planned. Éléonore ores are classified as moderately soft and abrasive. There was a clear correlation between cyanidation feed grind size and gold extraction from the testwork on gravity and flotation tailings. There was a marked improvement in gold recovery with finer grind;
- The ores of the Éléonore Operations were shown to contain various amounts of gravity-recoverable gold, and testwork has indicated that a gravity recovery process will be required to minimize losses in either a flotation process or a cyanidation process;
- Assumed life-of-mine gold recovery assumptions are based on appropriate testwork, and should average between 93 and 93.5% over the life-of-mine; however during the ramp-up period, Goldcorp has elected to use a weighted average metallurgical recovery of 92.5% for the current life-of-mine plan;
- Other than elevated arsenic levels, ICP and heavy metal analyses showed no evidence of any potentially-significant contaminant elements such as mercury, cadmium, lead or antimony;

- The overall gold recovery could be adversely affected by insufficient regrinding of the sulphide concentrate or if there is less gold associated with iron sulphides than expected. The risk remains low given that Goldcorp uses the proven IsaMill technology to achieve the expected grind, and given that the gold association with iron sulphides is constant through the orebody from surface to 750 m depth.

14.0 MINERAL RESOURCE ESTIMATES

The Mineral Resource estimate was prepared using all available results by Julie Doyon, P.Geo, Resources Geologist, supervised by Christine Beausoleil, P.Geo, Exploration Manager, Éléonore Operations.

14.1 Basis of Estimate

The coordinate system used for resource modelling is UTM NAD 83, Zone 18N. The three-dimensional (3D) topography surface, dated August 2008, was used as the upper constraint of the mineral resource model. A 3D surface, representing the bottom of overburden, was also modelled and rock units located above this surface were excluded from the Mineral Resource estimate.

The Mineral Resources are based on a total of 2,931 core drill holes and 142 surface channels, for a total of 394,861 assay results collected between September 2004 and 22 October, 2015 (the date of the database closeout for estimation purposes). Drill holes and channels more than 30 m away from the dilution envelope were excluded from the Project in order to reduce the database size.

Vulcan (version 9.0.4) software was used to produce the block model for this Mineral Resource estimate.

The block model uses a block size of 5 m x 5 m x 5 m (easting, northing, elevation) with sub-blocks of 1 m x 1 m x 1 m (easting, northing, elevation). The block dimensions reflect the dimension of the mineralized zones and plausible mining methods. The Mineral Resource model was not rotated. The model covers an area delineated by these coordinates:

- North: 5,838,800 to 5,840,350N;
- East: 425,650E to 427,400E;
- Elevation: 250 m to -1500 m (i.e., approximately 1,500 m below surface).

An average specific gravity of 2.77 was used for all mineralized zones.

The Mineral Resource estimate was prepared in accordance with the Canadian Institute of Mining Metallurgy and Petroleum (CIM) Definition Standards (2014) and the 2003 CIM Best Practice Guidelines for estimation of Mineral Resources and Mineral Reserves.

14.2 Geological Models

Mineralized zones were interpreted on plans and sections based on alteration, mineralization, structures, and assay results. Major lithologies and alteration styles were also interpreted on section and plan views. The mineralized zone interpretations consist of four approximately N30W principal zones (5010, 5050, 6000 and 7000) including 34 secondary zones, plus five east–west secondary zones also called Hanging Wall zones. The 500 zone is the most important HW zone. Zone 5050 comprises the Roberto style of mineralization, Zone 6000 comprises the Roberto East and Zone du Lac style of mineralization. The numbering of the principal zones is from footwall to hanging wall. The numbering of the hanging wall zones is from south to north (Figure 14-1).

Within the Vulcan block model, there are three types of mineralized solids/envelopes: high-grade (HG) solids, mineralized envelopes or low-grade (LG) solids, and one mineralized envelope for dilution (ME). Forty-three zones were defined inside the ME. Within each LG zone, one or more internal HG veins were modelled. In some cases, an HG zone exists without an LG zone surrounding it. Inside the HG zones, seven internal dilution volumes were modelled.

For all of mineralized solids, the 2015 interpretations were updated using new information. Interpretation of the geology and mineralized zones was first undertaken on a series of level plans spaced 15 m apart and then reconciled on cross-section views spaced 15 m apart. A minimum width of 2.5 m and cutoff grades of 1 g/t gold (LG) and 3 g/t gold (HG) were used. The dilution envelope was created at approximately 30 m around the LG zones.

Figure 14-2 shows a plan view of the mineralized zones. Figure 14-3 shows a plan view of the Roberto HG mineralized envelope 5050 as interpreted in 2014 and subsequently re-interpreted in 2015. The 2015 interpretation incorporates the folded corridor along the southern edge of the main oreshoot (not shown on the figure) where additional mining dilution is expected (refer to discussion in Section 7.3.2).

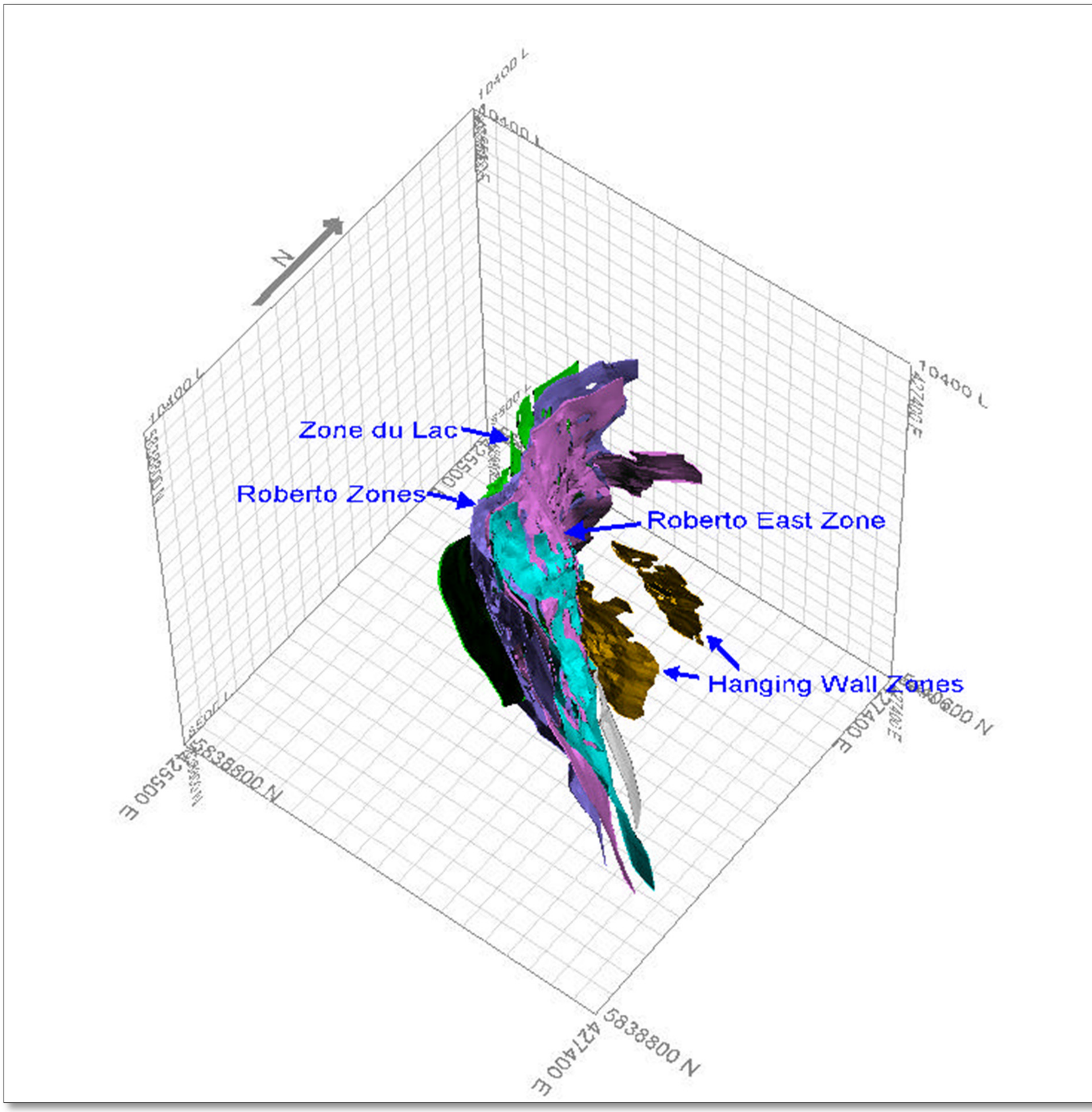
14.3 Exploratory Data Analysis

Exploratory data analysis (EDA), in the form of summary statistics, histograms, and cumulative probability plots, was performed in 2014 on uncapped samples for gold to determine suitable geological constraints to mineralization.

14.4 Grade Capping and Compositing

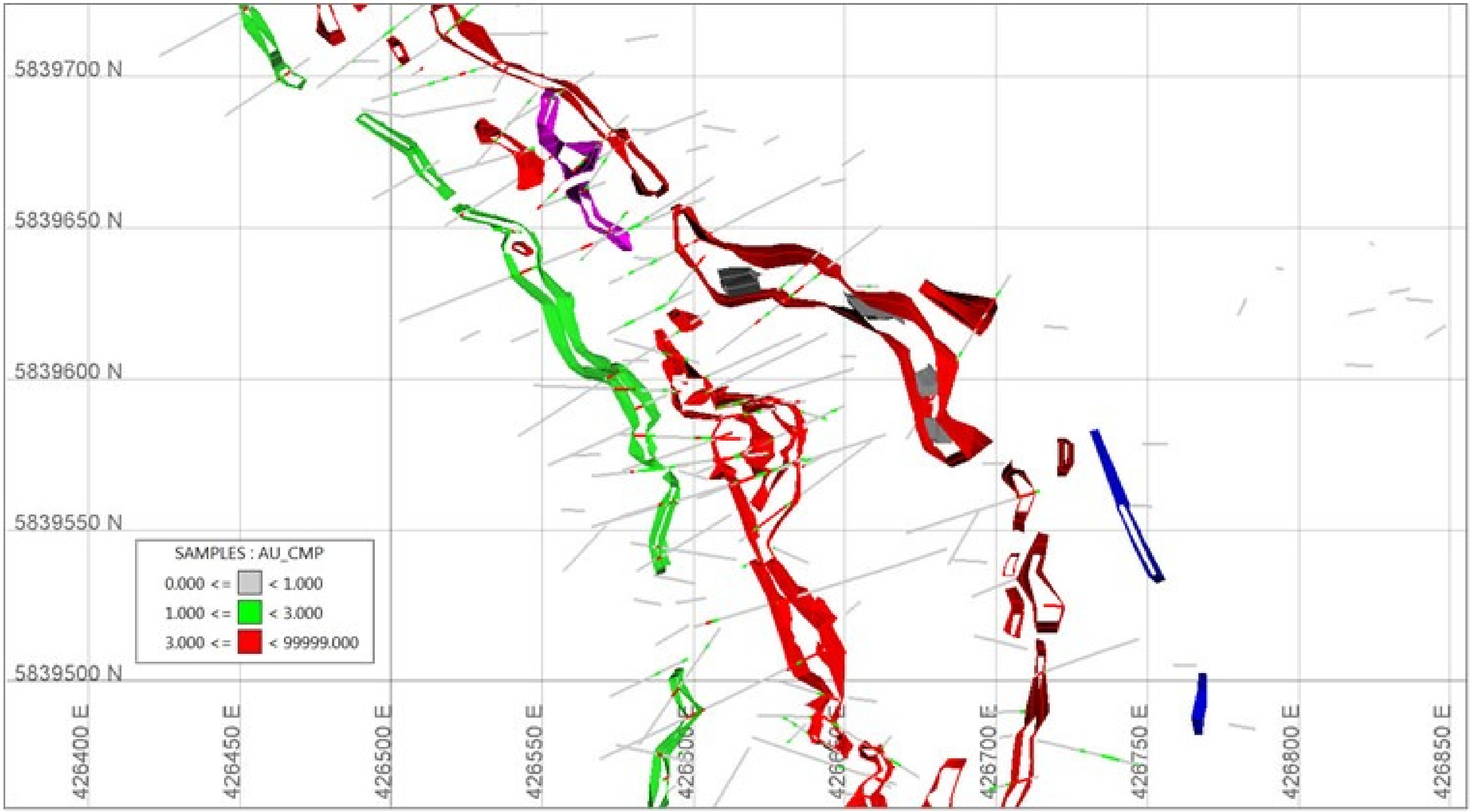
Outliers were identified in 2014 primarily based on the lognormal cumulative probability curves of assay grades. Each principal zone was evaluated separately. The high-grade cap threshold was determined at a grade where the curve showed a clear break and grades started becoming erratic as compared to the main grade populations. Verifications with histogram and decile methods were also conducted. High-grade samples were cut to the cap values prior to compositing. Capping values and the impact of the capping on the mean grade of each vein are summarized in Table 14-1.

Figure 14-1: Mineral Resource Geological Model



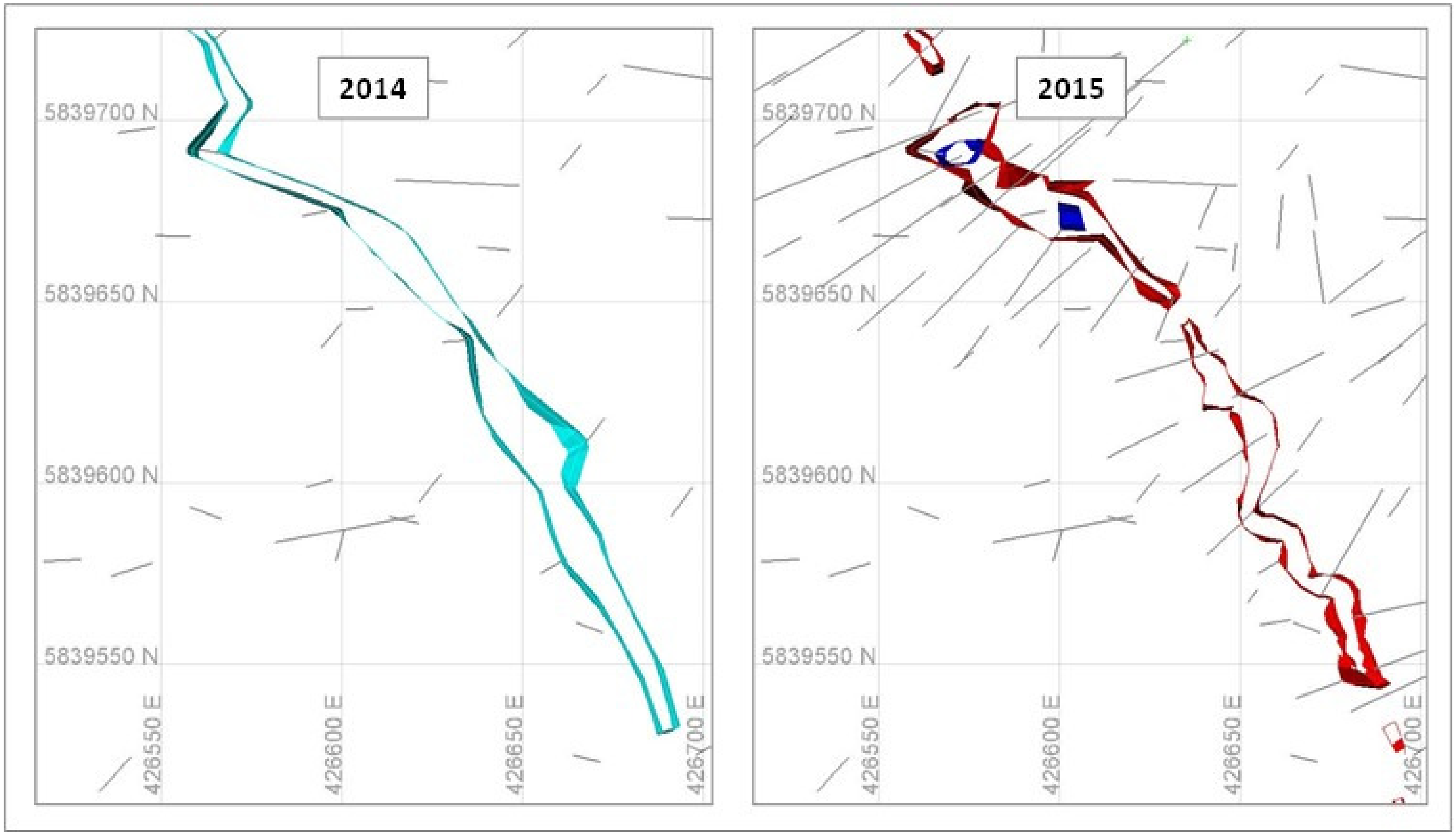
Note: Goldcorp figure prepared in 2015.

Figure 14-2: Au High-Grade Envelopes in Plan View at 9795 Elevation



Note: Goldcorp figure prepared in 2015.

Figure 14-3: 2014 and 2015 Roberto Zone Au High-Grade Envelopes in Plan View at 9475 Elevation



Note: Goldcorp figure prepared in 2015.

Table 14-1: High-Grade Capping on Gold Assays

Zone	Zone Type	Maximum (Au g/t)	Mean (Au g/t)	CV	Capping Value (Au g/t)	Capped Mean (Au g/t)	Capped CV (Au g/t)	%Data Capped
100	Dilution Envelope	3190.0	0.24	30.7	6.5	0.18	2.6	0.2%
5010	High Grade	494.0	5.11	3.0	60	4.43	1.7	0.5%
5050	High Grade	2460.0	7.43	3.6	90	6.69	1.7	0.3%
6000	High Grade	242.0	4.63	2.0	70	4.23	1.6	0.3%
7000	High Grade	198.5	4.08	2.0	40	3.78	1.6	0.8%
Other Zones	Various	972.7	4.10	4.8	100	3.61	2.1	0.3%
HW Zones	Various	182.5	2.16	3.1	30	1.77	3.0	0.7%

Samples generally vary from 0.20 m to 3.00 m (mean = 1.06 m; mode = 1.00 m). In an attempt to retain the integrity/resolution of the original samples, and considering the relative narrowness of the HG veins in some areas, the length of the composites was set at 2 m.

Drill hole samples were composited inside the mineralized solids into equal two meter down-hole length intervals. For HG and LG composites, residues were retained in the database since Vulcan allows composites to be weighted by length during the interpolation. Composites were calculated by length-weighted averaging of gold assays within each interval. Non-assayed intervals and lost core, except for those in the overburden or within the wedge areas were replaced with the background grade of zero. Wedge duplicates, wedge lost core, and navi-drill lost core intervals were ignored.

14.5 Variography

Composites within interpreted geological zones were used to generate variography and ultimately determine search ellipsoids.

Variography studies were completed in 2014 using the 2 m capped gold grade composites for the four main mineralized zones and the 500 hanging wall zone. Attempts were made to model the other zones but were largely unsuccessful, due mainly to the large variation in vein shape orientations, and the lack of data in selected vein areas where relatively consistent orientations were observed and partly due to time constraints.

Snowden SuperVisor (version 8.0.2.0) software was used to model log variograms from which grade variogram models were reconstructed. Maximum continuity was found in the principal mineralized zone dip direction, plunging 70° to the north, with a range of 130 m. For the hanging wall zone, a maximum continuity was found with a dip direction plunging 70° to the north for a range of 50 m. The results of the linear variographic investigations for the DDH composites are consistent with the geological features of the deposit. The investigations yielded the best-fit model along an orientation that roughly corresponds to the strike and dip of the observed ore shoots at the Roberto deposit.

The variograms parameters obtained were used for the kriging estimation of all zones (except ME), and the anisotropy was rotated to fit the orientation of the mineralized zones. The ME was estimated using an inverse distance weighting to the third power (ID3) interpolation.

14.6 Estimation Parameters

The block model was set up as a sub-block model. Each block could have only one rock code. The blocks were divided into three mains rock codes: HG, LG, and ME, according to the zone type.

Sample search ellipsoid sizes and orientation were established using a combination of variogram ranges, drill hole distribution, and geological understanding.

The block grade model was estimated with hard boundaries. Composites were only used for the estimation of blocks with the same rock code and same zone identifier (ID), except where one vein was the splay of another vein; in that case, composites were shared locally.

The HG, LG, and ME blocks were estimated independently, with a three-pass plan. The first two passes used relatively short search radii to interpolate the blocks close to the drill holes. The third pass was defined to populate the remaining blocks within the vein solids.

Ordinary kriging (OK) was used to estimate grades within the main HG and LG zones while grade estimation in the ME was completed using ID3 methods.

Parameters used for grade estimation are summarized in Table 14-2.

14.7 Block Model Validation

The estimated block model was validated visually and statistically. The statistical validation considered blocks that are candidate for the measured and indicated categories.

Visual inspection confirmed that the block model respected the drill hole data.

A nearest-neighbour (NN) model using 5 m composites and an inverse distance squared (ID2) model were produced to check the global and local bias in the mineral resource model. The global means of the resource model matched well with the verification models, with differences within acceptable limits in most of the main HG veins.

Table 14-2: Resource Model Estimation Parameters

Domain	Pass	Search Radius (m) Rotated to Fit Estimation Domain			No. of Composites			HG Threshold (Au g/t)	HG Restricted Search Radius			Estimation Method
		Major	Semi	Minor	Min	Max	Max/ Hole		X	Y	Z	
All Au (LG)	1	65	50	20	4	9	3	none	none	none	none	OK
	2	130	100	30	3	9	3					
	3	260	200	50	3	12	3					
All Au (HG)	1	65	50	20	4	9	3	none	none	none	none	OK
	2	130	100	30	3	9	3					
	3	260	200	50	3	12	3					
Dilution Au	1	65	50	20	8	18	6	1	15	15	5	ID3
	2	130	100	25	6	18	6					
	3	260	200	50	10	20	10					

Notes: Au (HG) = zone grade estimation inside the interpreted solids at 3 g/t Au cutoff grade; Au (LG) = zone grade estimation inside the interpreted solids at 1 g/t Au cutoff grade

The trend and local variation of the Mineral Resource model grades were reviewed against the NN model with swath plots in northing, easting and elevation directions, for the measured and indicated blocks. It was noted that, above the 600 mLv (600 m below surface) and at the core of the deposit, the Mineral Resource model showed similar trend in grades as the NN model with the expected smoothing. The two models departed slightly at depth and at peripheries where drill holes became sparsely spaced. This indicated that there is some risk associated in estimating Mineral Resources in areas of limited drilling, particularly at depth.

14.8 Reconciliation with Production

Underground stopes are designed using diamond drill holes data from the Mineral Resources and Mineral Reserves and geological mapping in the uppercut/undercut ore drifts. Chips assays in faces or walls as well as muck assays are not used to quantify the quality of the stope, although they serve to better define the shape of the geological resource. A block model estimate is updated using the resources composites based on the new ore shape following the development results. This new block model serves as the basis for short-term stope grade planning.

Ore produced from stoping is brought to surface by trucks in the upper part of the mine (H1) or is skipped to surface using an automated shaft system. All ore skipped to surface is weighted using calibrated load cells and that value is stored in the production database. The tonnage of ore trucked to surface is estimated using specific loading factors depending on equipment. This tonnage is then balanced with the weighted skipped tonnage using the mill official processed tonnage. Once the total mined out tonnage is balanced to the mill, it is broken out by individual workplaces for official production values. Ounces are reconciled by comparing sum of the workplace estimated ounces (sum of workplace tonnes times estimated grades) to the milling official ounces. Grade reconciliation is then calculated.

After mining, all underground stopes are surveyed using a cavity-monitoring system (CMS) to determine the quality of mining by quantifying the amount of ore left in place unbroken, ore left in place that is broken but unretrievable, overbreak in ore not designed, unplanned overbreak in waste, and waste rock left in place in the stope.

Using the CMS surveyed values, undiluted tonnages and grades are compiled from the balanced-to-mill tonnage and processed grade, and compared to planned and Mineral Resource values.

For 2015, the reconciliation reflects a better understanding of the geological constraints affecting the Roberto deposit. Correlation with planning, when all geological information is available, is 99% on tonnage and 92% on grade. When compared to previous geological data where delineation drilling and ore development is missing, the comparison is 82% on tonnage and 84% on grade. This demonstrates the geological complexities and the differences associated with the folded corridor and the associated east–west stretching zones.

14.9 Classification of Mineral Resources

The Mineral Resource classification definitions use the 2014 CIM Definition Standards.

For the Éléonore Operations Mineral Resource estimate (exclusive of Mineral Reserves), estimated blocks were classified into the Measured, Indicated and Inferred categories.

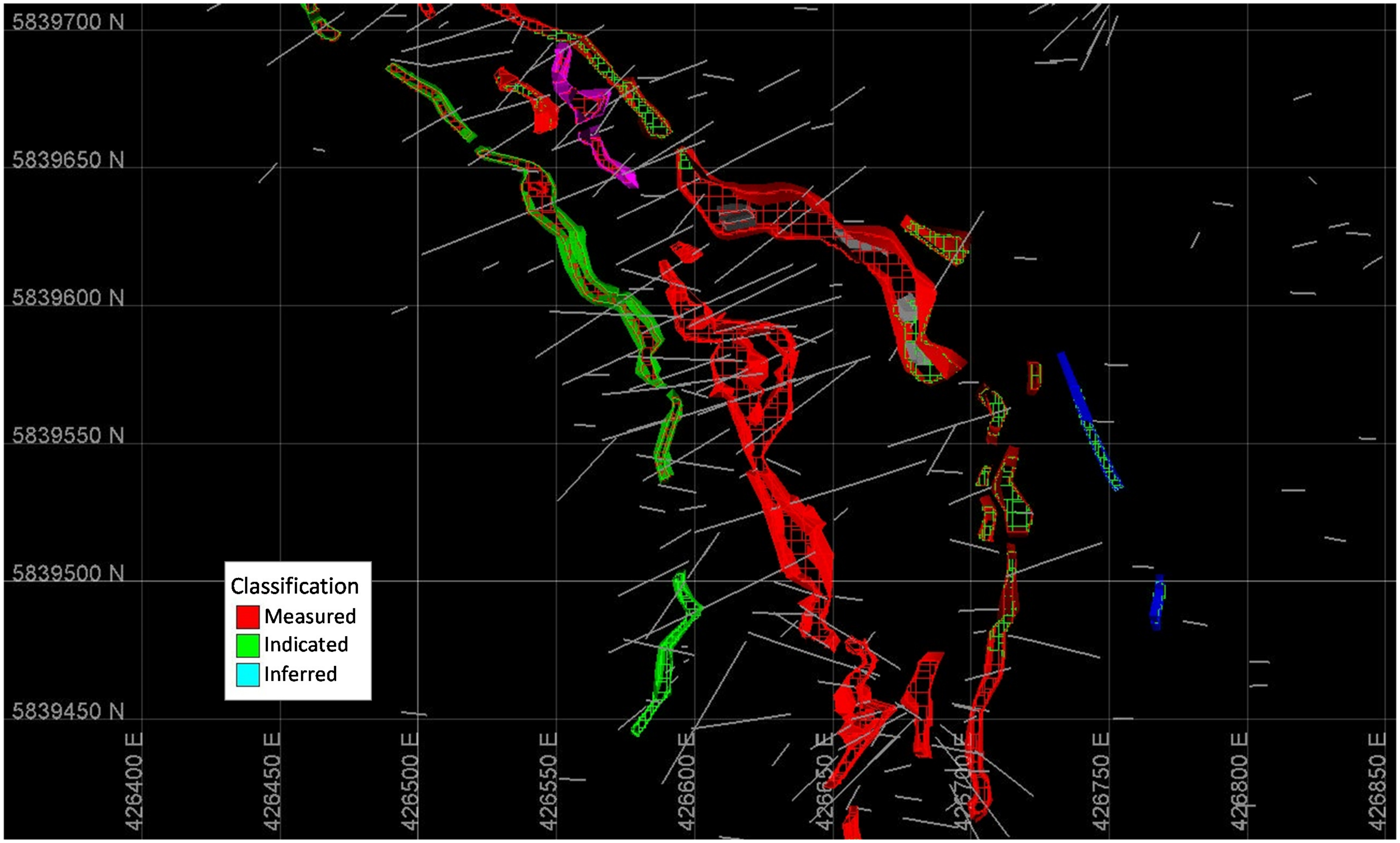
Measured Mineral Resources were defined for blocks within a maximum distance of 15 m (12.5 m x 12.5 m spacing) from three different drill holes, combined with an underground development in the mineralization.

Indicated Mineral Resources were defined for blocks estimated through the first pass (minimum two drill holes within 65 m x 50 m x 20 m search radii) and within 30 m of a drill hole.

Inferred Mineral Resources were defined for blocks within 60–70 m from two drill holes, with an occasional block influence as far as 80 m where the mineralization trend was demonstrated by multiple adjacent holes.

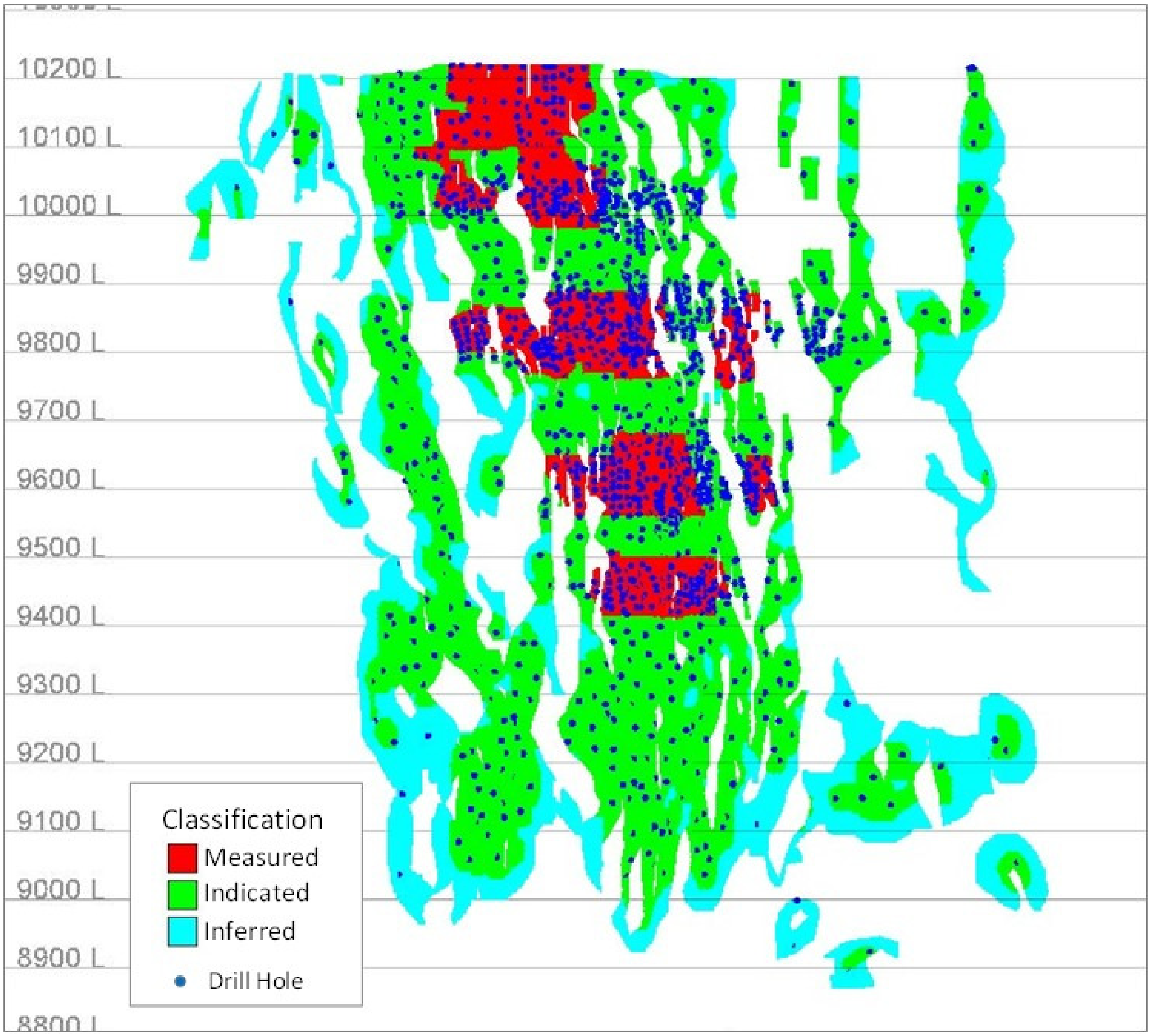
An illustration of the Mineral Resource classification is shown with the drill hole traces in plan view in Figure 14-4, and long section in Figure 14-5.

Figure 14-4: Mineral Resource Classification in Plan View at 9795 Elevation



Note: Goldcorp figure prepared in 2015.

Figure 14-5: Mineral Resource Classification in Long Section for Roberto Zone HG (5050)



Note: Goldcorp figure prepared in 2015.

14.10 Reasonable Prospects for Eventual Economic Extraction

Considering the geometry and shape of the orebody, the Roberto deposit is amenable to underground mining using long-hole stoping methods. Using parameters established during the pre-feasibility study, a metallurgical recovery of 92.5% and an operating cost of approximately US$100.42/t (comprising the following costs: mining: US$45.60/t; processing: US$31.22/t; general and administrative (G&A): US$23.60/t) were considered reasonable to constrain the estimate.

Using a gold price of US$1,300/oz with a C$/US$ exchange rate of 1.20, the cutoff grade required to support reasonable prospects of eventual economic extraction is approximately 2.8 g/t gold. The cut-off grade calculation is:

- Cutoff grade = [mining cost + process cost + G&A costs] / [payable recovery * Au price – royalty (% of sales) – refining cost].

14.11 Mineral Resource Statement

The Qualified Person for the Mineral Resource estimate is Christine Beausoleil, P.Geo., an employee of Goldcorp.

Given the density of the processed data, the search ellipse criteria, and the specific interpolation parameters, the current Mineral Resource estimate can be classified as Measured, Indicated and Inferred Mineral Resources. The estimate is reported using the 2014 CIM Definition Standards.

The Mineral Resources (exclusive of Mineral Reserves) for the Éléonore Operations using a cutoff grade of 2.8 g/t gold are summarized in Table 14-5.

Mineral Resources are reported at a commodity price of US$1,300/oz gold and have an effective date of 31 December, 2015.

14.12 Comment on Section 14

The responsible QP is of the opinion that the Mineral Resources for the Éléonore Operations, estimated using core drill data and channel samples, were estimated according to industry best practices and conform to the 2014 CIM Definition Standards.

To the extent known to the QP, there are no known environmental, permitting, legal, title-related, taxation, socio-political or marketing issues that could materially affect the Mineral Resource estimate that are not documented in this Report.

Key areas of uncertainty that may materially impact the Mineral Resource estimate include: geological complexity including folding and faulting of vein material between drill hole intercepts, commodity price assumptions; metal recovery assumptions; hydrological constraints; and rock mechanics (geotechnical) constraints.

There is upside potential for the estimates if mineralization that is currently classified as Inferred can be upgraded to higher-confidence Mineral Resource categories. Core drilling is currently underway in support of potential confidence category upgrades.

Table 14-3: Mineral Resource Estimate for the Éléonore Operations

Category	Tonnes (Mt)	Au Grade (g/t Au)	Contained Gold (M oz)
Measured	0.94	6.84	0.21
Indicated	3.65	5.14	0.60
Total Measured and Indicated	***4.58***	***5.49***	***0.81***
Inferred	9.97	7.11	2.28

Notes to Accompany Mineral Resource Table:

1. Ms Christine Beausoleil, P.Geo., a Goldcorp employee, is the Qualified Person for the estimate. The estimate has an effective date of 31 December, 2015.
2. The Mineral Resources are classified as Measured, Indicated and Inferred Mineral Resources, and are based on the 2014 CIM Definition Standards.
3. Mineral Resources are exclusive of Mineral Reserves. Mineral Resources are not known with the same degree of certainty as Mineral Reserves and do not have demonstrated economic viability.
4. A minimum true thickness of 2.5 m was applied for all Mineral Resource estimates, using the grade of the adjacent material when assayed, or a value of zero when not assayed.
5. A top cut varying from 30 g/t to 100 g/t gold (6.5 g/t gold for the dilution envelope) was applied to assay grades prior to compositing grades for interpolation into model blocks using ordinary kriging (OK) and inverse distance weighting to the third power (ID3) methods, and was based on 2 m composites within a block model made of 5 m long x 5 m wide x 5 m high blocks. Average specific gravity (SG) is 2.77.
6. Mineral Resources are reported using a 2.8 g/t gold cut-off grade, which is based on assumptions of a US$1,300 per ounce gold price, long-hole stoping underground mining methods, an exchange rate of C$/US$1.20, a life-of-mine metallurgical recovery of 92.5%, and a total mining cost of US$100.42/t (comprising the following cost: mining: US$45.60/t; processing: US$31.22/t; G&A: US$23.60/t).
7. Numbers may not sum due to rounding.

15.0 MINERAL RESERVE ESTIMATES

15.1 Introduction

Mineral Reserves have been estimated from the geological resources block model produced by the geology department in 2015. The requirements for Mineral Resources to be converted to Mineral Reserves are as follows:

- Only Measured and Indicated Mineral Resources can be considered;
- Dilution is included in the Mineral Reserve estimate;
- Mining recovery of 95% has been accounted for;
- Mineral Reserves are supported by an economic mine plan.

Mineable Shape Optimizer (MSO) software was used to create the stope designs. MSO is a module available in Datamine Studio 5 software, which was developed to optimize underground stope design. Using the block model as an input, MSO identifies the optimal shape, size and location of stopes for underground mine design. Stope sections produced in MSO are imported into Studio 5 software. Studio 5 (Underground Module) software is used to create solids (mineable stopes) from the section produced with MSO, estimating tonnage and grade for every stope. Finally, Studio 5 and EPS (another Studio 5 module) are used to optimize the mining sequence.

15.2 Mineral Reserves Statement

Mineral Reserves were modified from Mineral Resources by taking into account geologic, mining, processing and economic parameters and are therefore classified in accordance with the 2014 CIM Definition Standards.

Mineral Reserves provided in Table 15-1 incorporate considerations of minimum mining width, dilution and mining sequence. Mineral Reserves are classified as Proven and Probable Mineral Reserves. The estimate has an effective date of 31 December 2015.

Mineral Reserves are reported at a gold price of US$1,100/oz gold, a cutoff grade of 3.17 g/t gold, an exchange rate of C$/US$1.20, and have an effective date of December 31, 2015.

The Qualified Person for the Mineral Reserve estimate is Denis Fleury, P.Eng., an employee of Goldcorp.

Table 15-1: Mineral Reserve Estimate

Category	Tonnes (Mt)	Au Grade (g/t Au)	Contained Gold (M oz)
Proven	4.17	6.49	0.87
Probable	24.15	5.76	4.48
Total Proven + Probable	**28.32**	**5.87**	**5.35**

Notes to accompany Mineral Reserve table:

1. Mr. Denis Fleury, P.Eng., an employee of Goldcorp, is the Qualified Person for the estimate. The estimate has an effective date of 31 December 2015.
2. The Mineral Reserves are classified as Proven and Probable Mineral Reserves, and are based on the CIM Definition Standards. Proven Mineral Reserves include stockpile material.
3. Based on a gold price of US$1,100 per ounce, an economic function that includes variable operating costs and metallurgical recovery of 92.5%, and an exchange rate of C$/US$1.20.
4. Global cut-off grade of 3.17 grams per tonne. Total average US$ operating costs are $100.40 per tonne (mining: US$45.60/tonne; processing: US$31.20/tonne; G&A: US$23.60/tonne).
5. An overall dilution of 10% is applied to the stopes using the grade of the adjacent material when assayed or a value of zero when not assayed. An additional 10% dilution is added to areas with more complex and folded veining, which comprises approximately 10% of the Mineral Reserves.
6. Mineral Reserves take into account a 95% mining recovery.
7. Numbers may not sum due to rounding.

15.3 Factors That May Affect the Mineral Reserve Estimate

Factors that can affect the Mineral Reserve estimates include:

- Geological complexity causing under estimation of dilution;
- Deviations in drill holes necessary to support production may cause more dilution;
- Stope dilution and recovery factors that are based on assumptions that will be reviewed after mining experience; stope stability is also an important factor with some stopes having considerable span and thickness;
- More water infiltration from the surface or underground than expected;
- In situ stress in the rock;
- Rock burst;
- Paste backfill strength;
- Low recovery at the mill because of a possible change in the hardness of the rock or mineralogical characteristics;
- Changes in commodity price and exchange rate assumptions;
- Changes to mining cost assumptions.

15.4 Estimation Procedure

The stope design software models 5 m slices across pre-defined orientations through the orebody, and then combines these data to optimize the stope direction in relation to the orebody strike. An iterative process then creates the final optimal shape that maximizes the value of the stopes, while still respecting geometry constraints and input parameters. Input parameters include a specific gravity of 2.77 and a 3.17 g/t gold cutoff grade.

For the Éléonore Operations, separate cases for the north–north, north–central, central, south–central and south–south zones were run for every level (Figure 15-1).

Optimal stope shapes were created taking into account orebody geometry; they are not restricted to the standard rectangular or oblique stope shape. Constraints used on stope geometry are as indicated in Table 15-2.

Studio 5 is used to join the 5 m long initial stopes that were produced with MSO into stopes of 25 m long. Studio 5 was also used to create tonnage and grade reports and to perform mine scheduling.

15.5 Dilution

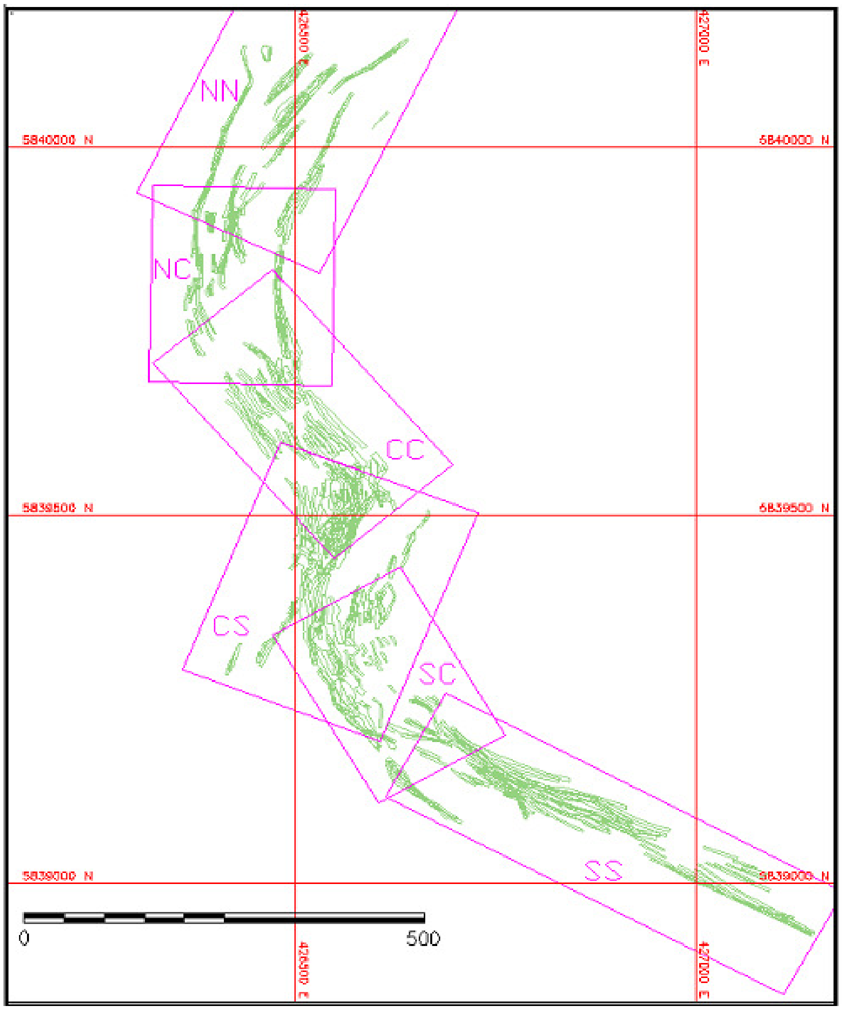
Three types of dilution were considered during Mineral Reserves estimation: internal and external dilution within the geological contour, and external dilution from the design viewpoint.

The block model contains estimated grades within low-grade and high-grade mineralized envelopes, plus grades within a dilution envelope extending 30 m from the mineralization. This helps in calculating geological external and internal dilution. Geological external dilution is evaluated directly from the life-of-mine (LOM) plan and is specific to each and every stope.

In addition to that material, is a stope design external dilution of 10% and recovery of 95%. The approach of external dilution is based on an average of 10% (from hanging wall to footwall) and drill and blast experience. It is a logical option that a narrow vein will create relatively more dilution when compared to a thicker stope. It is expected that short-term to mid-term planning teams during mining operations will re-assess the stope design geometry, length and inclination to minimize any such additional dilution.

Based on the complexity of the orebody, stopes within the folded corridor will have 20% external dilution applied to them. The folded corridor area is estimated to contain about 10% of the Mineral Resources.

Figure 15-1: Locations of the MSO Simulation Zones



Note: Goldcorp figure prepared in 2015. In this figure, NN = north–north, NC = north–central, Cc = central–central, SC = south–central and SS = south–south zones

Table 15-2: Geometry Constraints

MSO Geometry Constraints	
Minimum width	2.5 m
Maximum width	100 m
Minimum waste pillar width	1 m
Near wall dilution	0 m
Far wall dilution	0 m
Minimum dip angle	45^0
Maximum dip angle	135^0
Maximum strike angle	45^0
Maximum strike angle change	20^0
Maximum side length ratio	3
Level spacing	30 m
Section spacing	5 m

15.6 Mining Widths

Mining widths are primarily a function of the geometry of the orebody. The selection of a long-hole stoping mining method (transversal and longitudinal) and the choice of mining equipment allows mining to reach a mining width of 2.5 m before dilution.

15.7 Conversion Factors from Mineral Resources to Mineral Reserves

Mineral Resources classified as either Indicated or Measured were considered during the conversion to Mineral Reserves.

The economic analysis used to define the Mineral Reserve combines the results from long-term and mid-term planning. The Geology Department issues block model data which are used by the Engineering Department to build a long-term mine plan and Mineral Reserves. The work consists of evaluating the geological block model with MSO, using Studio 5 to create mineable stopes and EPS to produce a preliminary mining sequence. At this stage of the operations, the mining sequence in the Upper Mine was optimized according to development priorities and rock mechanic requirements, but the mining sequence in the Lower Mine was mostly based on the longitudinal retreat mining method.

15.8 Production Reconciliation

The reconciliation process is discussed in Section 14.8.

15.9 Comments on Section 15

The Mineral Reserves for the Éléonore Operations, which have been estimated using core drill and development data, appropriately consider modifying factors, have been estimated using industry best practices, and have been reported in accordance with the 2014 CIM Definition Standards.

16.0 MINING METHODS

16.1 Introduction

The mining method is a mix between open stoping and longitudinal stoping. The geometry of the mineralized lenses varies depending on location. Generally, the lenses in the centre of the orebody are wider than the ones in the northern and southern areas.

A trade-off study was performed to determine the optimal mining rate. Golder evaluated production from two different levels, and set production parameters for four mining activities (drilling, blasting, mucking and backfilling). The results indicated a production rate between 1,800 t/d to 2,500 t/d would be required from two production levels at the same time. The Goldcorp engineering team built different scenarios using all the mining activities and all the stopes to validate the production rate.

The results showed that it was possible to produce an average of 1,800 t/d from one mining horizon with the estimated Mineral Reserves.

Current ramp development has reached a depth of approximately 920 m from surface while production has started on the 800 mLv.

16.2 Geotechnical Considerations

Golder was the geotechnical engineering firm for the feasibility phase. The Goldcorp engineering team started to update Golder's information in 2013. The development of different infrastructures and galleries below 300 m depth will allow for rock mass characterization in the deeper part of the mine (below 300 m).

16.2.1 Rock Mass Quality

Geotechnical site investigations of the upper part of the mine were carried out during 2007 and 2008.

The main findings from these investigations were:

- All rock types encountered at Éléonore can be described as strong to very strong (UCS >100 MPa);
- Rock mass quality for the greywacke varies with depth, being lower near surface (upper 150 m) due to the occurrence of open subhorizontal fractures;
- A total of 73% of open structures recorded during the geotechnical investigations belonged to subhorizontal joint sets;
- Core mapping from vertical holes showed that the fracture frequency per metre decreases from 3.5 fractures/m to 0.5 fractures/m between surface and 500 m depth.

From surface to 920 m depth, the spacing between fractures increases from 0.5 fractures/m to almost 3 fractures/m.

Geotechnical mapping was performed in the summer of 2013 by the Goldcorp engineering team. Orientation of the main join sets were found to be the same as that identified by Golder. Only the subhorizontal joint set is less represented.

In 2015, mapping on the 140 mLv and 170 mLv were completed with the use of a 3D photogrammetric technique (Shapemetrix) and confirmed the main joint sets orientations that were identified with the televiewer technique used by Golder. This information is being used in the current modelling of the mine crown pillar.

A total of six faults were modelled (Figure 16-1), which have a northwest–southeast orientation. Only one can be characterised as a typical fault, and contains chlorite and gauge material (RMP-FX01). The other faults are a suite of northwest–southeast-oriented epidote–quartz breccia zones. They are modelled as discrete structures, but in reality they are not always internally continuous, and often look like damage zones.

Many fault zones have been logged in core; however, even with the benefit of oriented core it is difficult to determine the extent and significance of minor faults. They appear to be bounded by the major faults, but there is no evidence as to how they interact with each other, so at present they are modelled without mutual offset though clearly they must terminate or be offset where they intersect. Where they are intercepted by the development, minor modifications to the support regime may be necessary.

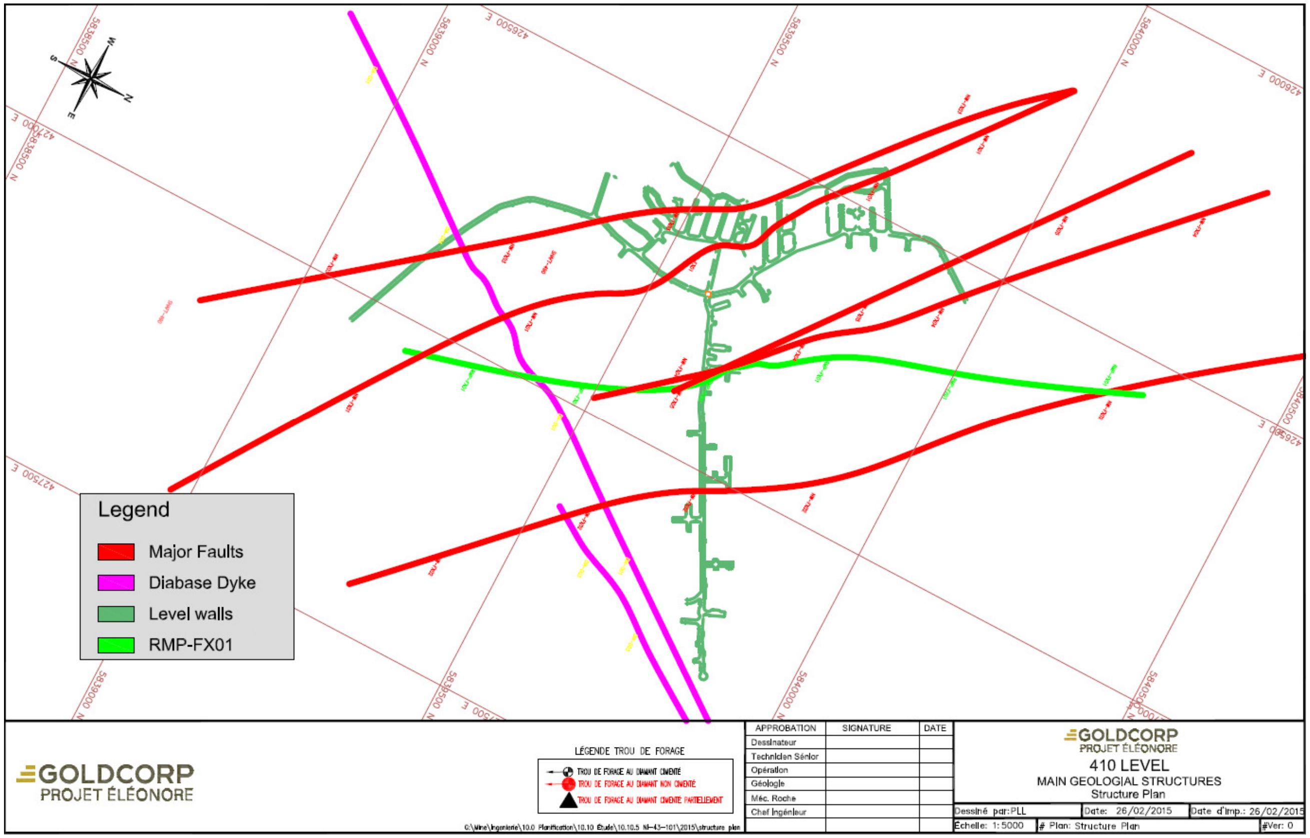
Recently, with the development of some infrastructure, sub-horizontal structures were encountered. These water-bearing features extend over a couple of hundred metres. They can be described as a series of high density horizontal joints. The thickness of the fractured zone varies between 30 cm to as much as 2 m.

To the southeast of the mine, there is a prominent northeast–southwest-trending zone with abundant diabase dike intersections. In detail, it appears that there are several subparallel dike segments. They are stronger than the host rock. The geotechnical significance of these dikes remains to be determined.

16.2.2 Stope Design

The selected mining method is long-hole stoping (down-hole drilling) using longitudinal retreat with consolidated backfill and primary and secondary transverse stoping (open stope). Paste backfill mixed with crushed waste rock was envisioned for stope fill (see Section 16.2.4).

Figure 16-1: Plan View of Main Geological Structures Intercepted on the 410m Level



Note: Goldcorp figure prepared in 2015.

The orebody is divided into three areas. The following maximum stope dimensions are used for mine planning:

- Stope width = minimum 2.5 m, maximum 20 m;
- Stope height = 30 m (sublevel floor to floor);
- Stope strike length = average 25 m, maximum 50 m.

Depending of different factors as the depth, the geology, the strike, the geometry, etc. the dimensions will vary and additional support may need to be added. Design parameters are reviewed as information becomes available from back analysis of completed stopes.

16.2.3 Ground Support

Systematic ground support is installed in all excavations such as drifts, raises and ramps. The walls are also supported to avoid the formation of unstable wedges. Ground support consists of various combinations of rebar bolts, friction bolts, cables, screen and shotcrete depending on the rock quality and particular requirements of each heading.

16.2.4 Backfill

Where possible, unconsolidated backfill is used, to avoid costs incurred by hoisting waste rock to surface.

Consolidated backfill is used to avoid pillars between stopes. Paste fill (mill tailings and binder) with crushed waste rock has been incorporated in the backfill, and will reduce costs, and eliminate the surface waste rock pad by the end of the mine life.

The current paste backfill mixture consists of 70% mill tailings, 25% fine sulphide concentrate, and between 4% to 7% binder. The sulphide tailing concentration can be up to 25% without having effect on the paste strength. Crushed waste (15%) will be added during the latter part of 2016, so the percentage of the mill tailings in the backfill will decreased to 55%.

16.2.5 Surface Crown Pillar

Golder had indicated that for a 15 m stope span, the minimum recommended crown pillar thickness was 75 m. In the case of a 10 m stope span, the minimum crown pillar thickness could be decreased to 40 m. These recommendations took into account the high risk of water infiltration from the overlying Opinaca Reservoir.

An extensive drilling program was completed during the summer of 2015 to better characterize water regime in the vicinity of the crown pillar. The water table is currently deeper than the Opinaca Reservoir itself. Accordingly, a proper dewatering strategy could significantly reduce the water table below the reservoir, and potentially below the crown pillar. A dewatering strategy will help to drain the water levels in horizon 1.

A review of the crown pillar is currently underway, using recent joint mapping data, and will include numerical modelling and empirical rules assessment. A pre-feasibility study into crown pillar recovery is planned to be completed during 2016.

16.3 Hydrological Considerations

The Roberto deposit is located under the Opinaca Reservoir whose water level is controlled by Hydro-Québec. The highest water level in the reservoir is at 215.8 masl while the critical water level is at 216.4 masl (Hydro-Québec data).

Due to the presence of open subhorizontal decompression joints encountered mainly within the first 150 m below surface, and the proximity of the reservoir, management of ground water infiltration is considered paramount for successful mining operations.

Hydrogeological site investigations were carried out from 2007 to 2009 in conjunction with Golder. In the second half of 2010, Goldcorp consulted with Peter White, P.Eng., regarding water mitigation strategies mine water inflows and mine water pumping capacity. During the summer of 2013, a surface program to characterize the flow between the reservoir and the orebody was completed (Hydro-Resources, 2013).

Currently, the water infiltrations in the orebody are located mostly in the three sub-horizontal structures. Most of the other permeable areas are located between the shaft and the orebody, so away from the stope areas. In February 2015, the total water inflow was approximately 590 US gpm or 3,200 m^3/day.

The permanent pumping system is designed to be upgradable depending on the total water infiltration in the mine and depending upon the mine plan. It consists of two main pumping stations (400 mLv and 650 mLv). All the water collected above the 400 mLv will be redirected to the main pumping station on the 400 mLv. The water collected below the 400 mLv will be redirected to the main station on the 650 mLv and pumped to the 400 mLv station. Finally, all the water will reach the surface from the 400 mLv via a pipe in the Gaumond shaft.

The second phase will start when the production of the lower mine will start. At that time, another pumping station will be installed on the 1140 mLv. The system will be the same as the one in Phase 1; the only difference is that water will reach the surface from 400 mLv via the production shaft.

Finally, at every main pumping station (400 mLv, 650 mLv and later 1140 mLv) the number of pumps will double. This means that every pumping station has two identical sets of pumps.

The mine plan is under evaluation to include the mining the zone above 65 m below surface (crown pillar recovery project). Development of the upper part of the mine, from the 230 mLv and above (mining horizon 1), with a higher coefficient of permeability, started in 2014. Work is in progress to characterise flow in the permeable structure around the 230 mLv. The first stopes located in the central and southern part of mining horizon 1 were blasted in Q2 and Q3 2015 without any water infiltration. Characterisation of the sub-horizontal structures at the 470 mLv and 770 mLv will be completed during 2015–2016.

16.4 Production Rate

Mining commenced from the 440 mLv and 650 mLv.

For one independent mining horizon (example: from the 440 mLv to the 230 mLv) the average production rate is 1,800 t/d, excluding the beginning and end of the sequence. The maximum rate could be as much as 2,500 t/d per horizon. With addition of horizons 1 and 4, a nominal production rate of about 5,000 t/d of ore is a realistic target for 2016, assuming mined material from these two horizons is trucked to surface and the 650 mLv respectively.

Production will be at the projected rate of about 5,000 t/d in 2016, with the four mining horizons starting on the 230 mLv, 440 mLv, 650 mLv, and 800 mLv.

At this stage, it is expected that all the ore and waste of horizon 1 (80 mLv to 230 mLv) will be trucked to the surface; the ore and waste of horizons 2, 3 and 4 (230 mLv to 800 mLv) will be either dumped down an ore pass or trucked to the 650 mLv and hoisted by the exploration shaft.

Exploration drilling from underground will be conducted to test for additional mineralization that may support Mineral Resource estimation and potential conversion to Mineral Reserves. There is considerable exploration upside potential in the Lower Mine area.

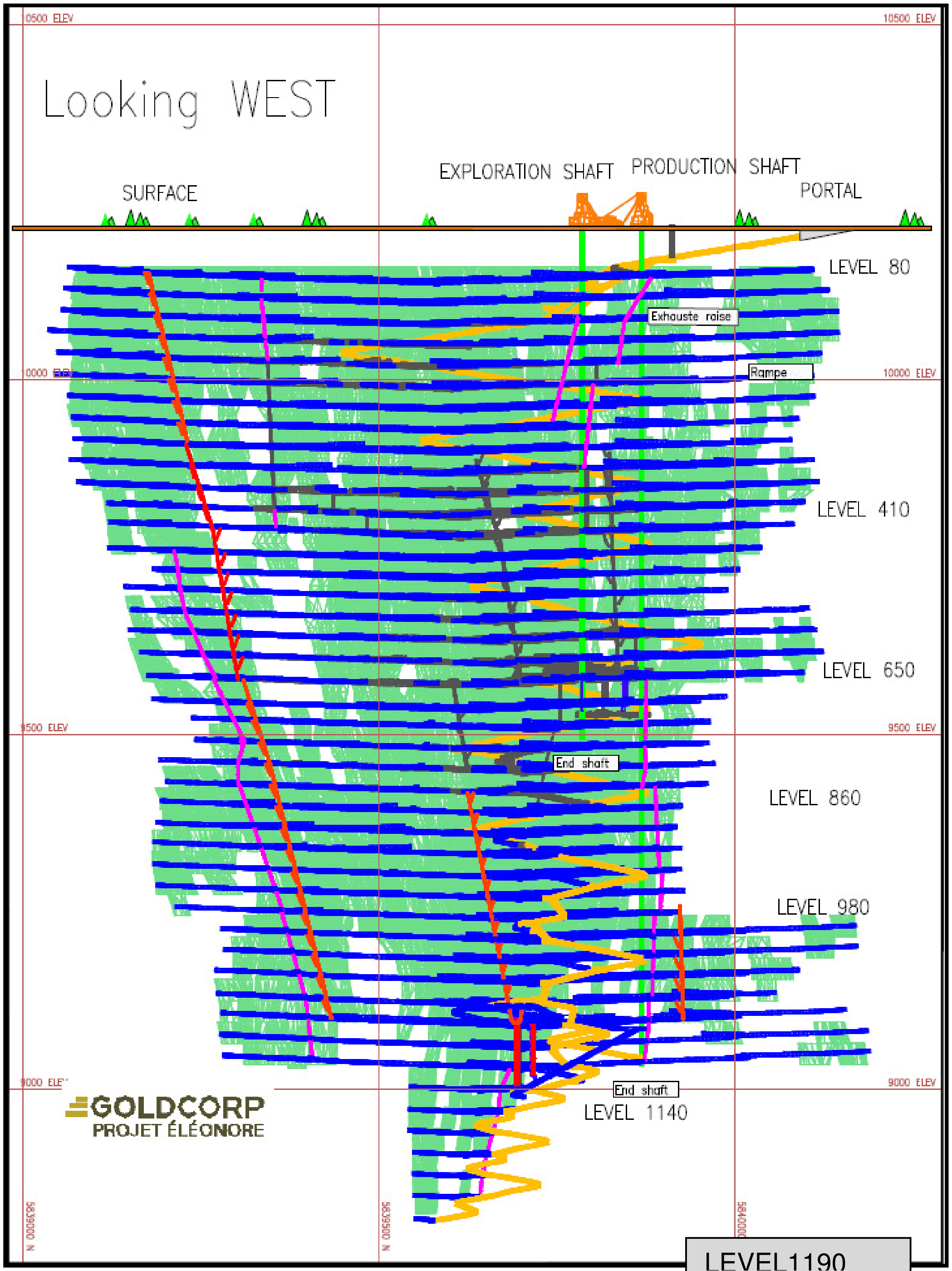
Currently, with the available information and the Mineral Reserve estimate, increasing the production rate to 7,000 t/d can be achieved by mid-2018 and will be sustained for five years. Depending on the results of the exploration drilling program, there may be potential for the mine life to be extended at this production rate.

16.5 Mine Plan

With the current Mineral Reserve, the mine has a 12-year life, with production from the beginning of 2016 to the end of 2027.

The Mineral Reserves mine plan addresses the recovery of mineralization between 60 m and 1,190 m below surface. Figure 16-2 shows a longitudinal view of the main infrastructures in relation to the Mineral Reserves.

Figure 16-2: Longitudinal View of Economic Stopes and Major Infrastructure



Note: Goldcorp figure prepared in 2015.

Ore is transported to surface via the Gaumond shaft. Currently, no mining is planned above a depth of 65 m below surface to mitigate the risks associated with potential water inflow as per Golder's preliminary recommendations regarding the thickness of the sill pillar.

On each level the orebody is subdivided into three parts, the North Zone, the Central Zone and the South Zone (Figure 16-3). Each zone will have its own ore pass to reduce hauling distance between stopes and ore passes. Two ventilation raises will be excavated (north and south). This will improve productivity as well as operational flexibility.

The selected mining method consists of long-hole stoping (down-hole drilling) on longitudinal retreat with consolidated backfill and transverse stoping. However, a transverse-stoping approach may be used where the mineralized vein is wider. The vertical distance between mining levels is 30 m, from floor to floor.

The main loading system for the 2016 forecast production rate of about 5,000 t/d is constructed on the 690 mLv. Mine production is hauled using 55 t trucks from the ore/waste pass of each zone to loading stations located on the 650 mLv. The rock is directly loaded from the ore/waste passes chutes into haulage trucks and then dumped onto a grizzly located over the storage bins.

A rock-breaking system is located over the bins to break oversized rock. The bins feed the rock onto a conveyor that transports it to the measuring loading box. At that point, the rock is automatically loaded into the skip.

All material from lower than the 650 mLv will be hauled using the 55 t trucks via the ramp to 650 mLv loading station.

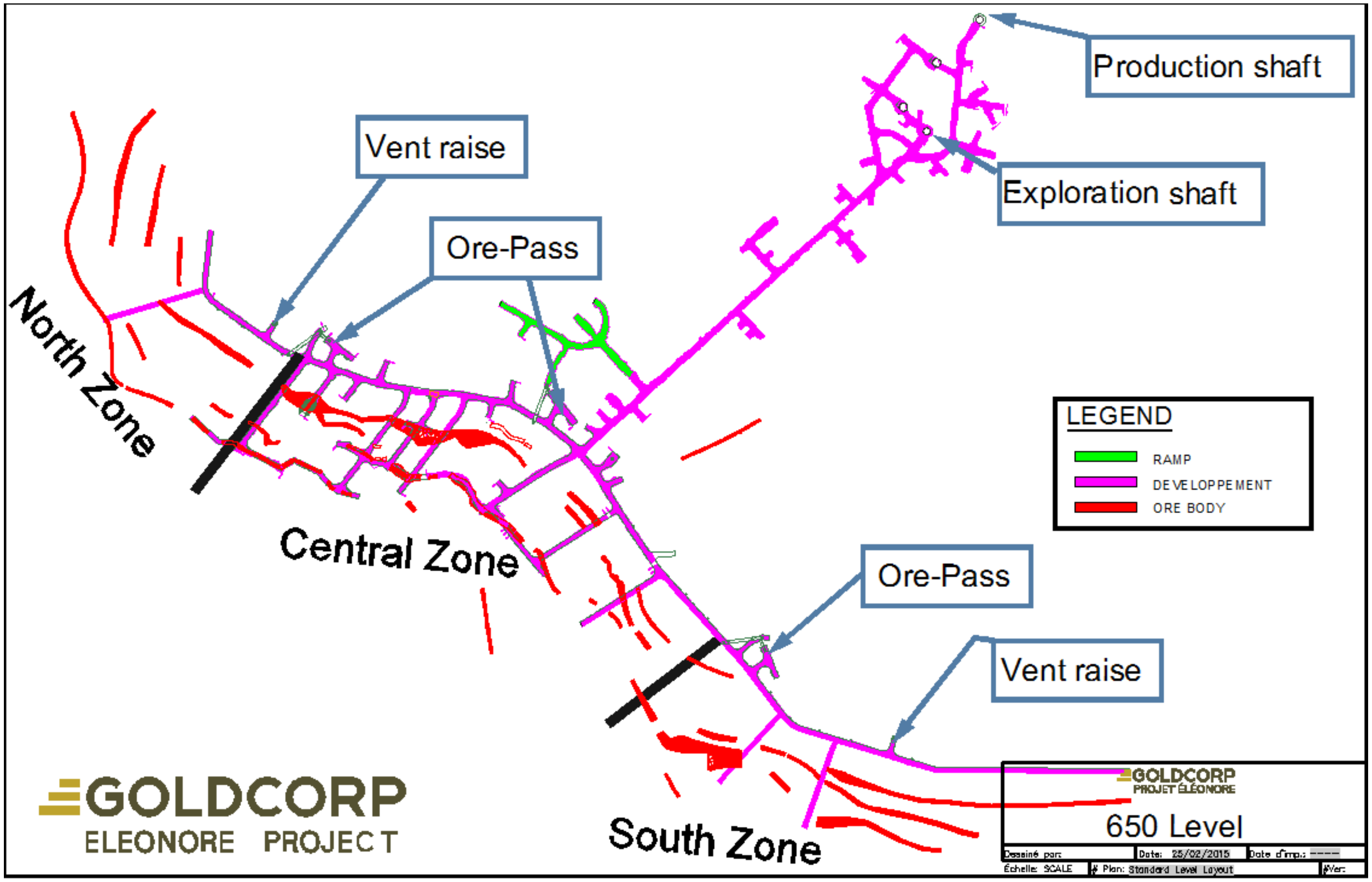
16.5.1 Gaumond/Ventilation Shaft

The circular shaft has an inside diameter of 7 m and is lined with concrete to a final depth of 715 m. The shaft is equipped with two 10 to 12 t skips. A cage is fitted below one of the skips to transport personnel and material from surface to the working levels.

The main hoist was used for both sinking and hoisting during the pre-production development period, and is used at the beginning of the production period from the upper levels. The Gaumond shaft has a total hoisting capacity of 7,000 t/d, sufficient to handle both ore and waste during the first two years of production. Ore production will be at a nominal rate of 3,500 t/d.

The main hoist is located at surface. This hoist is adequate for sinking to a depth of 900 m.

Figure 16-3: Example Level Plan View



Note: Goldcorp figure prepared in 2015.

A Maryann auxiliary cage is installed in the Gaumond shaft for emergency egress.

Two shaft stations are excavated on the 400 mLv and 650 mLv. The loading station is located between the 650 mLv and 690 mLv.

Fans are installed at the surface and the Gaumond shaft is used as the main ventilation raise.

16.5.2 Production Shaft

The production shaft will be circular with an inside diameter of 7 m. The shaft will be lined with concrete to a final depth of 1,190 m, and will be equipped with two 23 t skips (payload), a service cage with two cables, and a Maryann auxiliary cage.

The same hoist will be used for sinking and production. For the production shaft, Goldcorp selected a hoisting capacity of 8,500 t/d (combined ore and waste.

A service cage will be installed to transport personnel and material to the working levels. An auxiliary Maryann cage will be installed in the production shaft for personnel and emergency situations.

Three shaft stations are excavated from the production shaft, at the 400 mLv, 650 mLv and 1140 mLv. The shaft stations will be used to develop the main shaft accesses and the mine dewatering pumping stations. Two shaft loading stations are planned at depths of 690 m and 1,140 m respectively. A loading pocket arrangement will be installed on the 650 mLv, identical to that used in the exploration shaft, and the conveyor will be rerouted.

For the 1140 mLv, a loading pocket arrangement will be identical to the existing infrastructure on the 650 mLv. However, the ore and waste bin will be placed closer to the ore body to reduce trucking haulage. A conveyor belt will be installed to move muck from bins to the 1140 loading pockets over a 400 m distance.

If additional mineralization that could support Mineral Reserve estimates can be defined, there is potential that all of the production of the mine (Upper and Lower Mines) could be transferred to the production shaft.

16.5.3 Spill Pocket

Both shafts have a spill pocket. This excavation allows for the clean-up of all rocks and mud that can accumulate at the bottom of the shaft.

16.5.4 Surface Ramp

The portal of the ramp is located approximately 300 m from the Gaumond shaft and 800 m from the orebody. The first part of the ramp is 7 m wide by 5 m high and has a grade of 15% (8.4°). At the connection with the 400 mLv, the ramp dimension reduces to 5.8 m wide and a grade of 17%. The total length of the ramp, between surface and the 650 mLv is 4.5 km, and an extra 2.6 km of ramping is needed to reach the 1190 mLv.

16.5.5 Ore/Waste Passes

The ore/waste passes are located close to the ore zones in order to minimize the hauling distance between the mining work places and the dumping areas, and to limit the number of shaft accesses.

16.5.6 Communications

A leaky feeder system is the chosen communication system for verbal underground communication. A Wi-Fi system is available in some areas.

16.6 Backfill

Excavations will be backfilled with paste fill. On average, between 1,500 t/d to 2,000 t/d of paste backfill will be needed to meet the 2016 interim production target of about 5,000 t/d from four mining horizons. At a rate of about 5,000 t/d, the mill can fill only one line at a time. When the production ramp-up reaches about 6,500 t/d, a second line will be made available.

The paste plant was designed to provide paste to two different lines at the same time, and has provision for the supply to be of two different paste compositions.

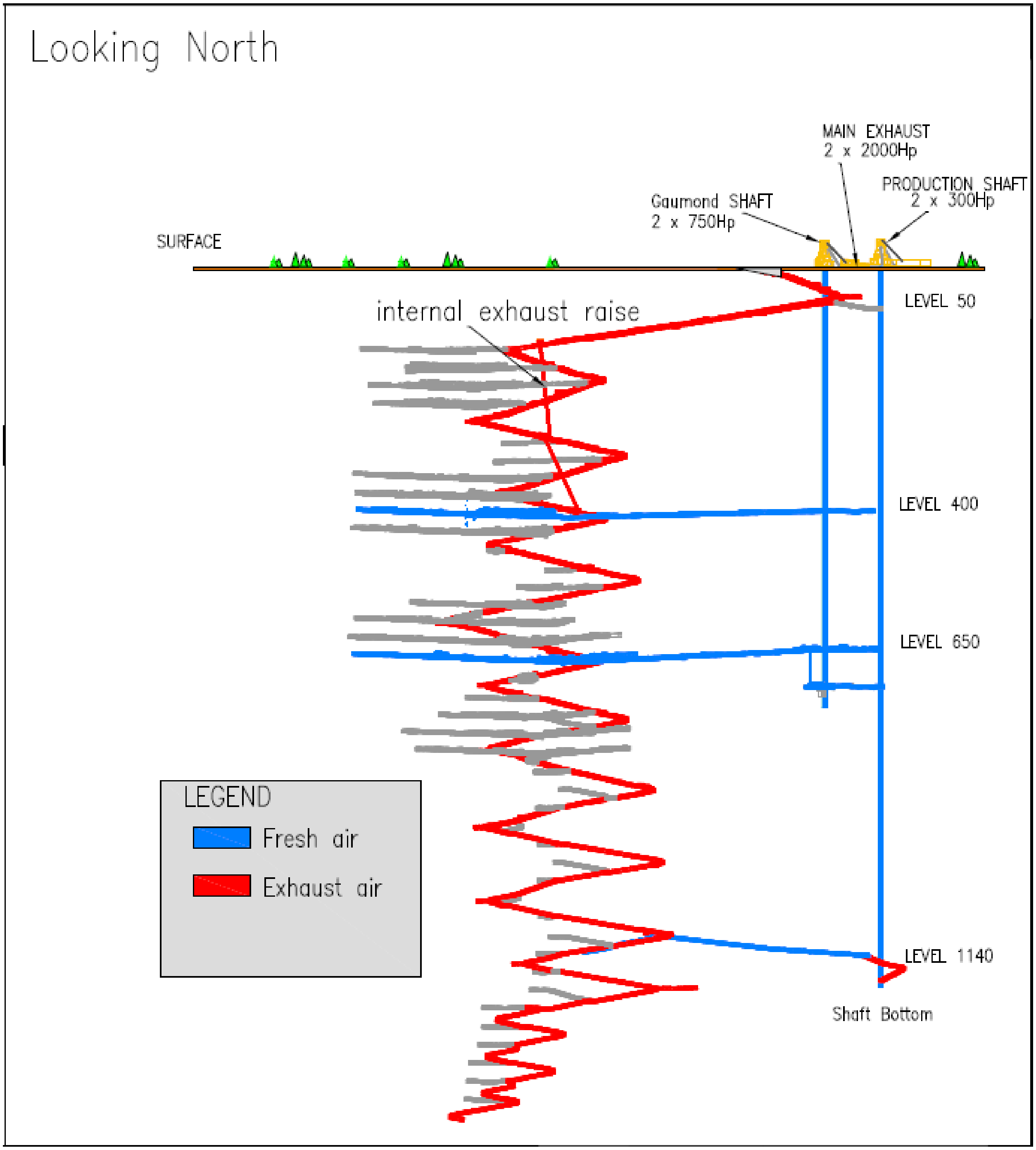
16.7 Ventilation

The Éléonore Operations are equipped with a ventilation-on-demand (VOD) system which tracks mobile and electrical equipment as well as personnel throughout the underground network. This system provides an adequate ventilation rate per mobile unit in compliance with the requirements of Québec's Occupational Health and Safety Act. The VOD system will evaluate the in-real-time operation needs and deliver the volume required for daily production. The system has a maximum capacity of 1.3 M cubic feet per minute (cfm).

The ventilation system consists of a pull system. The air is pulled from the ramp at which an airlock (SAS doors) is installed near the surface. The air bypasses over an exhaust raise (diameter 7 m) where two 2,000 hp fans are installed. Fresh air is provided partly through the Gaumond shaft, two 750 hp fans push fresh air through this dedicated ventilation shaft. The production shaft, will be the second main fresh air intake, where two low-pressure fans (300 hp) will be installed, to pressurize the shaft head frame.

The main ventilation network is shown in Figure 16-4.

Figure 16-4: Main Ventilation Network



Note: Goldcorp figure prepared in 2015.

From the main fresh air shaft, three discharge points will be located on the 400 mLv, 650 mLv and 1140 mLv. To reduce the air velocity in the ramp, an internal exhaust raise is planned to be excavated alongside the ramp. Fresh air on all levels will be distributed with the support of two internal raises which are located in the north and south zones.

16.8 Explosives

Hydrogeological studies indicate that there is a high risk of mining activity intercepting large water flows. As a consequence, emulsion has been selected as the explosive of choice. Initially, material was stored on surface, prior to completion of additional drilling and a trade-off study to determine whether an underground or surface facility is the preferred option for Project operations.

Currently, all explosive products are stored underground in two explosive storage facilities on 400 mLv and 650 mLv.

16.9 Equipment Fleet

The mobile diesel equipment fleet consists of 9.5 yd^3 and 15.2 yd^3 loaders, 45 t, 55 t and 60 t dump trucks, mine service and personnel vehicles, fully automatic jumbo drills, bolting platforms, scissor lifts, forklifts, boom trucks, and utility diameter holes in trucks. Top hammer drills are used to drill 100 mm diameter holes in the stope.

Table 16-1 shows the equipment requirements to support the 7,000 t/d production rate.

16.10 Comment on Section 16

In the opinion of the responsible QP, the following comments are appropriate:

- The 2016 planned nominal throughput rate of about 5,000 t/d is appropriate for the style of the mineralization with four different mining horizons; production will continue to ramp-up through 2017, reaching 7,000 t/d in mid-2018;
- Goldcorp has demonstrated that a production rate of 7,000 t/d is possible. To produce 7,000 t/d, the permanent ore handling system has to be completed and operational;
- If additional Mineral Resources that may support conversion of Mineral Reserves are identified, it will be possible to increase the number of operating mining horizons;
- In addition, if Mineral Resources that may support conversion of Mineral Reserves are identified, it may be possible to extend the mine life at the 7,000 t/d rate or higher. However, any increase in throughput will require an additional backfill line;
- Geotechnical considerations have been appropriately assessed based on currently available geotechnical data. An assessment of the feasibility of crown pillar recovery is currently underway;

Table 16-1: Equipment List

Equipment	Manufacturer	Model	Quantity (7,000 t/d production rate)
Haul truck	Caterpillar	AD45	1
Haul truck	Caterpillar	AD55	3
Haul truck	Caterpillar	AD60	2
Scooptram	Caterpillar	R1600G	3
Scooptram	Caterpillar	R2900G; R3000	9
Jumbo	Atlas Copco	M2C; M2D	6
Production drill	Atlas Copco	Simba	2
Bolter	MacLean	MEM-928	11
Scissor lift	MacLean	SL3	7
Boom truck	MacLean	BT3	6
Cassette carrier	Maclean	CS	2
Shotcrete machine	Maclean	SS-3	1
Telehandler	Caterpillar	TH255	2
Cement mixer underground	Caterpillar	725	2
Transport	Toyota	Land Cruiser	18
Grader	Caterpillar	12M	2
Back hoe	Caterpillar	420F	2
Loader	Caterpillar	962	1
Loader	John Deere	344J	1
Excavator	Caterpillar	303,5	1
Tractor	John Deere	6100D	D
Emulsion loader (production)	MacLean	EL-3	1
Emulsion loader (development)	MacLean	EL-3	1
Block holer	MacLean	BH-3	1

- Water management is critical for operational success, as the orebody is located directly under the Opinaca Reservoir. Mining will not take place within 65 m of the surface due to the presence of the reservoir and open subhorizontal decompression joints mainly encountered within the first 150 m below surface;
- The mine dewatering system is designed to be easily upgradable;
- Mining equipment selection was based on the mine production schedule and equipment productivities, and included consideration of workforce and operating hours. The fleet is appropriate for the planned production schedule.

17.0 RECOVERY METHODS

17.1 Process Flow Sheet

The plant capacity is controlled by the underground mine capacity. The plant initially operated at 3,500 t/d. The crushing area is designed for a capacity of 8,500 t/d including waste crushing (1,500 t/d), and the other plant areas were designed for a processing capacity of 7,000 t/d.

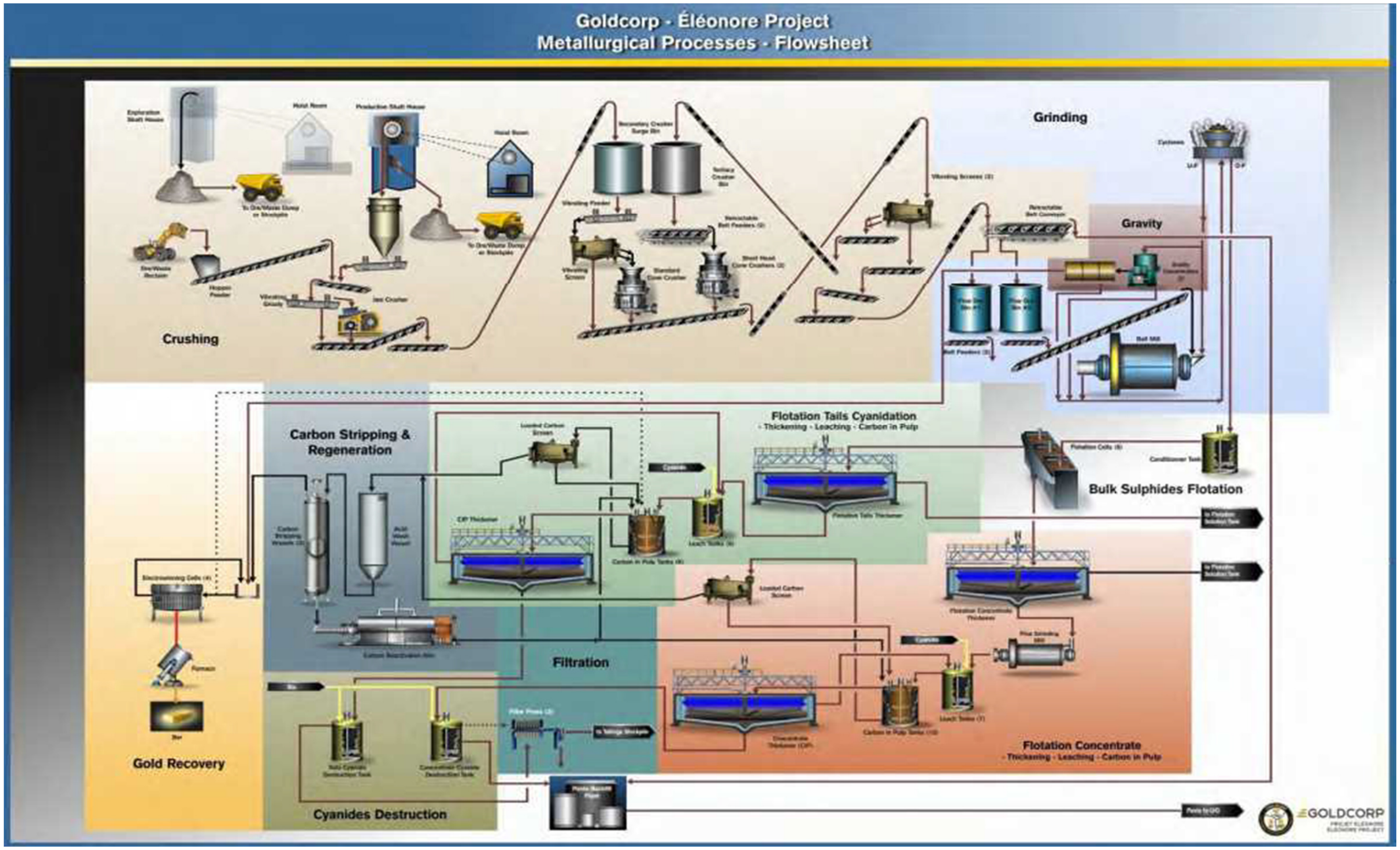
The process plant availability was established at 95% based on performance from similar operations with the same type of comminution circuit. The crushing plant provides a -11 mm feed to the grinding circuit and also crushes waste material for addition in the paste backfill mix.

The comminution process consists of three stages of crushing followed by a single stage ball mill grinding. The primary crusher (jaw crusher), the secondary crusher (standard cone crusher) and tertiary crushers (two short-head cone crushers will be required for a 7,000 t/d throughput rate) are located on the surface. The fine crushed ore is ground by a single stage ball mill in a closed circuit with cyclones. A portion of the cyclones underflow is directed to a gravity concentration circuit consisting of two Knelson Concentrators and an Acacia Reactor to recover liberated native gold. The cyclones overflow (grinding circuit product) is directed to the flotation cells for iron sulphides separation in a low mass sulphur concentrate. The flotation tail slurry density is adjusted with a thickener and the material is leached with cyanide for 36 hours in five leach tanks.

The flotation concentrate is thickened and reground to a P80 of 10–15 µm in a fine grinding mill and is leached with cyanide for 48 hours in five other leach tanks. The gold in solution is recovered in carousel carbon-in-pulp (CIP) circuits (one for each leach circuit). The carbon from each CIP circuit is stripped as required in a Zadra stripping circuit and the gold recovered is poured in gold bars at regular intervals. The carbon is regenerated and returned to the CIP circuits. The tails from each leaching circuit are detoxified in a conventional cyanide destruction circuit, and are filtered for addition in the paste backfill or stored in a covered shed before transportation to the tailings management facility.

A schematic flowsheet of the process is included as Figure 17-1.

Figure 17-1: Process Flowsheet



Note: Goldcorp figure prepared in 2014.

17.2 Plant Design

17.2.1 Crushing Circuit

The raw material with 400 mm (F80) size is reclaimed from underground at a feed rate of approximately 7,000 t/d from the production shaft. The material is reclaimed through a grizzly of 400 mm with a variable-speed apron feeder at a controlled feed rate to achieve 8,500 t/d in 16 hours or less of operation per day (7,000 t of ore and 1,500 t of waste). The reclaimed material is fed to the 1,200 mm wide conveyor discharges ore into the primary crusher feed hopper. Before feeding into the jaw crusher, material passes through the vibrating grizzly feeder that bypasses approximately 40% of the crusher feed.

The grizzly feeder undersize and the jaw crusher product are collected on a common conveyor to transfer material to the secondary crusher surge bin. The ore is reclaimed and fed to a double deck vibrating screen (76 mm and 22 mm openings). The oversize discharges to the secondary cone crusher that is equipped with a standard/fine cavity bowl (HP6 with a 450 kW motor). The secondary crusher product and the secondary crusher screen undersize are collected onto a common conveyor with the tertiary crusher product and transferred to the tertiary crusher double deck vibrating screens (32 mm and 11 mm openings).

The screen oversize is collected by a conveyor and loaded into a surge bin with two retractable variable speed belt feeders. The feeders feed the two tertiary cone crushers. The tertiary crusher product is recycled back to the tertiary crusher screens. Tertiary crusher screen undersize product, at -11 mm, is conveyed and stored in two 3,500 t ‘’live’’ fine ore bins or into the 2,000 t waste bin which is enclosed to prevent freezing. These bins are located at the process plant and provide more than 24 hours of storage capacity.

17.2.2 Grinding Circuit

The ore stored in the fine ore bins is reclaimed via two variable speed belt feeders and loaded at a controlled feed rate into the ball mill (6.40 m x 11.9 m with a 9,000 kW motor). This mill is operated in closed circuit with a cyclone pack that controls the grinding circuit product size. The cyclone pack has 19 cyclones of 400 mm diameter with 16 in operation and three on standby. The cyclone pack overflow at a P80 of 65 µm is the final grinding circuit product and is sent to the extraction process, while the coarse underflow is recycled to the ball mill for further grinding.

17.2.3 Gravity Circuit and Intensive Cyanidation

A portion of the secondary ball mill cyclone underflow is diverted and fed to the gravity concentration circuit. A scalping screen eliminates coarse solids and ball scats and the screen undersize feeds two gravity centrifugal concentrators (Knelson QS40 with 40 inch (approx. 101 cm) diameter bowl). The tailings from the centrifugal concentrators and the scalping screen oversize are returned to the ball mill discharge pump box while the concentrate is flushed periodically to the intensive leaching circuit located underneath.

Gravity concentrate is accumulated for one day and processed in batches using an intensive cyanidation dissolution module. Dissolved gold in solution is pumped to a gravity pregnant solution tank situated in the gold room for subsequent electrowinning. Gold sludge is periodically recovered and smelted to pour quality gold bars. Rejects of the intensive leaching circuit are flushed to the grinding circuit pump box.

17.2.4 Flotation Circuit

The ground product from the cyclone pack overflow is passed over a linear trash screen to remove wood pieces, plastic and other small trash material which would otherwise plug the carbon screens in the CIP circuits. It then enters the flotation conditioner (4.4 m x 5.0 m) with 10 minutes of retention time where it is conditioned with PAX and R208 collectors to float the sulphides. The conditioned slurry overflows s to the flotation circuit, which has a retention time of 40 minutes. The flotation circuit is made up of six flotation tank cells of 130 m^3 capacity each.

When transferred to the flotation cells, frother (MIBC) is added to the feed to produce a stable froth and recover 95%+ of the sulphides. Sulphide concentrate (approximately 10% weight recovery) is transferred to the flotation concentrate cyanidation circuit with two vertical tank pumps (one operating and one standby). Flotation tails are pumped to the flotation tail cyanidation circuit using horizontal slurry pumps (one operating and one standby).

17.2.5 Flotation Tails Leaching and CIP Circuit

From the flotation circuit, the flotation tailings are pumped to the flotation tails high-rate thickener to thicken the slurry to 65% solids. The thickener overflow water is recycled to the process water tank for reuse and the thickener underflow is pumped to the flotation tails leaching circuit. There are five leach tanks operating in series.

The leach feed density is adjusted by recycling the overflow from the flotation tail CIP thickener and process water to operate at 45% solids. The leach train feed (flotation tails thickener underflow) pH is adjusted with lime to approximately 10.5 to prevent HCN formation as a safety precaution. Cyanide is added to the first and third leaching tank with the addition rate controlled with a cyanide analyzer. The flotation tails leaching train has a total retention time of 36 hours. The slurry flows by gravity to each tank in steps of 600 mm. Each tank is equipped with an agitator to maintain the solids in suspension and air is injected to promote the gold dissolution rate. Interconnecting tank launders is arranged so that any tank in series can be bypassed without the whole plant having to be shut down.

After leaching, the slurry is transferred to the tail CIP circuit. Gold is adsorbed onto carbon in a Kemix AAC pumpcell system. The adsorption circuit has six tanks of 120 m^3 each in series with 15 minutes retention time each and contains a total of 36 t of carbon. The pumpcell mechanism combines the functions of agitation, interstage screening and slurry transfer in one unit. Suspension of the carbon and slurry mixture is maintained by the hydrofoil mixer. The interstage screen surface is kept free of carbon build-up by means of wiper blades attached to the rotating cage. The pumping action of the interstage screen generates a head differential and the contactors can be placed at the same level. With the contactors being at the same level it becomes relatively simple to provide common feed and tailings launders to allow the plant to operate in a carousel mode. This mode of operation has several advantages compared to conventional counter-current CIP circuits including faster adsorption kinetics, lower gold lock-up and reduced elution rate.

The tanks are fed by a launder which, via a series of plug and gate valves, allows the feed slurry to be diverted to the different head tanks. When the carbon in a head tank has reached the required gold on carbon loading, this tank is isolated from the adsorption sequence and the loaded carbon is separated from the slurry by pumping the entire content of the tank over a vibrating screen to recover the carbon for the elution circuit. The screened slurry flows back to join the adsorption circuit feed. The design carbon concentration in the adsorption tanks is approximately 50 g/L, which is within the normal pumpcell operating range of 30–60 g/L, for a total inventory of 2.5 t of carbon per tank.

After the adsorption circuit, the flotation tails stream is pumped through a carbon safety screen to the flotation tail CIP thickener (16 m diameter high rate thickener) for recovery of residual cyanide. The thickener overflow is recycled to the leach feed while the underflow is sent to the flotation tails cyanide destruction system.

17.2.6 Flotation Concentrate Leaching and CIP Circuit

Flotation concentrate is pumped to the flotation concentrate thickener (9.0 m diameter high rate thickener) where it is thickened to 55% solids. Thickener overflow water is recycled to the process water tank for reuse and the thickener underflow is pumped with peristaltic pumps (one operating and one standby) to the IsaMill feed pump box.

The IsaMill (M5000 with a 1,500 kW motor) receives the flotation concentrate thickener underflow. Grinding media is added as required in the IsaMill feed pump box to keep the power input constant to the regrind mill. The flotation concentrate is reground to a P80 of 10 to15 µm before being discharged into a second pumpbox where dilution water, recycled from the concentrate CIP thickener overflow, and process water is added to reduce the leach feed density to 30% solids. The IsaMill product is then pumped to the first of two pre-aeration tanks to pre-condition the slurry for leaching through five flotation concentrate leaching tanks (7.9 m diameter x 8.4 m).

The pH in cyanidation is maintained at approximately 10.5 as a safety precaution to prevent hydrogen cyanide formation. Lead nitrate and oxygen are added to reduce the sulphide activity. Cyanide is also added to the first and third leaching tank at a rate controlled with a cyanide analyzer. The flotation concentrate leaching train has a total retention time of 48 hours. Slurry flows by gravity to each tank in steps of 400 mm. Each tank is equipped with an agitator to maintain the solids in suspension and oxygen is injected to promote gold dissolution rate. Interconnecting tank launders are arranged so that any tank in series can be bypassed without the whole plant having to shut down.

After leaching, slurry is transferred by gravity to the concentrate CIP circuit. Gold is adsorbed onto carbon in a Kemix AAC pumpcell system. In order to achieve elevated gold loadings on carbon and due to solution concentrations, the concentrate CIP system has been designed to have a 30 minute contact time in each pumpcell tank. Carbon gold loadings are expected to be as high as 25 kg/t of carbon. The adsorption circuit has ten 30 m^3 tanks in series with a total inventory of 15 t of carbon. The tanks are fed by a launder which, via a series of plug and gate valves, allows the feed slurry to be diverted to the different head tanks. When the carbon in a head tank has reached the required gold loading, this tank is isolated from the adsorption sequence and the loaded carbon is separated from the slurry by pumping the entire content of that tank over a vibrating screen to wash and transfer the loaded carbon to the elution circuit. The screened slurry flows back to join the adsorption circuit feed. The design carbon concentration in the adsorption tanks is 50 g/L which is within the normal pumpcell operating range of 30–60 g/L for a total of 1.5 t of carbon per tank.

After the adsorption circuit, the flotation concentrate stream is pumped to the concentrate CIP thickener (12.0 m diameter high rate thickener) through a carbon safety screen. The thickener overflow is recycled to the flotation concentrate leach feed for dilution and the thickener underflow at 40% solids is transferred to the cyanide destruction system.

17.2.7 Carbon Elution Circuit and Carbon Regeneration

Loaded carbon is pumped from the loaded carbon surge tanks to the acid wash tank, which has a capacity of 6 t of carbon. A dilute solution of 2% nitric acid is pumped into the acid-washing vessel from the bottom and returns to the acid-holding tank while the pH is monitored. After the acid wash cycle is completed, the spent acid is neutralized by adding caustic, drained and pumped to the tailings pump box for disposal.

An exhaust fan is connected to the acid wash pump box and the acid wash vessel and is used to remove fumes. After acid washing, the carbon is first rinsed with water then with a small amount of caustic to ensure neutralization. The carbon is subsequently pumped to the carbon stripping vessel. In the stripping vessel, gold is desorbed from the carbon by circulating a caustic-cyanide strip solution at high temperature (140ºC) and pressure (550 kPa) using the Zadra stripping process.

The gold-rich strip solution is cooled with heat exchangers to about 80ºC and accumulated in a pregnant solution tank. Reagents (caustic and cyanide) are added as needed to the strip solution to have the correct chemistry and conductivity for carbon stripping. At the end of the elution cycle, the stripped carbon is rinsed with fresh water and pumped to the carbon reactivation system via a dewatering screen ahead of the reactivation kiln. The water used to pump the carbon slurry to the screen drains to the quench tank. Dewatered carbon from the screen is stored in a 6 t surge bin in front of the kiln which ensures a steady feed during kiln operation. A steam-rich atmosphere is maintained in the kiln to prevent the carbon from charring. The kiln discharges into a quench tank filled with water to simultaneously cool and wet the carbon. The kiln is electrically fired and has a regeneration capacity of 6 t per day. The batch of reactivated carbon is pumped to the pumpcell systems after the carbon extraction in the pumpcell is completed. Fresh carbon required to make up for losses of fine carbon is conditioned prior to use to remove fines, round sharp edges and to thoroughly wet the particles. This is achieved in an attrition tank.

17.2.8 Electrowinning and Refining

The gold-loaded strip solution, also called pregnant solution, is cooled with heat exchangers to about 80ºC and accumulated in a pregnant solution tank. The pregnant solution is then pumped into electrowinning cells. Each elution circuit (flotation concentrate and flotation tails) has its own electrowinning circuit. The pregnant solution is pumped into series of two electrowinning cells in each circuit. The gold in solution precipitates and adheres to the cathode which is made of woven-mesh stainless steel. The barren solution goes to the barren solution tank and is pumped back to the elution column passing through the in-line heater for re-heating to 143ºC. The electrowinning in the gold room is done with two electrowinning cells per circuits. Additionally, a separate electrowinning cell is used to recover the gold in the pregnant solution from the gravity-intensive cyanidation system. There are five cells in total.

The loaded stainless- steel cathodes and the sludge accumulated at the bottom of the cell are cleaned in-situ with a high-pressure washer. The sludge is directed to a holding tank ahead of a sludge pump feeding a recessed plate filter for filtration. The filtered solids are discharged from the plate filter in trays and dried in the mercury retort. Because of safety concerns, a mercury retort was added instead of a simple drying furnace for the drying of the gold sludge from the electrowinning cells. The dry solids are cooled and mixed with an appropriate amount of flux and refined. The refining furnace provided is an induction furnace. Refined gold is poured to a series of moulds and the slag is poured into slag moulds.

The slag residue is processed in a small gravity system comprising a jaw crusher, a cone crusher and a small Knelson concentrator. The tail from this small recovery circuit is recycled to the grinding circuit.

17.2.9 Cyanide Destruction

Two cyanide destruction systems are in place for the flotation concentrate stream and the flotation tails stream. The selected cyanide destruction system is the Inco SO_2/air with oxygen. Thickened slurries from their respective CIP thickeners are pumped to their respective cyanide destruction tanks, where process water is added to adjust the slurry density to the operating level. The target weak acid dissociable cyanide (CN_{wad}) content at the output of the destruction system is <15 ppm. After the cyanide destruction process, the tails streams are routed to their respective thickeners.

17.2.10 Filtration Plant

Slurry from cyanide destruction of flotation tails is fed to the non-sulphide tailings thickener with addition of fresh water and flocculant. The thickener overflow stream is pumped to the process water tank. Thickener underflow is pumped to the non-sulphide tailings filters surge tank. The non-sulphide tailings filters surge tank slurry is pumped to the pressure filters (two operating, one standby). Filter cake falls to reversible conveyors either sending cake to the paste backfill plant or to the enclosed non-sulphide tailings stockpile.

Slurry from cyanide destruction of flotation concentrate is fed to the sulphide tailings thickener with addition of fresh water and flocculant. Thickener overflow is pumped to the process water tank. Thickener underflow is pumped to the sulphide tailings surge tank. When the paste backfill plant is in operation (60.8% of the time), the slurry from the surge tank is pumped to the paste backfill plant. When the surge tank capacity is exceeded, this slurry is diverted to pressure filter #1. Filtrate goes to the non- sulphide thickener feed tank. The filter cake is conveyed to the emergency sulphide tailings stockpile.

17.3 Product/Materials Handling

17.3.1 Paste Backfill Plant

Filter cake (approximately 75% non-sulphides tailings) is conveyed to the filter cake bin. The filter cake multi-screw feeders feed a conveyor that lead to the two paste mixer hoppers. The sulphide tailings slurry from the surge tank is pumped to the paste mixer hoppers (approximately 25% of the paste). Binder (90 slag /10 cement) is fed to the paste mixer hoppers (4.5% of the paste) from silo by screw feeders as well to complete the paste composition. By the end of 2015, crushed waste will be fed by vibrating feeders to the two crushed waste conveyors which lead to the paste mixer hoppers. The paste composition will change accordingly to approximately 60% non-sulphides tailings, 15% aggregates, 25% fine sulphides concentrate and 3 to 5% binder.

Process water is added to the mixers to adjust paste density. The paste mixers (two operating) feeds the paste hoppers which in turn feeds the piston pumps (one by mixer). Each piston pump sends paste to underground through its individual pipeline. Finally, tails are either added to the paste backfill or stored in a covered shed before being transported to the tailings management facility.

17.4 Energy, Water, and Process Materials Requirements

17.4.1 Fresh and Process Water Supply

The plant water balance represents an average operating day with 95% availability of the process plant. Fresh water makeup comes from the polishing pond downstream of the water treatment plant.

The process water tank receives water recycled from the flotation products thickeners, from the stripping circuit heat exchanger and from the paste backfill plant. As required, water is pumped back from the clarification pond after the water treatment plant to supplement the process water. Process water is distributed in the process plant through two process water pumps (one operating and one standby) at a system pressure of 350 kPa (50 psi). A total process water flow rate of 453 m^3/h is required to feed the various process areas such as the grinding mills, the cyanidation areas and the cyanide destruction system. There is an excess of process water of 43 m^3/h, which must be bled to the water treatment plant to maintain the plant water balance.

Fresh water is used in the process plant to prepare reagents and to provide clean gland seal water for the slurry pumps. Clean water is also required for the Knelson gravity concentrator. The fresh water source is the treated water from the water treatment plant. Slurry pumps requiring higher pressure gland seal water are supplied by two gland seal water booster pumps (one operating and one on standby) increasing the water pressure from 350 kPa to 860 kPa (50 psi to 125 psi). The process plant fresh water requirement is 42 m^3/h for gland seal water, 36 m^3/h for the Knelson concentrator, and 3.4 m^3/h for reagent preparation and dilution at a system pressure of 350 kPa (50 psi).

17.4.2 Energy

The Éléonore mine and processing plant is fed through a 120 kV overhead electrical power line supplied and installed by Hydro-Québec from the existing distribution point at the Eastmain power generation substation. Since 2012, Hydro-Quebec has changed the operating voltage to 120 kV to supply Opinaca's two permanent 120/25 kV substations. All 25 kV distribution lines were designed in order to take into account the constraints imposed at this northern latitude, such as weather, ice and wind loads. The present's electrical infrastructure is sufficient to sustain the production increase to 7,000 t/d.

The site power consumption at full production is expected to be 48 MW. For the year to date (September 2015) the average consumption has been 36 MW. During the month of September 2015 its distribution was 25% to the mine, 8% to surface operations and 67% to the process plant.

17.4.3 Process Material Requirement

There are six main process areas in the plant where consumables are used:

- Grinding: uses 3.5 inch (8.9 cm) forged balls; the balls are delivered by truck and stored at the grinding area and is added on daily basis as required;
- Cyanidation: requires lime, cyanide and lead nitrate. Quicklime is delivered in bulk trucks in solid form. Bulk cyanide is supplied in briquette form and delivered in ISO road tankers. Lead nitrate is delivered to the site in 1,000 kg bags and needs to be dissolved to a 20% solution prior to its addition into the flotation concentrate leaching circuit. Carbon is received in 500-kg bags. Nitric (HNO_3) acid is supplied in 1 m^3 containers. Caustic (NaOH) solution is supplied in bulk tankers as a 50%w/w solution, and is stored on site in a heated storage tank at 20% solution concentration;
- Cyanide destruction: requires sulphur dioxide (SO_2) and copper sulphate ($CuSO_4$). Liquid SO_2 is delivered by truck to the site and stored in a 252 m^3 pressurized reservoir. Copper sulphate is received in 1,000 kg bags and needs to be dissolved to make a 10% solution prior to use;
- Flotation: two flotation collectors (PAX – potassium amyl xanthate and R208 – a dithiophosphate) and a frother (MIBC); the PAX is received in bags in solid form and needs to be dissolved in a preparation system prior to its addition to the flotation circuit;
- Dewatering: polymer for the thickeners is received in 700 kg bags.

17.5 Comments on Section 17

In the opinion of the responsible QP, the following interpretations and conclusions are appropriate:

- The Éléonore plant uses conventional mineral processing equipment to produce a marketable gold doré;
- The process flowsheet is standard, consisting of three stages of crushing, grinding, gravity concentration, sulphides flotation, cyanide leaching, and gold recovery in a CIP circuit;
- The plant is designed to achieve 7,000 t/d for an annual throughput of 2.5 Mt/a and operate for 365 days a year. Following a debottlenecking exercise aimed at resolving mechanical and operational problems in the filtration section, the plant has been achieving its nameplate capacity of 7,000 t/d for two months since September 2015. The precious metals recovery circuit is designed to produce an average of approximately 600,000 ounces of gold annually;
- The plant has been achieving its design primary grind of 80% passing 65 µm. To October 2015, the average recorded P80 was 68 µm, which is marginally above the target due to some instability during the initial part of 2015;
- The recoveries seen in laboratory testwork, which were in the range of 93.0–93.5% have not been achieved consistently in the plant during the ramp-up period which covers the entire year of 2015. Corrective actions, which started being implemented in the 4^{th} quarter of 2015, are expected to improve recoveries to beyond 90% in 2016;
- The process plant uses electricity as energy, supplied by Hydro- Québec. The power requirement at 7,000 t/d is about 30 MW;
- The main reagent to recover the gold is cyanide, with several other reagents such as quicklime, NaOH, flotation collectors, SO_2, and copper sulphate also used. The residual cyanide is treated before sending detoxified tails to the tailings management facility and the remaining residual reagents is treated in the water treatment plant;
- More than 90% of the water used in the process plant is recycled from the filtration of tailings slurry prior to its final disposal. The remaining 10% is fresh water sourced from the water treatment plant. The water management plan follows industry best practices.

18.0 PROJECT INFRASTRUCTURE

The main infrastructure includes the Gaumond shaft and the production shaft that is under development, a surface ramp, a waste rock storage dump, tailings storage facilities, a process plant, offices, and a permanent camp. Figure 18-1 shows an aerial schematic of the infrastructure layout. Additional detail on the tailings, water management and waste rock facility is included in Section 20.

18.1 Road and Logistics

Project access is discussed in Section 5.

18.2 Surface Infrastructure

Surface infrastructure to support operations is in place, and includes:

- Waste rock storage facilities;
- Tailings storage facilities;
- Shaft headframes;
- Accommodation camp;
- Administration building;
- Warehouse and garage facilities;
- Assay laboratory;
- Processing facilities;
- Terminal and airstrip;
- Landfill facility;
- Fuel storage facilities.

18.3 Power and Electrical

The Éléonore main 120/25 kV substation was designed taking into consideration redundancy, labour and transport costs, as well as the geographic location, and a total substation life expectancy of 15 to 25 years. The total mine complex load during winter is estimated at 48 MW. The substation consists of one 120 kV overhead incoming with two 120/25 kV 40/53/66.6 MVA oil step-down transformers, for redundancy purposes.

The main 120/25 kV substation is installed near the concentrator and hoist/shaft, to limit the length of conductors feeding the largest loads.

Figure 18-1: Aerial View, Infrastructure Layout

Note: Goldcorp image, 2015. Distance from left to right across the image is approximately 6 km.

All 25 kV distribution lines are designed in order to take into account the constraints imposed at this northern latitude such as weather, ice and wind loads in addition to the loads related to the equipment and conductors.

18.4 Comments on Section 18

Infrastructure has been constructed sufficient to support the 2016 forecast production rate of about 5,000 t/d production rate. Additional underground infrastructure will continue to be added to support the planned final rate of 7,000 t/d.

Production data to date are limited and no conclusions as to infrastructure performance can yet be drawn.

19.0 MARKET STUDIES AND CONTRACTS

19.1 Market Studies

Goldcorp's bullion is sold on the spot market by Goldcorp's in-house marketing experts. The terms contained within the sales contracts are typical of and consistent with standard industry practices, and are similar to supply contracts elsewhere in the world.

19.2 Commodity Price Projections

Commodity prices used for Mineral Resource and Mineral Reserve estimates are set by Goldcorp Corporate.

19.3 Comment on Section 19

In the opinion of the QP, doré production from the Éléonore Operations is marketed in a similar manner to, and use similar sales contracts to, that of existing Goldcorp operations.

20.0 ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL OR COMMUNITY IMPACT

20.1 Baseline Studies

Goldcorp has completed baseline studies in support of the Strategic Environmental Assessment (SEA; or ESIE in French) and is carrying out continuous monitoring studies to support project permitting and various commitments. Studies, undertaken by third-party consultants, are addressing the following aspects:

- Soil;
- Hydrology;
- Surface water quality and sediment;
- Hydrogeology and groundwater quality;
- Air and climate;
- Noise and vibration;
- Vegetation;
- Wetlands;
- Wildlife;
- Fishes and fish habitat;
- Land use and resources;
- Archaeology;
- Landscape;
- Socio-economics.

The studies include documentation of the existing baseline for each aspect in the list above, considerations of the impact of the mining operational phase, and considerations relating to reclamation and closure when operations cease.

20.2 Environmental Considerations

For the Éléonore Operations, the major issues identified include the potential impacts on the environment, the proper management of tailings and waste water, access (roads, airports), social acceptability and management of the post-reclamation site.

Goldcorp is of the opinion that these issues have been addressed and mitigated through a combination of baseline data collection, appropriate engineering and project design studies, and public consultation.

20.3 Waste Rock Storage

A waste/ore rock pad, with a volume of approximately 1 Mm^3, was built for stockpiling rocks to support underground development activities and provide ore inventory for the process plant commissioning. Another waste rock pad of about 1 Mm^3 was built into the tailings management facility to support the underground development during the ramp-up period. Because waste rock has an acid drainage and arsenic leaching potential, the waste rock pad was completely lined with a high density polyethylene (HDPE) liner. Water that has been in contact with waste rock is collected in retention basins and treated before being released to the environment.

Over the LOM, approximately 11 Mt of waste is expected to be produced. Some of this material may be stored in a temporary tailings facility, or on an expanded waste rock facility. However, by the end of the mining operation, all waste will have been consumed in backfill and returned underground.

20.4 Tailings Facility

The tailings area is fully lined and will store about 26 Mt of filtered tailings at 85% solids over the expected life of mine. The filtered tailings are trucked 5 km to the tailings area, which has an overall surface area of 80 ha. The filtered tailings offer a great potential for progressive restoration and support a significant reduction of risk of dike or dam failure.

The following residues will be stored in the tailings area:

- Non-sulphide residues;
- Waste rock (temporary storage, approximately 2 Mt from year 0 to 10).

The non-sulphide ore residues are considered non acid-generating. Arsenic was formerly identified as a risk element; however, a new static leaching test confirms that arsenic can be leached from the residues, as well as copper and iron. The kinetic leaching test on the residues, after 24 weeks, reveals that there is little arsenic, iron and copper in the water after it came into contact with the residues.

All the water in contact with the tailings area is contained and pumped to the water treatment plant. As per the environmental ministry D019 directive, the water management facility in the tailings area has to be designed to take into account the following:

- A 1:100 year snowfall event, melting over a 30-day period;

- A 1:100 year 24-hour rainfall event during that period.

Under the average annual rainfall scenario (i.e. 1:2 year), water will be pumped out of the tailings area over a total of 74 days per year. No water will be pumped from the tailings area during the winter months. In the spring period, during the snow thaw, it is expected that water will be pumped continuously for 15 to 30 days. In the summer period, the water will be pumped intermittently.

An evaluation of the leaching test data on the waste rock is underway. This study is being undertaken to estimate the quality of the tailings area runoff water based on the mixing of run-off coming into contact with waste rock and the non-sulphide residues.

20.5 Water Management

20.5.1 Potable Water for Campsite and Industrial Area

The drinking water supply for the campsite and industrial area is presently drawn from four existing wells. The wells are located 1.2 km northeast of the campsite.

20.5.2 Wastewater Collection and Treatment

Wastewater is collected by a gravity sewer network. The wastewater will then be pumped to the treatment system via the sewage pumping station. The existing pumping station has a capacity of 2,160 m^3/day.

20.5.3 Industrial Effluent Water Collection and Treatment

Design of the water treatment plant (WTP) is based on a conceptual operating life of 20 years and allows for a possible expansion considering the uncertainty surrounding the volume of water that will be pumped from the mine. The WTP includes the water treatment system, pumps and all the collection basins required to store and manage the site runoff water, process water and the mine water.

Mine Water

Arsenic and iron are present in sampled mine shaft waters to a depth of 300 m; however, these contaminants are primarily present in the form of suspended solids. Additional water sampling will be required from deeper levels of the shaft.

Process Water

Based on the preliminary water balance of process water, the flow of process water sent to the WTP is 4.9 m^3/hr (118 m^3/day) when the paste backfill plant is not in service, which will occur intermittently. This flow represents the excess of process water when the process plant is at steady state. The process water purge will be done discontinuously.

When the paste backfill plant is in service, it is planned to have no process effluent sent to the WTP. The paste backfill plant availability is 60%. Therefore, 40% of the time, the backfill plant will be offline and a process water purge will be sent to the WTP.

Additional tests were conducted on the process water. As part of the testing, water samples were taken from the overflows of the flotation concentrate thickener, the flotation tailings thickener, the sulphide tailings thickener and the non-sulphide tailings thickener. The data collected indicate the presence of ammonium nitrate in the process water. Pilot plant testing is currently underway to reduce the presence of this compound in the process water.

Industrial Zone Runoff

Water that comes into contact with the industrial zone will be captured and sent to the WTP. Two collecting ponds were built to collect the runoff water before the discharge to the environment

20.6 Closure Plan

A mining reclamation plan was prepared under the requirements of the Mining Act of Québec and approved by the MNR on November 28, 2013.

The closure and reclamation plan incorporates the following components:

- Demolition of buildings, pipelines and power lines (if they cannot be transferred);
- Closure of underground mine openings by capping the ventilation and production shafts, and the ramp access;
- Rehabilitation of accumulation areas, including tailings and settling ponds;
- Dismantling of buildings, infrastructure, equipment and sanitation;
- Removal of machinery, equipment, storage containers and construction waste;
- Safe removal and disposal of chemical products, petroleum and other hazardous waste;
- Reclamation of sand pits;
- Reforestation of paths and flat surfaces;
- Treatment of contaminated soils;
- Monitoring the physical and chemical stability of the site after closure;
- Preparing a report on the state of the site at the end of the work.

The reclamation work program as envisaged in the plan will take place over a period of about two to three years (excluding on-going monitoring) after completion of mining activities. The estimated cost of reclamation is C$40.1 million.

Under the Mining Act of Quebec, a bond, in the form of a bank letter-of-guarantee, must be submitted to the MNR. The amount of guarantee must cover, after a period of three years, 100% of the reclamation costs:

- Year 1 at 50% + Year 2 at 25% + Year 3 at 25% = 100%.

As Goldcorp chose to file the entire amount in Year 1, a bond of C$40.1 million was sent to the MNR in February 2014. The bond and bond amount are still current. Unless Goldcorp requests an earlier review, the next formal review of the closure cost estimate and bonding provisions would be in 2018.

20.7 Permitting

The Éléonore Operations were removed from the federal review process but were subject to Provincial review under Chapter II of the Environmental Quality Act (EQA) for a project north of the 49th parallel. An ESIA has been completed, and has been subject to consultation with the Cree Nation, local communities and the general public.

The Global Certificate of Approval under Chapter II of EQA was issued to the operations on November 10, 2011. The Certificate of Approval under Chapter I of the EQA for all infrastructures have been released.

If needed during the operations phase, other applications for Certificates of Approval would be submitted to the appropriate ministries.

The mining lease from the MNR was granted on February 21, 2014. Quarry and sandpit licence applications for borrow materials can also be lodged if an update of a lease is needed during the current year.

Key permits identified to date are summarized in Table 20-1. Where an application has been made for the permits, this is noted in the table.

20.8 Considerations of Social and Community Impacts

20.8.1 First Nations

The Éléonore Operations are located on traditional family territories of the Cree Nation of Wemindji, and within the Municipality of Eeyou–Isthee–James Bay. Both are part of the administrative region of Nord-du-Québec (Region 10).

The operations are located entirely in Cree territory, or Eeyou Istchee, on Category III lands belonging to the Quebec Government and subject to the James Bay and Northern Quebec Agreement (JBNQA).

Table 20-1: Key Permits and Authorizations Required For Project Construction and Operation

Department Responsible	Permit or Approval	Status
Ministry of Natural Resources (MRN)	Quarries and sand pit exploration (sites for the construction of the road and mining infrastructure)	Received
	Lands use permits (lease)	Received
	Mining exploitation lease	Received
Ministry of Sustainable Development and Parks (MSDEP)	Reclamation plan approval	Approved
	Chapter II of EAQ	
	Global Certificate of Approval	Received (Modifications were done)
	Certificated of Approval for construction of the road	Received
	Certificates of Approval for borrow pit and quarry >3 ha	Received
	Chapter I of EAQ	
	Certificated of Approval for production shaft and power	Received
	Tailings management facility construction	Received
	Tailings management facility operation	Received
	Industrial water treatment	Received
	Process mill construction	Received
	Process mill operation and ore extraction	received
	Waste rock pad	Received
	Drinking water pumping	Received
	Sewage water pumping	Received
Municipality	Small sewage water treatment (device installation)	Received
	Small drinking water pumping	Received
	Construction permit	Received

The JBNQA plays a key role in the organization of the territory and its contemporary use by the Cree. The territory of James Bay is subdivided into three land categories. Under Category I and II lands, the Cree Nation has exclusive hunting, fishing and trapping rights. In Category III lands, Cree peoples have exclusive rights to harvest certain species of wildlife as well as conduct trapping activities. Each hunting area has a tallyman.

The Éléonore Operations are located on portions of Cree trapline territories VC 22, VC 28, and VC 29 that collectively constitute the traditional territory of Wemindji.

A collaboration agreement was signed with the Cree Nation of Wemindji in February 2011.

20.8.2 Community Consultations

During the ESIA process, public consultations were held in the communities of Wemindji and Chibougamau.

20.8.3 Archaeology

Heritage and archaeological studies have been conducted in the proposed mine area, and a total of 30 areas with archaeological potential have been identified. Of these, 11 areas have been subject to archaeological inventory during two separate programs conducted in 2007 and 2009. A number of likely heritage/archaeological sites were identified, and such sites were protected during Project construction and will continue to be protected during operation.

20.9 Comments on Section 20

There has been a focused effort to collect comprehensive environmental baseline data and lay the groundwork with local and regulatory stakeholders for the successful permitting, development and operation of the mine.

Goldcorp is of the opinion that environmental issues identified in relation to Project development have been, or can be, addressed and mitigated through a combination of baseline data collection, appropriate engineering and Project design studies, and public consultation.

Goldcorp has been granted the global Certificate of Approval for the Project.

Key issues for Project development and operations include the proper management of tailings and waste water, access (roads, airports), social acceptability and post-reclamation management.

Closure costs are estimated at C$40.1 million, which includes a provision for dismantling and removal of infrastructure, remediation of water ponds, the tailings storage facility and waste rock facility, soil and waste management, indirect cost, post-closure monitoring and contingency.

21.0 CAPITAL AND OPERATING COSTS

21.1 Capital Cost Estimate

Exploration expenditures were not included in the financial analysis. Exploration drilling will be performed in the future to target mineralization that may lead to an increase in Mineral Resources. Because these future exploration drilling expenditures do not pertain to the current Mineral Reserves, they were not included in the financial model.

Capital costs are based on the latest mine construction data and budgetary figures and quotes provided by suppliers. Capital cost estimates include funding for infrastructure, mobile equipment, development and permitting, and miscellaneous costs. Infrastructure requirements were incorporated into the estimates as needed. Sustaining capital costs reflect current price trends.

The sustaining and expansionary capital cost estimates are included as Table 21-1.

21.2 Operating Cost Estimates

Operating costs were estimated by Goldcorp personnel, and are based on the 2015 LOM budget. Labour cost estimation is based on Goldcorp's 2015 salary scale and fringe benefits in force. Mining consumables are based on 2015 costs and contracts and the costs for future operation consumables, such as mill reagents, and grinding media, are based on recent supplier quotations.

The Éléonore Operations are located at a remote site. Costs for camp accommodation, meals, employee travel, and site security were included in the general and administrative (G&A) component of the estimate.

The operating cost estimate over the LOM is presented in Table 21-2 and includes allocations for processing and overhead costs.

An average overall unit cost of US$100.42/t was estimated, comprising US$31.22/t for processing, including backfill and tailings treatment and transportation, US$45.60/t for mining, and US$23.60/t for G&A.

21.3 Comments on Section 21

The capital cost estimates are based on a combination of quotes, vendor pricing, and Goldcorp's experience with similar-sized operations. The capital cost estimates include direct and indirect costs.

Operating costs were based on estimates from first principles for major items; the costs include allowances or estimates for minor costs.

Table 21-1: Capital Cost Estimate

Area	Life-of-Mine (US$ million)
Sustaining	416
Expansionary	98
Grand Total	***514***

Note: totals may not sum due to rounding.

Table 21-2: Operating Cost Estimate

Area	Life-of-Mine (US$/t)
Process Plant	31.22
Mining Operations	45.60
General & Administration	23.60
Grand Total	***100.42***

22.0 ECONOMIC ANALYSIS

Goldcorp is using the provision for producing issuers, whereby producing issuers may exclude the information required under Item 22 for technical reports on properties currently in production.

Mineral Reserve declaration is supported by a positive cashflow.

22.1 Comments on Section 22

The operations demonstrate positive economics over the life-of mine.

23.0 ADJACENT PROPERTIES

This section is not relevant to this Report.

24.0 OTHER RELEVANT DATA AND INFORMATION

This section is not relevant to this Report.

25.0 INTERPRETATION AND CONCLUSIONS

25.1 Introduction

In the opinion of the responsible QPs, the following interpretations and conclusions are appropriate to the current status of the Project.

25.2 Mineral Tenure, Surface Rights, Agreements, and Royalties

- Information from legal experts and Goldcorp's in-house experts support that the mining tenure held is valid and sufficient to support a declaration of Mineral Resources and Mineral Reserves;
- Mineral claims are not surveyed; this is in accordance with appropriate regulatory requirements. Annual claim-holding fees have been paid to the relevant regulatory authority;
- A mining lease was granted in February 2014;
- The surface rights are held by Les Mines Opinaca Ltée;
- The Roberto deposit is located under the Opinaca Reservoir; water levels within the reservoir are controlled by Hydro-Québec;
- A sliding-scale royalty is payable to Osisko Gold, and is capped at 3.5%. Advance royalty payments commenced in April 2009;
- An annual payment is due to the Cree Nation under the collaborative agreement;
- Permits obtained by the company to explore and undertake project development are sufficient to ensure that activities are conducted within the regulatory framework required by the local, provincial and federal governments.

25.3 Geology and Mineralization

- Knowledge of the deposit settings and lithologies, as well as the structural and alteration controls on mineralization and the mineralization style and setting, is sufficient to support Mineral Resource and Mineral Reserve estimation;
- The Roberto deposit is considered to be an example of a clastic sediment-hosted stockwork-disseminated gold deposit in an orogenic setting.

25.4 Exploration, Drilling and Data Analysis

- The exploration programs completed to date are appropriate for the style of the Roberto deposit and prospects on the Project;

- Sampling methods are acceptable for Mineral Resource and Mineral Reserve estimation;
- Sample preparation, analysis and security are generally performed in accordance with exploration best practices and industry standards;
- The quantity and quality of the lithological, geotechnical, collar and down-hole survey data collected during the exploration and delineation drilling programs are sufficient to support Mineral Resource and Mineral Reserve estimation. The collected sample data adequately reflect deposit dimensions, true widths of mineralization, and the style of the deposits. Sampling is representative of the gold grades in the deposits, reflecting areas of higher and lower grades;
- The QA/QC programs adequately address issues of precision, accuracy and contamination. Drilling programs typically included blanks, duplicates and SRM samples. QA/QC submission rates meet industry-accepted standards. The QA/QC programs did not detect any material sample biases;
- The data verification programs concluded that the data collected from the Project adequately support the geological interpretations and constitute a database of sufficient quality to support the use of the data in Mineral Resource and Mineral Reserve estimation;
- Additional exploration potential remains within the Roberto deposit at depth. Other targets have been identified around the Roberto deposit, including the HWV, NZ and the 494 areas. Little exploration has been undertaken outside the immediate area of the Roberto deposit, and the Project area retains exploration potential.

25.5 Metallurgical Testwork

- Metallurgical testwork and associated analytical procedures were performed by recognized testing facilities, and the tests performed were appropriate to the type of mineralization;
- Samples selected for testing were representative of the various types and styles of mineralization on the Roberto deposit. Samples were selected from a range of depths within the Roberto deposit. Sufficient samples were taken to ensure that tests were performed on sufficient sample mass;
- LOM gold recovery assumptions are based on appropriate testwork, and are expected to average 93.0–93.5% over the LOM;
- Deleterious elements are present in the deposit and must be accommodated in the process design.

25.6 Mineral Resource Estimation

- The Mineral Resource estimation for the Project conforms to industry best practices and meets the requirements of CIM (2014);
- Key areas of uncertainty that may materially impact the Mineral Resource estimate include: geological complexity including folding and faulting of vein material between drill hole intercepts, commodity price assumptions; metal recovery assumptions; hydrological constraints; and rock mechanics (geotechnical) constraints;
- There is upside potential for the estimates if mineralization that is currently classified as Inferred can be upgraded to higher-confidence Mineral Resource categories. Core drilling is currently underway in support of potential confidence category upgrades.

25.7 Mineral Reserve Estimation

- The Mineral Reserve estimation for the Project incorporates industry best practices and meets the requirements of CIM (2014);
- Mineral Resources were converted to Mineral Reserves using appropriate modifying factors. These included the consideration of dilution, mining widths, ore losses, mining extraction losses, appropriate underground mining methods, metallurgical recoveries, permitting and infrastructure requirements;
- Factors that can affect the Mineral Reserve estimates include:
  - Geological complexity causing under estimation of dilution;
  - Deviations in drill holes necessary to support production may cause more dilution;
  - Stope dilution and recovery factors that are based on assumptions that will be reviewed after mining experience; stope stability is also an important factor with some stopes having considerable span and thickness;
  - More water infiltration from the surface or underground than expected;
  - In situ stress in the rock;
  - Rock burst;
  - Paste backfill strength;
  - Low recovery at the mill because of a possible change in the hardness of the rock or mineralogical characteristics;
  - Changes in commodity price and exchange rate assumptions;
  - Changes to mining cost assumptions.

25.8 Mine Plan

- Mining operations can be conducted year-round;
- The mine plan was developed by Goldcorp personnel. The mining methods are long-hole stoping (down-hole drilling) on longitudinal retreat with consolidated backfill (paste backfill mixed with crushed waste rock) and transverse stoping approach where the mineralized lens is wider;
- Operations are accessed using a surface ramp and shaft. The production rate will be about 5,000 t/d in 2016, and will reach 7,000 t/d by mid-2018;
- The proposed mine life is 12 years;
- No mining is planned above 65 m below surface in order to mitigate risks associated with potential water inflow from the Opinaca Reservoir and to respect preliminary recommendations for the surface crown pillar;
- Due to the presence of open subhorizontal decompression joints encountered mainly within the first 250 m below surface couple with the proximity of the reservoir, the management of ground water infiltration is considered paramount for successful project implementation;
- As part of day-to-day operations, Goldcorp will continue to undertake reviews of the mine plan and consideration of alternatives to and variations within the plan. Alternative scenarios and reviews may be based on ongoing or future mining considerations, evaluation of different potential input factors and assumptions, and corporate directives.

25.9 Process Plan

- The process design is based on a conventional gold plant flowsheet consisting of three stages of crushing, grinding, gravity concentration, sulphide flotation, leaching flotation tails and concentrate, CIP and electrowinning circuit. The mill was designed to operate 365 days/year with a design capacity of 2.55 Mt of ore per year (7,000 t/d);
- Tailings are filtered at the mill, and are trucked to the tailings area;
- The tailings facilities is completely lined, and all water coming into contact with the tailings is collected and treated. The surface area of the exposed tailings will be kept to a minimum through the use of filtered tailings, which allows for progressive reclamation. The tailings design envisions a storage capacity of 26 Mt. This is sufficient for the current LOM;

- The majority of non-sulphide tailings and sulphides concentrate and all waste rocks will be returned to the underground operation in the form of backfill.

25.10 Infrastructure Considerations

- Since October 2014, Éléonore has been an operating project and key infrastructure on site includes the underground mine, sample and process plants, waste rock storage and tailings storage facilities, ancillary buildings, pump stations, electrical systems, quarry site, camp pads and laydowns, ore storage pads, roads, culverts and bridges, airstrip, and mobile equipment;
- The existing and planned infrastructure; staff availability; existing power, water, and communications facilities; the methods whereby goods will be transported to the mine; and any planned modifications or supporting studies are all well-established, or the requirements to establish such are well understood by Goldcorp and can support the disclosure of Mineral Resources and Mineral Reserves.

25.11 Markets and Contracts

- Goldcorp's bullion, including production from Éléonore, is sold on the spot market by Goldcorp's in-house marketing experts;
- The terms contained within the existing sales contracts are typical and consistent with standard industry practices, and are similar to contracts for the supply of doré elsewhere in the world.

25.12 Environmental, Social Issues and Permitting

25.12.1 Environment

- Goldcorp's team of on-site environmental experts will need to be continuously monitoring regulatory compliance in terms of approvals, permits, and observance of directives and requirements;
- There has been a focused effort to collect comprehensive environmental baseline data and lay the groundwork with local and regulatory stakeholders for the successful permitting and development of the Project;
- Closure costs are estimated at C$40.1 M, which includes provisions for dismantling and removal of infrastructure; the remediation of water ponds, the tailings storage facility and the waste rock facility; soil and waste management; indirect costs; and post- closure monitoring and contingency.

25.12.2 Community

- Goldcorp has undertaken community consultation with the communities of Wemindji and Chibougamau;
- A Collaboration Agreement has been signed with the Grand Council of the Crees (Eeyou Istchee), the Cree Regional Authority and the Cree Nation of Wemindji, and an economic partnership agreement has been concluded with the local communities of the James Bay region.

25.12.3 Permitting

- Goldcorp has been granted a Global Certificate of Approval for the Project. Subsequently, many other Certificates of Approval were also granted under Chapter I of the Environmental Quality Act., which allows the company to proceed with the construction and operation of various infrastructure elements;
- Key issues for operations include the proper management of tailings and waste water, access (roads, airports), social acceptability and post-reclamation management.

25.13 Capital and Operating Cost Estimates

- The capital cost estimates are based on a combination of quotes, vendor pricing, and Goldcorp experience with similar-sized operations;
- Capital costs total US$514 million, comprising US$416 million of sustaining capital and US$98 million of expansionary capital.
- An average unit operating cost of US$100.42/t was estimated over the life-of-mine.

25.14 Financial Analysis

- Using the assumptions detailed in this Report, the Éléonore Operations have positive economics until the end of the mine life documented in the Mineral Reserves mine plan, which supports Mineral Reserve estimation.

25.15 Conclusions

- In the opinion of the responsible QPs, the Éléonore Operations that are outlined in this Report have met corporate objectives in that Mineral Resources and Mineral Reserves have been estimated, and a mine has been constructed;
- Attention will need to be paid during the commissioning and early operational phases to ensure that the assumptions made in the mine plan are reflected in the actual operations. A review of operating performance, including review of all underlying

assumptions, together with mining, plant, budget and reconciliation performance, should be undertaken once there are sufficient meaningful data to assess the mine and plant performance;

- Inferred Mineral Resources above the cutoff grade were treated as "waste" in this evaluation. This mineralization represents upside potential for the Éléonore Operations if some or all of the Inferred Mineral Resources identified within the LOM production plan can be upgraded to higher-confidence Mineral Resource categories, and eventually to Mineral Reserves.

26.0 RECOMMENDATIONS

26.1 Introduction

Recommendations put forward are for a single-phase work program.

In order to continue with development and prepare for the production phase, intensive exploration and delineation drilling must be performed. The first objective of the drilling will be to support potential conversion of Mineral Resources to Mineral Reserves. Drilling at depth and laterally is also required to identify mineralization that may support estimation of additional Mineral Resources.

The suggested program involves a rate of approximately 25,000 m per year of exploration drilling to test the deposit's extensions and provide sufficient drill spacing to potentially support Mineral Resource estimates, another 50,000 m per year of infill drilling (at 25 m spacing) to potentially support conversion of Indicated Mineral Resources to Probable Mineral Reserves, and approximately 100,000 m per year of final delineation or definition drilling (production drilling at 12.5 m spacing) for stope delineation. This amounts to a total of 175,000 m of drilling per year, representing an estimated annual budget of US$18.75 million.

26.2 Exploration Drilling

Drilling has identified additional exploration potential within the Roberto area.

- In the HWV area, 8,000 m of surface drilling is proposed at a total cost of US$1.0 million, to support a potential Mineral Resource estimate of the mineralization in the exploration ramp. The HWV shear and alteration zones were identified near the shaft, and the zones may become accessible during mine development activities.
- In the NZ area, mineralization crops out at surface and may represent a potential open pit target. Additional drilling is warranted, totalling an estimated US$1.5 million for 10,000 m;
- In the 494 area, 8,000 m of underground drilling is proposed at a total cost of US$1.3 million to drill-test a potential mineralized corridor located between the 494 area and a surface showing (Trench #10) that has similar mineralized features.

27.0 REFERENCES

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APPENDIX A:

Mineral Tenure Table

Status	Claim Number	Title Type	Registration Date	Expiration Date	Completion Number	Renewal Number	Area (ha)	Relative Acts	Exceed (C$)	Work Required (C$)	Right Required ($C)	Owners (name, number and % interest)	Renewal Pending	Work in Progress	Title Transfer	Conversion/Substitution of Claims	Fusion of Claims
Active	6648	CDC	12-11-2003 0:00	11-11-2017 23:59	0	6	52.21	Yes	$256.63	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	Yes	No	Yes	No	No
Active	6649	CDC	12-11-2003 0:00	11-11-2017 23:59	0	6	52.21	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	6650	CDC	12-11-2003 0:00	11-11-2017 23:59	0	6	52.2	Yes	$256.63	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	6651	CDC	12-11-2003 0:00	11-11-2017 23:59	0	6	52.2	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	6652	CDC	12-11-2003 0:00	11-11-2017 23:59	0	6	52.19	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	6653	CDC	12-11-2003 0:00	11-11-2017 23:59	0	6	52.19	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	6654	CDC	12-11-2003 0:00	11-11-2017 23:59	0	6	52.19	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	6655	CDC	12-11-2003 0:00	11-11-2017 23:59	0	6	52.19	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	6656	CDC	12-11-2003 0:00	19-11-2018 23:59	0	6	51.97	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	6657	CDC	12-11-2003 0:00	18-11-2016 23:59	0	5	43.24	Yes	$822.81	$1,170.00	$110.16	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	6658	CDC	12-11-2003 0:00	18-11-2016 23:59	0	5	35.99	Yes	$108,874.35	$1,170.00	$110.16	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	6659	CDC	12-11-2003 0:00	18-11-2016 23:59	0	5	42.14	Yes	$4,206.10	$1,170.00	$110.16	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	6660	CDC	12-11-2003 0:00	11-11-2017 23:59	0	6	52.19	Yes	$372.62	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	6661	CDC	12-11-2003 0:00	11-11-2017 23:59	0	6	52.19	Yes	$1,915.99	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	6662	CDC	12-11-2003 0:00	11-11-2017 23:59	0	6	52.19	Yes	$124.88	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	6663	CDC	12-11-2003 0:00	11-11-2017 23:59	0	6	52.19	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	6664	CDC	12-11-2003 0:00	11-11-2017 23:59	0	6	52.19	Yes	$256.39	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	6665	CDC	12-11-2003 0:00	11-11-2017 23:59	0	6	52.19	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13124	CDC	13-02-2004 0:00	12-02-2018 23:59	0	6	52.23	Yes	$1,121.57	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13125	CDC	13-02-2004 0:00	12-02-2018 23:59	0	6	52.23	Yes	$344.08	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13126	CDC	13-02-2004 0:00	12-02-2018 23:59	0	6	52.22	Yes	$1,305.33	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13127	CDC	13-02-2004 0:00	12-02-2018 23:59	0	6	52.22	Yes	$1,345.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13150	CDC	12-02-2004 0:00	11-02-2018 23:59	0	6	52.32	Yes	$911.42	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13151	CDC	12-02-2004 0:00	11-02-2018 23:59	0	6	52.32	Yes	$287.31	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13152	CDC	12-02-2004 0:00	11-02-2018 23:59	0	6	52.32	Yes	$274.08	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13153	CDC	12-02-2004 0:00	11-02-2018 23:59	0	6	52.32	Yes	$473.31	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13154	CDC	12-02-2004 0:00	11-02-2018 23:59	0	6	52.32	Yes	$167.86	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13155	CDC	12-02-2004 0:00	11-02-2018 23:59	0	6	52.32	Yes	$353.86	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13156	CDC	12-02-2004 0:00	11-02-2018 23:59	0	6	52.32	Yes	$367.08	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13157	CDC	12-02-2004 0:00	11-02-2018 23:59	0	6	52.32	Yes	$247.64	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13164	CDC	12-02-2004 0:00	11-02-2018 23:59	0	6	52.31	Yes	$97.71	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13165	CDC	12-02-2004 0:00	11-02-2018 23:59	0	6	52.31	Yes	$460.08	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13166	CDC	12-02-2004 0:00	11-02-2018 23:59	0	6	52.31	Yes	$125.86	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13167	CDC	12-02-2004 0:00	11-02-2018 23:59	0	6	52.31	Yes	$56.98	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13168	CDC	12-02-2004 0:00	11-02-2018 23:59	0	6	52.31	Yes	$818.86	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13169	CDC	12-02-2004 0:00	11-02-2018 23:59	0	6	52.31	Yes	$313.75	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13170	CDC	12-02-2004 0:00	11-02-2018 23:59	0	6	52.31	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13171	CDC	12-02-2004 0:00	11-02-2018 23:59	0	6	52.31	Yes	$473.31	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13172	CDC	12-02-2004 0:00	11-02-2018 23:59	0	6	52.31	Yes	$48.41	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13173	CDC	12-02-2004 0:00	11-02-2018 23:59	0	6	52.31	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13174	CDC	12-02-2004 0:00	11-02-2018 23:59	0	6	52.31	Yes	$61.64	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13175	CDC	12-02-2004 0:00	11-02-2018 23:59	0	6	52.31	Yes	$513.41	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13176	CDC	12-02-2004 0:00	11-02-2018 23:59	0	6	52.31	Yes	$872.19	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13177	CDC	12-02-2004 0:00	11-02-2018 23:59	0	6	52.31	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13182	CDC	12-02-2004 0:00	11-02-2018 23:59	0	6	52.3	Yes	$526.20	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13183	CDC	12-02-2004 0:00	11-02-2018 23:59	0	6	52.3	Yes	$2,079.45	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13184	CDC	12-02-2004 0:00	11-02-2018 23:59	0	6	52.3	Yes	$1,230.09	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13185	CDC	12-02-2004 0:00	11-02-2018 23:59	0	6	52.3	Yes	$446.86	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13186	CDC	12-02-2004 0:00	11-02-2018 23:59	0	6	52.3	Yes	$566.31	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No

Status	Claim Number	Title Type	Registration Date	Expiration Date	Completion Number	Renewal Number	Area (ha)	Relative Acts	Exceed (C$)	Work Required (C$)	Right Required ($C)	Owners (name, number and % interest)	Renewal Pending	Work in Progress	Title Transfer	Conversion/Substitution of Claims	Fusion of Claims
Active	13187	CDC	12-02-2004 0:00	11-02-2018 23:59	0	6	52.29	Yes	$499.75	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13188	CDC	12-02-2004 0:00	11-02-2018 23:59	0	6	52.29	Yes	$367.08	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13189	CDC	12-02-2004 0:00	11-02-2018 23:59	0	6	52.29	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13190	CDC	12-02-2004 0:00	11-02-2018 23:59	0	6	52.29	Yes	$935.57	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13191	CDC	12-02-2004 0:00	11-02-2018 23:59	0	6	52.28	Yes	$154.64	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13192	CDC	12-02-2004 0:00	11-02-2018 23:59	0	6	52.28	Yes	$858.09	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13193	CDC	12-02-2004 0:00	11-02-2018 23:59	0	6	52.28	Yes	$579.53	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13194	CDC	12-02-2004 0:00	11-02-2018 23:59	0	6	52.28	Yes	$1,613.01	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13195	CDC	12-02-2004 0:00	11-02-2018 23:59	0	6	52.27	Yes	$128.19	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13196	CDC	12-02-2004 0:00	11-02-2018 23:59	0	6	52.27	Yes	$181.08	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13197	CDC	12-02-2004 0:00	11-02-2018 23:59	0	6	52.27	Yes	$2,211.80	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13680	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.3	Yes	$353.86	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13681	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.3	Yes	$287.31	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13682	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.3	Yes	$1,058.84	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13683	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.3	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13684	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.3	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13685	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.3	Yes	$1,111.08	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13686	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.3	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13687	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.3	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13688	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.3	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13689	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.3	Yes	$725.86	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13690	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.3	Yes	$48.41	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13691	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.3	Yes	$808.81	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13694	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.29	Yes	$1,028.57	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13695	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.29	Yes	$1,108.34	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13696	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.29	Yes	$221.19	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13697	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.29	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13698	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.29	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13699	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.29	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13700	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.29	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13701	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.29	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13702	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.29	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13703	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.29	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13704	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.29	Yes	$184.64	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13705	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.29	Yes	$513.41	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13706	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.29	Yes	$141.41	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13707	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.29	Yes	$433.64	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13710	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.28	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13711	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.28	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13712	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.28	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13713	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.28	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13714	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.28	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13715	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.28	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13716	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.28	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13717	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.28	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13718	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.28	Yes	$100.57	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13719	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.28	Yes	$53.08	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13720	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.28	Yes	$13.01	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13721	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.28	Yes	$180.31	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13722	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.28	Yes	$419.64	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13723	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.28	Yes	$38.31	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No

Status	Claim Number	Title Type	Registration Date	Expiration Date	Completion Number	Renewal Number	Area (ha)	Relative Acts	Exceed (C$)	Work Required (C$)	Right Required ($C)	Owners (name, number and % interest)	Renewal Pending	Work in Progress	Title Transfer	Conversion/Substitution of Claims	Fusion of Claims
Active	13726	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.27	Yes	$4,025.85	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13727	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.27	Yes	$1,483.15	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13728	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.27	Yes	$1,426.80	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13729	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.27	Yes	$799.82	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13730	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.27	Yes	$667.91	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13731	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.27	Yes	$451.03	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13732	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.27	Yes	$278.80	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13733	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.27	Yes	$109.55	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13734	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.27	Yes	$201.94	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13735	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.27	Yes	$0.57	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13736	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.27	Yes	$11.80	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13737	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.27	Yes	$17.08	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13738	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.27	Yes	$53.08	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13739	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.27	Yes	$221.19	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13742	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.26	Yes	$465.53	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13743	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.26	Yes	$951.53	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13744	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.26	Yes	$1,711.04	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13745	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.26	Yes	$9.50	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13746	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.26	Yes	$247.64	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13747	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.26	Yes	$93.53	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13748	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.26	Yes	$10.86	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13749	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.26	Yes	$473.31	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13752	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.25	Yes	$12.73	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13753	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.25	Yes	$1.54	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13754	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.25	Yes	$267.57	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13755	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.25	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13756	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.25	Yes	$208.72	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13757	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.25	Yes	$7.53	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13758	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.25	Yes	$8,158.31	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13759	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.25	Yes	$1,581.68	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13760	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.25	Yes	$1,382.45	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13761	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.25	Yes	$1,514.85	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13762	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.24	Yes	$1,718.66	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13763	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.24	Yes	$1,041.79	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13764	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.24	Yes	$1,520.01	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13765	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.24	Yes	$344.07	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13766	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.24	Yes	$344.07	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13767	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.24	Yes	$1,613.01	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13768	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.24	Yes	$526.64	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13787	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.25	Yes	$154.64	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13788	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.25	Yes	$1,028.58	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13789	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.24	Yes	$858.53	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	13790	CDC	26-02-2004 0:00	25-02-2018 23:59	0	6	52.24	Yes	$753.63	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	36736	CDC	14-09-2004 0:00	13-09-2016 23:59	0	5	52.21	Yes	$0.00	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	36737	CDC	14-09-2004 0:00	13-09-2016 23:59	0	5	52.21	Yes	$0.00	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	36738	CDC	14-09-2004 0:00	13-09-2016 23:59	0	5	52.21	Yes	$0.00	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	36739	CDC	14-09-2004 0:00	13-09-2016 23:59	0	5	52.2	Yes	$0.00	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	36740	CDC	14-09-2004 0:00	13-09-2016 23:59	0	5	52.2	Yes	$0.00	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	36741	CDC	14-09-2004 0:00	13-09-2016 23:59	0	5	52.2	Yes	$0.00	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	36742	CDC	14-09-2004 0:00	13-09-2018 23:59	0	6	52.2	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	36743	CDC	14-09-2004 0:00	13-09-2016 23:59	0	5	52.2	Yes	$0.00	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No

Status	Claim Number	Title Type	Registration Date	Expiration Date	Completion Number	Renewal Number	Area (ha)	Relative Acts	Exceed (C$)	Work Required (C$)	Right Required ($C)	Owners (name, number and % interest)	Renewal Pending	Work in Progress	Title Transfer	Conversion/Substitution of Claims	Fusion of Claims
Active	36744	CDC	14-09-2004 0:00	13-09-2016 23:59	0	5	52.2	Yes	$0.00	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	36745	CDC	14-09-2004 0:00	13-09-2016 23:59	0	5	52.2	Yes	$0.00	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	36746	CDC	14-09-2004 0:00	13-09-2016 23:59	0	5	52.19	Yes	$0.00	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	36747	CDC	14-09-2004 0:00	13-09-2016 23:59	0	5	52.19	Yes	$0.00	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	36748	CDC	14-09-2004 0:00	13-09-2016 23:59	0	5	52.19	Yes	$0.00	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	36749	CDC	14-09-2004 0:00	13-09-2018 23:59	0	6	52.19	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	36750	CDC	14-09-2004 0:00	13-09-2016 23:59	0	5	52.19	Yes	$0.00	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	36751	CDC	14-09-2004 0:00	13-09-2016 23:59	0	5	52.19	Yes	$0.00	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	36752	CDC	14-09-2004 0:00	13-09-2016 23:59	0	5	52.19	Yes	$0.00	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	36753	CDC	14-09-2004 0:00	13-09-2016 23:59	0	5	52.18	Yes	$0.00	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	36754	CDC	14-09-2004 0:00	13-09-2016 23:59	0	5	52.18	Yes	$0.00	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	36755	CDC	14-09-2004 0:00	13-09-2016 23:59	0	5	52.18	Yes	$0.00	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	36756	CDC	14-09-2004 0:00	13-09-2016 23:59	0	5	52.18	Yes	$0.00	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	36757	CDC	14-09-2004 0:00	13-09-2018 23:59	0	6	52.18	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	36758	CDC	14-09-2004 0:00	13-09-2018 23:59	0	6	52.18	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	36759	CDC	14-09-2004 0:00	13-09-2018 23:59	0	6	52.18	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	36760	CDC	14-09-2004 0:00	13-09-2018 23:59	0	6	52.18	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	36761	CDC	14-09-2004 0:00	13-09-2018 23:59	0	6	52.18	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	36762	CDC	14-09-2004 0:00	13-09-2018 23:59	0	6	52.18	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	36763	CDC	14-09-2004 0:00	13-09-2016 23:59	0	5	52.18	Yes	$0.00	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	36764	CDC	14-09-2004 0:00	13-09-2016 23:59	0	5	52.18	Yes	$0.00	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	36765	CDC	14-09-2004 0:00	13-09-2016 23:59	0	5	52.18	Yes	$0.00	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	36766	CDC	14-09-2004 0:00	13-09-2016 23:59	0	5	52.18	Yes	$0.00	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	36767	CDC	14-09-2004 0:00	13-09-2018 23:59	0	6	52.17	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	36768	CDC	14-09-2004 0:00	13-09-2018 23:59	0	6	52.17	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	36769	CDC	14-09-2004 0:00	13-09-2018 23:59	0	6	52.17	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	36770	CDC	14-09-2004 0:00	13-09-2018 23:59	0	6	52.17	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	36771	CDC	14-09-2004 0:00	13-09-2018 23:59	0	6	52.17	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	36772	CDC	14-09-2004 0:00	13-09-2018 23:59	0	6	52.17	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	36773	CDC	14-09-2004 0:00	13-09-2018 23:59	0	6	52.17	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	36774	CDC	14-09-2004 0:00	13-09-2018 23:59	0	6	52.17	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	36775	CDC	14-09-2004 0:00	13-09-2016 23:59	0	5	52.17	Yes	$0.00	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	36776	CDC	14-09-2004 0:00	13-09-2016 23:59	0	5	52.17	Yes	$0.00	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	36777	CDC	14-09-2004 0:00	13-09-2016 23:59	0	5	52.17	Yes	$0.00	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	36778	CDC	14-09-2004 0:00	13-09-2016 23:59	0	5	52.17	Yes	$0.00	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	36779	CDC	14-09-2004 0:00	13-09-2016 23:59	0	5	52.17	Yes	$1,220.88	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	36780	CDC	14-09-2004 0:00	13-09-2016 23:59	0	5	52.21	Yes	$0.00	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	36781	CDC	14-09-2004 0:00	13-09-2016 23:59	0	5	52.21	Yes	$1,220.88	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	36782	CDC	14-09-2004 0:00	13-09-2016 23:59	0	5	52.2	Yes	$0.00	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	36783	CDC	14-09-2004 0:00	13-09-2016 23:59	0	5	52.2	Yes	$1,220.88	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	36784	CDC	14-09-2004 0:00	13-09-2016 23:59	0	5	52.19	Yes	$0.00	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	36785	CDC	14-09-2004 0:00	13-09-2016 23:59	0	5	52.19	Yes	$1,121.88	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	36786	CDC	14-09-2004 0:00	13-09-2016 23:59	0	5	52.18	Yes	$0.00	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	36787	CDC	14-09-2004 0:00	13-09-2016 23:59	0	5	52.18	Yes	$1,121.88	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	36788	CDC	14-09-2004 0:00	13-09-2016 23:59	0	5	52.17	Yes	$923.88	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	36789	CDC	14-09-2004 0:00	13-09-2016 23:59	0	5	52.17	Yes	$1,814.88	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	38864	CDC	21-09-2004 0:00	20-09-2016 23:59	0	5	52.25	Yes	$1,778.69	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	38865	CDC	21-09-2004 0:00	20-09-2016 23:59	0	5	52.25	Yes	$1,413.81	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	38866	CDC	21-09-2004 0:00	20-09-2016 23:59	0	5	52.24	Yes	$1,792.75	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	38867	CDC	21-09-2004 0:00	20-09-2016 23:59	0	5	52.24	Yes	$2,089.74	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	38868	CDC	21-09-2004 0:00	20-09-2016 23:59	0	5	52.23	Yes	$1,495.75	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No

Status	Claim Number	Title Type	Registration Date	Expiration Date	Completion Number	Renewal Number	Area (ha)	Relative Acts	Exceed (C$)	Work Required (C$)	Right Required ($C)	Owners (name, number and % interest)	Renewal Pending	Work in Progress	Title Transfer	Conversion/Substitution of Claims	Fusion of Claims
Active	38869	CDC	21-09-2004 0:00	20-09-2016 23:59	0	5	52.23	Yes	$1,693.75	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	38870	CDC	21-09-2004 0:00	20-09-2016 23:59	0	5	52.22	Yes	$1,512.81	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	38871	CDC	21-09-2004 0:00	20-09-2016 23:59	0	5	52.22	Yes	$1,413.81	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	38872	CDC	21-09-2004 0:00	20-09-2016 23:59	0	5	52.21	Yes	$3,150.00	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	38873	CDC	21-09-2004 0:00	20-09-2016 23:59	0	5	52.21	Yes	$4,923.00	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	38874	CDC	21-09-2004 0:00	20-09-2016 23:59	0	5	52.2	Yes	$1,314.81	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	38875	CDC	21-09-2004 0:00	20-09-2016 23:59	0	5	52.2	Yes	$1,215.81	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	38876	CDC	21-09-2004 0:00	20-09-2016 23:59	0	5	52.19	Yes	$1,116.80	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	38877	CDC	21-09-2004 0:00	20-09-2016 23:59	0	5	52.19	Yes	$1,215.80	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	38878	CDC	21-09-2004 0:00	20-09-2016 23:59	0	5	52.18	Yes	$1,116.80	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	38879	CDC	21-09-2004 0:00	20-09-2016 23:59	0	5	52.18	Yes	$1,215.80	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	38880	CDC	21-09-2004 0:00	20-09-2016 23:59	0	5	52.17	Yes	$3,096.80	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	38881	CDC	21-09-2004 0:00	20-09-2016 23:59	0	5	52.17	Yes	$1,413.80	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	39452	CDC	21-09-2004 0:00	20-09-2016 23:59	0	5	52.21	Yes	$2,003.49	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	39453	CDC	21-09-2004 0:00	20-09-2016 23:59	0	5	52.21	Yes	$0.00	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	39454	CDC	21-09-2004 0:00	20-09-2016 23:59	0	5	52.21	No	$0.00	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	42180	CDC	04-10-2004 0:00	03-10-2016 23:59	0	5	52.22	Yes	$0.00	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	42181	CDC	04-10-2004 0:00	03-10-2016 23:59	0	5	52.22	Yes	$0.00	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	42182	CDC	04-10-2004 0:00	03-10-2016 23:59	0	5	52.22	Yes	$0.00	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	42183	CDC	04-10-2004 0:00	03-10-2016 23:59	0	5	52.21	Yes	$0.00	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	42184	CDC	04-10-2004 0:00	03-10-2016 23:59	0	5	52.21	Yes	$0.00	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	42185	CDC	04-10-2004 0:00	03-10-2016 23:59	0	5	52.21	Yes	$0.00	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	42186	CDC	04-10-2004 0:00	03-10-2016 23:59	0	5	52.21	Yes	$0.00	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	42187	CDC	04-10-2004 0:00	03-10-2016 23:59	0	5	52.21	Yes	$0.00	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	42188	CDC	04-10-2004 0:00	03-10-2016 23:59	0	5	52.21	Yes	$0.00	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	42189	CDC	04-10-2004 0:00	03-10-2016 23:59	0	5	52.2	Yes	$132.27	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	42190	CDC	04-10-2004 0:00	03-10-2016 23:59	0	5	52.2	Yes	$0.00	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	42191	CDC	04-10-2004 0:00	03-10-2016 23:59	0	5	52.2	Yes	$0.00	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	42192	CDC	04-10-2004 0:00	03-10-2016 23:59	0	5	52.2	Yes	$0.00	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	42193	CDC	04-10-2004 0:00	03-10-2016 23:59	0	5	52.2	Yes	$0.00	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	42194	CDC	04-10-2004 0:00	03-10-2016 23:59	0	5	52.2	Yes	$3,197.25	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	42195	CDC	04-10-2004 0:00	03-10-2016 23:59	0	5	52.2	Yes	$6,219.60	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	42196	CDC	04-10-2004 0:00	03-10-2016 23:59	0	5	52.2	Yes	$6,455.25	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	42197	CDC	04-10-2004 0:00	03-10-2016 23:59	0	5	52.2	Yes	$5,600.25	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	42308	CDC	04-10-2004 0:00	03-10-2016 23:59	0	5	52.25	Yes	$1,322.35	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	42309	CDC	04-10-2004 0:00	03-10-2016 23:59	0	5	52.25	Yes	$1,520.35	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	42310	CDC	04-10-2004 0:00	03-10-2016 23:59	0	5	52.24	Yes	$2,039.01	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	42311	CDC	04-10-2004 0:00	03-10-2016 23:59	0	5	52.24	Yes	$2,312.35	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	42312	CDC	04-10-2004 0:00	03-10-2016 23:59	0	5	52.23	Yes	$2,047.64	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	42313	CDC	04-10-2004 0:00	03-10-2016 23:59	0	5	52.23	Yes	$1,619.35	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	42314	CDC	04-10-2004 0:00	03-10-2016 23:59	0	5	52.22	Yes	$4,478.76	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	42315	CDC	04-10-2004 0:00	03-10-2016 23:59	0	5	52.22	Yes	$5,255.21	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	42316	CDC	04-10-2004 0:00	03-10-2016 23:59	0	5	52.21	Yes	$3,262.54	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	42317	CDC	04-10-2004 0:00	03-10-2016 23:59	0	5	52.21	Yes	$1,421.35	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	42318	CDC	04-10-2004 0:00	03-10-2016 23:59	0	5	52.2	Yes	$1,520.35	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	42319	CDC	04-10-2004 0:00	03-10-2016 23:59	0	5	52.2	Yes	$1,421.35	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	42320	CDC	04-10-2004 0:00	03-10-2016 23:59	0	5	52.19	Yes	$1,520.35	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	42321	CDC	04-10-2004 0:00	03-10-2016 23:59	0	5	52.19	Yes	$1,619.35	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	42322	CDC	04-10-2004 0:00	03-10-2016 23:59	0	5	52.18	Yes	$1,718.35	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	42323	CDC	04-10-2004 0:00	03-10-2016 23:59	0	5	52.18	Yes	$1,322.35	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	42324	CDC	04-10-2004 0:00	03-10-2016 23:59	0	5	52.17	Yes	$1,048.13	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	42325	CDC	04-10-2004 0:00	03-10-2016 23:59	0	5	52.17	Yes	$1,048.13	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No

Status	Claim Number	Title Type	Registration Date	Expiration Date	Completion Number	Renewal Number	Area (ha)	Relative Acts	Exceed (C$)	Work Required (C$)	Right Required ($C)	Owners (name, number and % interest)	Renewal Pending	Work in Progress	Title Transfer	Conversion/Substitution of Claims	Fusion of Claims
Active	42666	CDC	13-10-2004 0:00	12-10-2016 23:59	0	5	52.15	No	$1,018.29	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	43678	CDC	12-10-2004 0:00	11-10-2016 23:59	0	5	52.17	Yes	$1,265.68	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	43679	CDC	12-10-2004 0:00	11-10-2016 23:59	0	5	52.17	Yes	$1,265.68	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	42308	CDC	04-10-2004 0:00	03-10-2016 23:59	0	5	52.25	Yes	$1,322.35	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	42309	CDC	04-10-2004 0:00	03-10-2016 23:59	0	5	52.25	Yes	$1,520.35	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	42310	CDC	04-10-2004 0:00	03-10-2016 23:59	0	5	52.24	Yes	$2,039.01	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	42311	CDC	04-10-2004 0:00	03-10-2016 23:59	0	5	52.24	Yes	$2,312.35	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	42312	CDC	04-10-2004 0:00	03-10-2016 23:59	0	5	52.23	Yes	$2,047.64	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	42313	CDC	04-10-2004 0:00	03-10-2016 23:59	0	5	52.23	Yes	$1,619.35	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	42314	CDC	04-10-2004 0:00	03-10-2016 23:59	0	5	52.22	Yes	$4,478.76	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	42315	CDC	04-10-2004 0:00	03-10-2016 23:59	0	5	52.22	Yes	$5,255.21	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	42316	CDC	04-10-2004 0:00	03-10-2016 23:59	0	5	52.21	Yes	$3,262.54	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	42317	CDC	04-10-2004 0:00	03-10-2016 23:59	0	5	52.21	Yes	$1,421.35	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	42318	CDC	04-10-2004 0:00	03-10-2016 23:59	0	5	52.2	Yes	$1,520.35	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	42319	CDC	04-10-2004 0:00	03-10-2016 23:59	0	5	52.2	Yes	$1,421.35	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	42320	CDC	04-10-2004 0:00	03-10-2016 23:59	0	5	52.19	Yes	$1,520.35	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	42321	CDC	04-10-2004 0:00	03-10-2016 23:59	0	5	52.19	Yes	$1,619.35	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	42322	CDC	04-10-2004 0:00	03-10-2016 23:59	0	5	52.18	Yes	$1,718.35	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	42323	CDC	04-10-2004 0:00	03-10-2016 23:59	0	5	52.18	Yes	$1,322.35	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	42324	CDC	04-10-2004 0:00	03-10-2016 23:59	0	5	52.17	Yes	$1,048.13	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	42325	CDC	04-10-2004 0:00	03-10-2016 23:59	0	5	52.17	Yes	$1,048.13	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	42666	CDC	13-10-2004 0:00	12-10-2016 23:59	0	5	52.15	No	$1,018.29	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	43678	CDC	12-10-2004 0:00	11-10-2016 23:59	0	5	52.17	Yes	$1,265.68	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	43679	CDC	12-10-2004 0:00	11-10-2016 23:59	0	5	52.17	Yes	$1,265.68	$1,170.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1016890	CDC	09-05-2001 0:00	08-05-2017 23:59	0	7	52.25	No	$2,902.67	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1016891	CDC	09-05-2001 0:00	08-05-2017 23:59	0	7	52.25	No	$1,649.22	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1016892	CDC	09-05-2001 0:00	08-05-2017 23:59	0	7	52.24	No	$4,988.91	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1016893	CDC	09-05-2001 0:00	08-05-2017 23:59	0	7	52.24	No	$3,175.90	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1028884	CDC	22-09-2001 0:00	21-09-2017 23:59	0	7	52.26	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1028885	CDC	22-09-2001 0:00	21-09-2017 23:59	0	7	52.26	Yes	$81.01	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1028886	CDC	22-09-2001 0:00	21-09-2017 23:59	0	7	52.26	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1028887	CDC	22-09-2001 0:00	21-09-2017 23:59	0	7	52.26	Yes	$4,115.56	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1028888	CDC	22-09-2001 0:00	21-09-2017 23:59	0	7	52.26	Yes	$3,480.73	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1028889	CDC	22-09-2001 0:00	21-09-2017 23:59	0	7	52.26	Yes	$2,101.53	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1028892	CDC	22-09-2001 0:00	21-09-2017 23:59	0	7	52.25	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1028893	CDC	22-09-2001 0:00	21-09-2017 23:59	0	7	52.25	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1028894	CDC	22-09-2001 0:00	21-09-2017 23:59	0	7	52.25	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1028895	CDC	22-09-2001 0:00	21-09-2017 23:59	0	7	52.25	Yes	$3,485.18	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1028896	CDC	22-09-2001 0:00	21-09-2017 23:59	0	7	52.25	Yes	$3,709.73	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1028897	CDC	22-09-2001 0:00	21-09-2017 23:59	0	7	52.25	Yes	$4,649.60	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1028898	CDC	22-09-2001 0:00	21-09-2017 23:59	0	7	52.25	Yes	$3,138.79	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1028899	CDC	22-09-2001 0:00	21-09-2017 23:59	0	7	52.25	Yes	$3,138.90	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1028900	CDC	22-09-2001 0:00	21-09-2017 23:59	0	7	52.25	Yes	$1,612.22	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1028907	CDC	22-09-2001 0:00	21-09-2017 23:59	0	7	52.24	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1028908	CDC	22-09-2001 0:00	21-09-2017 23:59	0	7	52.24	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1028909	CDC	22-09-2001 0:00	21-09-2017 23:59	0	7	52.24	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1028910	CDC	22-09-2001 0:00	21-09-2017 23:59	0	7	52.24	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1028911	CDC	22-09-2001 0:00	21-09-2017 23:59	0	7	52.24	Yes	$2,919.05	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1028912	CDC	22-09-2001 0:00	21-09-2017 23:59	0	7	52.24	Yes	$3,067.23	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1028913	CDC	22-09-2001 0:00	21-09-2017 23:59	0	7	52.24	Yes	$4,888.94	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1028914	CDC	22-09-2001 0:00	21-09-2017 23:59	0	7	52.24	Yes	$3,138.90	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1028915	CDC	22-09-2001 0:00	21-09-2017 23:59	0	7	52.24	Yes	$3,138.90	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No

Status	Claim Number	Title Type	Registration Date	Expiration Date	Completion Number	Renewal Number	Area (ha)	Relative Acts	Exceed (C$)	Work Required (C$)	Right Required ($C)	Owners (name, number and % interest)	Renewal Pending	Work in Progress	Title Transfer	Conversion/Substitution of Claims	Fusion of Claims
Active	1028916	CDC	22-09-2001 0:00	21-09-2017 23:59	0	7	52.24	Yes	$873.93	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1028917	CDC	22-09-2001 0:00	21-09-2017 23:59	0	7	52.24	Yes	$873.93	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1028918	CDC	22-09-2001 0:00	21-09-2017 23:59	0	7	52.24	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1028927	CDC	22-09-2001 0:00	21-09-2017 23:59	0	7	52.23	Yes	$947.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1028928	CDC	22-09-2001 0:00	21-09-2017 23:59	0	7	52.23	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1028929	CDC	22-09-2001 0:00	21-09-2017 23:59	0	7	52.23	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1028930	CDC	22-09-2001 0:00	21-09-2017 23:59	0	7	52.23	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1028936	CDC	22-09-2001 0:00	21-09-2017 23:59	0	7	52.22	Yes	$612.36	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1028937	CDC	22-09-2001 0:00	21-09-2017 23:59	0	7	52.22	Yes	$920.97	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1028938	CDC	22-09-2001 0:00	21-09-2017 23:59	0	7	52.22	Yes	$430.86	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1042266	CDC	12-12-2001 0:00	11-12-2017 23:59	0	7	52.26	Yes	$122.25	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1042267	CDC	12-12-2001 0:00	11-12-2017 23:59	0	7	52.26	Yes	$65.90	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1042268	CDC	12-12-2001 0:00	11-12-2017 23:59	0	7	52.26	Yes	$1,289.99	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1042269	CDC	12-12-2001 0:00	11-12-2017 23:59	0	7	52.26	Yes	$692.32	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1042270	CDC	12-12-2001 0:00	11-12-2017 23:59	0	7	52.26	Yes	$172.38	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1042271	CDC	12-12-2001 0:00	11-12-2017 23:59	0	7	52.23	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1042272	CDC	12-12-2001 0:00	11-12-2017 23:59	0	7	52.23	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1042273	CDC	12-12-2001 0:00	11-12-2017 23:59	0	7	52.23	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1042274	CDC	12-12-2001 0:00	11-12-2017 23:59	0	7	52.23	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1042275	CDC	12-12-2001 0:00	11-12-2017 23:59	0	7	52.23	Yes	$780.84	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1042276	CDC	12-12-2001 0:00	11-12-2017 23:59	0	7	52.23	Yes	$1,781.98	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1042277	CDC	12-12-2001 0:00	11-12-2017 23:59	0	7	52.23	Yes	$2,855.18	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1042278	CDC	12-12-2001 0:00	11-12-2017 23:59	0	7	52.23	Yes	$122.25	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1042279	CDC	12-12-2001 0:00	11-12-2017 23:59	0	7	52.23	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1042280	CDC	12-12-2001 0:00	11-12-2017 23:59	0	7	52.23	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1042281	CDC	12-12-2001 0:00	11-12-2017 23:59	0	7	52.22	Yes	$2,947.90	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1103421	CDC	25-10-2002 0:00	24-10-2016 23:59	0	6	52.22	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1103422	CDC	25-10-2002 0:00	24-10-2016 23:59	0	6	52.22	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1103423	CDC	25-10-2002 0:00	24-10-2016 23:59	0	6	52.22	Yes	$149.65	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1103424	CDC	25-10-2002 0:00	24-10-2016 23:59	0	6	52.22	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1103425	CDC	25-10-2002 0:00	24-10-2018 23:59	0	7	52.22	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1103426	CDC	25-10-2002 0:00	24-10-2018 23:59	0	7	52.22	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1103427	CDC	25-10-2002 0:00	24-10-2018 23:59	0	7	52.22	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1103428	CDC	25-10-2002 0:00	24-10-2016 23:59	0	6	52.22	Yes	$3,119.33	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1103429	CDC	25-10-2002 0:00	24-10-2016 23:59	0	6	52.22	Yes	$3,119.33	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1103430	CDC	25-10-2002 0:00	24-10-2016 23:59	0	6	52.22	Yes	$3,802.59	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1105802	CDC	28-11-2002 0:00	27-11-2018 23:59	0	7	52.23	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1105803	CDC	28-11-2002 0:00	27-11-2018 23:59	0	7	52.23	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1105804	CDC	28-11-2002 0:00	27-11-2016 23:59	0	6	52.23	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1105805	CDC	28-11-2002 0:00	27-11-2016 23:59	0	6	52.23	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1105806	CDC	28-11-2002 0:00	27-11-2016 23:59	0	6	52.23	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1105807	CDC	28-11-2002 0:00	27-11-2016 23:59	0	6	52.22	Yes	$2,279.20	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1105808	CDC	28-11-2002 0:00	27-11-2018 23:59	0	7	52.22	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1105809	CDC	28-11-2002 0:00	27-11-2018 23:59	0	7	52.22	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1105810	CDC	28-11-2002 0:00	27-11-2016 23:59	0	6	52.22	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1105811	CDC	28-11-2002 0:00	27-11-2016 23:59	0	6	52.22	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1105812	CDC	28-11-2002 0:00	27-11-2016 23:59	0	6	52.21	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1105813	CDC	28-11-2002 0:00	27-11-2016 23:59	0	6	52.21	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1105814	CDC	28-11-2002 0:00	27-11-2016 23:59	0	6	52.21	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1105815	CDC	28-11-2002 0:00	27-11-2018 23:59	0	7	52.21	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1105816	CDC	28-11-2002 0:00	27-11-2018 23:59	0	7	52.21	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1105817	CDC	28-11-2002 0:00	27-11-2016 23:59	0	6	52.21	Yes	$3,050.27	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No

Status	Claim Number	Title Type	Registration Date	Expiration Date	Completion Number	Renewal Number	Area (ha)	Relative Acts	Exceed (C$)	Work Required (C$)	Right Required ($C)	Owners (name, number and % interest)	Renewal Pending	Work in Progress	Title Transfer	Conversion/Substitution of Claims	Fusion of Claims
Active	1105818	CDC	28-11-2002 0:00	27-11-2016 23:59	0	6	52.21	Yes	$2,414.69	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1105819	CDC	28-11-2002 0:00	27-11-2016 23:59	0	6	52.21	Yes	$1,263.50	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1105820	CDC	28-11-2002 0:00	27-11-2018 23:59	0	7	52.21	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1105821	CDC	28-11-2002 0:00	05-12-2017 23:59	0	6	47.15	Yes	$112,788.31	$1,625.00	$123.12	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1105822	CDC	28-11-2002 0:00	05-12-2017 23:59	0	6	24.56	Yes	$5,499,146.10	$650.00	$30.51	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1105823	CDC	28-11-2002 0:00	05-12-2017 23:59	0	6	11.06	Yes	$2,427,080.60	$650.00	$30.51	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1105824	CDC	28-11-2002 0:00	05-12-2017 23:59	0	6	36.14	Yes	$112,249.74	$1,625.00	$110.16	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1105825	CDC	28-11-2002 0:00	27-11-2016 23:59	0	6	52.21	Yes	$109,007.35	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1105826	CDC	28-11-2002 0:00	27-11-2016 23:59	0	6	52.21	Yes	$3,907.71	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1105827	CDC	28-11-2002 0:00	27-11-2018 23:59	0	7	52.21	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1105828	CDC	28-11-2002 0:00	27-11-2018 23:59	0	7	52.2	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1105829	CDC	28-11-2002 0:00	27-11-2018 23:59	0	7	52.2	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1105830	CDC	28-11-2002 0:00	27-11-2016 23:59	0	6	52.2	Yes	$2,692.93	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1105831	CDC	28-11-2002 0:00	27-11-2016 23:59	0	6	52.2	Yes	$1,787.50	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1105832	CDC	28-11-2002 0:00	05-12-2017 23:59	0	6	49.99	Yes	$3,039.80	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	No
Active	1105833	CDC	28-11-2002 0:00	05-12-2017 23:59	0	6	5.81	Yes	$318,850.65	$650.00	$30.51	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	
Active	1105835	CDC	28-11-2002 0:00	05-12-2017 23:59	0	6	0.05	Yes	$5,480,050.96	$650.00	$30.51	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	
Active	1105836	CDC	28-11-2002 0:00	05-12-2017 23:59	0	6	41.37	Yes	$110,704.52	$1,625.00	$110.16	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	
Active	1105837	CDC	28-11-2002 0:00	27-11-2016 23:59	0	6	52.2	Yes	$106,810.82	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	
Active	1105838	CDC	28-11-2002 0:00	27-11-2016 23:59	0	6	52.2	Yes	$3,466.71	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	
Active	1105839	CDC	28-11-2002 0:00	27-11-2018 23:59	0	7	52.2	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	
Active	1129593	CDC	12-02-2004 0:00	11-02-2018 23:59	0	6	52.23	Yes	$1,442.37	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	
Active	1129594	CDC	12-02-2004 0:00	11-02-2018 23:59	0	6	52.23	Yes	$1,814.37	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	
Active	1129595	CDC	12-02-2004 0:00	11-02-2018 23:59	0	6	52.22	Yes	$313.75	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	
Active	1129596	CDC	12-02-2004 0:00	11-02-2018 23:59	0	6	52.22	Yes	$207.42	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	
Active	1129597	CDC	12-02-2004 0:00	11-02-2018 23:59	0	6	52.18	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	
Active	1129598	CDC	12-02-2004 0:00	11-02-2018 23:59	0	6	52.18	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	
Active	1129599	CDC	12-02-2004 0:00	11-02-2018 23:59	0	6	52.18	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	
Active	1129600	CDC	12-02-2004 0:00	11-02-2018 23:59	0	6	52.18	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	
Active	1129601	CDC	12-02-2004 0:00	11-02-2018 23:59	0	6	52.18	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	
Active	1129602	CDC	12-02-2004 0:00	11-02-2018 23:59	0	6	52.18	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	
Active	1129603	CDC	12-02-2004 0:00	11-02-2018 23:59	0	6	52.18	Yes	$0.00	$1,625.00	$138.24	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	Yes	No	
TOTAL	**369 Claims**						**19037.17**		**$14,680,789.50**								
Active	1009	BM	21-02-2014 0:00	20-02-2034 23:59	2	0	289.4	No	$0.00	$0.00	$0.00	Les Mines Opinaca Ltée (81210) 100% (responsible)	No	No	No		