# CHAMPION IRON

CHAMPION IRON LIMITED ANNUAL INFORMATION FORM FOR THE YEAR ENDED MARCH 31, 2017

June 28, 2017

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#### CAUTIONARY STATEMENT

This Annual Information Form (sometimes referred to herein as this "**AIF**") includes certain "forward-looking information" within the meaning of applicable Canadian securities legislation. All information, other than regarding historical facts, included in this AIF that address activities, events or developments that Champion Iron Limited and its subsidiaries, including Champion Iron Mines Limited and Quebec Iron Ore Inc. ("**QIO**")(collectively, "**Champion**" or the "**Corporation**") expects or anticipates will or may occur in the future, including such things as future business strategy, competitive strengths, goals, expansion and growth of the Corporation's businesses, operations, plans and other such matters is forward-looking information.

When used in this AIF, the words "estimate", "plan", "anticipate", "expect", "intend", "believe", "will", "should", "could", "may" and similar expressions are intended to identify forward-looking information. This information involves known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of the Corporation to be materially different from any future results, performance or achievements expressed or implied by such forward-looking information.

Examples of such forward-looking information include information regarding financial results and expectations for fiscal year 2018, such as, but not limited to, the potential of the Corporation's properties, availability of financing, interpretation of drill results, the geology, grade and continuity of mineral deposits and conclusions of economic evaluations, metal prices, demand for metals, currency exchange rates, cash operating margins, expenditures on property, plant and equipment, increases and decreases in exploration activity, changes in project parameters, joint venture operations, resources and anticipated grades and recovery rates, are or may be based on assumptions and/or estimates related to future economic, market and other factors and conditions.

Forward-looking information is based on reasonable assumptions, estimates, analysis and opinions of management made in light of its experience and its perception of trends, current conditions and expected developments, as well as other factors that management believes to be relevant and reasonable in the circumstances at the date that such information is made available. Forward-looking information is inherently subject to known and unknown risks and uncertainties and other factors that may cause the actual results, level of activity, performance or achievements of the Corporation to be materially different from those expressed or implied by such forward-looking information. Although the Corporation has attempted to identify important factors that could cause actual results to differ materially, there may be other factors that cause results not to be as anticipated, estimated or intended, including the factors and risks described or referred to elsewhere herein, as well as unanticipated and/or unusual events. Many of such factors are beyond the Corporation's ability to predict or control. Risks and uncertainties that may affect forward-looking information herein include, but are not limited to, those which relate to:

- (a) the nature of mineral exploration and mining;
- (b) potential land claims First Nations groups;
- (c) financing risks;
- (d) infrastructure;
- (e) the absence of significant revenues;
- (f) current global financial condition;
- (g) dilution and future sales of capital of the Corporation ("**Ordinary Shares**");
- (h) Champion being primarily focussed on the Bloom Lake project;
- (i) joint ventures and option agreements;
- (j) going concern considerations;
- (k) dependence on key personnel;
- (l) no assurance of titles;
- (m) permits and licences;
- (n) fluctuating prices for iron;

- (o) estimates of mineral resources and mineral reserves;
- (p) foreign exchange;
- (q) dependence on outside parties;
- (r) reduced global demand for steel or interruptions in steel production;
- (s) availability of reasonably priced raw materials and mining equipment;
- (t) volatility of stock price;
- (u) extensive governmental regulation of Champion's activities;
- (v) environmental regulations;
- (w) conflicts of interest;
- (x) competition;
- (y) parameters and assumptions underlying future mine plans;
- (z) completion of purchase contracts, orders or agreements with the Corporation to date;
- (aa) ability to realize estimated mineral reserves and convert mineral resources into reserves;
- (bb) success of exploration activities;
- (cc) timing and amount of any estimated future production and the related potential costs;
- (dd) mining or processing issues;
- (ee) required capital expenditures and operating costs; and
- (ff) labour, equipment failure or other disruptions.

For more information on risk factors, refer to the heading "Risk Factors" below.

Readers of this AIF are cautioned not to put undue reliance on forward-looking information due to its inherent uncertainty. The Corporation disclaims any intent or obligation to update any forward-looking information, whether as a result of new information, future events or results or otherwise, except in accordance with applicable securities legislation. This forward-looking information should not be relied upon as representing management's views as of any date subsequent to the date of this AIF.

# CURRENCY

All references to "\$" or "dollars" herein are to Canadian dollars, unless otherwise specified.

# GENERAL

Reference is made in this Annual Information Form to Champion's audited financial statements together with the auditor's report thereon (the "**Financial Statements**") and management's discussion and analysis for the fiscal years ended March 31, 2017 and March 31, 2016.

The Financial Statements are available for review under the Corporation's profile on the SEDAR website located at <u>www.sedar.com</u>. All financial information in this AIF is prepared in accordance with Canadian generally accepted accounting principles, including international financial reporting standards ("**IFRS**") incorporated therein.

Unless otherwise noted herein, information in this AIF has been presented as at June 28, 2017.

# MINERAL DISCLOSURE

In this document, any statement regarding the potential quantity and grade (expressed as ranges) of a potential mineral deposit is conceptual in nature. Historical estimates of mineral resources, if any, referred to in this AIF are

not compliant with National Instrument 43-101- *Standards of Disclosure for Mineral Projects* ("NI 43-101") standards, and should therefore not be relied upon. No "qualified person" (as such term is defined in NI 43-101) (a "Qualified Person") has done sufficient work to classify such historical estimates as current "mineral resources", as such term is defined in NI 43-101 (hereinafter, "Mineral Resources"). The Corporation is not treating any such historical estimates as current Mineral Resources. In this AIF, Mineral Resource estimates have been calculated using the Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") "Standards on Mineral Resources and Reserves, Definitions and Guidelines" prepared by the CIM Standing Committee on Reserve Definitions and adopted by CIM, as amended.

#### SELECTED TECHNICAL TERMS

- "dmtu" means dry metric tonne unit.
- **"Feasibility Study"** means a comprehensive technical and economic study of the selected development option for a mineral project that includes appropriately detailed assessments of applicable Modifying Factors together with any other relevant operational factors and detailed financial analysis that are necessary to demonstrate, at the time of reporting, that extraction is reasonably justified (economically mineable). The results of the study may reasonably serve as the basis for a final decision by a proponent or financial institution to proceed with, or finance, the development of the project. The confidence level of the study will be higher than that of a Pre-Feasibility Study.
- "IRR" means internal rate of return.
- "Indicated Mineral means that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters to support mine planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration and test information gathered through appropriate techniques from location such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough for geological and grade continuity to be reasonably assumed.
- "Inferred Mineral means that part of a Mineral Resource for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes.
- "m" means metre.
- "MRE" means a Mineral Resource estimate.
- "Mtpa" means million tonnes per annum.

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

- "Mineral Reserve" is the economically mineable part of a Measured or Indicated Mineral Resource demonstrated by at least a Preliminary Feasibility Study. This Study must include adequate information on mining, processing, metallurgical, economic and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified. A Mineral Reserve includes diluting materials and allowances for losses that may occur when the material is mined.
- "Mineral Resource" means a concentration or occurrence of diamonds, natural solid inorganic material, or natural solid fossilized organic material including base and precious metals, coal, and industrial minerals in or on the earth's crust in such form and quantity and of such a grade or quality that it has reasonable prospects for economic extraction. The location, quantity, grade, geological characteristics and continuity of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge.
- "NPV" means Net Present Value.
- "NSR" means net smelter return, namely, the gross revenue from a resource extraction operation, less transportation, insurance, and processing costs.
- "NSR Royalty" means a defined percentage of the NSR.

**"Preliminary Economic** means a study, other than a Preliminary Feasibility Study or Feasibility Study, that includes an economic analysis of the potential viability of Mineral Resources.

- "Preliminary Feasibility means a comprehensive study of the viability of a mineral project that has advanced to a stage where the mining method, in the case of underground mining, or the pit configuration, in the case of an open pit, has been established and an effective method of mineral processing has been determined, and includes a financial analysis based on reasonable assumptions of technical, engineering, legal, operating, economic, social, and environmental factors and the evaluation of other relevant factors which are sufficient for a qualified person, acting reasonably, to determine if all or part of the Mineral Resource may be classified as a Mineral Reserve.
- "Probable Mineral means the economically mineable part of an Indicated and, in some circumstances, a Measured Mineral Resource demonstrated by at least a Preliminary Feasibility Study. This study must include adequate information on mining, processing, metallurgical, economic, and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified.
- "Proven Mineral means the economically mineable part of a Measured Mineral Resource demonstrated by at least a Preliminary Feasibility Study. This study must include adequate information on mining, processing, metallurgical, economic, and other relevant factors that demonstrate, at the time of reporting, that economic extraction is justified.
- "t" or "tonne" means a measure of weight equal to 1,000 kilograms or 2,204 pounds.
- **"Total Iron"** means all forms of iron which can be digested by four acid digestion or peroxide fusion methods.
- "waste" means barren rock in a mine, or mineralized material that is too low in grade to be mined and milled at a profit.

#### METRIC EQUIVALENTS

For ease of reference, the following factors for converting imperial measurements into metric equivalents are provided:

To convert imperial measurement units	To metric measurement units	Divide by
Inches	Centimetres	0.3939
Troy ounces	Grams	0.03215
Acres	Hectares	2.4711
Pounds	Kilograms	2.2046
Miles	Kilometres	0.6214
Feet	Metres	3.2808
Inches	Millimetres	0.03937
Short Tons	Tonnes	1.1023

# CORPORATION PROFILE AND CORPORATE STRUCTURE

The full corporate name of the Corporation is Champion Iron Limited. Champion is an exploration and development corporation focused on discovering and developing significant iron ore resources in eastern Canada, particularly in Québec. The Corporation is one of the largest stakeholders of mineral concessions in the Fermont Iron Ore District of Québec with its Bloom Lake iron ore property (the "Bloom Lake Assets" or the "Bloom Lake **Property**"), the Quinto claims which encompass the Peppler Property, Lamelee Property and Hobdad Property("Quinto Claims"), and the wholly-owned Fermont Property Holdings ("Fermont Property Holdings") which encompasses the Consolidated Fire Lake North Project ("Consolidated Fire Lake North" or "CFLN").

# Head Office and Other Offices

The Corporation's head office, registered office and mailing address is Level 1, 91 Evans Street, Rozelle, New South Wales 2039, Australia. The Corporation also has two offices in Canada, with one located at 20 Adelaide Street East, Suite 200, Toronto, Ontario, M5C 2T6 and the other at 1100 René Lévesque Ouest, Bureau 610, Montréal, Québec H3B 4N4.

# Legal Matters

Champion Iron Limited was incorporated in Australia (Australian Company Number – CAN - 11970142). Champion Iron Limited is registered in Western Australia under the Companies Act 2001. The Constitution of Champion Iron Limited was amended to comply with the Toronto Stock Exchange ("**TSX**") requirements relating to the retirement and re-election of directors at the Corporation's Annual General Meetings.

The Corporation is a reporting issuer in all Canadian provinces other than Québec.

The Ordinary Shares are listed for trading on the Australian Stock Exchange ("ASX") and the TSX under the symbol "CIA".



#### **Champion Iron Limited**

Champion Iron Mines Limited is incorporated in Canada under the Business Corporations Act of Ontario. Quebec Iron Ore Inc. is incorporated in Canada under the Canada Business Corporations Act and is 63.2% owned by the Corporation. 9306-2867 Quebec Inc. is incorporated in the Province of Quebec and is 33.3% owned by the Corporation. 9306-2867 Quebec Inc. is the general partner of La Société ferroviaire du Nord Québécois, société en commandite, of which Champion Iron Mines Limited is a limited partner owning 33.3%. CIP Magnetite Pty Ltd is registered under the Companies Act 2001 in Australia. CIP Magnetite Ltd is incorporated in Canada under the Corporations Act of Newfoundland and Labrador. Mambas Minerais Limitada is incorporated in Mozambique and is 97.5% owned by the Corporation and is currently being liquidated. Champion Exchange Limited is wholly-owned by the Corporation Inc. is wholly-owned by the Corporation Inc.

# DESCRIPTION AND GENERAL DEVELOPMENT OF THE BUSINESS INCLUDING THREE-YEAR HISTORY AND SIGNIFICANT ACQUISITON

#### **Description of the Business**

The Corporation is a mineral exploration and development company focused on the acquisition, exploration and development of iron ore deposits, in North-Eastern Québec. Since its adoption of a business strategy to carry on business as a resource exploration company, the Corporation has acquired a number of significant mining exploration properties, primarily in North-Eastern Québec and Newfoundland and Labrador.

The Corporation has interests in numerous mineral property claims located in two distinct areas of North-Eastern Québec and Newfoundland and Labrador referred to herein as follows:

- (i) the "Bloom Lake Property" located in the Fermont area, Québec;
- (ii) the "Quinto Claims" located in the Fermont area, Québec;
- (iii) the "Fermont Property Holdings" located in the Fermont area, Québec; and
- (iv) the "Powderhorn Property" and "Gullbridge Property", each located in Newfoundland.

At this time, the Corporation is focusing its resources on its Fermont area properties, primarily the Bloom Lake Property (see Map 1 – Fermont Area - Property Holdings), which is the only project the Corporation considers material for the purposes of this AIF.

The Bloom Lake mine is located approximately 13 km north of Fermont, Quebec, in the Labrador Trough and consists of Mining Lease BM877 and 114 mining claims. The Bloom Lake mine was an open pit truck and shovel mine, with a concentrator that utilized single-stage crushing and an autogenous mill and gravity separation to produce iron concentrate. From the site, concentrate can be transported by rail, initially on the Bloom Lake Railway, to a ship loading port in Sept-Îles, Québec. The Bloom Lake mine is currently in a care and maintenance mode and has been since December 2014.

The Bloom Lake rail assets consist of the provincially regulated short-line railway comprising a 32 km rail spur contained wholly within Newfoundland and Labrador that connects the Bloom Lake mine to the railway owned by Northern Land Company.

The Corporation completed and filed a feasibility study in connection with the Bloom Lake Mine on March 17, 2017, a summary of which appears in the *Three Year History* section and is further detailed in the Material Property Technical Report section below in this AIF.

The Corporation's wholly-owned Fermont Property Holdings consist of 7 properties covering approximately 700 square kilometres located in the Fermont Iron Ore District (the "**FIOD**") of northeastern Quebec, ranging from 6 to 80 km southwest of Fermont. In accordance with NI 43-101 for technical reporting purposes, the Fermont Property Holdings' Fire Lake North, Oil Can, Bellechasse and Midway properties were consolidated and designated the CFLN. On February 7, 2013, Champion announced the results from its PFS for the Fire Lake North West and East deposits of the CFLN project that was performed by BBA Inc. of Montréal, Québec. A copy of the PFS is available under Champion's filings on SEDAR at <u>www.sedar.com</u>. With the completion of the PFS and the exploration phase of CFLN, the Corporation has significantly curtailed exploration and development expenditures at CFLN. Subsequent to the PFS, a description of the Corporation's work at CFLN is provided in the *Three-Year History* section below.

Although three other properties within the Fermont Property Holdings contain NI 43-101 Mineral Resources, namely the Harvey-Tuttle Project, the Penguin Lake Project and the Moire Lake Project, the Corporation does not consider them to be material for purposes of NI 43-101. Likewise, the Corporation does not consider its interests in the Powderhorn Property or Gullbridge Property to be material for purposes of NI 43-101.

The Fermont Property Holdings are grouped into three clusters from north to south, termed Clusters 1, 2 and 3, as outlined in Map 1. The Fermont Property Holdings are located in proximity to and locally contiguous to an operating iron mine and a number of former operating iron mines and projects currently being developed for iron mining. Table 1 sets out the current NI 43-101 compliant In-Pit Mineral Resource Estimates for the Fermont Property Holdings by Property<sup>1</sup>:

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			Current Mineral Resources Estimates at 15% Iron Cut-Off							
Property	Cluster	Deposit	Measured		Indica	ted	Infer	red		
			tonnes	grade	tonnes	grade	tonnes	grade		
			millions	FeT%	millions	FeT%	millions	FeT%		
Moire Lake	1	Lac Moire	-	-	163.9	30.5	416.9	29.4		
Consolidated Fire		Fire Lake								
Lake North	2	North-West	28.4	35.5	441.5	32.2	307.9	32.7		
		Fire Lake								
		North-East	12.0	31.2	273.5	30.2	153.1	30.0		
		Fire Lake								
		North-Don								
		Lake	0.4	21.4	52.1	26.5	186.8	25.3		
		Subtotal-Fire Lake North	40.8	34.1	767.1	31.1	647.8	29.9		
		Oil Can (Oxide)	-	-	-	-	967.0	33.2		
		Oil Can (Mixed)					912.0	24.1		
		Bellechasse	-	-	-	-	177.2	29.2		
		Midway	-	-	-	-	-	-		
		Total -CFLN	40.8	34.1	767.1	31.1	2,704.0	29.1		
Harvey-Tuttle	2	Harvey-Tuttle	-	-	-	-	749.0	23.6		
O'Keefe-Purdy	2		-	-	-	-	-	-		
Jeannine Lake <sup>2</sup>	3		-	-	-	-	-	-		
Round Lake <sup>2</sup>	3	Penguin Lake	-	-	-	-	531.2	33.1		
Fermont Holdings In-Pit Resource Totals		40.8	34.1	931.0	31.0	4,401.1	28.7			

Table 1: In-Pit Mineral Resource Estimates - Fermont Property Holdings

The current Mineral Resource Estimate was calculated using the Canadian Institute of Mining, Metallurgy and Petroleum (CIM), CIM Standards on Mineral Resources and Reserves, Definitions and Guidelines prepared by the CIM Standing Committee on Reserve Definitions. Mineral resources, which are not mineral reserves, do not have demonstrated economic viability. The mineral resource estimate may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing or other relevant issues. Furthermore, the quantity and grade of estimated Inferred Resource reported herein are uncertain and there has been insufficient exploration to categorize them as an Indicated or Measured Resource. It is uncertain if further exploration will result in reclassification of Inferred Mineral Resources to the Indicated or Measured Mineral Resource categories. The tonnage numbers are rounded according to NI 43-101 standards.

<sup>2</sup> Round Lake includes Aubrey-Ernie, Black Dan, Penguin Lake and Round Lake properties. Currently under option to Cartier Iron Corporation.



# CHAMPION IRON 🖄 FERMONT HOLDINGS



Copies of the NI 43-101 Mineral Resource Estimate reports for Consolidated Fire Lake North, Moire Lake, Bellechasse and Harvey-Tuttle are available under Champion's filings on SEDAR at <u>www.sedar.com</u> and a copy of

the NI 43-101 Mineral Resource Estimate report for Penguin Lake is available under Cartier Iron Corporation's filings on SEDAR.

The Quinto Claims (447 claims), which encompass the Peppler Property (118 claims) and the Lamelee Property (236 claims) and the Hobdad Property (93 claims), are located approximately 50 km southwest of the Bloom Lake mine.

The Corporation is not in commercial production on any of its mineral resource properties and, accordingly, the Corporation has no revenues. The Corporation finances its operations by raising capital in the equity markets. See also *"Risk Factors"* section below.

# Three-Year History

# Fiscal Year ended March 31, 2015

# <u>Background</u>

On December 6, 2013, the Corporation announced that it had entered into a definitive arrangement agreement to effect a business combination of the Corporation and Champion Iron Mines Limited, a Canadian iron ore developer. On March 31, 2014, the business combination was completed pursuant to which the Corporation and a wholly-owned subsidiary, Champion Exchange Limited, acquired all 137,895,609 outstanding common shares of Champion Iron Mines Limited under a court-approved plan of arrangement (the "Arrangement"). Under the Arrangement, each Champion Iron Mines Limited shareholder became entitled to receive 0.7333333 of an Ordinary Share for each Champion Iron Mines Limited common share held (the "Exchange Ratio"). Certain eligible Champion Iron Mines Limited shereholders elected to receive all or part of their consideration in the form of exchangeable shares of Champion Exchange Limited. The Arrangement also resulted in the issuance of replacement stock options for Ordinary Shares to holders of outstanding Champion Iron Mines Limited by the Exchange Ratio).

Champion Iron Mines Limited holds 100% of the Fermont Property Holdings, including the Consolidated Fire Lake North Property, which is located in Canada's major iron ore producing district in the Labrador Trough in the Province of Quebec.

\* \* \* \* \*

During the quarter ended June 30, 2014, the Corporation continued with planned drilling and field work programs at its Consolidated Fire Lake North Property. The Corporation's wholly-owned subsidiary Champion Iron Mines Limited holds 100% of the Fermont Property Holdings, including the Consolidated Fire Lake North Property, which is located in Canada's major iron ore producing district in the Labrador Trough in the Province of Quebec.

On July 24, 2014, the Corporation announced its intention to participate in a rail feasibility study to determine the optimum rail option for iron ore miners in the Labrador Trough region to reach ports to service international markets competitively. This initiative was announced by the Quebec Government which announced that it would set aside a maximum of \$20 million to contribute to the study. On October 1, 2014, the Quebec government followed this by passing a decree to invest up to \$20 million for the feasibility study which, in Phase 1, is to cover a rail spur linking the port of Sept-Iles with the Corporation's Consolidated Fire Lake North Property. The Corporation formed a limited liability partnership with the Government of Quebec and co-miner Lac Otelnuk Mining Inc. (a joint venture between Adriana Resources Inc. and WISCO International Resources Development & Investment Limited), "La Société ferroviaire du Nord québécois, société en commandite ("SFNQ"), to manage the implementation of the feasibility study.

During the quarter ended September 30, 2014, the Corporation completed the remainder of 34 backhoe dug test pits and drilled the remaining holes of the 24 hole geotechnical campaign. The project database was up-dated to include logging and analytical results from the 2014 drilling campaigns. The database was also updated with re-logging of drill intersections to acquire data related to hardness of samples. The quality assurance/quality control ("QAQC") results were evaluated and the database was subject to internal and external audits.

Interpretations of drill sections were up-dated and the 3D geological models were regenerated for each of the West and East deposits at the Consolidated Fire Lake North project. A new block model mineral resource estimate was generated internally by the Corporation. The Corporation contracted the services of P&E Mining Consultants to complete an independent audit of the Consolidated Fire Lake North project database and produce an updated Mineral Resource Estimate in compliance with Joint Ore Reserves Committee ("JORC") and National Instrument 43-101 ("NI 43-101") guidelines. This culminated with the Corporation's announcement on October 27, 2014, of a JORC Resource and Reserve Statement.

The October 27, 2014 announcement stated that P&E Mining Consultants completed an independent audit of the Consolidated Fire Lake North project database and produced an updated Mineral Resource Estimate of over 1.2 billion tonnes, including 755 million tonnes of Measured and Indicated metallurgical coarse grained hematite mineralization for Consolidated Fire Lake North in compliance with JORC and NI 43-101 guidelines (see Table 1 above).

The Corporation's exploration activity at the Consolidated Fire lake North project also included the collection of a 10 tonne bulk sample.

During the quarter ended December 31, 2014, the SFNQ completed the tender process for the feasibility study on the first phase of the new multi-user railway that would line the new Pointe Noire port facilities at the Port of Sept-Iles to miners in the Fermont area of Quebec. The contract was awarded to Canarail. The scope of the study was expanded to include extending the rail northward from Consolidated Fire Lake North to Bloom Lake (phase 1B). The Corporation continues to manage the feasibility study on behalf of the SFNQ.

The Corporation expended \$776,000 on limited exploration activity on the CFLN project during the quarter ended March 31, 2015. Following the completion of the exploration phase of the CFLN project, the exploration camp at the Fire Lake North site was dismantled in order to minimize costs.

#### Fiscal Year ended March 31, 2016

On June 25, 2015, the Corporation completed the acquisition and cancellation of half of a 3% royalty on the Fermont Property Holdings, such that the Fermont Property Holdings are now only subject to a 1.5% royalty payable by the Corporation to an arm's length party.

During the quarter ended June 30, 2015, the Corporation expended \$385,851 on limited exploration activity on the CFLN project. An additional \$410,000 was expended on limited exploration on the CFLN project during the quarter ended September 30, 2015.

On December 11, 2015, the Corporation announced that its subsidiary QIO had entered into an asset purchase agreement (the "Asset Purchase Agreement") to acquire, subject to Court approval, the Bloom Lake Property and related rail assets (collectively, "Bloom Lake") and the Quinto Claims in Quebec from affiliates of Cliffs Natural Resources Inc. that were subject to restructuring proceedings under the *Companies' Creditors Arrangement Act* (Canada) ("CCAA") (collectively, the "Bloom Lake CCAA Parties").

Bloom Lake's operations had ceased in December 2014, and was in care and maintenance since that time. None of its employees remained other the skeletal staff required for care, maintenance and security purposes.

The Corporation, through QIO, bid for Bloom Lake under the amended sale and investor solicitation procedures (the "**SISP**") approved by the Québec Superior Court on April 17, 2015 and June 9, 2015 as part of the CCAA restructuring proceedings which commenced in January 2015. The SISP was conducted by Moelis & Company ("**Moelis**"), as sale advisor to the Bloom Lake CCAA Parties, under the supervision of FTI Consulting Canada Inc. acting as court-appointed monitor of the Bloom Lake CCAA Parties under the CCAA proceedings (the "**Monitor**").

Champion's bid was chosen as the preferred bid by the Bloom Lake CCAA Parties, in consultation with Moelis and the Monitor, and was formalized with the signing of the Asset Purchase Agreement.

Pursuant to the Asset Purchase Agreement, the Bloom Lake assets and the Quinto Claims were to be acquired for a cash consideration of C\$10.5 million and the assumption of certain liabilities (the "Acquisition"). Pursuant to the Asset Purchase Agreement, QIO would also become responsible for environmental obligations, including environmental reclamation liabilities presently assessed at approximately C\$41.7 million by the Government of Québec, as well as the replacement of certain bonds securing certain obligations in respect of Bloom Lake totalling approximately C\$1.1 million.

The Acquisition was subject to the granting of an *Approval and Vesting Order* by the Québec Superior Court as part of the CCAA proceedings, providing that the Bloom Lake assets and the Quinto Claims would be acquired free and clear of any security interests and any other encumbrances (subject to certain limited permitted encumbrances). The Asset Purchase Agreement contained a number of closing conditions, including a requirement to obtain the Approval and Vesting Order and the conclusion by Champion of a private placement financing, as described below.

The Corporation concurrently announced a private placement financing of Ordinary Shares at a price of C\$0.16 per share to raise up to C\$25 million (the "**Offering**") in order to fund the acquisition purchase price and to provide working capital. In connection with the Offering, the Corporation received commitments from two parties to equally backstop an aggregate of up to C\$15 million of the Offering. One of the parties was arm's length while the other is a company controlled by Champion's Chairman and CEO, Mr. O'Keeffe.

The Offering was subsequently increased to C\$30 million and was subject to the satisfaction of all regulatory approvals, including the approval of the TSX and the ASX, approval of the shareholders of the Corporation, the Asset Purchase Agreement becoming unconditional and not being terminated as well as the satisfaction of customary closing conditions. The Ordinary Shares issued under the Offering were issued pursuant to exemptions from the prospectus requirements of applicable securities laws and were subject to a four months statutory hold period from the date of closing of the Offering. The terms and conditions of the Offering and the Acquisition were further described in the Corporation's management proxy circular (Canada) and Notice of Meeting (Australia), which were filed on SEDAR and mailed to the Corporation's shareholders on connection with the Special Shareholders' meeting held on March 31, 2016.

# Fiscal Year ended March 31, 2017

On April 11, 2016, the Corporation completed the acquisition of Bloom Lake (through its subsidiary QIO) and the Quinto Claims (through its subsidiary Champion Iron Mines Limited). The cash consideration paid for Bloom Lake was \$9.75 million while the Quinto Claims were acquired for cash consideration of \$776,818.

In order to fund the acquisition purchase price of Bloom Lake and to provide working capital, the Corporation completed the Offering consisting of the placement of 187,500,000 Ordinary Shares at a price of \$0.16 per share for gross proceeds of \$30,000,000.

Subscribers to the Offering included Ressources Québec (\$6,000,000), WC Strategic Opportunity L.P. (a Wynnchurch Capital LLP portfolio company) ("**Wynnchurch**")(\$10,000,000), Resource Capital Fund VI LP ("**RCF**") (\$6,453,000) and a company controlled by Michael O'Keeffe, the Corporation's Chairman and CEO (\$3,500,000).

In connection with the Offering, the Corporation received commitments from two parties (the "Initial Subscribers") to backstop up to \$15,000,000 of the Offering. One of the Initial Subscribers was arm's length while the other was a company controlled by Michael O'Keeffe, the Corporation's Chairman and CEO. The Initial Subscribers each agreed to purchase 46,875,000 Ordinary Shares (the "Committed Shares") under the Offering, subject to their right to engage dealers to find substituted purchasers to purchase all or a portion of the Committed Shares. In connection with their commitment to subscribers, each entitling the holder to purchase one Ordinary Share for \$0.25 until February 1, 2020. For one year after the closing of the Offering, the Initial Subscribers were restricted from selling, pledging or granting any rights with respect to the acquired ordinary shares, except in certain limited circumstances.

In connection with the Offering, subject to certain terms and conditions, including the condition that they continue to hold more than 10% of the issued and outstanding Ordinary Shares of the Corporation, Wynnchurch and RCF were

each granted the right to designate one nominee for election or appointment to the board of directors of the Corporation. In addition, subject to such terms and conditions, the Corporation agreed not to grant any stock options unless such grant is unanimously approved by the board of directors of the Corporation.

# Private placement by QIO

On April 11, 2016, QIO completed a private placement of 14,000,000 Ordinary Shares to Ressources Québec at a price of \$1 per share for gross proceeds of \$14,000,000, following which, the Corporation's interest in QIO was reduced from 100% to 63.2%.

In connection with the private placement by QIO, the Corporation granted 6,000,000 compensation options to Ressources Québec, each entitling the holder to purchase one Ordinary Share at a price of \$0.25 per share until February 1, 2020.

\* \* \* \* \* \*

Following the acquisition of Bloom Lake, the Corporation's main focus has been to investigate the potential re-start of the Bloom Lake mine and concentrator.

During the quarter ended September 30, 2016, the Corporation expended \$4,656,000 on care and maintenance at the Bloom Lake project and \$219,000 on limited exploration activity at the CFLN Project. During the quarter ended December 31, 2016, the Corporation spent \$5,931,001 on care and maintenance at Bloom Lake, while \$277,000 was spend on limited exploration at the CFLN Project.

On March 10, 2017, the Corporation, through its wholly-owned subsidiary, Lac Bloom Railcars Corporation Inc. ("**Lac Bloom Railcars**"), entered into a Railcar Instalment Sale Agreement to acquire 735 specialized iron ore railcars for consideration of US\$30,077,570 plus Goods and Services Tax ("**GST**") of US\$1,503,879 and Quebec Sales Tax ("QST") of US\$3,000,238. The Corporation made a down payment of US\$1,818,100 with the balance of the consideration, including HST and QST being financed by a note owing to the vendor.

During the quarter ended March 31, 2017, \$4,718,000 was spent on care and maintenance at Bloom Lake and \$1,513,000 was spent on exploration and administration activities.

The Corporation completed a NI 43-101 Technical Report on the Bloom Lake Mine Re-Start ("**Feasibility Study**") dated March 17, 2017. The Feasibility Study demonstrates that recommencing iron ore mining operations at Bloom Lake is financially viable and would be competitive in global iron ore markets with the potential to be one of the region's leading long-life iron ore mines. A production restart at Bloom Lake would be a major contributor to the provincial and national economy.

Highlights of the Feasibility Study include:

- Net after-tax cash flow of \$2.3 billion (including all forecasted CAPEX);
- After-tax net present value at 8% discount rate of \$984 million and an internal rate of return of 33.3% after tax;
- Total revenue over life-of-mine of \$15.1 billion;
- Total capital costs of \$326.8 million including mine upgrade capital cost of \$157.2 million;
- Mineral Reserves for the Bloom Lake Project are estimated at 411.7 million tonnes at an average grade of 30.0% iron ("Fe");
- Concentrate production averages 7.4 million tonnes per annum at an assumed steady state over the 21-year lifeof-mine. The concentrate, at 66.2% Fe is obtained with an expected metallurgical recovery that averages 83.3% Fe relative to plant feed at the 30% Fe average feed grade;
- Plant and processing upgrades are expected to deliver improvements in Fe recovery. The upgraded recovery circuit flowsheet replaces the existing 3-stage spiral circuit with a new gravity circuit that limits the recirculating process streams and reduces the chance of losses of iron to the rougher stage tailings. The recovery of additional iron minerals will also be achieved by a magnetic scavenging circuit;
- Life-of-mine average operating cost of production of \$44.62 per dry metric tonne, FOB Sept-Iles;

• Life-of-mine average iron ore price at 66.2% Fe CFR China (62% Fe index plus premium for extra Fe content) of US\$78.40 provided by a market study by Metalytics, a specialist economics consultancy in the metals and mineral resources sector.

Mining Parameters	Reserve (Mt)	411.7
	Processed tonnage (Mtpa)	20.0
	Average Fe processing recovery (%)	83.3%
	Average mining dilution (%)	4.3%
	Average Recovered concentrate (Mtpa)	7.4
	Mine Life (years)	21 years
Cost Parameters	Initial CAPEX including Working Capital (CA\$M)	326.8
	LOM CAPEX (CA\$M)	329.5
	LOM OPEX (CA\$/t of ore)	16.85
	LOM OPEX (CA\$/t dry concentrate)	44.62
Revenue Parameters	Gross Revenue (CA\$M)	15,116
	Shipping Costs (CA\$M)	3,748
	Cash Operating Margin (CA\$M)	4,432
	Operating Margin %	29.3%
	After Tax Net Cash-Flow (CA\$M)	2,335
Iron Ore Price	LOM Av Iron Price at 66.2%Fe CFR China (US\$/ton)	78.40
Parameters	Inflation	Nil
	Average Exchange Rate	0.79 US\$:1.0 CA\$
Valuation Parameters	NPV – 8% Pre-Tax (CA\$M)	1,675
	IRR (pre-tax)	43.9%
	NPV – 8% After-Tax (CA\$M)	984
	IRR (after-tax)	33.3%
	Pay-back (pre-tax) (years)	2.5
	Pay-back (after-tax) (years)	3.1

A summary of the economic paramaters and feasibility results include:

# **Current Financial Period**

The Corporation, through QIO, Société du Plan Nord and Tata Steel Minerals Canada entered into a memorandum of understanding to work together, in a multi-user approach, to manage and develop the industrial facilities (rail lines, access to port facilities, rail yards, a pellet plant, administrative offices and other facilities) on a site of around 1,200 hectares at Pointe-Noire in Sept-Îles, Québec, via the limited partnership Société Ferroviaire et Portuaire de Pointe-Noire ("SFPPN"). SFPPN will develop an innovative business model that meets the needs of the private sector while also promoting maximum benefits for future projects in the region.

The Corporation contributed \$1,000,000 to the capital of the limited partnership.

On April 12, 2017, the Corporation, through QIO, and the band council, Innu of Takuaikan Uashat mak Maniutenam entered into an Impact and Benefits Agreement (the "**IBA**") with respect to future operations at Bloom Lake.

The IBA is a life-of-mine agreement and provides for real participation in Bloom Lake for the Uashaunnuat in the form of training, jobs and contract opportunities, and ensures that the Innu of Takuaikan Uashat mak Mani-utenam will receive fair and equitable financial and socio-economic benefits. The IBA also contains provisions which recognize and support the culture, traditions and values of the Innu of Takuaikan Uashat mak Mani-utenam, including recognition of their bond with the natural environment.

# Off-take agreement

On May 18, 2017, the Corporation announced that its subsidiary QIO had signed a Framework Off-Take Agreement

(the "**Off-take Agreement**") with Sojitz Corporation ("**Sojitz**"), a major trading company based in Tokyo, Japan, pursuant to which Sojitz would purchase up to 3,000,000 DMT per annum from QIO after the re-commencement of commercial operations at the Bloom Lake. The Off-take Agreement is for an initial five-year term from the date that commercial operations commence at Bloom Lake and shall automatically extend for successive terms of five-years.

# \$40,000,000 bridge financing

To finance required upgrades to the tailings management system, other process plant upgrades and long-lead items in connection with the recommencement of operations at Bloom Lake, the Corporation arranged, on behalf of QIO, a \$40,000,000 bridge financing, comprised of debt of \$26,000,000 and equity of \$14,000,000. The debt component consists of a one-year term loan secured against the Bloom Lake fixed assets and large-scale mining equipment. The equity component consists of a proportionate contribution of \$8,800,000 and \$5,200,000 from the shareholders of QIO, the Corporation and the Government of Québec, respectively.

In connection with its \$8,800,000 equity contribution into QIO, the Corporation completed the sale of a \$10,000,000 unsecured convertible debenture bearing interest at the rate of 8% payable quarterly and matures on June 1, 2018 ("**Debenture**"). The Debenture is convertible at the option of the holder at any time into Ordinary Shares of the Corporation at a conversion price of \$1.00 per Ordinary Share. Should the Corporation not complete a master financing of a minimum of \$212,000,000 ("**Master Financing**") by November 30, 2017, the conversion price will be adjusted to the lesser of \$1.00 or the 5-day weighted average trading price of Ordinary Shares on the TSX determined as of the date of conversion. The maximum number of Ordinary Shares that may be issued upon conversion of the Debenture is 50,000,000 Ordinary Shares, with the balance of the unconverted principal amount of the Debenture to be repaid in cash or converted into a proportion of the Royalty (as defined hereinafter) at the option of the Corporation. If the principal amount is not repaid in full on or before June 1, 2019, the holder will have the right to convert the entire outstanding principal amount into a 0.21% gross overriding royalty on Bloom Lake.

Following completion of the Master Financing, the principal amount of the Debenture may be prepaid in whole or in part by the Corporation subject to a minimum payment representing 6 months of interest.

# Financial assistance from Government of Québec's Green Fund

On June 5, 2017, the Corporation announced that QIO has been granted \$5,200,000 in financial assistance from the Government of Québec's Green Fund in connection with two energy conversion projects at Bloom Lake. The two energy conversion projects will reduce Bloom Lake's greenhouse gas emissions by 19,689.2 tonnes equivalent CO<sub>2</sub> per year, which is equivalent to removing approximately 5,800 light vehicles from roads annually.

#### Rail transportation contract

On June 19, 2017, the Corporation announced that QIO had entered into a transportation agreement with the Quebec North Shore & Labrador Railway Company Inc. ("QNS&L") for the transportation of iron ore from Bloom Lake by way of the QNS&L railway for approximately 400 kilometres from the Wabush Lake Junction in Labrador City, Newfoundland & Labrador to the Sept-Îles Junction in Sept-Îles, Québec.

#### Significant Acquistion - Bloom Lake

The Corporation completed the Acquisition on April 11, 2016.

On June 27, 2016, the Corporation filed on SEDAR a Busines Acquisition Report or Form 51-102F4 in respect of the Acquisition.

As noted above, the Acquisition of Bloom Lake was in fact the acquisition of separate assets from a number of vendors. The Bloom Lake mine had ceased operations for more than 15 months before the Acquisition, and the only skeletal staff of employees remaining were for purposes of care, maintenance and security.

At the time of the Acquisition, Bloom Lake had long since ceased to generate any revenue. Rather, for an extended period of time there was only the incurrence of the expenses required for care, maintenance and security. The

limited information which has been made available for purposes of preparing the financial statements in the business acquisition report were such care, maintenance and security expenses.

It is the Corporation's expectation that significant evaluation, planning, refurbishment, changes and expenditures will be required if Bloom Lake is to ultimately be able to again be put into operation. Among the many requirements for economically viable operations will be various arrangements with staff, arm's length suppliers and servicers and adequate iron ore prices.

# Employees

As at March 31, 2017, the Corporation had 9 full-time employees, 2 part-time employees and 3 consultants primarily working out of Sydney, Australia, Toronto, Ontario and Montreal, Québec and 54 workers in care and maintenance at the Bloom Lake project located near Fermont, Quebec. The Corporation's use of consultants is a strategy consistent with that of many mineral exploration and development companies in order to manage costs. Four of Champion's executive officers are engaged by consulting companies to provide services to Champion.

Champion is dependent on the services of key executives, including the Executive Chairman and Chief Executive Officer and a small number of highly skilled and experienced executives and personnel. See "*Risk Factors – Dependence on Key Personnel*".

# Environmental Protection

All phases of Champion's operations are subject to environmental regulation in the jurisdictions in which it operates. These regulations mandate, among other things, the maintenance of air and water quality standards and land reclamation. They also set forth limitations on the generation, transportation, storage and disposal of solid and hazardous waste and greenhouse gas emissions. These regulations set forth a wide range of sanctions and penalties, both criminal and civil, for violations of the regulations. Compliance with such laws and regulations increases the costs and delays of exploration, planning, designing, drilling and developing the Corporation's properties.

To date, applicable environmental legislation has had no material financial or operational effects on Champion. See also "*Risk Factors – Environmental Regulations*".

# Competitive Conditions

The mineral exploration and mining industry is intensely competitive in all its phases. The Corporation competes with many other mineral exploration companies which have greater financial resources, expertise and experience. The market price of metals and minerals is determined in international markets, is volatile and is beyond the Corporation's control. See "*Risk Factors – Competition*" and "*Risk Factors – Fluctuating Prices*".

# **RISK FACTORS**

An investment in securities of the Corporation is highly speculative and involves significant risks. If any of the events contemplated in the risk factors described below or in the documents incorporated by reference actually occur, the Corporation's business may be harmed and its financial condition and results of operation may suffer significantly. In that event, the trading price of the Ordinary Shares could decline, and purchasers of Ordinary Shares may lose all or part of their investment. The risks described herein and in the documents incorporated by reference herein are not the only risks facing the Corporation. Additional risks and uncertainties not currently known to the Corporation, or that the Corporation currently deems immaterial, may also materially and adversely affect its business.

#### Nature of Mineral Exploration and Mining

At the present time, the Corporation does not hold any interest in a mining property in production. The Corporation's viability and potential for success lie in its ability to develop, exploit and generate revenue out of mineral deposits. The exploration and development of mineral deposits involve significant financial risks over a significant period of time which even a combination of careful evaluation, experience and knowledge may not eliminate. While discovery of a mine, or operating a mine may result in substantial rewards, few properties which are explored are ultimately

developed into producing mines. Major expenses may be required to establish reserves by drilling and to construct mining and processing facilities at a site. It is impossible to ensure that the current or proposed mine development and/or exploration programs on exploration properties in which Champion has an interest will result in a profitable commercial mining operation.

The operations of the Corporation are subject to all of the hazards and risks normally incidental to exploration and development of mineral properties, any of which could result in damage to life or property, environmental damage and possible legal liability for any or all damage. The activities of the Corporation may be subject to prolonged disruptions due to weather conditions depending on the location of operations in which the Corporation has interests. Hazards, such as unusual or unexpected formation, rock bursts, pressures, cave-ins, flooding or other conditions may be encountered in the drilling and removal of material. While the Corporation may obtain insurance against certain risks in such amounts as it considers adequate, the nature of these risks are such that liabilities could exceed policy limits or could be excluded from coverage. There are also risks against which the Corporation cannot insure or against which it may elect not to insure. The potential costs which could be associated with any liabilities not covered by insurance or in excess of insurance coverage or compliance with applicable laws and regulations may cause substantial delays and require significant capital outlays, adversely affecting the future earnings and competitive position of and, potentially, its financial position.

Whether a mineral deposit will be commercially viable depends on a number of factors, some of which are the particular attributes of the deposit, such as its size and grade, proximity to infrastructure, financing costs and governmental regulations, including regulations relating to prices, taxes, royalties, infrastructure, land use, importing and exporting and environmental protection. The effect of these factors cannot be accurately predicted, but the combination of these factors may result in the Corporation not receiving an adequate return on invested capital.

# Potential Land Claims – First Nations Groups

The Corporation conducts its operations in the Province of Newfoundland and Labrador and in north-eastern Québec, which areas are subject to conflicting First Nations land claims. Aboriginal claims to lands, and the conflicting claims to traditional rights between aboriginal groups, may have an impact on the Corporation's ability to develop its properties. The boundaries of the traditional territorial claims by these groups, if established, may impact the areas which constitute the Corporation's properties. Mining licences and their renewals may be affected by land and resource rights negotiated as part of any settlement agreements entered into by governments with First Nations.

Pursuant to section 35 of *The Constitution Act of 1982*, the Federal and Provincial Crowns have a duty to consult Aboriginal peoples and, in some circumstances, a duty to accommodate. When development is proposed in an area to which an Aboriginal group asserts Aboriginal rights and titles, and a credible claim to such rights and titles has been made, a developer may be required by the Crown to conduct consultations with Aboriginal groups which may be affected by the project and, in some circumstances, accommodate them.

The development and the operation of the Corporation's properties requires the conclusion of IBAs and/or other agreements with the affected First Nations. As a result of the IBAs or of other agreements, the Corporation may incur significant financial or other obligations to affected First Nations.

On April 12, 2017, the Corporation, through QIO, and the band council, Innu of Takuaikan Uashat mak Maniutenam entered into an IBA with respect to future operations at Bloom Lake. The IBA is a life-of-mine agreement and provides for real participation in Bloom Lake for the Uashaunnuat in the form of training, jobs and contract opportunities, and ensures that the Innu of Takuaikan Uashat mak Mani-utenam will receive fair and equitable financial and socio-economic benefits. The IBA also contains provisions which recognize and support the culture, traditions and values of the Innu of Takuaikan Uashat mak Mani-utenam, including recognition of their bond with the natural environment.

The negotiation of any IBAs required in the future for other projects may also significantly delay the advancement of the properties. There can be no assurance that the Corporation will be successful in reaching an IBA or other agreement with the Innu of Takuaikan Uashat mak Mani-utenam or other First Nations groups who may assert Aboriginal rights or may have a claim which affects the CFLN Project, Quinto Claims or any of the Corporation's other projects.

# Financing Risks

The Corporation has limited financial resources and there is no assurance that additional funding will be available to it for further exploration and development of its projects or to fulfill its obligations under applicable agreements. Although the Corporation has been successful in the past in obtaining financing through the sale of equity securities, there can be no assurance that the Corporation will be able to obtain adequate financing in the future or that the terms of such financing will be favourable. Failure to obtain such additional financing could result in delay or indefinite postponement of further exploration and development of the property interests of the Corporation with the possible dilution or loss of such interests.

# Infrastructure

Some of the Corporation's properties are located in relatively remote areas at some distance from existing infrastructure. Active mineral exploitation at any such properties would require building, adding or extending infrastructure, which could add to time and cost required for mine development.

Mining, processing, development and exploration activities depend, to one degree or another, on adequate infrastructure. In order to develop mines on its properties, Champion will need to negotiate and conclude various agreements for various infrastructure requirements, including for rail transportation, power and port access with various industry participants, including external service and utility providers. These are important determinants affecting capital and operating costs. The Corporation has not yet concluded agreements with the relevant rail companies or operators necessary for the transportation and handling of the Corporation's planned production of iron ore and there can be no assurance that agreements on acceptable terms will be concluded. The Corporation is also in ongoing discussions with potential strategic partners to evaluate various rail transportation options (including a multi-user facility) but there can be no assurance that any such agreements will be concluded. The inability to conclude any such agreements – for rail transportation and power – could have a material adverse effect on the Corporation's results of operations and financial condition and on its ability to produce or market any products from the projects.

The Corporation's projects will require access to a sea port which is currently expected to be the Port of Sept-Îles, however, there is no assurance that the Corporation will have access to such facilities or alternative facilities on economically feasible terms.

In addition, there is no certainty that the Corporation will be able to access sources of power on economically feasible terms for all of its projects and requirements and this could have a material adverse effect on the Corporation's results of operations and financial condition.

#### No Significant Revenues

To date, the Corporation has not recorded any revenues, other than interest and investment income and management fees and it has no dividend record. The Corporation has not commenced commercial production on any property. There can be no assurance that significant losses will not occur in the near future or that the Corporation will be profitable in the future. The Corporation's operating expenses and capital expenditures may increase in subsequent years as consultants, personnel and equipment costs associated with advancing exploration, development and commercial production of the Corporation's properties increase. The Corporation expects to continue to incur losses unless and until such time as it enters into commercial production and generates sufficient revenues to fund its continuing operations. The development of the Corporation's properties will require the commitment of substantial resources to conduct time-consuming development. There can be no assurance that the Corporation will generate any revenues or achieve profitability.

# Current Global Financial Condition

Global financial markets experienced extreme and unprecedented volatility and disruption in 2008 and 2009. World economies experienced a significant slowdown in 2008 and 2009 and only slowly began to recover late in 2009, through 2010, 2011, 2012, 2013, 2014, 2015 and into 2016-2017, although the strength of recovery has varied by region and by country. In the latter half of 2011 and 2012-2013, debt crises in certain European countries and other factors adversely affected the recovery. The majority vote in favour of the United Kingdom leaving the European Union may worsen and/or prolong global financial markets' challenges and the demand for commodities. These conditions have resulted and may continue to result in a reduction in demand for various resources and raw

materials. As a result, access to public financing has been negatively impacted. These factors may impact the ability of the Corporation to obtain equity or debt financing in the future on favourable terms. Additionally, these factors, as well as other related factors, may cause decreases in asset values that are deemed to be other than temporary, which may result in impairment losses. If such increased levels of volatility and market fluctuations continue, the Corporation's operations could be adversely impacted and the trading price of its Ordinary Shares may be adversely affected.

# Dilution and Future Sales of Ordinary Shares

The Corporation may issue additional shares in the future, which would dilute a shareholder's holdings in the Corporation. The Corporation's Constitution permits, among other things, the issuance of an unlimited number of Ordinary Shares.

# The Corporation is Primarily Focussed on the Bloom Lake Project

The Corporation is focusing much of its resources on developing its recently acquired Bloom Lake project. Any adverse development affecting the Bloom Lake project could have a material adverse effect on the Corporation's business, prospects, financial performance and results of operations.

The Bloom Lake mine operations ceased some time ago, and its previous owner was forced to seek creditor protection under the CCAA. Numerous conditions (including among others, the successful implementation of the required upgrades to the Bloom Lake mine, economically sustainable commodity prices, labour and other arrangements and the completion of significant financings) must be satisfied if the Bloom Lake project is to be successfully put into economic operation.

# Joint Ventures and Option Agreements

From time to time several companies may participate in the acquisition, exploration and development of natural resource properties through options, joint ventures or other structures, thereby allowing for their participation in larger programs, permitting involvement in a greater number of programs and reducing financial exposure in respect of any one program. It may also be the case that a particular company will assign all or a portion of its interest in a particular program to another of these companies due to the financial position of the company making the assignment. In determining whether or not the Corporation will participate in a particular program and the interest therein to be acquired by it, the directors will primarily consider the degree of risk to which the Corporation may be exposed and its financial position at that time. In some of those arrangements, failure of a participant to fund its proportionate share of the ongoing costs could result in its proportionate share being diluted and possibly eliminated.

From time to time the Corporation may enter into option agreements and joint ventures as a means of gaining property interests and raising funds. Any failure of any option or joint venture partner to meet its obligations to the Corporation or other third parties, or any disputes with respect to third parties' respective rights and obligations, could have a material adverse effect on such agreements. In addition, the Corporation may be unable to exert direct influence over strategic decisions made in respect of properties that are subject to the terms of these agreements.

#### Going Concern

Values attributed to the Corporation's assets may not be realizable. The Corporation has a limited history and its ability to continue as a going concern depends upon a number of significant variables. The amounts attributed to the Corporation's properties in its financial statements represent acquisition and exploration costs and should not be taken to represent realizable value. Further, the Corporation has no proven history of performance, revenues, earnings or success. As such, the Corporation's ability to continue as a going concern is dependent upon the existence of economically recoverable resources, the ability of the Corporation to obtain the necessary financing to complete the development of its interests and future profitable production or, alternatively, upon the Corporation's ability to dispose of its interests on a profitable basis.

# Dependence on Key Personnel

The Corporation is dependent on a relatively small number of key employees or consultants, the loss of any of whom could have an adverse effect on its operations. The Corporation currently does not have key person insurance on these individuals.

# No Assurance of Titles

The acquisition of title to mineral projects is a very detailed and time consuming process. Although the Corporation has taken precautions to ensure that legal title to its property interests is properly recorded in the name of the Corporation or, where applicable, in the name of its joint venture partners, there can be no assurance that such title will ultimately be secured. Furthermore, there is no assurance that the interests of the Corporation in any of its properties may not be challenged or impugned.

# Permits and Licenses

The operations of the Corporation require licenses and permits from various governmental authorities. The Corporation believes that it presently holds all necessary licenses and permits required to carry on with activities which it is currently conducting under applicable laws and regulations and the Corporation believes it is presently complying in all material respects with the terms of such licenses and permits. However, such licenses and permits are subject to change in regulations and in various operating circumstances. There can be no assurance that the Corporation will be able to obtain all necessary licenses and permits required to carry out exploration, development and mining operations at its projects.

# Fluctuating Prices

Factors beyond the control of the Corporation may affect the marketability of any iron ore or any other minerals discovered. Resource prices have fluctuated widely and are affected by numerous factors beyond the Corporation's control. These factors include market fluctuations, the proximity and capacity of natural resource markets and processing equipment, and government regulations, including regulations relating to prices, taxes, royalties, land tenure, land use, importing and exporting of minerals and environmental protection. The exact effect of these factors cannot be accurately predicted, but the combination of these factors may result in the Corporation not receiving an adequate return on invested capital and a loss of all or part of an investment in securities of the Corporation may result.

# Estimates of Mineral Resources

Although the mineral resource estimates included herein have been carefully prepared by independent mining experts, these amounts are estimates only and no assurance can be given that any particular level of recovery of iron ore or other minerals will in fact be realized or that an identified mineral deposit will ever qualify as a commercially mineable (or viable) ore body which can be economically exploited. Additionally, no assurance can be given that the anticipated tonnages and grades will be achieved or that the indicated level of recovery will be realized. Estimates of mineral resources can also be affected by such factors as environmental permitting regulations and requirements, weather, environmental factors, unforeseen technical difficulties, unusual or unexpected geological formations and work interruptions. In addition, the grade of ore ultimately mined may differ dramatically from that indicated by results of drilling, sampling and other similar examinations. Short-term factors relating to mineral resources, such as the need for orderly development of ore bodies or the processing of new or different grades, may also have an adverse effect on mining operations and on the results of operations. Material changes in mineral resources, grades, stripping ratios or recovery rates may affect the economic viability of projects. Mineral resources are reported as general indicators of mine life. Mineral resources should not be interpreted as assurances of potential mine life or of the profitability of current or future operations. There is a degree of uncertainty attributable to the calculation and estimation of mineral resources and corresponding grades. Until ore is actually mined and processed, mineral resources and grades must be considered as estimates only. In addition, the quantity of mineral resources may vary depending on mineral prices. Any material change in resources or mineral resources, or grades or stripping ratios will affect the economic viability of the Corporation's projects.

# Foreign Exchange

Iron ore is sold in U.S. dollars thus the Corporation is subject to foreign exchange risks relating to the relative value of the Canadian dollar as compared to the U.S. dollar. To the extent that the Corporation generates revenues upon reaching the production stage on its properties, it will be subject to foreign exchange risks as revenues will be received in U.S. dollars while operating and capital costs will be incurred primarily in Canadian dollars. A decline in the U.S. dollar would result in a decrease in the real value of the Corporation's revenues and adversely impact the Corporation's financial performance.

# Dependence on Outside Parties

The Corporation has relied upon consultants, engineers and others and intends to rely on these parties for development, construction and operating expertise. Substantial expenditures are required to construct mines, to establish mineral reserves through drilling, to carry out environmental and social impact assessments, to develop metallurgical processes to extract the metal from the ore and, in the case of new properties, to develop the exploration and plant infrastructure at any particular site. If such parties' work is deficient or negligent or is not completed in a timely manner, it could have a material adverse effect on the Corporation.

# Reduced Global Demand for Steel or Interruptions in Steel Production

The global steel manufacturing industry has historically been subject to fluctuations based on a variety of factors, including general economic conditions and interest rates. Fluctuations in the demand for steel can lead to similar fluctuations in iron ore demand. A decrease in economic growth rates could lead to a reduction in demand for iron ore. Any decrease in economic growth or steel consumption could have an adverse effect on the demand for iron ore and consequently on the Corporation's ability to obtain financing, to achieve production and on its financial performance. See also "Current Global Financial Conditions" above.

# Availability of Reasonably Priced Raw Materials and Mining Equipment

The Corporation will require a variety of raw materials in its business as well as a wide variety of mining equipment. To the extent these materials or equipment are unavailable or available only at significantly increased prices, the Corporation's production and financial performance could be adversely affected. It is also expected that the required refurbishment at Bloom Lake will require significant financing.

# Volatility of Stock Price

In recent years, the securities markets in Australia and Canada have experienced a high level of price and volume volatility, and the market prices of securities of many companies have experienced wide fluctuations in price which have not necessarily been related to the operating performance, underlying asset values or prospects of such companies. There can be no assurance that continual fluctuations in price will not occur. It may be anticipated that any quoted market for the Ordinary Shares will be subject to market trends generally, notwithstanding any potential success of the Corporation in creating revenues, cash flows or earnings and that the value of the Ordinary Shares will be affected by such volatility.

#### The Corporation's Activities are Subject to Extensive Governmental Regulation

Exploration, development and mining of minerals are subject to extensive federal, provincial and local laws and regulations governing acquisition of mining interests, prospecting, development, mining, production, exports, taxes, labour standards, occupational health, waste disposal, toxic substances, water use, land use, land claims of aboriginal peoples and local people, environmental protection and remediation, endangered and protected species, mine safety and other matters.

#### Environmental Regulations

The operations of the Corporation are subject to environmental regulations promulgated by government agencies from time to time. Environmental legislation provides for restrictions and prohibitions on spills, releases or emissions of various substances produced in association with certain mining industry operations, such as seepage from tailings disposal areas, which would result in environmental pollution. A breach of such legislation may result in the imposition of fines and penalties. In addition, certain types of operations require the submission and approval of environmental impact assessments. Environmental legislation is evolving toward stricter standards, and enforcement, fines and penalties for non-compliance are becoming more stringent. Environmental assessments of proposed projects carry a heightened degree of responsibility for companies and their directors, officers and employees. The cost of compliance with changes in governmental regulations has a potential to reduce the profitability of operations.

The Corporation's operation is subject to environmental regulation primarily by the Department of Environment and Conservation (Newfoundland and Labrador) and Ministère du Développement durable, de l'Environnement et des

Parcs (Québec). In addition, the Department of Fisheries & Oceans (Canada) and the Department of the Environment (Canada) have an enforcement role in the event of environmental incidents.

# **Conflicts of Interest**

The directors and officers of the Corporation may serve as directors or officers of other public resource companies or have significant shareholdings in other public resource companies. Situations may arise in connection with potential acquisitions and investments where the other interests of these directors and officers may conflict with the interests of the Corporation. In the event that such a conflict of interest arises at a meeting of the directors of the Corporation, a director is required to disclose the conflict of interest and to abstain from voting on the matter.

#### Competition

The mineral exploration and mining business is competitive in all of its phases. The Corporation competes with numerous other companies and individuals, including competitors with greater financial, technical and other resources than the Corporation, in the search for and acquisition of attractive mineral properties. The ability of the Corporation to acquire properties in the future will depend not only on its ability to develop its present properties, but also on its ability to select and acquire suitable properties or prospects for mineral exploration. There is no assurance that the Corporation will continue to be able to compete successfully with its competitors in acquiring such properties or prospects.

# MATERIAL PROPERTY

# **TECHNICAL INFORMATION – Bloom Lake Property**

On April 11, 2016, the Corporation, through QIO, acquired the Bloom Lake Assets. Although Bloom Lake had mining operations for several years, mining operations at Bloom Lake were suspended in December 2014 and the mine was transitioned to care and maintenance mode. As discussed above in this AIF, the Bloom Lake Assets were acquired through a CCAA process and significant analysis and other work was required for the Corporation to better determine the optimal approach for potential future operations and to procure a NI 43-101 compliant technical report. The Corporation completed a NI 43-101 technical report on Bloom Lake dated March 17, 2017 ("**Feasibility Study**").

Stéphane Rivard, Eng., Robing Jones, Eng., and Michel Bilodeau, Eng., of Ausenco Canada Inc. ("Ausenco"), Luois-Pierre Gignac Eng., Rejean Sirois, Eng., and Etienne Bernier, Eng. of G Mining Services Inc. ("G Mining") and Edwart Hart, MAusIMM. of Mineral Technologies Pty Ltd. ("Mineral Technologies"), and Phillippe Rio Roberge, P. Eng. of WSP Candad Inc. ("WSP") (collectively the "Feasibility Study Authors"), prepared the Feasibility Study. Each of the Feasibility Study Authors is a qualified person under NI 43-101 and is independent of the Corporation. The Feasibility Study was prepared for the Corporation and QIO to provide an independent, NI 43-101 compliant technical report on the Bloom Lake project.

The information in the following section has been derived from and based on the assumptions, qualifications and procedures set out in the Feasibility Study. Portions of the following section are extracts of the Feasibility Study and are included herein with the consent of the Feasibility Study Authors. Readers should consult the Feasibility Study to obtain further particulars regarding the Bloom Lake project. Figures or charts referred to in this summary but not reproduced herein may be viewed in the Feasibility Study. Table references are to the tables in the Feasibility Study certain of which are reproduced herein. Technical information in this AIF regarding the Bloom Lake project should be read in the context of the qualifying statements, procedures and accompanying discussion within the complete Feasibility Study and the summary provided herein is qualified in its entirety by the Feasibility Study. Capitalized and abbreviated terms appearing in the following summary shall have the meaning ascribed to such terms in the Feasibility Study.

# **Property Description and Location**

The Bloom Lake property is located in the Labrador Trough area straddling the border between Quebec and Labrador. There are several iron ore mines in the area including Mont-Wright owned by ArcelorMittal and Carol Lake owned by Iron Ore Company of Canada (IOC). Wabush Mines, located in Labrador and once owned by Cliffs Natural Resources (Cliffs), ended its activities in 2014.

The Bloom Lake property is owned by Quebec Iron Ore Inc. (QIO). QIO has owned the property and the facilities at the Bloom Lake mining site since April 12, 2016.

The mining site is located in the north-eastern part of the province of Quebec, adjacent to the Labrador/Newfoundland border, in Normanville Township, Kaniapiskau County. The property is centred at latitude  $52^{\circ}$  50' North and longitude  $67^{\circ}$  16' West, 13 km west of the town of Fermont and 30 km southwest of the municipalities of Wabush and Labrador City.

In 2016, QIO was holding 100% of 114 active claims outside of the Mining Lease (BM 877) which has a total of 6857.7 ha. QIO requested the renewal of 69 claims in October 2016. Those claims outside the mining lease remain active.

There are no royalties, agreements or encumbrances on the mining site.

# Accessibility, Climate, Local Resources, Infrastructure and Physiography

The mine site lies approximately 13 km west of the town of Fermont (central geographical coordinates  $52^{\circ}$  50' N and  $67^{\circ}$  16' W). A 5-km access road has been constructed to connect the Bloom Lake mine with Highway 389. It is accessible by road from Baie-Comeau on the north shore of the Saint Lawrence River, as well as by road from the Wabush airport in Newfoundland & Labrador. The Wabush airport is located approximately 30 km from the Bloom Lake mine. The mine site is located approximately 950 km northeast of Montreal.

The rail access to port consists of three separate segments. The first segment is the rail spur on site, consisting of a 31.9-km long segment that is operational and connects to the Quebec North Shore and Labrador (QNS&L) railway at the Wabush Mines facilities in Wabush, Labrador. This first segment belongs to QIO. The second segment employs the QNS&L railway from Wabush to Arnaud Junction in Sept-Îles and from there, the third section is from Arnaud junction to Pointe-Noire (Sept-Îles), property of "Les Chemins de Fer Arnaud", Sept-Îles, Quebec, where the concentrate will be unloaded, stockpiled, and loaded onto vessels. The third segment is owned by the Government of Quebec through the Société du Plan Nord, which acquired these assets from Cliffs' CCAA.

The climate at Fermont is defined as sub-arctic with temperatures ranging from -40 C to +25 C. The prevailing winds are mostly from the west at an average speed of 14 km/h. Average daily maximum temperatures above freezing normally starts in April and falls below freezing by end of October.

The town of Fermont has a population of 2,874 as per Statistics Canada, and is the residential town for employees working for ArcelorMittal's Mont-Wright mine operations. The town has all the required infrastructure to support the employees and families who live in this town. As part of the purchase of the Bloom Lake mine, QIO acquired the following accommodations, which are in the town of Fermont:

- 4 houses located on *rue des Mélèzes* (with 5 rooms each and built in 2012)
- 22 houses, fully furnished, located on *rue des Bâtisseurs* (12 with 8 rooms each, 6 with 7 rooms each and 4 with 5 rooms each and built in 2009)
- Two blocks (motels) of 99 rooms of lodging located on *rue du Fer* (built in 2013)

These accommodations are fully equipped with furniture, linen, and wiring for communications and entertainment and can host up to about 700 people on a fly-in-fly-out basis.

The electrical power supply which is currently installed is supplied by Hydro Quebec from the Normand sub-station which is located 12 km from the mine. The previous owner, Cliffs, was preparing for an expansion of the operations which would have doubled the production capacity. As part of this preparation, the high voltage power lines were upgraded to be able to handle a further 30 Mw. QIO owns a 315 kV station including 2 x 80 MVA transformers. QIO's current plans for a moderate increase in production capacity and further tailings pumping will use only a small fraction of this surplus electrical power availability (68 MW authorized by Hydro-Québec).

A spare parts inventory representing a total of CAN \$43.6 M, as estimated in October 2014 (before the mining operations stopped), is currently available for the future operations. Moreover, all equipment including a mining fleet sufficient to support future operations and infrastructure dedicated to future expansion planned by the previous owner is still at the site, and is available for the current project. The following is a partial list of equipment that can be used for spares or will be used to reduce the actual project cost:

- Water and slurry pumps ranging from 25hp 1250hp (qty.: 70)
- Automatic sliding gate or butterfly valves ranging from 6 in to 24 in (qty.: 120)
- Flowmeters ranging from 1.5 in to 20 in (qty.: 70)
- Full set of Metso AG mill liners and wear components
- AG mill gear and 2 complete motor/gearbox/pinion set
- Complete AG mill electrical drive components and lubrication system
- Phase 2 electrical cabling (control cables (100%), low voltage cables (75%) and medium voltage cables (10%))
- Medium and low voltage variable speed drives and motor starters up to 2000 hp for complete plant
- Power distribution components (protection relays, MCC, distribution panels, medium and low voltage transformers, etc.)
- Complete automation system and control panels
- Miscellaneous accessories related to plant services (fire protection, air/steam distribution, etc.)

The relief of the claims area is relatively hilly. The average elevation varies between 671 m and 762 m and the highest peaks culminate at about 808 m.

# <u>History</u>

In 1951, following the discovery of a cobalt showing at Bloom Lake, James and Michael Walsh staked claims for Mr. Bill Crawford of Sursho Mining Corporation (SMC). In February 1952, Quebec Cobalt and Exploration Limited (QUECO) was incorporated to acquire the claims held by SMC.

In 1952, a crew of six prospectors under the supervision of Mr. K. M. Brown began a program to prospect an area that included the Bloom Lake property. In June 1952, Mr. R. Cunningham, a mining geologist with Québec Metallurgical Industries, began to map the various cobalt occurrences at Bloom Lake. Although the results for cobalt were disappointing, several zones of magnetite-hematite iron formation (IF) were identified between Bloom Lake and Lac Pignac and were sampled. Further exploration was conducted in 1953.

In 1954, Cunningham supervised a program to investigate the iron occurrences through line cutting, geological mapping, and magnetometer surveys. In 1955, Jones and Laughlin Steel Corporation (J&L) optioned the property from QUECO. Cleveland-Cliffs Iron Company (CCIC) joined with J&L and conducted a diamond drill program from 1956 through 1957. Two drills were brought to the property and two series of holes, the "QC" and the "X" series, were drilled to test IF on the Bloom Lake property. Holes X-1 to X-11 (XRT - ¾" diameter core) amounted to 446 m and Holes QC-1 to QC-30 (AXT size 1.28" diameter core) totalled 4,769 m. The holes were largely drilled on sections 800 to 1,000 ft. apart (244 to 305 m). Four of these drillholes were drilled on the west part of the property.

More drilling was conducted in 1966 by Boulder Lake Mines Incorporated, a subsidiary of CCIC, and Jalore Mining Company Limited (Jalore), a subsidiary of J&L. Holes X-12 to 20, totalling 175 m, and other holes were drilled as part of this campaign, but these were not on the present property. Some ground magnetometer surveying was also conducted in 1966. J&L's option on the property was terminated in 1968.

In 1971, exploration on the property was renewed by a QUECO-sponsored program that was managed by H. E. Neal & Associates Ltd. (HEN). The exploration program consisted of line cutting, geological mapping, gravity and magnetometer surveys, and diamond drilling in 1971 and 1972.

These holes were drilled to investigate the potential for IF beneath the amphibolite on the eastern side of the property. Nine drillholes were done in 1971 for a total of 1,834.23 m (341 samples) and 12 were drilled in 1972 (3,497.79 m and 341 samples). Eight of the drillholes were done on Bloom Lake West in 1971 and five were drilled

in 1972. The mapping and magnetometer surveys were designed to fill in areas not previously surveyed. The gravity survey was conducted to help evaluate the potential for IF beneath the amphibolite.

In 1973, Republic Steel Corporation optioned the property and HEN prepared a "Preliminary Evaluation" of the property that consisted of currently held property and claims further to the west. This work was conducted until 1976. The evaluation included "mineral reserve" estimates, a metallurgical test program, and preliminary mine design. The mine design included pit outline, dump area, access roads, and railway spur. Dames and Moore prepared the mine design and "reserve" estimates. Lakefield Research (Lakefield) conducted the metallurgical test work.

In 1998, a major exploration program was conducted by Watts, Griffis and McOuat (WGM) for QCM, which then held the Bloom Lake property under option from Consolidated Thompson-Lundmark Gold Mines Limited (CLM). QCM held the option on the property until 2001, but no work was conducted between 1998 and 2005. The 1998 program included line cutting, surveying, road building, camp construction, diamond drilling, geological mapping, mini-bulk sampling, bench-scale preliminary metallurgical test work, preparation of a "mineral resource" estimate, camp demobilization, and site clean-up.

In 2005, CLM retained WGM to conduct a technical review, including the preparation of a mineral resource estimate for the Bloom Lake iron deposit to assist CLM in making business decisions and future planning. The technical review was prepared in compliance with the standards of NI 43-101 in terms of structure and content. The mineral resource estimate was prepared in accordance with NI 43-101 guidelines and CIM standards. In 2006, Consolidated Thompson-Lundmark Gold Mines Limited changed the name of the Company to Consolidated Thompson Iron Mines Limited. This name change reflected the Company's focus on iron ore mining and exploration.

From 2006 to 2007, CLM drilled 17 drill-holes (2,884.36 m) on the site of the future pit in order to get a sample for metallurgical test work. The Lakefield laboratory performed these tests. In 2006, bulk sampling took place in the area of the future pit.

Cliffs acquired CLM in May 2011. Quebec Iron Ore Inc., owns the Bloom Lake property and the facilities since April 12, 2016.

Overall, 243 drill-holes were made between 1957 and 2009 for a total of 45,386 metres and 273 drill-holes in 2010, 2012 and 2013 for a total of 89,197 meters. Four geotechnical holes have been drilled in 2014. The complete description of the drill programs are described in section 10.

In 2008, CLM started the construction of the plant. In December 2009, the plant was in the starting phase. Table 6-1 shows production from 2010 to 2014 in Dry Metric Ton per Year.

	2010	2011	2012	2013	<b>2014</b> <sup>1</sup>	2015	2016
Iron Ore mined	10,254,914	16,860,407	16,984,149	17,615,793	19,306,207	0	0
Iron Ore processed	8,201,688	15,604,183	15,833,945	18,429,598	18,883,848	0	0
Iron Ore concentrate production	3,166,297	5,466,155	5,450,228	5,876 761	5,940,442	0	0

Table 6-1 : Production at the Bloom Lake Mine from 2010 to 2014 in Dry Metric tonnes per Year

<sup>1</sup> Production halt in mid-December 2014

#### **Geological Setting, Mineralization, and Deposit Types**

The Bloom Lake Iron Deposit lies within the Fermont Iron Ore District (FIOD), a world-renowned iron-mining camp at the southern end of the Labrador Trough within the geological Grenville Province. The Labrador Trough extends along the margins of the eastern boundary of the Superior-Ungava craton for more than 1,200 km and is up to 75 km wide at its central part. The Bloom Lake deposit, including the Bloom Lake West property, is located within the Parautochton Deformation Belt of the Grenville Province of the Canadian Shield, just south of the Grenville Front. The Grenville Front, the northern limit of the Grenville Province, truncates the Labrador Trough,

separating the Churchill Province greenschist metamorphic grade part of the Labrador Trough rocks from the highly metamorphosed and folded amphibolite to granulite metamorphic grade rocks, which are their equivalent in the Grenville.

The western half of the Labrador Trough, consisting of a thick sedimentary sequence, can be divided into three sections based on changes in lithology and metamorphism (north, central and south). The Trough is comprised of a sequence of Proterozoic sedimentary rocks including iron formations, volcanic rocks and mafic intrusions known as the Kaniapiskau Supergroup. The Kaniapiskau Supergroup consists of the Knob Lake Group in the western part of the Trough and the Doublet Group, which is primarily volcanic, in the eastern part. The Kaniapiskau Supergroup within the Grenville is highly metamorphosed and complexly folded and is named the Gagnon Group. It occurs as numerous isolated segments. From the base to the top, it includes a sequence of gneisses and schists, a group of chemically precipitated sediments, and more schists, including some distinctive aluminous varieties. Gabbro sills intrude parts of the Gagnon Group, and granites are found in the gneiss.

The Central or Knob Lake Range section extends for 550 km south from the Koksoak River to the Grenville Front located 30 km north of Wabush Lake. The principal iron formation unit, the Sokoman Formation, part of the Knob Lake Group, forms a continuous stratigraphic unit that thickens and thins from sub-basin to sub-basin throughout the fold belt.

The southern part of the Trough is crossed by the Grenville Front. The rocks in the Grenville Province to the south are highly metamorphosed and complexly folded. Iron deposits in the Grenville part of the Labrador Trough comprise Bloom Lake, Lac Jeannine, Fire Lake, Mounts Wright and Reed, and the Luce, Humphrey and Scully deposits in the Wabush area. The high-grade metamorphism of the Grenville Province is responsible for recrystallization of both iron oxides and silica in primary iron formation, producing coarse-grained sugary quartz, magnetite, specular hematite schists (meta-taconites) that are of improved quality for concentrating and processing.

The iron-formation and associated metasedimentary rocks, which were derived from an assemblage of continental shelf-type sediments, do not appear to extend south beyond a line trending northeast from the Hart-Jaune River linear to Plaine Lake and northeast to Ossokmanuan Lake. Granite-gneisses, charnockites, and anorthosites are part of the rock assemblage south of this line. These typical deep-seated Grenville rocks may have been thrust northwest along a system of faults that coincide with this line. The large suite of gabbro intrusions in the area between Wabush Lake and Ossokmanuan Lake probably were intruded along faults in this linear zone.

The geology and geological interpretation for the Bloom Lake property are based on data from a number of sources. These sources include the diamond drilling and mapping done on the property as part of the 1998 program, presented by Watts, Griffs and McOuat in 2005, as well as the drilling conducted in 1956, 1957, 1967, 1971, 1972 and 2007-2014 programs. The geological interpretation relies heavily on the mapping programs conducted in 1952 and the ground magnetic surveys carried out in 1967 and 1971/72 as compiled in 1973 and the survey done in April 2008.

The Bloom Lake deposit comprises gently plunging synforms on a main east-west axis separated by a gently north to northwest plunging antiform. One of these synforms is centred on Triangle Lake, while the centre for the other is located just north of Bloom Lake. The Bloom Lake property is centred primarily on the eastern synform but covers a portion of the northern limb of the western synform.

These synforms are the result of a minimum of two episodes of folding and are of regional scale.

In addition to these regional scale folds, which have created the deposit scale synforms shaping the Bloom Lake deposit, there are several other folds of diverse orientation on the property. It is not clear if all folding directions represent distinct folding episodes or progressive change in fold orientation with time.

The Bloom Lake deposits are about 24 km southwest of Labrador City and about 8 km north of the Mount Wright range. The western 6 km of this range contains very large reserves of specular hematite-magnetite iron-formation in a synclinal structure that is regarded as a southwest extension of the Wabush Lake ranges.

The iron-formation and quartzite are conformable within a metasedimentary series of biotite-muscovite-quartzfeldspar-hornblende-garnet-epidote schists and gneisses in a broad synclinal structure. This succession, following the first stage of folding and faulting, was intruded by gabbroic sills which were later metamorphosed and transformed into amphibolite gneiss with foliation parallel with that in adjacent metasediments. Two separate ironformation units are present; these join northwest of Bloom Lake, but are separated by several dozen meters of gneiss and schist in the southern part of the structure. Quartzite, present below the upper member throughout the eastern part of the area, pinches out near the western end. Folded segments and inclusions of iron-formation in the central part of the syncline that are surrounded by amphibolite, are in most cases thought to be part of an overlying sheet that was thrust over the main syncline during the first period of deformation. The large amphibolite mass in the central part of the area was apparently emplaced along the zone of weakness created by this early thrust fault.

Iron-formation in the western 5 to 6 kilometers of the structure is predominantly of the magnetite-hematite-quartz facies that forms the major zones of potential ore. Hematite is distributed in two ways through the quartzite. The hematite is of the specularite type and has a silvery-grey colour and is non-magnetic. It is most often occurring as anastomosing to discontinuous stringers and bands less than 10 cm thick in a quartz or actinolite-quartz matrix. Bands tend to be folded and deformed but also can be regular and tabular. Quartz is milky and granular.

Magnetite typically occurs in narrow millimetric veinlets associated with quartz-carbonate veining material. The crystals are sub- to euhedral and demonstrate the typical dull to sub- metallic luster. When associated to hematiteenriched mineralization, the magnetite occurs as blebs of porous grains, often granoblastic, that may extend up to several centimetres. Enriched magnetite horizons are mostly found, but not always, in the upper portion of the iron formations in close contact with the amphibolite mass.

With the actual state of geological knowledge in the western sector of the Bloom Lake deposit, magnetite-rich IF are less important in volume than in the eastern half of the Bloom Lake pit area. The thickness of drillhole intercepts is lower than 10 vertical metres. Many drill holes did not return significant magnetite intersections. Very few actinolite or grunerite minerals associated with magnetite mineralization were described in the western holes.

A fairly abrupt change in facies takes place along strike east of a line passing northwest across Bloom Lake, east of which the grunerite-Ca-pyroxene-actinolite-magnetite-carbonate facies predominates. The oxide facies to the west is uniform.

The lower unit is less than 30 meters thick in some places and is considerably thinner than the upper unit. The iron content ranges from 32 to 34 per cent in this facies. In places the silicate-carbonate facies to the east contains more than 50 per cent cummingtonite, which in part is magnesium rich, and the manganese content ranges from 0.1 to more than 2.0 per cent. Mueller (1960) has studied the complex assemblage of minerals in this rock and has discussed chemical reactions during metamorphism in considerable detail. He has shown that a close approach to chemical equilibrium in the amphibolite metamorphic facies is indicated by the orderly distribution of Mg, Fe, and Mn among coexisting actinolite, Ca-pyroxene, and cummingtonite, and the restriction in the number and type of minerals in association with each other. Furthermore, a comparison between the composition of the silicates and the presence of hematite shows that the Mg to Mg plus Fe ratio is increased, but is much less variable when hematite is present.

Recent re-modelling of the deposit (2014) added 2 new domains in the ore classification (MAG – Magnetite Iron Formation and WSIF – Grunnerite-rich Iron Formation) in addition to the existing HEM (Hematite Iron Formation) and SIF (Silicate Iron Formation).

The iron-formation forms a long doubly plunging syncline which is canoe-shaped but buckled across the centre to produce two distinct oval-shaped basins. Although this structure appears to be relatively simple in form, it seems to have been developed during two stages of deformation. Folding along northwest-trending axes and overthrusting of the upper iron-formation during the first stage of deformation appear to have been followed by gabbro intrusion, folding along east-west axes, faulting, and metamorphism during the Grenville orogeny.

Bloom Lake property mineralization style is a deposit typical of the Superior-Lake type.

The peaks in iron sedimentation took place between  $\sim 2.65$  and 2.32 Ga and again from  $\sim 1.90$  to 1.85 Ga. Their deposition is linked to geochemical and environmental evolution of Earth, the Great Oxidation Event (GOE) at ca. 2.4 Ga, the growth of continents as well as to mantle plume activity and rapid crustal growth.

The Labrador Trough contains four main types of iron deposits:

- Soft iron ores formed by supergene leaching and enrichment of the weakly metamorphosed cherty iron formation; they are composed mainly of friable fine grained secondary iron oxides (hematite, goethite, limonite).
- Taconites, the fine-grained, weakly metamorphosed iron formations with above average magnetite content and which are also commonly called magnetite iron formation.
- More intensely metamorphosed, coarser-grained iron formations, termed metataconites which contain specular hematite and subordinate amounts of magnetite as the dominant iron minerals.
- Minor occurrences of hard high-grade hematite ore occur southeast of Schefferville.

Secondary enrichment included the addition of secondary iron and manganese which appear to have moved in solution and filled pore spaces with limonite-goethite. Secondary manganese minerals, i.e., pyrolusite and manganite, form veinlets and vuggy pockets. The types of iron ores developed in the deposits are directly related to the original mineral facies. The predominant blue granular ore was formed from the oxide facies of the middle iron formation. The yellowish-brown ore, composed of limonite-goethite, formed from the carbonate-silicate facies, and the red painty hematite ore originated from mixed facies in the argillaceous slaty members.

All iron ore deposits in the Labrador Trough formed as chemical sediments on a continental margin which were lithified and variably affected by alteration and metamorphism that had important effects upon grade, mineralogy and grain size. Faulting and folding led to repetition of sequences in many areas, increases the surface extent and mineable thicknesses of the iron ore deposits. Underlying rocks are mostly quartize or mica schist. Transition from these rocks and the mineralized iron formation may take place over up to 10 meters vertically. All rock sequences have been heavily metamorphosed by intense folding phases that are part of the Grenville Orogen.

IF sequences range commonly from 25% to 40% iron oxide, mainly hematite of the specularite type with minor amount of magnetite (remainder mostly quartz) and can have thicknesses (ignoring minor intercalated bands of schist and quartz rock) of up to 200 m. It is these sequences that are of economic importance.

For iron formation to be mined economically, the iron content must generally be greater than 30%, but also iron oxides must be amenable to concentration (beneficiation) and the concentrates produced must be low in manganese and deleterious elements such as silica, aluminum, phosphorus, sulphur and alkalis. For bulk mining, the silicate and carbonate lithofacies, as well as other rock types interbedded within the iron formation, must be sufficiently segregated from the magnetite. Iron formations repeated by folding are often required to produce sufficiently thick sections for mining in the Mont-Wright / Wabush area.

# **Exploration**

While construction phases were implemented at the Bloom Lake project, CLM continued to explore west of the future pit operation, between Triangle and Carrot lakes. This sector was targeted, based upon a regional airborne magnetometric survey made by the Geological Survey of Canada.

253 drill holes were made between 1957 and 2009 for a total of 45,694 metres and 278 drill holes in 2010, 2012 and 2013 for a total of 90,096 meters. Four geotechnical holes have been drilled in 2014 (GT-14-07, GT-14-08, GT-14-09, GT-14-10).

The complete description of the drill programs is described in the following section.

A detailed ground magnetometric survey was done between longitudes 612200 m E and 614100 m E and between latitudes 5854600 m N and 5855800 m N. Geophysique TMC of Val D'Or, Quebec did the survey in April 2008 using a Geonics GEM-19 magnetometer.

Drilling and geophysics outlined several outcropping mineralized zones that were subsequently targeted for mechanical stripping.

# Drilling

All of the data related to drilling done on the property are on the UTM NAD 83 geographical coordinates. The territory is covered by zone 19. All the previous coordinates were converted in that system.

Most of information for the 1957 - 2008 drilling programs have been summarized in Genivar report (2009) and are presented below. This drilling information was used by BBA to create a block model in 2009. The drilling programs continued in 2009, 2010, 2012 and 2013, and the new information was used to create a new block model in 2014.

The Bloom Lake west area was drilled during the years 1957 to 2008, following two dominant axes. The first one, EW oriented, is located approximately at latitude of 5855400N and the second, on a NS axis at 613250E and 613550E, where cross-sections were established.

Following the compilation of the previous results, planning of the first phase of the campaign carried out between November 2006 and December 2008 was based on historical data related to geological compilation and property ground magnetic surveys, as well as on a few existing drill holes. A new ground magnetic survey performed in April 2008 was used to do the interpretation required to plan the next phases of the campaign to better define the zones and their extensions. A set of sections was produced at 75 m intervals at the end of the campaign and covered the whole western area. The drill holes of 2008 were planned in order to properly cover the zones with a 3D spacing of 150 m.

Forage André Roy from St-Isidore, Quebec, was the contractor who did the drilling during this campaign and a BQ size drill core was produced. Towards the end of the campaign, Forage La Virole from Rimouski, Quebec, was the contractor who carried out drilling and NQ size core was produced.

The drilling campaigns continued in 2009, 2010, 2012, and 2013.

Most of the holes were drilled in the West Bloom area, as well as in the Bloom Pignac area. Much less drilling was in the Confusion Lake, Carrot Lake and central Bloom areas. All this new information was added to the previous one and a new block model was created in 2014.

In 2014, an exploration drilling campaign was planned, but only four (4) geotechnical holes were drilled.

The drilling contractors have been Forage CCL and Les Forages Lantech Drilling Services Inc. They produced both BQ and NQ size core.

The holes were collared on-site with a portable Garmin GPS. This position could vary from a few meters to accommodate drilling, depending on the ground conditions but still, was maintaining the relative position and spacing relative to the other holes.

Drilling azimuth reference was provided through points of coordinates. The use of a compass was not recommended, due to the high level of magnetism developed by some horizons of the underlying iron formations.

Deviation and inclination tests were carried out in the holes. Tests with hydrofluoric acid (HF) were done for the drilling of 2006 - 2008 while, starting 2009, a Flexit instrument was used to measure both orientation and inclination of all the drill holes. This instrument provided useful magnetic susceptibility values. Readings were taken every 15 or 30 meters. All the data obtained with the Flexit instrument were analysed and all the inappropriate data were eliminated if deviation was too large and/or if the magnetic susceptibility was too high. For some 45 holes drilled in 2012 and 2013, deviation and inclination readings were taken with a Gyro instrument every 5 m.

Deviation readings were not taken for many drill holes that were lost or abandoned.

All the drill hole collars were surveyed. The firm of land surveyors, Roussy Michaud from Sept-Îles, put in place stations on the pit site. These points were used as references for positioning the west zone. Surveyors of Roussy Michaud and Consolidated Thompson used a Trimble R8 instrument to survey the drill hole collars.

The inclination and direction of the drill collars were not precisely surveyed. An approximate direction was obtained in aiming at a 3 m rod inserted into the drill hole tubing and then, the direction was verified against Flexit readings for most holes, and against Gyro readings for a few holes.

The core shack was established in the industrial area of the town of Fermont. It is situated in a large warehouse building used for various purposes. In the core shack area, a number of inclined tables were installed for core logging with several core racks for boxes storage. An area was also organized for sampling and shelves were put in to store sample bags before being shipped to the assay laboratory.

Another closed and locked section contained core boxes of the drilling programs from previous and current campaigns.

Until July 2008, 10 feet drill rods were used. The drillers identified the marks in the boxes using the imperial system and then, a conversion into the metric system was done at the core shack. After July, 3 m rods replaced the 10 feet rods. Drillers also took care of marking the core portions not recovered with wooden sticks. At the drill rig, all the used core boxes were carefully closed with tape and were transported by either snowmobile or ATV to a pick-up truck which brought them to the core shack in the Town of Fermont at the end of each shift. No core box was left outside the core shack.

All the boxes were labelled, photographed in lots of five and most of them were photographed in detail, 3 to 4 pictures being taken for each box. The core boxes were systematically measured to validate the marks of the drillers. Measuring was also done to calculate the RQD and the core recovery.

Most of the core was stored at the mine site.

The core was logged using standard verified methods. Rock types were identified and intervals were measured according to the marks done by the drillers. Geological logging took into account the general colour of the rock, the relative percentage of constituents, the grain size distribution, the alteration, the contact with other rocks, the texture and the variation of these elements, when significant. A particular attention was given to the orientation of foliations relative to the core axis. This was very useful in the structural interpretation. Geotechnical features in the core, such as core recovery, rock quality designation (RQD), fractures and joints, foliation, granulometry, friability, rock strength, and weathering, were also described in the logs.

The mineralized units to be sampled were marked with a grease pencil at 1 to 6 m intervals, depending on the mineral content.

All the data were stored in the Geovia GEMS logging tool, CoreLogger, which uses a SQL database platform.

# Sampling, Analysis, and Data Verification

The sampling procedure for the various analyses is relatively simple. The two factors that are taken into consideration are the grade cut-off for samples and the length of the samples. Samples are taken before, through and after the potentially mineralized zone.

In case of planned heavy liquids tests, head chemistry results are required before selecting samples for gravity separation.

The iron content of samples must be equal to or greater than 15%. This estimate is done visually by the person core logging. In addition, a sample is taken directly before and after the potentially economic ore and its rock type is noted (quartzite or amphibolite). An argillized contact between iron formation and amphibolite is generally included in the amphibolite. Overall, sample intervals respect the lithological contacts (upper or lower) and does not overlap

two distinct lithologies. Samples must isolate, if possible, areas of equal content, but also potentially contaminated zones.

The geologist indicates the beginning and end of the sample to guide employees responsible for physical sampling. The sample still in its box is broken into fragments of 10 cm or less. Each fragment is divided into two portions using a hydraulic splitter. One of the fragments is placed in the same order in the core box and is stored as a Save. The other fragment is deposited in a numbered bag with the hole number and "FROM / TO". Generally, a chalk line marks the entire sample. To facilitate the repositioning of the fragments in the box, the sample was cut along the line.

The standard length of a sample is six (6) meters, the equivalent of a box of BQ core. Obviously, the sample is half the core previously divided. However, the sample must be between three (3) to six (6) meters to a maximum of seven (7) meters in length. For the NQ core the standard sample length is 4.5 meters.

Samples are composed of at least 1.6 m of core. If the core sequence is intersected by CNR intervals, core pieces are added up to create a sample measuring at least 1.6 m long.

Core boxes are handled with care during transportation and storage. Boxes are kept horizontal at all times to avoid jostling the core.

Upon arrival at the core shack, the boxes are placed on a table and opened. The core intervals are carefully measured and compiled on a list that will then be used to identify each box using aluminum tape affixed to its end. The following is affixed to the front of each box: the number of the hole, the number of the box and "FROM / TO".

When all the work of description and sampling is completed, the boxes are placed on stands to keep the remaining core intact as a reference or, if required, for further testwork.

At the Bloom Lake site, sample bags are stored in a core shack until removed to go, via pick-up trucks, to TST Overland Express in Wabush, which then transported them to SGS Lakefield Research Limited (Lakefield), in Lakefield, Ontario. Once delivered to TST Overland in Wabush, the bags were put on pallets that were sealed with plastic wrap-ups.

At SGS Lakefield, the samples were dried at  $\sim 70 + 10^{\circ}$ C for a suitable amount of time, if received wet. The next step involved crushing to reduce each sample size to 2 mm (9 mesh). The sample was then split with a riffle splitter to divide the sample into two representative 0-2 mm portions. One portion was for analysis and the other for reject.

A whole rock analysis was done on each sample to measure the following parameters (in %): SiO<sub>2</sub>, Al<sub>2</sub>O<sub>3</sub>, Fe<sub>2</sub>O<sub>3</sub>, MgO, CaO, Na<sub>2</sub>O, K<sub>2</sub>O, TiO<sub>2</sub>, P<sub>2</sub>O<sub>5</sub>, MnO, Cr<sub>2</sub>O<sub>3</sub>, V<sub>2</sub>O<sub>5</sub>, loss on ignition ("LOI") and S (in ppm).

Samples are crushed and pulverized to -150 mesh. This method is used to report, in percentage, the whole rock suite  $(SiO_2, Al_2O_3, Fe_2O_3, MgO, CaO, Na_2O, K_2O, P_2O_5, MnO, TiO2, Cr_2O_3, V_3O_5$ . Sample preparation entails the formation of a homogenous glass disk by the fusion of 0.2 to 0.5 g of rock pulp with 7g of lithium tetraborate/lithium metaborate (50/50). The disc specimen was then analyzed by WDXRF spectrometry. The detection limits for all analyzed oxides is 0.01%.

This method has been fully validated for the range of samples typically analyzed. Method validation includes the use of certified reference materials, replicates and blanks to calculate accuracy, precision, linearity, range, limit of detection, limit of quantification, specificity and uncertainty measurement.

The LOI at 1000°C is determined separately gravimetrically. The LOI is included in the matrix-correction calculations, which are performed by the XRF instrument software.

Additional analysis included determination of magnetic iron with a Satmagan magnetic analyser. The instrument is an equilibrated, level and clean magnet potentiometer scale (Satmagan). The magnetic force is read from the potentiometer scale. The magnetic Fe is calculated using the formula: % magnetic Fe = Reading from scale x calibration factors x 0.724

Other additional analysis included determination of sulphur by combustion-infrared detection on LECO instrumentation.

Specific gravity was determined using an air comparison pycnometer. It should be noted that this method does not take into account existing porosity in a rock and some of the oxide iron formation does contain vugs due to calcite removal. Although the degree of porosity has not been quantified, it is estimated on the basis of visual examination of drill core to be generally less than 2%. It should be noted that specific gravity was not measured for all drill holes.

Total iron was calculated from Fe<sub>2</sub>O<sub>3</sub> by dividing total iron expressed as Fe<sub>2</sub>O<sub>3</sub> by a factor of 1.4295.

A database was provided to G Mining by Quebec Iron Ore Inc. The database contained coordinates of drill hole collars, deviation tests, lithological contacts, measures of contact and foliation, geotechnical data and assay results. Verifications were done with the provided digital copies of the original log books and assay certificates.

The conversion of the old drill holes coordinates was done by Watts, Griffis and McOuat Limited when the resource was calculated for the pit in 2005. The method of conversion was not specified in their 43-101 Technical Review and Mineral Resource Estimate, dated May 26, 2005.

All the assays on the core samples were done by SGS Lakefield. In 1998, Lakefield was accredited by the Standards Council of Canada under ISO Guide 25. The routine quality control program at Lakefield was modelled after guidelines provided by the International Standards Organization (ISO), the Ontario Ministry of Environment and Energy, Environment Canada and the Canadian Association of Environmental Analytical Laboratories and included the processing of method blanks, replicate samples and standard reference materials. Quality control for the routine sample analysis included Lakefield's own quality control procedures, involving internal and external checks. Approximately 6% of laboratory throughput was quality control material of which, 5% were duplicates and 1% blanks. The reference material (standards) has been used for the 2013 drilling campaign only.

No external check was carried out with respect to the precision and accuracy of the various analytical methods used during these drilling programs.

A number of 170 duplicates coming from the core of the 2010, 2012 and 2013 drilling programs were analysed for major oxides and sulphurs. Table 12-1 presents the list of duplicates and the major oxides results.

In order to validate the assays results from the analytical laboratory, a series of graphs were produced (Table 12-1). These graphs, shown in the next pages, present the correlation between the samples and the duplicates of the same samples.

In all cases, the curves demonstrate no significant difference, which means a correlation varying from acceptable to excellent. The graphs (for Fe, Mag Fe, MgO and CaO) show a few outliners that are considered to be typing errors. Until 2009, quartz samples have been used as blanks. These blank samples were obtained from the Daviault Lake silica quarry of Blackburn Quartz. This property, entirely owned by Quebec/ Labrador Exploration, is located 7 km north of Fermont. The samples of quartz were visually selected prior to their use as blanks, to avoid the presence of any impurity. The samples were crushed to 2 - 3 cm. A complete description and assay results of the silica blanks are provided in the Technical Reports of Consolidated Thompson Iron Mines and Breton Banville & Associates (2007) and Genivar (2009).

Starting with the 2012 drilling campaign, the silica blanks have been replaced by samples coming from the waste lithology, mainly amphibolites. Even if they were considered as blanks, these 69 samples have a variable amount of oxides that is related to the mineralogical composition and alteration of the selected samples. Because of this reason, these blanks cannot offer any indication if the sample preparation and analytical results have been affected by contamination. The list of the blanks is presented in Table 12-2, but we did not consider these blanks as part of the QAQC procedures.

Twenty-seven (27) Standards have been used in the 2013 drilling campaign. They are presented in Table 12-3. These Standards were not of industrial type, but rather made from samples collected from mineralized material from

the Bloom Lake deposit. The Standards analysed reported grades varying between 26.90% Fe and 28.40% Fe and an average of 27.80% Fe.

Due to insufficient information about the procedures surrounding Standard analyses, no conclusions can be drawn from the Standard results in terms of QA/QC.

G Mining has taken core samples to compare with assay grades available in the drilling database of the Bloom Lake project. The sampling was carried out independently by the qualified person responsible for the resource estimate, Réjean Sirois, during the site visit in September 2016. A total of 12 samples were selected and analysed for iron content. The check samples generally returned higher iron grades than those of the original assays in the database. Results are presented in Table 12-4 and illustrated in a scatterplot in Figure 12-2.

G Mining is of the opinion that the check assay results are reasonably close to those of the original assays and that consequently, the assay results included in the database of the Bloom Lake Project are reliable and can be used for the resource estimation.

# Mineral Processing and Metallurgical Testing

The proposed Phase 1 upgrade flowsheet was developed to improve the overall iron recovery achieved by the existing Phase 1 concentrator. The specific goal was to improve the recovery of both the coarser (+425 microns) and fine (-106 microns) iron minerals, while having no adverse effect on the recovery of other size fractions.

The Phase 1 upgrade flowsheet development was initially based on historical Phase 1 data, pilot testing data undertaken during the Phase 1 operation, the proposed Phase 2 flowsheet design and Mineral Technologies design data and information on spiral and UCC performance in iron ore applications in the Labrador Trough area.

Mineral Technologies proposed two processing routes for the Phase 1 upgrade flowsheet:

- 1. A gravity-only primary case comprising rougher spirals, rougher middlings scavenging spirals, an up-current classifier (UCC) and a final UCC overflow scavenging spiral stage.
- 2. A bonus case serving to boost recovery of iron ore through the treatment of the gravity circuit tailings by a series of wet high intensity magnetic separators (WHIMS).

The proposed flowsheet, including the bonus case, is presented in Figure 1-2.



#### Figure 1-2 – Phase 1 Upgrade Conceptual Flow Diagram

This flowsheet is similar to that developed for the planned Phase 2 concentrator; however, it includes a Mids Scavenger spiral stage. This stage has been included in the flowsheet to enable:

- Improved iron recovery through the production of a lower grade gravity circuit tailings stream than would otherwise be produced by a Rougher spiral stage only
- Maximum utilisation of the Rougher spirals for treating virgin run-of-mine material (compared to recirculating the middlings back to the Rougher spiral feed).
- "Buffer" capacity that serves to recover minerals that would otherwise be lost to tailings in the event of an increase in feed grade to a Rougher spiral stage.

A metallurgical model was developed to estimate the mineral recovery levels in the flowsheet. To verify and confirm the performance estimated by the model, a comprehensive metallurgical testing program has been conducted using six bulk samples taken from the Bloom Lake deposit as well as an additional 500kg composite sample taken from drill core samples on hand at Bloom Lake to represent plant feed for the first 5 years of mine operation. The metallurgical testing of the gravity portion of the upgrade flowsheet comprised the following stages:

- Rougher stage spiral testing was conducted on each bulk sample separately, to produce a bulk Rougher concentrate
- The Rougher stage middlings products were combined and used as feed for the Mids Scavenger spiral stage testing.
- Both the Rougher and Mids Scavenger spiral concentrate products were blended as feed for the UCC testwork. The UCC underflow product represents the main source of gravity concentrate.
- Fine iron from the UCC overflow was scavenged by retreating this stream over a spiral to simulate the overflow spiral stage. The concentrate from this overflow spiral stage combines with the UCC underflow, to make up the gravity concentrate stream.

Following on from the gravity circuit testwork, the tailings (reject) material from both the Overflow spiral and Mids Scavenger stages were tested separately for amenability to iron scavenging in a Wet High Intensity Magnetic Separator (WHIMS).

The tailings stream from the Overflow spirals was upgraded by rougher and cleaner stage WHIMS to an iron grade sufficient for inclusion as part of the overall plant concentrate production, whereas the iron grade achieved when scavenging the Mids spiral tailings was not sufficient for inclusion in the combined final concentrate.

The bulk sample processing iron recovery to the final product from both gravity and WHIMS stages of metallurgical testwork was 81.0% (refer to Table 1-4).

		XRF as	say								Recov	ery	
PRODUCT	% Mass	Fe	SiO <sub>2</sub>	$Al_2O_3$	Р	S	CaO	TiO <sub>2</sub>	Mn	MgO	Fe	SiO <sub>2</sub>	$AI_2O_3$
PRODUCT	Head	%	%	%	%	%	%	%	%	%	%	%	%
UCC Underflow	33.1	67.2	3.19	0.23	0.01	0.01	0.06	0.12	0.08	0.06	69.8	2.0	10.2
O/F Spiral Concentrate	4.76	64.4	5.92	0.51	0.04	0.01	0.32	0.40	0.08	0.28	9.6	0.5	3.3
O/F Spiral Reject WHIMS Concentrate	1.00	48.1	29.3	0.40	0.02	0.01	0.34	0.26	0.09	0.31	1.5	0.6	0.5
Total	38.8	66.4	4.20	0.27	0.01	0.01	0.10	0.16	0.08	0.09	81.0	3.1	14.0

# Table 1-4 – Metallurgical Test Program Concentrate Summary

The recovery obtained during the testwork pertains to performance within the limits of stage-by-stage bulk sample processing in a laboratory environment. Plant operation incorporates fully integrated circuitry which allows greater control of the final product grade and plant recovery, hence, a higher level of recovery is expected.

The experimental data collected from the testwork program was used to update the metallurgical model, allowing it to be utilised for optimising and predicting plant circuit performance in terms of concentrate grade, production rate and recovery at various feed grades. Following the update of the metallurgical model, the 500kg drill core sample was processed and subsequently confirmed the results of the model.

The model predicts a theoretical maximum iron recovery from the flowsheet of 85.3% and an expected plant recovery of 83.3% from a continuous plant operation treating ore of similar characteristics to the sample tested at the expected life of mine feed grade of 30% iron.

# Mineral Resource and Mineral Reserve Estimates

G Mining Services Inc. ("GMS") was mandated to produce the mineral resource estimate for the Bloom Lake Project. The mineral resource estimate was prepared in accordance with the Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") Standards for Mineral Resource and Mineral Reserves (2014) as incorporated in National Instrument 43-101 – Standards of Disclosure for Mineral Projects (NI 43-101). The 2016 Bloom Lake Mineral Resource presented herein was prepared under the supervision and approved by Réjean Sirois, P. Eng., from GMS. Mr. Sirois is an independent "Qualified Person" as defined in NI 43-101.

In November 2014, Dassault Systemes, Geovia ("Geovia") prepared a resource estimate for the Bloom Lake deposit for Cliffs Natural Resources and the results were published internally in the company. GMS reviewed and approved the geology and mineralization model, the geostatistical studies, the variography analysis, the interpolation assumptions and estimation procedure developed by Geovia in 2014.

Geovia® GEMS software was used to facilitate the resource estimation process including geological modelling review, geostatistical and variography analysis, and grade interpolation. The resource model was prepared in November 2016, using all of the drill holes available in the zone of interest as of that date.

Eight geological units were modelled on cross-sections which interpretations were transferred to plan sections through the use of traverses (or horizontal holes). The final geological model, including mineralized and non-mineralized units, was based on wireframes extruded every 14 m bench level. Because of the folded nature of the Bloom Lake deposit, the geological model was divided into multiple structural domains, each of which outlines a single mineralization continuity orientation.

The raw-assays were composited into regular 7.0 m run lengths within each mineralized unit. Grade variography analyses were completed on the 7.0 m composites, grouped by litho-structural domains. Large search ellipsoids and one pass run strategy were used to perform the ordinary kriging grade interpolation inside the block model. The dimensions of the blocks in the block model are (X)10 m by (Y)10 m by (Z)14 m. The interpolation was done strictly within the mineralization wireframes, using various search ellipsoid orientations, according to the structural domains defined in the deposit. The mineral resource estimate was classified into measured, indicated and inferred categories according to the CIM Definition Standards on Mineral Resources and Mineral Reserves.

Table 1-1 presents the Mineral Resource for the Bloom Lake Project as of November 15, 2016, estimated at a cut-off grade of 15% Fe, inside an optimized Whittle open pit shell based on a long-term iron price of USD \$60/dmt concentrate. The Measured and Indicated Mineral Resource for the Bloom Lake Project is estimated at 911.6 Mt at an average grade of 29.7% Fe, and Inferred Mineral Resource at 80.4 Mt at an average grade of 25.6% Fe.

						0
Classification	Tonnage (dry)	Fe	CaO	Sat	MgO	Al <sub>2</sub> O <sub>3</sub>
	kt	%	%	%	%	%
Measured	439,700	31.0	0.6	3.0	0.7	0.3
Indicated	471,900	28.5	2.5	6.8	2.3	0.4
Total M&I	911,600	29.7	1.6	5.0	1.5	0.4
Inferred	80,400	25.6	1.9	7.9	1.7	0.3

 Table 1-1 – Mineral Resource Estimate for the Bloom Lake Project

Notes on Mineral Resources:

1. The mineral resources were estimated using the **Canadian Institute of Mining, Metallurgy and Petroleum** (CIM) Standards for Mineral Resources and Reserves, Definitions and Guidelines prepared by the CIM Standing Committee on Reserve Definitions and adopted by CIM Council May 10<sup>th</sup>, 2014.

- The independent and qualified person for the 2016 Bloom Lake resource estimate, as defined by NI 43-101, is Réjean Sirois, P. Eng., from G Mining. The effective date of the estimate is November 15, 2016.
- 3. The mineral resources are estimated at a cut-off grade of 15% Fe.
- 4. The mineral resources are estimated using a long-term iron price of USD \$60/dmt con and an exchange rate of 1.30 CAD/USD.
- 5. The mineral resources are reported within an optimized Whittle open pit shell.
- 6. The average strip ratio is 0.97:1 (w:o).
- 7. "Sat" stands for Satmagan or Saturation Magnetization Analyser, an instrument which measures magnetite in ores.
- 8. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. There is no certainty that all or any part of the Mineral Resource will be converted into Mineral Reserves.
- 9. The number of metric tons was rounded to the nearest hundred. Any discrepancies in the totals are due to rounding effects; rounding followed the recommendations in NI 43-101.

The mineral reserve for the Bloom Lake Project is estimated at 411.7 Mt at an average grade of 30.0% Fe as summarized in Table 1-2. The mineral reserve estimate was prepared by G Mining Services Inc. ("GMS"). The resource block model was also generated by GMS.

Classification	Diluted Ore Tonnage (dry)	Fe	CaO	SAT	MgO	Al <sub>2</sub> O <sub>3</sub>
	kt	%	%	%	%	%
Proven	264,160	30.73	0.48	2.98	0.56	0.32
Probable	147,554	28.71	2.84	6.68	2.72	0.40
Total P&P	411,713	30.01	1.33	4.30	1.33	0.35

Table	1-2 -	Mineral	Reserve	Estimate
Lanc	1-4 -	<b>TATHOLA</b>	INCOUL VC	Estimate

Notes:

1. CIM definitions were followed for mineral reserves.

2. Mineral reserves based on September 28, 2016 LIDAR survey

3. Mineral reserves are estimated at a cut-off grade of 15% Fe.

4. Mineral reserves are estimated using a long-term iron price reference price (Platt's 62%) of \$50/dmt and an exchange rate of 1.30 CAD/USD. An Fe concentrate price adjustment of \$4.00/dmt was added.

- 5. Bulk density of ore is variable but averages  $3.63 \text{ t/m}^3$ .
- 6. The average strip ratio is 0.48:1.
- 7. The mining dilution factor is 4.3%.
- 8. Numbers may not add due to rounding.

The mine design and mineral reserve estimate have been completed to a level appropriate for feasibility studies. The mineral reserve estimate stated herein is consistent with the CIM definitions and is suitable for public reporting. As such, the mineral reserves are based on measured and indicated ("M&I") mineral resources, and do not include any inferred mineral resources. The inferred resources contained within the mine design are classified as waste. The mineral reserve includes a 4.3% mining dilution at an average grade of 10.34% Fe.

Open pit optimization was conducted to determine the optimal economic shape of the open pit to guide the pit design process. This task was undertaken using Whittle software, which is based on the Lerchs-Grossmann algorithm. The optimization parameters are presented in Table 1-3.

Optimization Parameters		Values
Ore tonnage	Mtpy	20.00
Mining dilution	%	3%
Mining recovery	%	100%
Royalty	%	0%
Weight recovery	%	34.5%
Fe recovery	%	80.0%
Revenues		
Concentrate production	Mt con.	6.90
Concentrate iron grade	% Fe	66.0%
Concentrate moisture content	%	3.5%
Reference price (Platt's 62%)	US\$/dmt con.	50.00
Fe concentrate price adj.	US\$/dmt con.	4.00
Concentrate adjusted price CIF China (66%)	US\$/dmt con.	54.00
Exchange rate	C\$/US\$	1.30
Concentrate adjusted price CIF China	C\$/dmt con.	70.20
Land Logistics (Mine to Sept-Iles Port)	C\$/dmt con.	16.58
Ocean freight (Sept-Iles to China)	C\$/dmt con.	16.72
Total concentrate logistics costs	C\$/dmt con.	33.30
Concentrate adjusted price FOB Bloom Lake	C\$/dmt con.	36.90
Ore-Based Costs		
Processing cost	C\$/dmt ore	3.41
Crushing cost	C\$/dmt ore	0.56
Tailings and water mgmt. cost	C\$/dmt ore	1.03
G&A costs	C\$/dmt ore	2.15
Total ore based cost	C\$/dmt ore	7.15
Mining Costs & Parameters		
Reference mining cost	C\$/dmt mined	2.85
Incremental bench cost	US\$/t/14m	0.029
Reference elevation	RL	704

A pit slope design study was carried out by Golder following a request from the previous owner of the project. The conclusions of this study have been used as an input to the pit optimization and design process.

# **Mining Operations**

The Bloom Lake Project was previously owned by Cliffs Natural Resources and was closed and placed on care in maintenance in January 2015. It was later acquired by QIO in April 2016. The restart of the operation is based on

different operating assumptions which consist of an upgrade to the Phase I plant with a mineral reserve and mining scenario updated for the current iron ore market.

The operation consists of a conventional surface mining method using an owner mining approach with electric hydraulic shovels and mine trucks. All major mine equipment required for the restart of the project is present on site as this equipment was among the assets purchased by QIO from Cliffs. The study consists of resizing the open pit based on parameters outlined in this section and producing a life-of-mine ("LOM") plan to feed a plant at a nominal rate of 20 Mtpa.

Drill and blast specifications are established to effectively single pass drill and blast a 14 m bench. For this bench height, a 311 mm blast holes size is proposed with a 6.25 m burden by 7.25 m spacing with 1.5 m of sub-drill in ore. The blast pattern in waste material varies slightly with the various rock types. These drill parameters, combined with a high energy bulk emulsion with a density of  $1.2 \text{ kg/m}^3$ , result in a powder factor of 0.40 kg/t. Blast holes are initiated with electronic detonators and primed with 450 g boosters. The bulk emulsion product is a gas-sensitized pumped emulsion blend specifically designed for use in wet blasting applications.

The majority of the loading in the pit will be done by two electric drive hydraulic face shovels equipped with a 23  $m^3$  bucket. The shovels are matched with a fleet of 218 t payload capacity mine trucks. The project already owns three Caterpillar 6060 electric drive hydraulic front shovels. The hydraulic shovels will be complemented by one production front-end wheel loader ("FEL") with a 12  $m^3$  bucket. Two Komatsu WA1200-6 units are available on site.

Haulage will be performed with 218 tonne class mine trucks. The existing truck fleets consist of seven Caterpillar 793D and three Caterpillar 793F mechanical drive trucks, which is sufficient for the project excluding equipment replacement.

Mining of the Bloom Lake Project is planned in four phases with a starter phase and a final pushback in both the east and west pits. Waste rock will be disposed of in two distinct waste dumps. The original northern location used by the previous owner and a new location to the south. From year 5 onwards, in-pit dumping will occur whenever possible, once a phase gets fully depleted. The open pit generates 198.9 Mt of overburden and waste rock for a strip ratio of 0.48:1.



**Figure 1-1 – Mine Production** 

# **Processing and Recovery Operations**

Quebec Iron Ore (QIO) intends to use the crushing and storage facilities of the Phase II operation along with the mill and the rail load-out facilities from the Phase I operation to produce 7.4 Mtpa of concentrate, with a recovery of 83.3% from the ore mined from the main pit.

The phase I and phase II facilities currently exist; however, prior to the start-up planned for the end of 2017, refurbishments and improvements as described below will be made to improve the iron ore recovery, operational reliability, and fugitive dust control.

Table 1-5 following is the list of major equipment that will be used for QIO operations and from which operational phase it comes from:

Major Processing Facilities	Source Phase
Primary Crusher (near pit)	Phase II
Crushed ore stock pile (local to the crusher)	Phase II
Overland conveyor (3.46 km)	Phase II
A-Frame crushed ore stockpile shed	Phase II
Reclaim apron feeders (within the A-Frame)	Phase I
AG Mill	Phase I
Screens	Phase I
Spirals	Phase II & New
Hydrosizer	New
Magnetic separators	New
Pan filter & thickener	Phase I
Concentrate storage and rail load-out	Phase I

Table 1-5 – List of Major Processing Facilities

Figure 1-3 shows the block flow diagram of the plant process from the primary crusher to the rail load-out.

The existing Phase 1 concentrator circuit is a traditional 3-stage spiral separator circuit with rougher, cleaner and recleaner spiral stages. The three stages of spiral separators are arranged vertically, allowing products from one stage to flow to the next via gravity. A basic flowsheet is shown in Figure 1-8.



Figure 1-4 – Simplified Phase 1 Three-Stage Spiral Recovery Circuit Flowsheet

The long-term iron recovery of the Phase 1 concentrator prior to the shutdown averaged nominally 72%. Factors influencing this lower-than-expected performance include the selection of the spiral model used in the process, premature wear of the spirals, changing concentrate grade requirements and operational issues relating to inconsistent spiral feed densities and wash water supply. To enable direct comparison of the previous operational recoveries and those achieved through the testwork, the previous feed PSD was evaluated against the sample characterisation undertaken during the metallurgical testing (refer section 13.1.4). This confirmed a close match and shows that the sample preparation closely represented the operational feed preparation.

For the planned Phase 2 concentrator, an alternative gravity concentration flowsheet was developed to provide significantly improved iron recoveries. The Phase 2 flowsheet is comprised of rougher spirals followed by a cleaning stage employing UCCs (up-current classifiers) producing final concentrate to the underflow. The UCC overflow stream is scavenged with a spiral separator stage to recover misplaced fine iron. This complementary use of these two methods of gravity separation maximises iron recovery across a broad range of particle sizes. A simplified diagram of the Phase 2 recovery circuit flowsheet is shown in Figure 1-8.



Figure 1-5 – Simplified Phase 2 Spiral and UCC Recovery Circuit Flowsheet

The seven-turn WW6+ spiral was selected for both the rougher and UCC overflow spiral stages in the Phase 2 flowsheet following in-plant testing against 3 other spiral models. The WW6 spiral separator has been used successfully for many years for iron ore processing; thousands of spiral starts are in operation around the world, with a high concentration of units in service in the Labrador Trough.

The effort to develop an improved flowsheet for implementation in the Phase 1 concentrator upgrade was initially based on the review of available data, including historical Phase 1 performance, testing and pilot data from development of the Bloom Lake Phase 2 flowsheet and MT information regarding spiral performance on typical ores in the Labrador Trough.

Based on the results of the data review and process modelling (described in section 13), Mineral Technologies developed a proposed Phase 1 upgrade flowsheet (refer to Figure 1-6) to replace the existing Phase 1 iron recovery circuit. The key difference between the proposed upgrade flowsheet and the Phase 2 flowsheet is the inclusion of a mids scavenger spiral stage to treat the rougher middlings and an additional magnetic separation stage to recover fine iron from the gravity circuit tailings.



Figure 1-6 – Upgraded Phase 1 Recovery Circuit Flowsheet

The upgraded Phase 1 recovery circuit flowsheet depicts the replacement of the existing three-stage spiral circuit with a new gravity circuit comprising:

- WW6+ spirals used in the Rougher duty for primary concentration of the feed, with the rougher stage concentrate proceeding directly to the cleaner UCC
- WW6+ spirals used in the Mids-Scavenger duty to scavenge iron minerals remaining in the Rougher spiral middlings
- MT's SLIM UCC's in a cleaner duty, closely coupled with WW6+ spirals treating the UCC overflow stream to scavenge fine iron and produce a combined concentrate stream. This unique configuration allows the two processing stages to be located on the one floor level, enabling its use in the existing Phase 1 concentrator building
- MT's Low Intensity Magnetic Separators (LIMS) and Wet High Intensity Magnetic Separators (WHIMS) to scavenge fine iron from overflow spiral rejects and produce a supplementary concentrate for blending with the gravity concentrate stream

All new equipment for the upgraded Phase 1 recovery circuit will be housed in the existing Phase 1 concentrator building and, as such, will utilise existing services, infrastructure and ancillary processing equipment.

The performance of the proposed flowsheet has been confirmed by a comprehensive metallurgical testing program (described in section 13 of this document). Testing data was used to confirm separation models used for each stage of upgrading, and this in turn allowed the population of a detailed mass balance for the entire circuit.

Table 1-6 below shows the predicted iron recovery of the overall recovery circuit (gravity and magnetic circuits) at varying feed grades.

	29% Feed Fe		30% Feed Fe		31% Feed Fe	
	Fe Recovery (%)	Mass Recovery (%)	Fe Recovery (%)	Mass Recovery (%)	Fe Recovery (%)	Mass Recovery (%)
Optimum Case	84.3%	37.3%	85.3%	39.0%	86.3%	40.8%
Expected Plant Performance	82.3%	36.6%	83.3%	38.2%	84.3%	39.9%

Table 1-6 – Modelled Performance of the Upgraded Phase 1 Circuit

# **Infrastructure, Permitting and Compliance Activities**

The entire mine infrastructure which was being used by Cliffs is available for the mining operations. It includes the following facilities:

- Mine maintenance shop (with 4 bays)
- Mine equipment secondary garage capable of servicing 320 t trucks (35 m x 50 m, with two bays)
- Mine equipment wash bay (38 m x 60 m)
- Fuel storage and distribution system
- Electrical infrastructure for the mine, including a 34.5 kV sub-station
- A cafeteria at Bloom West Mine (to minimize the lost time for truck driver breaks)
- Mobile shovel bucket repair shop
- Dispatch system, complete with trailers, offices and a cafeteria

# Infrastructure Located at the Processing Plants

The entire infrastructure which was being used by Cliffs is available for the Quebec Iron Ore operations. Figure 1-7 shows the location of the major infrastructure located at the phase 1 and phase II plants.

# Port Infrastructure

The concentrate is unloaded from railcars at Pointe Noire, which is owned by SFP Pointe-Noire (SFPPN) which is controlled by the Government of Quebec and can be either loaded directly onto a vessel or stockpiled to be reclaimed and loaded at a later date. The former Cliffs / Bloom Lake concentrate stockpiling and shipping system is comprised of a rotary car dumper, dump hopper, stockpiling and reclaiming conveyors, a stacker-reclaimer, and ship loaders. Storage capacity is currently 670,000 t of concentrate in the stockpile yard.

A new multi-user dock, owned by the Port of Sept-Iles, was built at Pointe-Noire. The dock has a capacity of 50 Mtpa via two 10,000 t/h travelling ship loaders. The dock was designed to receive 400,000 DWT Chinamax vessels.

# Tailings and Surface Water Management

Work on surface water management and the tailings storage facility (TSF) is required in order to operate the Bloom Lake site in accordance with regulations and operational standards.

The surface water management system is composed of a network of ditches, collection basins, pumping stations and retention ponds. The surface contact water is pumped to the tailings storage facility to be managed. The process water reserve and the legislative water storage capacity is located in the TSF. A water treatment plant is located next to the TSF where excess water can be treated and released. For the restart of mining operations, the existing water management system is mostly unchanged as it is functional. However, upgrades to some components are required to

meet operational standards and governmental regulations. Among others, increase in pumping capacity and automation is considered.

In section 18, figure 18.2 presents the tailings management facility. The tailings management strategy is developed around tailings slurry pumping and hydraulic placement of an annual 12.36 Mt of tailings that are separated in two feeds: coarse (83%) and fine (17%). This separation optimizes the footprint and utilizes the existing infrastructure. Slurry pumping and hydraulic deposition is an economic way to transport and store large quantities of tailings. Fine tailings are stored in a basin developed with impervious dykes and filtering dykes, while coarse tailings are contained in a storage facility developed with filtering dykes to hold the tailings and with water-retaining dykes to hold the process water. Most construction work in the fine tailings basin is expected to be executed by contractors, while the coarse tailings management facility will be mostly built by the QIO personnel and equipment using an upstream construction method. In order to achieve the tailings management strategy, upgrades to the existing tailings slurry pumping system and the construction of a second booster pumping station are also required.

#### Environment and Permitting

The mine has been authorized for operation under the federal environmental authorities and provincial governments. There is only one pending process with the federal government associated with the 2016 authorization for destruction of fish habitats. The compensatory plan is under preparation and the authorization from DFO to proceed with the compensation project should be issued in 2017. This process does not prevent QIO from operating the mine.

The new mine plan and the proposed tailings management strategy will require modifications to the existing authorizations from the MDDELCC.

Considering that the mine does exist, and that there is no expansion projected, no additional impacts are anticipated on plants and wildlife. Impacts to local lakes and water courses were identified in the initial environmental impact study. No additional serious harm to fish or fish habitat loss is anticipated in order to operate the mine, as no expansion is projected. The mine conducts routine monitoring of water, wastewater and air as part of its decrees and authorizations.

In regards to water quality, QIO must comply with the requirements from Directive 019, the MMER, as well as the depollution attestation. The depollution attestation should be effective in 2017. The attestation will comprise several conditions that were already included in previous certificates of authorization delivered to the mine. There are no new conditions expected within the attestation.

Potential nonpoint sources of dust include the tailings pond, the waste rock piles and the ore and concentrate stockpile areas. The mine has dust mitigation measures for fine particle emissions, such as dust collectors. The mine proceeds to watering of the roads to reduce dust emission. In the tailings impoundment as well as the waste rock stockpiles, areas that become inactive are gradually revegetated to avoid wind erosion and dust dispersion.

There are no known significant issues that are believed to materially impact the mine's ability to operate.

MERN approved a revised closure plan at a cost of CAD \$41.7 million which was covering five years of mining operations for both Phase I and Phase II. The plan was approved for the previous owner starting in 2012. QIO must provide a financial guarantee covering this five years closure plan cost to the provincial government in accordance with Section 111 of the Regulation Respecting Mineral Substances other than Petroleum, Natural Gas and Brine (Chapter M-13.1, r. 2). In order to estimate a mine closure and restoration costs for the entire life of the new Bloom Lake mining project, WSP used a conservative approach in line with the concepts of the MERN's guide on mine closure and restoration (MRNF, 1997). The mine closure and restoration costs for the entire life of the new Bloom Lake mining project is estimated at CAD \$76,435,740, assuming no salvage value for the equipment and that a third party will complete the closure and restoration work. This cost includes the direct and indirect costs of site restoration as well as post-operation and post-closure monitoring.

Infrastructure such as the mining pit, waste rock stockpiles, tailings management facilities, water management structures as well as the water treatment plant have all been authorized. However, a few of the current authorizations will require modifications before site operation resumes in order to adjust them to the new mining plan. These include certificates of authorization associated with the new waste rock stockpiles and for the site operational plan which include the new mining pit, the new tailings and water management plan as well as the upgraded concentrator process.

# **Capital and Operating Costs**

The following is the summary tables for the capital cost estimate (CAPEX).

WBS	Area	Cost
0000	General	\$13 318 225
1000	Mina	\$46,725,010
1000	Nille D	\$40,723,919
2000	Process	\$64,851,532
3000	On-site Infrastructure	\$0
4000	Off-site Infrastructure	\$0
9000	Indirect Costs	\$32,291,825
Total		\$157 187 501
TOTAL		\$157,187,501

Capital Cost Estimate Summary by Area (CAD)

Туре	Discipline	Cost
А	Site Work	\$0
В	Earthworks	\$14,345,950
С	Concrete	\$0
Е	Structural Steel	\$0
F	Architectural and Unit Building	\$0
G	Port/Marine	\$0
Н	Rail	\$0
J	Mining	\$41,898,100
K	Pipeline	\$0
L	Mechanical Plate-work and Tanks	\$0
М	Mechanical Equipment	\$64,342,069
Р	Piping	\$0
Q	Electrical Equipment	\$549,500
R	Conduit and Cable Tray	\$164,437
S	Wire and Cable	\$2,309,515
Т	Instrumentation	\$1,286,106
U	Construction Indirects	\$6,182,126
V	Other Indirects	\$0
W	EPCM	\$7,834,291

**Capital Cost Estimate Summary by Discipline (CAD)** 

Discipline	Cost
Contingency	\$8,106,485
Owner Cost, including Risk	\$10,168,924
Open	\$0
	\$157,187,501
	Discipline         Contingency       Owner Cost, including Risk         Open       Open

A summary of the average operating cost over the life of mine is show in the table below.

Description	Production Pe		
Description	\$/t Ore	\$/t Dry Concentrate	% of Costs
Mining	3.95	10.45	24.35%
Crushing plant	0.37	0.98	2.29%
Process plant	2.81	7.44	17.32%
Concentrate shipping	6.37	16.88	39.32%
Water & tailings operations	0.83	2.20	5.13%
General and administration	1.88	4.98	11.59%
Total Cost	16.21	42.93	100.00%

#### Summary of Average Production Period Operating Costs (CAD)



**Operating Costs over the Project Life** 

#### Economic Analysis

The economic/financial assessment of the Bloom Lake project of Quebec Iron Ore Inc. is based on Q1-2017 price projections in U.S. currency and cost estimates in Canadian currency. A spot exchange rate of 0.7600 USD per CAD was assumed to convert particular components of the cost estimates into CAD and forward exchange rate estimates were used to convert USD market price projections into CAD. No provision was made for the effects of inflation. The evaluation was carried out on a 100%-equity basis. Current Canadian tax regulations were applied to assess the corporate taxes, while the recently adopted regulations in Quebec (originally proposed as Bill 55, December 2013)

were applied to assess the mining taxes. The financial indicators under base case conditions are presented in Table 1-10.

Table 1-10 – Financial Would Indicators			
<b>Financial Results</b>	Unit	Value	
Pre-tax NPV @ 4%	M CAD	2,468.6	
Pre-tax NPV @ 6%	M CAD	2,024.2	
Pre-tax NPV @ 8%	M CAD	1,674.8	
Pre-tax IRR	%	43.9	
Pre-tax Payback Period	Years	2.5	
After-tax NPV @ 4%	M CAD	1,491.1	
After-tax NPV @ 6%	M CAD	1,207.2	
After-tax NPV @ 8%	M CAD	983.5	
After-tax IRR	%	33.3	
After-tax Payback Period	Years	3.1	

Table 1-10 – Financial Model Indicators

A sensitivity analysis reveals that the Project's viability will not be significantly vulnerable to variations in capital and operating costs, within the margins of error associated with Feasibility-Study-level estimates. However, the Project's viability remains more vulnerable to the USD/CAD exchange rate and the larger uncertainty in future market prices. For further detail, please refer to section 19 – Marketing Study.

# Financial Model and Results

Figure 1.10 illustrates the after-tax cash flow and cumulative cash flow profiles of the Project for base case conditions. Note that the total height of a particular bar (i.e., after-tax cash flow plus corporate and mining taxes) represents the before-tax cash flow. The intersection of the after-tax cumulative cash flow curve with the horizontal dashed line represents the payback period.





The Bloom Lake Mine re-start project is financially and technically feasible with a total estimated capital cost of C\$326.8 M, including mine upgrade capital cost of C\$157 M. The economic analysis of the re-start Project shows an IRR of 33.3% and a simple payback period of 3.1 years after taxes.

The level of accuracy of the capital and operating cost estimates is +/- 15%. The capital cost estimate includes a 8.3% contingency and a 6.2% risk allowance on construction costs. Costs for the contracts with the QNS&L railway and the SFPPN port authority are included in the operating costs.

This study clearly demonstrates the feasibility of re-starting the Bloom Lake mine with the restoration and improvement work planned for 2017.

# Exploration, Development, and Production at the Bloom Lake Property

As discussed above in this AIF, the Bloom Lake Assets were acquired through a CCAA process and significant analysis and other work was undertaken by the Corporation to better determine the optimal approach for potential future operations. A Feasibility Study was completed on Bloom Lake as detailed above in the AIF. Subsequent to the release of the Feasibility Study the Corporation has undertaken financings, signed a Framewrok Off-Take Agreement and taken other steps towards potentially re-starting operations at Bloom Lake. As of the date of this AIF the Corporation is in advanced discussions to obtain the necessary financing required to fund the costs detailed in the "*Capital Expenditures Including Working Capital*" component of the Bloom Lake Feasibility Study (see *Three Year History* and *Risk Factors* sections above for further details).

# **DIVIDEND POLICY**

To date, the Corporation has not declared or paid any dividends and there is no expectation that it will do so in the foreseeable future. Any future determination to pay dividends will be in the discretion of the Board of Directors and will depend upon results of operations, capital requirements and such other factors as the Board considers relevant.

# SHARE CAPITAL DESCRIPTION

The Corporation is incorporated under the Corporations Act in Australia ("**Corporations Act**") and is limited by shares. The Corporation currently has two classes of shares on issue, being fully paid shares ("**Ordinary Shares**") and a Special Voting Share ("**Special Voting Share**"). At the date of this Circular, there are 387,084,339 Ordinary Shares and one Special Voting Share on issue. Performance Shares can be converted into Ordinary Shares upon achievement of certain performance hurdles. There are no partly paid shares on issue.

The Corporation does not have an authorised share capital as the requirement for a company to state an authorised share capital was repealed in Australia in 1998. Subject to compliance with the Corporations Act and the ASX Listing Rules, the legal ability of the Corporation to raise capital and the number of Ordinary Shares that it may issue is unlimited. The rights attaching to Ordinary Shares in the Corporation are set out in the Constitution of the Corporation (the "**Constitution**") and are regulated by the Corporations Act, ASX Listing Rules, ASX Settlement Operating Rules and laws of general application.

The rights attaching to Ordinary Shares are summarized below. This summary is not exhaustive and does not constitute a definitive statement of the rights attaching to the holders of Ordinary Shares (the "Ordinary Shareholders").

#### **Issue of Ordinary Shares**

Subject to the Corporations Act, the ASX Listing Rules and the Constitution, the Corporation's Board may issue and allot Ordinary Shares for such issue prices and on such terms as it determines (including shares with preferential, deferred or special rights, privileges or conditions, or which are liable to be redeemed or are bonus shares). This includes the power to grant options over unissued Ordinary Shares. The Ordinary Shares may be issued to existing Ordinary Shareholders, whether in proportion to their existing shareholdings or otherwise, or to such persons as the Corporation's Directors may determine.

#### **Transfer of Ordinary Shares**

Shareholders may transfer Ordinary Shares by way of a written transfer instrument in any usual or common form (or any other form approved by the Corporation's Directors), or by way of a transfer effected under a computerised or electronic system in accordance with the ASX Settlement Operating Rules and requirements of the ASX Listing Rules. The Corporation's Directors may in their discretion refuse to register a transfer of Ordinary Shares in circumstances permitted by the ASX Listing Rules. The Corporation's Directors must refuse to register a transfer of Ordinary Shares where required to do so by the ASX Listing Rules.

#### **Conversion of Ordinary Shares**

Under the Corporations Act, Ordinary Shares may be converted to preference shares provided certain conditions are met. As the Constitution does not prescribe the rights that would attach to preference shares, a conversion of Ordinary Shares to preference shares would, under the Corporations Act, be permitted only if the Shareholder's rights with respect to the following matters are first approved by special resolution: repayment of capital, participation in surplus assets and profits, cumulative and non-cumulative dividends, voting, and priority of payment of capital and dividends in relation to other shares or classes of preference shares.

The requirements as to variation of rights, set out immediately below, would apply to the conversion.

#### Variation of Rights

The rights attached to Ordinary Shares or Performance Shares may be varied in accordance with the Corporations Act. Under the Corporations Act, rights attached to shares in a class of shares may be varied or cancelled only by both a special resolution of the Company and either a special resolution of the relevant class or with written consent of shareholders with at least 75% of the votes in the class.

If the shareholders in the class do not all agree to the variation or the cancellation (whether by resolution or written consent), the holders of not less than 10% of the votes in the class may apply to a court of competent jurisdiction to exercise its discretion to set aside such variation or cancellation.

# Dividends

The holders of Ordinary Shares on which any dividend is declared or paid by the Corporation are entitled to participate in that dividend equally, in proportion to the number of Ordinary Shares held. The holder of a partly paid Ordinary Share (of which none are currently on issue) would be permitted to receive a fraction of the dividend declared or paid on a fully paid Ordinary Share (equivalent to the proportion which the amount paid on the share bears to the issue price). These dividend entitlements are subject to the rights of persons holding shares with special rights as to dividends (of which none are currently on issue).

The Corporation's Board may from time to time by resolution either declare a dividend, or determine that a dividend is payable, out of the profits of the Corporation. The Corporation's Board may fix the amount, time and method of payment of the dividend. In the case of a determination that a dividend is payable, the resolution may be amended or revoked until the time fixed for paying the dividend arrives. The payment of a dividend does not require any confirmation by a general meeting, subject to compliance with the Corporations Act.

Before declaring or determining to pay a dividend, the Corporation's Board may resolve to set aside out of the profits of the Corporation such amounts by way of reserves as they think appropriate. They may also resolve to carry forward any undistributed profits without transferring them to a reserve. The Corporation's Board may resolve that a dividend will be paid wholly or partly by the transfer or distribution of specific assets, in which case the Corporation's Board may deal as they consider expedient with any difficulty which arises in making the transfer or distribution (for example to deal with fractional entitlements), subject to compliance with the Corporations Act.

# Winding Up

Subject to the rights of holders of Ordinary Shares issued on special terms and conditions, upon a winding up of the Corporation, the Ordinary Shareholders would be entitled to participate equally in the distribution of any surplus assets in proportion to the number of and amounts paid on the shares held.

A liquidator may, with the sanction of a special resolution, divide among the Ordinary Shareholders in kind all or any of the Corporation's assets, and, if there are any different classes of shares on issue, may for that purpose determine how the division is to be carried out between the different classes.

# Voting

Subject to any rights or restrictions attaching to any class of shares, every Ordinary Shareholder may vote at a general meeting in person or by proxy, attorney, or, in the case of an Ordinary Shareholder that is a body corporate, by the individual appointed as its representative. On a show of hands, an Ordinary Shareholder is entitled to one vote. Upon a poll, an Ordinary Shareholder has for each fully paid Ordinary Share held, one vote, and for each partly paid Ordinary Share held, a fraction of a vote equivalent to the proportion which the amount paid on the Ordinary Share bears to the total issue price.

In the case of jointly held Ordinary Shares, if two or more joint holders purport to vote, then the vote of the joint holder whose name appears first in the register of Ordinary Shareholders will be accepted to the exclusion of the other joint holder or holders.

A resolution put to the vote at a general meeting is decided on a show of hands, unless a poll is demanded by at least five Ordinary Shareholders entitled to vote on the resolution, or Ordinary Shareholders with at least 5% of the votes that may be cast on the resolution on a poll, or the chairperson of the meeting. A poll may be demanded before a vote is taken, or immediately before or after the result of a vote by show of hands is declared.

In the case of equality of votes on a resolution (by show of hands or poll), the chairperson has a casting vote.

# **Buy-back of Ordinary Shares and Reduction of Capital**

Pursuant to procedures regulated by the Corporations Act, the Corporation may, with the agreement of Ordinary Shareholders, buy-back Ordinary Shares from that Ordinary Shareholder. In certain circumstances (for example, where specified buy-back limits are to be exceeded, or the buy-back is selective), the buy-back would be subject to the approval of the Ordinary Shareholders at a general meeting. Upon registration of the transfer of the Ordinary Shares acquired by the Corporation in a buy-back, the Ordinary Shares would be deemed to be cancelled.

Pursuant to procedures regulated by the Corporations Act, the Corporation may also be permitted to carry out a reduction of capital (such as a return of capital to shareholders, or a cancellation of uncalled capital), provided the reduction is fair and reasonable to the Ordinary Shareholders as a whole, does not materially prejudice the ability to pay creditors, and the approval of shareholders is obtained (by way of ordinary resolution in the case of an equal reduction, or special resolution in the case of a selective reduction).

#### Sale of Non-Marketable Parcels

The Corporation may sell the Ordinary Shares of any Ordinary Shareholder who has less than a marketable parcel of those Ordinary Shares, provided procedures and conditions prescribed by the Constitution, ASX Listing Rules and ASX Settlement Operating Rules are followed. A "marketable parcel" in relation to Ordinary Shares is a parcel of Ordinary Shares of not less than \$500 based on the closing price on a trading platform. Notice is required to be given by the Corporation to the Ordinary Shareholder of the Corporation's intention to sell the Ordinary Shares. During this notice period, the Ordinary Shareholder has the opportunity to advise the Corporation that the Ordinary Shareholder, the Corporation is not permitted to sell the shareholding).

# **Special Voting Share**

The Corporation issued a special voting share in connection with the Arrangement having substantially the rights, privileges, restrictions and conditions described in the Voting and Exchange Trust Agreement (see "Material Contracts")

# MARKET FOR SECURITIES

# Price Range and Trading Volume of Ordinary Shares

To the knowledge of the Corporation, the Ordinary Shares have not been rated by any approved rating organization.

The Ordinary Shares commenced trading on the TSX on March 31, 2014 and on the ASX on April 3, 2014 under the symbol "CIA" and prior to that date, traded on the ASX under the symbol "MAB". The following table sets forth the volume of trading and price ranges of the Ordinary Shares on the TSX for each month during the fiscal year ended March 31, 2017.

Fiscal Year Ended March 31 2017			
Date	High	Low	Volume
	\$	\$	No. of Shares
April 2016	0.300	0.195	4,570,613
May 2016	0.265	0.170	3,366,354
June 2016	0.280	0.180	3,424,808
July 2016	0.250	0.215	2,294,214
August 2016	0.250	0.230	2,146,995
September 2016	0.245	0.225	1,544,881

Fiscal Year Ended March 31 2017			
Date High Low			Volume
	\$	\$	No. of Shares
October 2016	0.280	0.225	2,811,418
November 2016	0.500	0.235	17,177,559
December 2016	0.485	0.400	6,927,883
January 2017	1.470	0.455	52,691,584
February 2017	1.400	0.850	27,064,081
March 2017	1.120	0.870	9,845,175

# **Prior Sales**

No class of securities of the Corporation, other than the Ordinary Shares, are listed for trading on a marketplace. The following are the details of the other securities of the Corporation which are outstanding as at the date hereof.

#### Warrants

As at the date of this Annual Information Form, the there are no warrants to purchase Ordinary Shares outstanding.

#### Stock Options

As at the date of this Annual Information Form, the following options were outstanding under the Corporation's share incentive plan each exercisable to purchase one Ordinary Share:

Date of Grant	Exercise Price (\$)	Number of Shares	Expiry Date
November 29, 2013	A\$0.50	2,300,000	November 29, 2018
October 30, 2014	A\$0.30	1,000,000	October 30, 2017
December 11, 2014	A\$0.30	2,000,000	December 11, 2017
August 20, 2015	A\$0.30	1,000,000	August 20, 2018
November 4, 2016	A\$0.30	500,000	November 4, 2019
April 11, 2016	A\$0.20	7,500,000	April 11, 2020
May 25, 2017	A\$1.00	1,650,000	May 25, 2020

As at the date of this Annual Information Form, 1,000,000 options were granted outside of the Corporation's stock option plan on September 1, 2014, each exercisable to purchase one Ordinary Share at an exercise price of \$0.45 expiring on September 1, 2018.

#### Share Rights

As at the date of this Annual Information Form, 1,250,000 share rights vesting on the satisfaction of vesting conditions set by the Corporation's Board were outstanding under the Corporation's share incentive plan, each share right convertible into one Ordinary Share.

#### **Compensation Options**

On April 11, 2016, 15,000,000 Compensation Options were issued in connection with a private placement financing, each exercisable to purchase one ordinary share at an exercise price of \$0.25 expiring on February 1, 2020. As at the date of this Annual Information Form, all of the Compensation Options remain outstanding.

On April 11, 2016, 6,000,000 Compensation Options were issued to Ressources Quebec Inc. in connection with the private placement completed by the Corporation's subsidiary QIO, each exercisable to purchase one ordinary share

at an exercise price of \$0.25 expiring on February 1, 2020. As at the date of this Annual Information Form, all of the Compensation Options remain outstanding.

# ESCROWED SECURITIES AND SECURITIES SUBJECT TO CONTRACTUAL RESTRICTION ON TRANSFER

Designation of Class	Number of securities held in escrow or that are subject to a contractual restriction on transfer	Percentage of Class
Ordinary Shares	10,266,666 <sup>(1)</sup>	2.65%

Notes:

<sup>(1)</sup> 10,266,666 Ordinary Shares are subject to contractual restriction on transfer until May 17, 2018, or earlier with the consent of the Corporation.

# **DIRECTORS AND OFFICERS**

The Corporation's Board of Directors (the **"Board"**) has five directors. The current term of office of each director will expire on the date of the next annual meeting of shareholders of the Corporation or the date his successor is duly elected or appointed pursuant to the Corporation's Constitution, unless his office is earlier vacated in accordance with the provisions of the Corporation's Constitution.

The following table sets forth certain information concerning the Corporation's directors based upon information furnished by them to management.

Name, Province and Country of Residence	Position with Corporation	Principal Occupation During Five Preceding Years	Director Since
Michael O'Keeffe <sup>(3)</sup> NSW, Australia	Executive Chairman and Chief Executive Officer	Executive Director in the mining business: Executive Chairman of the Corporation since 2013 and Chairman of Riversdale Resources Limited since 2012. Founder and Executive Chairman of Riversdale Mining Limited from 2004 to 2011 (all resource exploration and development corporations).	2013
Gary Lawler <sup>(1)(2)</sup> NSW, Australia	Non Executive Director	Lawyer. Former Senior Partner of legal firm Ashurst Australia from 2012 until 2014. Now a consultant at Ashurst Australia	2014
Andrew J. Love <sup>(1) (2)</sup> NSW, Australia	Non Executive Director	Chartered Accountant. Senior Partner of Australian accounting firm Ferrier Hodgson from 1976 to 2008 and is now a consultant.	2014
Michelle Cormier <sup>(2)</sup> Quebec, Canada	Non Executive Director	Operating Partner of Wynnchurch Capital Canada, Ltd. since 2014. Chief Financial Officer of TNG Capital Inc. from 2001 to 2014.	2016
Wayne Wouters Ottawa, Canada	Non-Executive Director	Strategic and Policy Advisor with McCarthy Tétrault LLP since 2015. Clerk of the Privy Council, Secretary to the Cabinet, and Head of the Public Service from July 1, 2009 until October 3, 2014, at which time he retired from the Public Service of Canada.	2016

Notes:

<sup>(1)</sup> Member of the Audit Committee of the Corporation.

<sup>(2)</sup> Member of the Remuneration and Nomination Committee of the Corporation.

<sup>(3)</sup> Resigned on April 27, 2017 as member of the Remuneration and Nomination Committee of the Corporation.

The following table sets forth certain information concerning the executive officers of the Corporation, based in part upon information furnished by them to management.

Name, Province and Country of Residence	Position with Corporation	Principal Occupation During Five Preceding Years
Michael O'Keeffe NSW, Australia	Executive Chairman and Chief Executive Officer	Executive Director in the mining business: Executive Chairman of the Corporation since 2013 and Chairman of Riversdale Resources Limited since 2012. Founder and Executive Chairman of Riversdale Mining Limited from 2004 to 2011 (all resource exploration and development corporations).
David Cataford Quebec, Canada	Chief Operating Officer	Chief Operating Officer and previously, Vice President, Engineering of the Corporation since October 2014. Bloom Lake Mine Superintendent, Cliffs Natural Resources Inc. from 2013 to 2014. Technical Manager – Bloom Lake Mine, Cliffs Natural Resources Inc. from 2011 to 2012.
Beat Frei Shupfart, Switzerland	Head of Finance	Head of Finance of the Corporation since April 2014 and financial advisor to the Chairman of the Corporation from 2012 to 2014. Prior to 2012, independent consultant involved in commodity projects' development and financing and Chief Financial Officer with OOO Enisey, a privately owned Russian oil and gas company.
Miles Nagamatsu Ontario, Canada	Chief Financial Officer	Chief Financial Officer of the Corporation since 2014 and of Champion Iron Mines Limited since 2006, Cartier Iron Corporation and Eloro Resources Ltd. since 1997, United Hunter Oil & Gas Corp. since 2017,PC Gold Inc. from 2008 to 2012 and Director and CFO of Essex Oil Ltd. since 2008 (all resource exploration corporations).
Jorge Estepa, Ontario, Canada	Vice-President and Corporate Secretary (Canada)	Vice President and Corporate Secretary (Canada) of the Corporation since 2014 and Vice President and Secretary- Treasurer of Champion Iron Mines Limited since March 2006, Cartier Iron Corporation since 1993, Eloro Resources Inc. since 1997, and Corporate Secretary of Forsys Metals Corp. since 2004 (all resource exploration corporations).
Pradipkumar Devalia NSW, Australia	Company Secretary (Australia)	Company Secretary of the Corporation since June 2014. Consultant in the resources industry from 2010 to 2014. Partner with PwC, Australia from 1997 until 2009.

As at the date hereof, the directors and officers of the Corporation as a group, beneficially owned, directly or indirectly, or exercised control or direction over, an aggregate of 39,466,095 Ordinary Shares representing approximately 10.16% of the issued and outstanding Ordinary Shares.

# CEASE TRADE ORDERS, BANKRUPTCIES, PENALITIES OR SANCTIONS

To the knowledge of the Corporation, no director or executive officer of the Corporation is, at the date hereof, or has been, within 10 years before the date hereof, a director, chief executive officer or chief financial officer of any company (including the Corporation) that, while that person was acting in that capacity, (a) was the subject of a cease trade order or similar order or an order that denied the issuer access to any exemption under securities legislation, for a period of more than 30 consecutive days, or (b) was subject to an event that resulted, after that person ceased to be a director or executive officer, in the issuer being the subject of a cease trade or similar order or an order that denied the issuer access to any exemption under securities legislation, for a period of more than 30 consecutive days.

To the knowledge of the Corporation, no director, executive officer or shareholder of the Corporation holding a sufficient number of shares to affect materially the control of the Corporation, is, as at the date hereof, or has been

with 10 years before the date hereof, a director or executive officer of any company (including the Corporation) that, while that person was acting in that capacity, or within a year of that person ceasing to act in that capacity, became bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceedings, arrangements or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold its assets.

To the knowledge of the Corporation, no director, executive officer or shareholder of the Corporation holding a sufficient number of shares to affect materially the control of the Corporation, and no personal holding company of any of them, has, within the 10 years before the date hereof, become bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency, or became subject to or instituted any proceedings, arrangement or compromise with creditors, or had a receiver, receiver manager or trustee appointed to hold the assets of the proposed director.

To the knowledge of the Corporation, no director, executive officer or shareholder of the Corporation holding a sufficient number of shares to affect materially the control of the Corporation and no personal holding company of any of them,: (a) has been subject to any penalties or sanctions imposed by a court relating to securities legislation, or by a securities regulatory authority; or (b) since December 31, 2000, has entered into a settlement agreement with a securities regulatory authority or, before January 1, 2001, entered into a settlement agreement with a securities regulatory authority which would likely be important to a reasonable investor in making an investment decision; or (c) been subject to any other penalties or sanctions imposed by a court or regulatory body that would likely be considered important to a reasonable investor in making investment decision.

# **CONFLICT OF INTERESTS**

To the knowledge of the Corporation, there are no existing or potential conflicts of interest between the Corporation and any director or officer of the Corporation. The directors and officers of the Corporation may serve as directors or officers of other public resource companies or have significant shareholdings in other public resource companies. Situations may arise in connection with potential acquisitions and investments where the other interests of these directors and officers may conflict with the interests of the Corporation. In the event that such a conflict of interest arises at a meeting of the directors of the Corporation, a director is required to disclose the conflict of interest and to abstain from voting on the matter.

# LEGAL PROCEEDINGS AND REGULATORY ACTIONS

During the financial year ended March 31, 2016 and during the current financial year, there have been no (i) penalties or sanctions imposed against the Corporation by a court relating to securities legislation or by a securities regulatory authority; (ii) other penalties or sanctions imposed by a court or regulatory body against the Corporation that would likely be considered important to a reasonable investor in making an investment decision; or (iii) settlement agreements entered into by the Corporation before a court relating to securities legislation or with a securities regulatory authority.

# INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS

During the three most recently completed financial years or during the current financial year of the Corporation, to the knowledge of the Corporation, other than the participation of Michael O'Keeffe, the Corporation's Chairman and CEO, in the Offering, and as further described in this AIF, no director or executive officer of the Corporation, no shareholder that beneficially owns, or controls or directs, directly or indirectly, more than 10% of the securities of the Corporation, and no associate or affiliate of any of them, has or had any material interest, direct or indirect, in any transaction that has materially affected or is reasonably expected to materially affect the Corporation.

# AUDITORS, REGISTRAR AND TRANSFER AGENT

The Corporation's registrar and transfer agents are:

Security Transfer Registrars Pty Ltd Suite 1, Alexandria House, 770 Canning Highway Applecross Western Australia 6153 TSX Trust Company 200 University Avenue, Suite 300 Toronto, Ontario Canada M5H 4H1

The Corporation's auditor is:

Ernst & Young 680 George Street Sydney 2000 New South Wales Australia

# MATERIAL CONTRACTS

Other than as described elsewhere in this AIF, the Corporation has not entered into any material contracts, except as follows:

- Subscription agreements with WC Strategic Opportunity, LP
- Subscription agreement with Resource Capital Fund VI LP.
- Quebec Iron Ore Shareholders' Agreement with Ressources Quebec Inc.
- Voting and Exchange Trust Agreement
- Subscription agreement with Altius Minerals Corporation
- Railcar Instalment Sale Agreement entered into between Canadian Iron Ore Railcar Leasing LP and Lac Bloom Railcars Corporation Inc., a wholly-owned subsidiary of the Corporation

# **INTEREST OF EXPERTS**

The following persons and companies have prepared or certified a statement, report or valuation described or included in a filing, or referred to in a filing, made by the Corporation under National Instrument 51-102 during, or relating to, the financial years of the Corporation ended March 31, 2017 or to date:

Ernst & Young

Stéphane Rivard, Eng., Robing Jones, Eng., and Michel Bilodeau, Eng., of Ausenco Canada Inc.

Luois-Pierre Gignac Eng., Rejean Sirois, Eng., and Etienne Bernier, Eng. of G Mining Services Inc.

Edwart Hart, MAusIMM. of Mineral Technologies Pty Ltd.

Phillippe Rio Roberge, P. Eng. of WSP Canada Inc.

Ernst & Young, the external auditors of the Corporation, reported on the financial statements for the year ended March 31, 2017. Ernst & Young advised the Corporation that it has no registered or beneficial interest, direct or indirect, in any securities or other property of the Corporation. Ernst & Young has advised the Corporation that it is independent of the Corporation in accordance with the Rules of Professional Conduct of the Institute of Chartered Accountants of Ontario.

Ausenco Canada Inc. co-authored the Bloom Lake Feasibility Study ((see "Material Properties").

G Mining Services Inc. co-authored the Bloom Lake Feasibility Study ((see "Material Properties").

Mineral Technologies Pty Ltd. co-authored the Bloom Lake Feasibility Study ((see "Material Properties").

WSP Canada Inc. co-authored the Bloom Lake Feasibility Study ((see "Material Properties").

To the knowledge of the Corporation, after reasonable enquiry, none of the foregoing, beneficially owns, directly or indirectly, or exercises control or direction over any securities of the Corporation representing more than 1% of the outstanding Ordinary Shares.

# AUDIT COMMITTEE INFORMATION

#### **Audit Committee Charter**

The text of the Audit Committee's charter is attached as Schedule "A" hereto.

#### **Composition and Independence of Audit Committee**

The Audit Committee is currently composed of two (2) members, Andrew J. Love and Gary, none of whom is an executive officer or employee of the Corporation. All of the Audit Committee members are independent as defined in National Instrument 52-110 - Audit Committees ("**NI 52-110**").

#### **Financial Literacy**

NI 52-110 provides that an individual is "financially literate" if he or she has the ability to read and understand a set of financial statements that present a breadth and level of complexity of accounting issues that are generally comparable to the breadth and complexity of the issues that can reasonably be expected to be raised by the issuer's financial statements.

All of the members of the Audit Committee are financially literate.

#### **Relevant Education and Experience**

Each Audit Committee member possesses certain education and experience which is relevant to the performance of his or her responsibilities as an Audit Committee member and, in particular, education or experience which provides the member with one or more of the following: an understanding of the accounting principles used by the Corporation to prepare its financial statements; the ability to assess the general application of such accounting principles in connection with the accounting for estimates, accruals and reserves; experience preparing, auditing, analyzing or evaluating financial statements that present a breadth and level of complexity of accounting issues that are generally comparable to the breadth and complexity of issues that can reasonably be expected to be raised by the Corporation's financial statements, or experience actively supervising one or more individuals engaged in such activities; and an understanding of internal controls and procedures for financial reporting.

Andrew J. Love has obtained significant financial experience and exposure to accounting and financial issues in his capacity as a Chartered Accountant with more than 30 years experience in corporate recovery and reconstruction in Australia. He was a senior partner of Australian accounting firm Ferrier Hodgson from 1976 to 2013 and is now a consultant. In that time he advised major local and overseas companies and financial institutions in a broad variety of restructuring and formal insolvency assignments. During this time Mr. Love specialized in the Resources Industry. Mr. Love has been an independent company director of a number of companies over a 25-year period in the Resources, Financial Services and Property Industries. This has involved corporate experience in Asia, Africa, Canada, United Kingdom and United States. Mr. Love's previous recent Board positions have included Chairman of ROC Oil Ltd., Deputy Chairman of Riversdale Mining Limited., Director of Charter Hall Office Trust and Chairman of Museum of Contemporary Art. Mr. Love is also currently a director of Gateway Lifestyle Operations Ltd. and Scottish Pacific Group Ltd.

Gary Lawler has obtained significant financial experience and exposure to accounting and financial issues in his capacity as a leading Australian mergers and acquisitions lawyer who has been involved in some of Australia's most notable merger and acquisition transactions. Mr. Lawler has over 30 years' experience as a practising corporate lawyer and has been a partner in a number of leading Australian law firms. He is currently a consultant of the legal firm Ashurst Australia. Mr. Lawler was also previously a director of Riversdale Mining Limited and Dominion Mining Limited. Mr. Lawler is also currently a director of Cartier Iron Corporation and Riversdale Resources Limited.

# Mandate

The mandate of the Audit Committee is to oversee the Corporation's financial reporting processes and to liaise with the external auditors. In addition to reviewing the financial controls of the Corporation which are its ongoing responsibility, the Audit Committee reviews the annual financial statements, quarterly financial statements, and provides oversight of the accounting and financial reporting process and any other significant financial issues. The

Audit Committee is scheduled to meet at least four (4) times a year and otherwise as frequently and at such intervals as it determines is necessary to carry out its duties and responsibilities, including meeting separately with the external auditors.

# External Audit Fees

The following table sets forth the fees billed to the Corporation by Ernst & Young, the external auditors of the Corporation, for services rendered in the last two fiscal years.

Ernst & Young (Australian firm)	2017	2016
Audit of the financial report	88,000	80,000
Review of interim financial statements	46,000	42,000
Remuneration report	15,000	
Ernst & Young (Canadian firm)		
Audit of the financial statements of QIO	25,000	
Transaction advisory services	89,626	89,424
Taxation services	10,000	10,830
Total	273,626	222,254

The Corporation appointed Ernst & Young as auditors on November 26, 2013.

# ADDITIONAL INFORMATION

Additional information relating to the Corporation may be found under the Corporation's profile on SEDAR at <u>www.sedar.com</u>. Further, information with respect to the Corporation, including directors' and officers' remuneration and indebtedness, principal holders of securities of the Corporation and securities authorized for issuance under equity compensation plans is contained in the management information circular of the Corporation for its most recent annual meeting of shareholders (the "**Information Circular**") that involved the election of directors. Additional financial information is provided in the comparative consolidated financial statements and the management's discussion and analysis of the Corporation for its most recently completed financial year. A copy of this Annual Information Form, the annual report of the Corporation for the financial year ended March 31, 2017 and the Information Circular may be obtained from SEDAR or upon request from the Secretary of the Corporation.

# SCHEDULE A

# AUDIT COMMITTEE CHARTER - CHAMPION IRON LIMITED (the "Company")

The Audit Committee is a committee of the Board of Directors of the Company to which the Board delegates its responsibilities for the oversight of the accounting and financial reporting process and financial statement audits.

# Membership

Membership will be not less than three non-executive Directors as appointed by the Board.

# **Overall Purpose**

The overall purpose of the Audit Committee is to protect the interests of Champion Iron shareholders and other stakeholders by overseeing:

- On behalf of the Board:
  - The integrity of financial reporting;
  - The adequacy of the control environment and the processes for identifying and managing risk;
  - The internal and external audit functions;
  - Treasury and taxation practises; and
- As requested by the Board:
  - o Compliance with applicable legal and regulatory requirements and internal codes of conduct.

The Committee will assist the Board by making appropriate recommendations. The Committee does not make decisions on behalf of the Board unless such authority in respect of any matter is expressly delegated by the Board.

#### Chairman

The Chairman of the Audit Committee will be appointed by the Board. The Chairman of the Committee shall be independent (ie have no material relationships with Champion other than Board and Committee roles) and shall not be the Chairman of the Board.

The Chairman of the Committee shall:

- Be knowledgeable of Champion's business and financial and auditing processes;
- Oversee planning and conduct of Committee meetings including approval of agendas and minutes;
- Oversee written and verbal reporting to the Board on key matters arising from the Committee, and
- Be involved in the selection of Committee members.

#### **Member Requirements**

All members of the Committee will be non-executive Directors and will be independent. Whilst the Chairman of the Board is precluded from chairing the Committee, the Chairman of the Board is not precluded from being a member of the Committee. All Committee members will be financially literate and at least one member will have accounting or related financial expertise.

# **Meeting Arrangements**

The Committee shall meet at least four times a year. Additional meetings may be held if requested by the Committee Chairman. A quorum for Committee meetings will require at least two members.

The Chief Executive Officer and Chief Financial Officer will be present for the entirety of all meetings except when the Committee Chairman requests or consents otherwise. The Chairman may invite other senior management to attend meetings as appropriate.

The external and internal auditor will attend meetings at the invitation of the Chairman. The Committee will regularly meet with external and internal auditors, without management present.

All board members are to be issued an invitation to attend each meeting, including those where the focus of the discussion is period and financial reporting.

#### Secretarial

The Company Secretary or his designate shall be the secretary of the Committee and will be responsible for the minutes of meetings.

# Responsibilities

The Committee shall oversee the external audit function. This oversight will include:

- Reviewing the performance of the external auditor;
- Making recommendations to the Board of Directors regarding the continuation or termination of the external auditor's engagement and/or any material revision to the terms of engagement;
- Evaluating the independence of the external auditor and ensuring that the provision of non-audit services by the external auditor does not adversely impact independence;
- Reviewing the appropriateness of the audit approach, scope and methodology;
- Reviewing the results of the auditor's work with particular emphasis on unresolved or unadjusted issues between auditors and management;
- Providing a direct line of communication between the external auditor and the Board which is independent of management;
- Reviewing all reports to the Board and Committee by the external auditor; and
- Approving external auditor's fees.

The Committee shall assist the Board of Directors in fulfilling its fiduciary responsibilities relating to accounting and reporting practices by:

- Reviewing compliance with Accounting Standards, Financial Reporting Standards, Stock Exchange requirements and other legal requirements;
- Reviewing the position taken by management on significant transactions and accounting issues and any unusual or highly judgemental matters;
- Monitoring the effectiveness of the accounting and internal control systems;
- Reviewing quarterly, half year and full year Financial Statements and making the necessary recommendations to the Board;
- Considering capital management matters, including proposed dividends, prior to consideration by the Board;
- Ensuring that there are no material unresolved issues between management and the external auditor; and
- Reviewing other financial information distributed externally as required.

The Committee will review other key financial processes, in particular the tax and treasury operations, to ensure prudent management practices are in place.

The Committee shall assist the Board with regard to oversight of the Company's risk management processes by:

- Developing an understanding of key risk areas and the consequences of major risk events;
- Gaining assurance as to the adequacy of the Company's policies and processes for integrating risk management into its operations; and
- Reviewing the insurance strategy and determining the extent to which it aligns with the risk exposure of the Company.

The Committee shall oversee the internal audit function. The oversight will include:

- Reviewing the performance of the internal auditor and the approval of the annual internal audit plan;
- Reviewing significant internal audit findings and action by management to address these;
- Facilitating a direct line of communication from the internal auditor which is independent of management; and
- Approving the appointment of the Manager Risk and Internal Auditor.

As requested by the Board, the Committee shall review the processes and internal controls that management have put in place to ensure compliance with laws, regulations and internal codes of conduct.

# **Reporting Mechanism to the Board**

The Committee Chairman will report to the Board after each Committee meeting and will make recommendations to the Board as appropriate.

# Access to Information and Independent Advice

The Committee has the authority, subject to the law, to require access to any information, document, report or material in the possession of any employee of the Company or any related body corporate, and all employees must comply with such requests from the Committee.

The Committee may, with prior written approval of the Chairman of the Board, obtain such independent legal, financial, and other advice as it considers necessary, with the cost borne by the Company.

#### Reliance

Audit Committee members are entitled to rely on employees of the Company or professional advisers or consultants engaged by the Committee or the Company where:

- There are reasonable grounds to believe that the employee, adviser or consultant is reliable and competent; and
- The reliance was made in good faith and after making an independent assessment of the information.

#### **Review Processes**

The Charter, composition and annual agenda for the Committee will be reviewed at least annually. Any changes to this Charter will require the approval of the Board. The Committee will undertake a formal process of self-assessment on an annual basis. The results of this assessment will be communicated to the Board in order to assist the Board in its periodic review of the Committee's effectiveness.