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CHAMPION IRON

PRESS RELEASE

CHAMPION IRON ANNOUNCES AN AFTER-TAX IRR OF 33.4% IN FEASIBILITY STUDY FOR THE PHASE II EXPANSION AT BLOOM LAKE

After-Tax NPV of $956 Million with a 2.4-Year Payback on Initial Capital
Results Support the Approval of a $68 Million Budget to Secure Timetable

Montreal, June 20, 2019 - Champion Iron Limited (TSX: CIA) (ASX: CIA) ("Champion" or the "Company") is pleased to announce positive results of the Phase II Feasibility Study ("Feasibility Study" or "Study") prepared pursuant to National Instrument 43-101 - Standards of Disclosure for Mineral Projects ("NI 43-101") for the Bloom Lake Mining Complex ("Bloom Lake"), located near the town of Fermont, in north-eastern Quebec. The Feasibility Study envisions further exploiting Bloom Lake which would increase overall capacity from 7.4Mtpa to 15Mtpa of 66.2% Fe iron ore concentrate.

Conference Call Details

Champion will host a conference call and webcast at 8:30 AM EDT (Montreal Time), on Thursday June 20, 2019 to discuss the Feasibility Study results. Call details are outlined at the end of this news release.

All amounts stated in this news release are in Canadian dollars unless otherwise indicated.

1. FEASIBILITY STUDY HIGHLIGHTS – PHASE II

Base case assuming long-term price of US$68.2/t P62 and US$83.9/t P65 iron ore price CFR China		
	CA$	**US$**
NPV	- Pre-tax $NPV_{8\%}$ of $1,532 million - After-tax $NPV_{8\%}$ of $956 million - Pre-tax $NPV_{8\%}$ of $3,762 million combining Phase I & II - After-tax $NPV_{8\%}$ of $2,384 million combining Phase I & II	- Pre-tax $NPV_{8\%}$ of $1,160 million - After-tax $NPV_{8\%}$ of $724 million - Pre-tax $NPV_{8\%}$ of $2,850 million combining Phase I & II - After-tax $NPV_{8\%}$ of $1,806 million combining Phase I & II
IRR	Pre-tax IRR of 42.4% or after-tax IRR of 33.4% with a 2.4 years payback on initial capital	
Iron ore price	Based on $110.7/t P65 iron ore price CFR China	Based on $83.9/t P65 iron ore price CFR China
Initial CAPEX	$589.8 million	$446.8 million
Total cash cost[1]	$46.6/t FOB Sept-Îles	$35.4/t FOB Sept-Îles
Sustaining capital	4.4/t over the LoM	3.3/t over the LoM
All-in sustaining	$52.3/t FOB Sept-Îles	$39.7/t FOB Sept-Îles
Production	Estimated average annual production of 15 million tonnes of 66.2% Fe iron ore	
Construction period	21 months	
Mine life	Current study mine life of 20 years	
Mineral reserves	Bloom Lake reserves estimated at 807 million tonnes at an average grade of 29.0% Fe	
Recovery	Average metallurgical recovery of 82.4% relative to average plant feed grade of 29.0% Fe	

1 Cash cost and all-in sustaining costs are non-IFRS financial performance measures with no standard definition under IFRS. The Company provides them as supplementary information that management believes may be useful to investors to explain the Company's financial results.

Champion Iron CEO, Mr David Cataford, said, "This is a positive outcome for the Company as Phase II would further position Champion as one of the largest high-grade iron ore producers in the world. Based on conservative assumptions compared to current spot price, the Phase II Feasibility Study demonstrates that this expansion at Bloom Lake may drive additional value to shareholders and allow the Company to continue on its recent growth trajectory. In fact, we believe that very few iron ore projects offer the potential of 20+ years of production at industry-low operating costs, whilst being strategically located in close proximity to all necessary infrastructure and situated in what we consider to be a superior mining jurisdiction. Consistent with our commitment to offer accretive growth while managing dilution, we are approaching the project diligently by advancing key long-lead time items and will look at optimal sources of capital to further advance the project in due time."

The Feasibility Study conducted by BBA Inc. evaluated the life-of-mine ("LoM") option for expanded mining and processing to maximize the value of the mineral resource at Bloom Lake. The Feasibility Study evaluates the combined Phase I and II mining plan, current concentrator plant at Phase I and completion of the Phase II concentrator plant. Results of the Study recommend an expansion of Bloom Lake, resulting in a LoM production averaging 15 Mtpa of 66.2% Fe iron ore concentrate. Based on the new optimized mine plan, the mining rate at Bloom Lake would also be increased to accelerate the supply of ore to the expanded facilities, while maintaining a LoM of 20 years. Pursuant to the strong economics outlined in the Feasibility Study, the Company's board of directors has approved an initial budget of $68 million to advance the project during the remainder of 2019, which is expected to meet the timetable detailed in the Feasibility Study. The approved budget will be funded from cash on hand and existing debt facilities. Finalization of additional funding sources for the project is expected to be completed before mid-2020.

The processing plant for the Phase II concentrator is based on the currently operating Phase I design with minor changes to further improve performance. The recovery circuit is very similar to the Phase I concentrator with the addition of a stage of scavenger up current classifier to increase recovery and improve response to feed variations.

Most of the major equipment, with the exception of the gravity circuit equipment that was used as part of the Phase I restart project, was sourced on-site from the previous owner's Phase II expansion project which was interrupted in 2012.

The base case economic assumption utilizes a conservative blended average gross realized price at 66.2% Fe CFR China of US$84.1/t for the LoM. The P65 analyst consensus was utilized for years 1 to 3. For the remaining LoM, the iron price at 66.2% is based on the average of the P65 analyst long-term consensus and the P62 3-year trailing average with a 15% premium. These price assumptions compare with a spot price at P65 of US$124.7/t as of June 13, 2019, of which Bloom Lake's 66.2% Fe material receives a premium.

2. ECONOMIC SUMMARY

The economic sensitivity analysis uses the P65 pricing which compares to a spot price of US$124.7 (as at June 13, 2019).

	CA$	US$	CA$	US$	CA$	US$
Iron ore based on P65 $US/t CFR China	105.2/t	79.7/t	111.7/t	83.9/t	116.3/t	88.1/t
Pre-tax						
NPV$_{8\%}$ ($M)	1,210.12	976.76	1,531.80	1,160.45	1,853.47	1,404.14
IRR (%)	36.7%		42.4%		48.0%	
After-tax						
NPV$_{8\%}$ ($M)	753.17	570.59	955.71	724.03	1,157.08	876.57
IRR (%)	29.2%		33.4%		37.4%	
Payback (years)	2.5 years		2.4 years		2.2 years	
Combined Phase I and II						
Pre-tax NPV$_{8\%}$ ($M)	3,107.81	2,354.40	3,762.18	2,850.13	4,416.60	3,345.91
After-tax NPV$_{8\%}$ ($M)	1,969.81	1,492.28	2,384.09	1,806.13	2,797.24	2,119.12

3. MINING AND PROCESSING

A summary of the revenue, capital costs, production and operating metrics from the Feasibility Study are provided below.

4. PRODUCTION METRICS:

Feasibility Study Baseline Production Metrics	LoM
Reserve (Mt)	807.0
Processed tonnage (Mtpa)	41.6
Average Fe processing recovery (%)	82.4%
Average mining dilution (%)	1.2%
Average mining ore loss (%)	0.8%
Average recovered concentrate (Mtpa)	15.0
Mine life (years)	20 years

5. CAPITAL COSTS:

CAPEX Pre-Production	(CA$M)	(US$M)
General	28.2	21.4
Mine - Phase II	37.6	28.5
Crusher and stockpile	24.3	18.4
Concentrator	165.0	125.0
Tailings and water management	50.2	38.0
Services	30.5	23.1
Rail and port	73.4	55.6
Owner's costs	105.1	79.6
Contingency (15%)	75.5	57.2
TOTAL	589.8	**446.8**
Deposits	44.0	33.3
TOTAL Including Deposits	633.8	**480.1**

6. OPERATING COSTS SUMMARY:

Category	LoM (CA$/t)	LoM (US$/t)
Mining	13.4	10.2
Crushing and conveying	1.7	1.3
Processing plant	7.9	6.0
Concentrate shipping	16.8	12.7
Water and tailings management	2.1	1.6
General and administrative	4.7	3.6
Total Cash Cost[1]	46.6	**35.4**
Sustainability and other community expenses	1.3	1.0
Sustaining CAPEX	4.4	3.3
All-in Sustaining Costs[1]	52.3	**39.7**

[1] Cash cost and all-in sustaining costs are non-IFRS financial performance measures with no standard definition under IFRS. The Company provides them as supplementary information that management believes may be useful to investors to explain the Company's financial results.

7. KEY ASSUMPTIONS:

LoM average gross realized 66.2% Fe Price (CFR China (US$/t)	US$84.1/t
Average exchange rate (CA$/US$)	0.758
Diesel price	$1.18/l
Electricity tariff	$0.0491/kwh

8. UPDATED MINE PLAN

The Phase II expansion at Bloom Lake continues with the successful operating strategies currently used at the mine since the restart of Phase I. The mining scenario has been updated with operational changes in the pit and new blending constraints required for optimum concentrator productivity.

The Phase II mine plan continues with a conventional surface mining method using an owner mining approach. Electric hydraulic shovels will be complemented with front end loaders to allow a flexible mine plan. Additional drilling and hauling capacity will be added as mine tonnages increase starting in January 2021.

9. CONCENTRATOR PLANT

Quebec Iron Ore Inc. intends to complete construction of the Phase II concentrator and other supporting assets to bring Bloom Lake's total average LoM production to 15 Mtpa of 66.2% Fe iron ore concentrate. Existing crushing, feed and concentrate storage facilities will be modified or completed to support operation of both concentrators.

The proposed Phase II concentrator plant is based on the currently operating Phase I concentrator which has major proven improvements in terms of tonnage and recovery over historical performances (2010 - 2014). The Phase II recovery circuit is an evolution from the Phase I design and base of the Phase I first year of operation. The main modification from the Phase I design is the addition of a scavenger up current classifier stage that will result in improved recovery and response to feed variations.

Major processing equipment is currently on site from the original expansion project that was interrupted in 2012 by Bloom Lake's previous owner. Much of this equipment will be reused with the exception of the gravity circuit equipment that was used as part of the Phase I restart project. The Phase II project will also benefit from utilization of existing infrastructure and personnel. Overland conveyor, crushers, water management facility and booster pumphouse, workshops, are all examples of existing infrastructure that reduces the overhead burden on the project as well as assists in the development timeline with shorter mobilization periods.

10. LOGISTICS

The mine already has an operational rail loop infrastructure, with access to end markets via port and rail. The rail access consists of three separate segments. The first segment, a 31.9 km on-site rail spur, is operational and connects to the Quebec North Shore & Labrador (QNS&L) railway at the Wabush Mines facilities in Wabush, Labrador. The second segment uses the QNS&L railway between Wabush to the Arnaud junction in Sept-Îles. The third segment connects from Arnaud to Pointe-Noire port facilities (Sept-Îles), where the concentrate will be unloaded, stockpiled, then loaded onto vessels for export. Modifications will be made to the rail infrastructure as well as to the stockyard in order to reduce cycle time and increase concentrate storage capacity.

Bloom Lake benefits from excellent access to power, water, roads, rail, ports and a highly professional mining labour market, as well as a government that continues to be supportive of new investment and mining.

11. TAILINGS MANAGEMENT

Current tailings facilities, combined with the expansion plan set according to the Study, will be utilized to service the additional tonnage from Phase II. While the mine is located on the Canadian shield, being one of oldest and most seismically stable region in the world, the site is designed to resist all extreme scenarios from earthquakes to exceptional rain events. The safe tailings management will continue to adopt world class standards where fine material is separated from coarse material, maximizing each material given their distinct properties and behaviours. This process allows to greatly reduce potentially unstable materials where less than 15% of tailings are categorized as fine material, which are then stored in centerline or downstream construction, considered a proven, safe and stable method for this type of product. To further improve on safety, the dams are raised to levels that cannot exceed 40 metres, while coarse material stored in upstream construction utilizes a slope of 10:1 compared to the industry standard of 6:1. Finally, the Company has a robust monitoring program, including real-time surveillance consoles.

12. FEASIBILITY STUDY AND QUALIFED PERSONS

The Feasibility Study will be filed under the Company's profile on SEDAR within 45 days of the date of this news release. The following Qualified Persons, along with other Qualified Persons, have participated in the preparation of the Feasibility Study:

- André Allaire, P.Eng. – BBA Inc.
- Isabelle Leblanc, P.Eng. – BBA Inc.
- Pierre-Luc Richard, P.Geo – BBA Inc.
- Mathieu Girard, P.Eng. – Soutex
- Philippe Rio Roberge, P.Eng. – WSP Canada Inc.

Each of these foregoing Qualified Persons has reviewed and approved the technical information contained in this news release that is relevant to their area of responsibility and verified the data underlying such technical information. Reference is made to the Feasibility Study that will be filed within 45 days as to the data verification procedures, any limitations thereon and any failure to verify data.

13. MINERAL RESOURCE AND RESERVE ESTIMATES

The following table presents the mineral resource for Bloom Lake estimated at a cut-off grade of 15% Fe, inside an optimized open-pit shell based on a long-term iron price of US$61.50 per dry metric tonne ("dmt") for 62% Fe content, a premium of US$12.7/dmt for the 66.2%Fe concentrate and an exchange rate of 1.24 CA$/US$. The measured and indicated mineral resource for Bloom Lake is estimated at 893.5 Mt with an average grade of 29.3% Fe, and an inferred mineral resource at 53.5 Mt with an average grade of 26.2% Fe. Mineral resources that are not mineral reserves do not have demonstrated economic viability.

Mineral Resource Estimate for Bloom Lake (Notes 1-10)

Classification	Tonnage (dmt)	Fe	CaO	Sat	MgO	Al_2O_3
	kt	%	%	%	%	%
Measured	379,100	30.2	1.4	4.4	1.4	0.3
Indicated	514,400	28.7	2.5	7.7	2.3	0.4
Total M&I	893,500	29.3	2.1	6.3	1.9	0.4
Inferred	53,500	26.2	2.8	8.0	2.4	0.4

Notes on mineral resources:

1. The 2019 mineral resource estimate ("MRE") was prepared by or under the supervision of Pierre-Luc Richard, P. Geo, of BBA Inc. Mr. Richard is an independent qualified person, as defined by NI 43-101 guidelines. The effective date of the estimate is April 19, 2019. CIM definitions and guidelines for Mineral Resource Estimates have been followed.
2. These mineral resources are not mineral reserves as they do not have demonstrated economic viability. The MRE presented herein is categorized as measured, indicated, and inferred resources. The quantity and grade of reported Inferred resources in this MRE are uncertain in nature and there has been insufficient exploration to define these Inferred resources as Indicated or Measured.
3. Resources are presented as undiluted and in situ for an open-pit scenario and are considered to have reasonable prospects for economic extraction. The constraining pit shell was developed using pit slopes varying from 42 to 46 degrees. The pit shell was prepared using Minesight.
4. The MRE was prepared using GEOVIA Surpac 2019HF1 v.7.0.1949.0 and is based on 569 surface drill holes (141,289m), and a total of 11,397 assays.
5. Density values were calculated based on the formula established and used by the issuer.
6. Grade model resource estimation was calculated from drill hole data using an Ordinary Kriging interpolation method in a block model using blocks measuring 10 m x 10 m x 14 m (vertical) in size.
7. The estimate is reported using a cut-off grade of 15% Fe. The MRE was estimated using a cut-off grade of 15% Fe, inside an optimized open pit shell based on a long-term iron price of US$61.50/dmt for 62% Fe content, a premium of US$12.7/dmt for the 66.2% Fe concentrate and an exchange rate of 1.24 CA$/US$.
8. Calculations used metric units (metre, tonne). Metal contents are presented in percent. Metric tonnages were rounded and any discrepancies in total amounts are due to rounding errors.
9. The author is not aware of any known environmental, permitting, legal, title-related, taxation, socio-political or marketing issues, or any other relevant issues not reported in this Feasibility Study, that could materially affect the Mineral Resource Estimate.
10. Mineral reserves stated below are included in the mineral resources.

The proven and probable mineral reserve is estimated at 807.0 Mt at an average grade of 29.0% Fe based on a cut-off grade of 15% Fe. The mineral reserve was estimated using a long-term concentrate price of US$60.89/dmt for 62% Fe content, a premium of US$12.7/dmt for the 66.2%Fe concentrate and an exchange rate of 1.24 CA$/US$. The mineral reserve includes a mining dilution and ore loss calculated on a block-by-block basis based on the neighbouring blocks lithology and grade. The average strip ratio of the open pit is 0.88.

Mineral Reserve Estimate (Notes 1-13)

Classification	Diluted Ore Tonnage (dmt) Mt	Fe %	CaO %	Sat %	MgO %	Al2O3 %
Proven	346.0	29.9	1.5	4.7	1.4	0.3
Probable	461.0	28.2	2.6	7.9	2.5	0.6
Total P&P	807.0	29.0	2.2	6.5	2.0	0.5

Notes on mineral reserves:

1. The mineral reserves 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 10th, 2014.
2. The mineral reserve estimate was prepared by or under the supervision of Isabelle Leblanc, P. Eng., from BBA. Ms. Leblanc is an independent and qualified person, as defined by NI 43-101. The effective date of the estimate is May 17, 2019.
3. Inside the final open pit design all the measured resources and associated dilution (waste material at 0% Fe) have been converted into Proven Mineral Reserves. Inside the final open pit design all the indicated resources and associated dilution (waste material at 0% Fe) have been converted into Probable Mineral Reserves.
4. Mineral reserves based on forecasted December 31, 2020 mining surface.
5. The reference point of the mineral reserve is the primary crusher feed.
6. Mineral reserves are estimated at a cut-off grade of 15% Fe.
7. Mineral reserves are estimated using a long-term iron price reference price (P62) of US$60.89/dmt and an exchange rate of 1.24 CA$/US$. An Fe concentrate price adjustment of US$12.70/dmt was added.
8. Bulk density of ore is variable but averages 3.40 t/m^3.
9. The average strip ratio is 0.88:1.
10. Ore loss and dilution were calculated using a 1m contact skin between ore and waste rock types.
11. Average mining dilution is 1.2% at a grade of 0% Fe. Dilution was applied block by block and shows a wide range of local variability.
12. The average ore loss is 0.8% at a grade of 31% Fe. Ore loss was applied block by block and shows a wide range of local variability.
13. The author of the Feasibility Study is not aware of any known environmental, permitting, legal, title-related, taxation, socio-political or marketing issues, or any other relevant issues not reported in the Feasibility Study, that could materially affect the Mineral Reserve Estimate.

14. CONFERENCE CALL AND WEBCAST INFORMATION

A webcast and conference call to discuss these results will be held on Thursday, June 20, 2019, at 8:30 AM EDT (Montreal Time). Listeners may access a live webcast of the conference call from the Investors section of the Company's website at www.championiron.com or by dialing toll free 1-888-390-0546 within North America or +1-888-076-068 from Australia.

An online archive of the webcast will be available by accessing the Company's website at www.championiron.com. A telephone replay will be available for one week after the call by dialing +1-888-390-0541 within North America or +1-416-764-8677 overseas, and entering passcode 564607 #.

About the Bloom Lake Mining Complex

On April 11, 2016, Champion, through its subsidiary Quebec Iron Ore Inc., acquired the Bloom Lake assets from affiliates of Cliffs Natural Resources Inc. that were subject to restructuring proceedings under the Companies' Creditors Arrangement Act (Canada). Following the release of a feasibility study on February 16, 2017, Champion recommissioned Bloom Lake in February 2018, which completed its first shipment on April 1, 2018. QIO is 63.2% owned by Champion, with the remaining 36.8% equity interest owned by Ressources Québec, acting as a mandatary of the Government of Quebec. On May 29, 2019, Champion concluded an agreement with Ressources Québec to acquire 100% of the property.

The Bloom Lake property is located on the south end of the Labrador Trough, approximately 13 km north of Fermont, Quebec, and 10 km north of the Mount-Wright iron ore mining operation of ArcelorMittal Mines Canada. The mine is an open-pit truck and shovel operation with a concentrator. From the site, iron concentrate is transported by rail, initially on the Bloom Lake Railway, to a ship loading port in Sept-Îles, Quebec.

About Champion Iron Limited

Champion is a producing iron development and exploration company, focused on developing its significant iron resources in the south end of the Labrador Trough in the province of Québec. Following the acquisition of its flagship asset, the Bloom Lake iron ore property, the Company implemented upgrades to the mine and processing infrastructure and has partnered in projects associated with improving access to global iron markets, including rail and port infrastructure initiatives with government and other key industry and community stakeholders. Champion's management team includes professionals with mine development and operations expertise, who also have vast experience from geotechnical work to green field development, brown field management including logistics development and financing of all stages in the mining industry.

For further information please contact:

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*For additional information on Champion Iron Limited, please visit our website at: **www.championiron.com**.*

Forward-Looking information

This news release includes certain information that may constitute “forward-looking information” under applicable Canadian securities legislation. All statements, other than statements of historical facts, included in this news release that address future events, developments or performance that Champion expects to occur including management’s expectations regarding (i) the Feasibility Study; (ii) the Phase II expansion of Bloom Lake and its expected cost, construction period, IRR, NPV, funding, capital expenses, payback time and overall capacity; (iii) LoM of Bloom Lake; (iv) mineral reserves; (v) recovery; (vi) value creation and growth; (vii) operating costs; and (viii) the acquisition of the participation of Ressources Québec in QIO are forward-looking statements. Forward-looking statements are statements that are not historical facts and are generally, but not always, identified by the use of words such as “plans”, “expects”, “is expected”, “budget”, “scheduled”, “estimates”, “continues”, “forecasts”, “projects”, “predicts”, “intends”, “anticipates”, “aims”, “targets”, or “believes”, or variations of, or the negatives of, such words and phrases or state that certain actions, events or results “may”, “could”, “would”, “should”, “might” or “will” be taken, occur or be achieved. Although Champion believes the expectations expected in such forward-looking statements are based on reasonable assumptions, such forward-looking statements involve known and unknown risks, uncertainties and other factors, most of which are beyond the control of the Company, which may cause the Company’s actual results, performance or achievements to differ materially from those expressed or implied by such forward-looking statements. Factors that could cause the actual results to differ materially from those in forward-looking statements include, without limitation: changes in the assumptions used to prepare the Feasibility Study; project delays; continued availability of capital and financing and general economic, market or business conditions; general economic, competitive, political and social uncertainties; future prices of iron ore; failure of plant, equipment or processes to operate as anticipated; delays in obtaining governmental approvals, necessary permitting or in the completion of development or construction activities, as well as those factors discussed in the section entitled “Risk Factors” of the Company’s 2018 Annual Information Form and the risks and uncertainties discussed in the Company’s MD&A for the year ended March 31, 2018, both available on SEDAR at www.sedar.com. There can be no assurance that such information will prove to be accurate, as actual results and future events could differ materially from those anticipated in such forward- looking information. Accordingly, readers should not place undue reliance on forward-looking information. All of Champion’s forward-looking information contained in this press release is given as of the date hereof and is based upon the opinions and estimates of Champion’s management and information available to management as at the date hereof. Champion disclaims any intention or obligation to update or revise any of its forward-looking information, whether as a result of new information, future events or otherwise, except as required by law.

CHAMPION IRON LIMITED MINERAL RESOURCES UPDATE

FEASIBILITY STUDY FOR THE PHASE II EXPANSION

1. INTRODUCTION

1.1 Background

BBA Inc. (BBA), a Canadian-based consulting firm, has been requested by Champion Iron Limited (Québec Iron Ore – QIO) to update the Ore Reserve Estimate on its Bloom Lake mine, located in Fermont Québec.

The Ore Reserve Estimate has been derived and reported by BBA according to the guidelines and terminology proposed in the JORC Code (2012 version). It is important to note that the Ore Reserves presented in this report are also 100% compliant with the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) reporting guidelines as used in National Instrument 43-101 standards (NI 43-101).

1.2 Project Description

The Project's objective is to double the throughput capacity of the Bloom Lake Mine, previously started by Cliffs Natural Resources. This project was placed on hold and eventually in care and maintenance during the shutdown in January 2015. It was later acquired as a part of the purchase by QIO in April 2016. Phase 2 is based on similar operating assumptions seen during the Phase 1 ramp-up completed by QIO in 2018 with adjustments for economies of scale.

The operation consists of a conventional surface mining method using an owner mining approach with electric hydraulic shovels, wheel loaders and mine trucks. The study consists of resizing the open pit based on parameters outlined in this section and producing a 20-year life of mine (LOM) plan to feed a plant at a nominal rate of 41.9 Mtpy to produce 15Mtpa of 66.2%Fe iron concentrate. Year 1 of the current study corresponds to 2021.

2. MINERAL RESOURCES AND ORE RESERVES ESTIMATION

2.1 Mineral Resource Statement

The Measured, Indicated and Inferred Mineral Resources for the Bloom Lake project presented herein is estimated at a cut-off grade of 15% Fe, inside an optimized Whittle open pit shell based on a long term iron price of USD61.50/dmt for 62% Fe content, a premium of USD12.7/dmt for the 66.2% Fe concentrate and an exchange rate of 1.24 CAD/USD. The Measured and Indicated Mineral Resource for the Bloom Lake project is estimated at 893.5 Mt with an average grade of 29.3% Fe, and Inferred Mineral Resource at 53.5 Mt with an average grade of 26.2% Fe.

Table 1: Bloom Lake Mineral Resource

Classification	Tonnage (dry) kt	Fe %	CaO %	Sat %	MgO %	Al_2O_3 %
Measured	379,100	30.2	1.4	4.4	1.4	0.3
Indicated	514,400	28.7	2.5	7.7	2.3	0.4
Total M&I	893,500	29.3	2.1	6.3	1.9	0.4
Inferred	53,500	26.2	2.8	8.0	2.4	0.4

2.2 Ore Reserve Statement

The Ore Reserves Estimate prepared by BBA is based on the latest Mineral Resource estimate completed by BBA with an effective date of June 17, 2019. BBA has independently reviewed the quantity and quality of the underlying data and the methodologies used to derive and classify the Mineral Resource estimate.

Based on the Mineral Resources contained within the pit designs, BBA prepared the LOM plan that will feed both Phase 1 and Phase 2 processing facilities. The economic input parameters used in the LOM were provided by QIO. These are based on current operational experience gained by QIO over the last year and on the previous owner operational database.

The project financial evaluation was produced by QIO and reviewed by BBA and includes costs for mining, ore processing, general and administration costs, as well as all related shipping and handling costs. The iron ore selling price is based on the P65 analyst consensus for years 1 to 3 and from a blend of the P65 analyst long-term consensus and the P62 3-year trailing average with a 15% premium as of June 7, 2019 for the remaining LoM. The financial model adequately supports the Ore Reserves estimate, demonstrating robust project economics

Table 2 presents the Ore Reserves for the Bloom Lake Phase 2 Project. Ore Reserves are reported on a dry tonnes basis (i.e. exclude the moisture content) and are inclusive of mining dilution and ore loss. Ore tonnes are reported at a cut-off grade of 15% Fe. The effective date of the ore reserves is June 17, 2019 and the reference point is the primary crusher feed.

Table 2: Bloom Lake Mine Ore Reserves

Classification	Diluted ore tonnage (dry Mt)	Fe %	CaO %	Sat %	MgO %	Al_2O_3 %
Proved	346.0	29.9	1.5	4.7	1.4	0.3
Probable	461.0	28.2	2.6	7.9	2.5	0.6
Total Proved & Probable	**807.0**	**29.0**	**2.2**	**6.5**	**2.0**	**0.5**

2.3 Competent Person Statement

The statement relating to Ore Reserves in this report is based on information compiled by Isabelle Leblanc who is a Professional Engineer registered with the Ordre des ingénieurs du Québec (OIQ) and a member of the Australasian Institute of Mining and Metallurgy (AusIMM). Ms. Leblanc is a mining engineer and Department Manager in the mining and geology department at BBA Inc., a consulting firm based in Montréal, Canada.

Ms. Leblanc has sufficient experience relevant to the style of mineralization and type of deposit under consideration and to the activity she is undertaking to qualify as a Competent Person as defined in the

JORC Code (2012). The Competent Person, Ms. Isabelle Leblanc, has reviewed the Ore Reserve Estimate and has given her consent to the inclusion in the report of the matters based on her information in the form and context within which it appears.

The Competent Person relies on other professionals for all manner of things related to the Modifying Factors. These professionals also act has Qualified Persons under NI 43-101 compliant report that will be published on SEDAR with an effective date of June 17, 2019.

3. CONCLUDING REMARKS

BBA concludes that the Mineral Resource and Ore Reserve Statement presented is reported in accordance with the terms and definitions as included in the JORC Code (2012). Included in Appendix A of this report are the JORC checklist tables, which include additional details and commentary on Sections 1 to 4 of the JORC Table 1.

Appendix A: JORC Code (2012) – Table 1

Appendix A: JORC Code (2012) – Table 1

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	Code explanation	Commentary
Sampling techniques	▪ Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling. ▪ Include reference to measures taken to ensure sample representativeness and the appropriate calibration of any measurement tools or systems used. ▪ Aspects of the determination of mineralisation that are Material to the Public Report. ▪ In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual	▪ Sampling was completed using diamond drilling core. Several drilling campaigns were conducted between 1957 and 2018 by various companies. Through the years, core size changed from XRT to AXT, AQ, BQ and finally NQ. ▪ The drill hole locations were designed and oriented to allow for spatial spread of samples across different rock units and iron formations. Samples are generally representative of geological units. ▪ 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. ▪ The iron content of samples must be equal to or greater than 15%. This estimate is done visually by the person core logger. In addition, a sample is taken directly before and after the potentially economic material and its rock type is noted (quartzite or amphibolites). An argillized contact between iron formation and amphibolite is included in the amphibolite. Generally, a sample respects 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. ▪ In case of planned heavy liquids tests, head chemistry results are required before selecting samples for gravity separation. ▪ The standard length of a sample is 6 m, the equivalent of a box of BQ core. The sample is half the core previously divided. However, the sample must be between 3 m to 6 m to a maximum of 7 m in length. For the NQ core the standard sample length is 4.5 m. ▪ For the intervals of poor core recovery, the samples are at least 1.6 m if some of the core is continuous on such length. If uninterrupted intervals are too short (less than 1.6 m), the missing interval is included in the sampled interval.

Criteria	Code explanation	Commentary
	commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.	▪ Core boxes are handled with care during transportation and storage. 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 aluminium 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 test work. ▪ Core samples were split using a hydraulic core splitter. The second half of the split core sample was returned to the core tray. ▪ The sample bags are stored in a core shack until removed to go, via pick-up trucks, to TST Overland Express in Wabush which then, transport them to SGS Lakefield Research Limited (Lakefield), in Lakefield, Ontario (2014 and before) and Corem in Québec City, Québec (2017-2018). ▪ For the 2017-2018 drill programs, the preparation and assaying protocols were not made available to BBA as the results were still pending. ▪ For drill programs pre-2017, samples were crushed and pulverized to -150 mesh. This method was 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, TiO_2, Cr_2O_3, V_3O_5. Sample preparation included the creation of a homogenous glass disk by the fusion of 0.2 g to 0.5 g of rock pulp with 7 g 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 measurement uncertainty. ▪ 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 balance. The instrument is an equilibrated, level and clean Magnet Potentiometer scale (Satmagan). The magnetic force is

Criteria	Code explanation	Commentary
		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 OIF does contain vugs. 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.
Drilling techniques	▪ Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).	▪ Historical drilling includes drilling campaigns conducted by J&L and CCIC in 1956 and 1957, QUECO in 1971 and 1972, and WGM in 1998. Holes drilled by J&L and CCIC are XRT and AXT size core holes, producing 19 mm diameter core and 32.5 mm diameter core, respectively. In 1971 and 1998, holes were drilled with BQ drill rods, producing 36.4 mm core, however some of the holes were started with NQ tools where the ground was expected to be difficult. ▪ The Bloom Lake West area was drilled during the years 1957 to 2007 following two dominant axes. The first one, EW oriented, is located approximately at latitude of 5,855,400 mN and the second, on a NS axis at 613,250 mE and 613,550 mE, where cross-sections were established. ▪ Between 2007 and 2008, CLM drilled BQ and NQ size core holes. Consolidated Thompson conducted drilling campaigns between 2007 and 2010 recovering BQ size drill in 2007, and subsequently NQ size tools were used. ▪ 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. ▪ Also for 2014, an exploration drilling campaign was planned, but only four (4) geotechnical holes have been drilled. ▪ The drilling contractors have been Les Forage CCL and Les Forages

Criteria	Code explanation	Commentary
		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 metres 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 m or 30 m. All the data obtained with the Flexit instrument were analyzed and all the inappropriate data were eliminated if deviation was too large and/or if the magnetic susceptibility was too high. ▪ Deviation readings were not taken for 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, direction was verified against the Flexit readings. ▪ In 2018, following the re-opening, two small campaigns were conducted for which a total of 36 boreholes were drilled to better understand the position of the Pignac pit north hanging wall and for better defining the Patte Pignac sector. These holes were drilled by Les Forages CCL. They produced NQ core and deviation survey was taken every 50 m. Holes were located using mine surveying before and after hole completion.

Criteria	Code explanation	Commentary
Drill sample recovery	▪ Method of recording and assessing core and chip sample recoveries and results assessed. ▪ Measures taken to maximise sample recovery and ensure representative nature of the samples. ▪ Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	▪ Core recovery is recorded in the database. ▪ Core recovery was very good, generally more than 90%. ▪ There are no significant core loss or sample recovery issue. ▪ There is no apparent relationship between core-loss and grade.
Logging	▪ Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. ▪ Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography. ▪ The total length and percentage of the relevant intersections logged.	▪ The core was logged using standard verified methods. Rock types were identified and intervals were measured according to the marks done by the drillers. Logging generally took into account the general color of the rock, the relative percentage of constituents, the grain size distribution, texture and the variation of these elements when significant. ▪ Logging was both qualitative and quantitative. ▪ 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 software, which uses an MS Access database. ▪ 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.

Sub-sampling techniques and sample preparation	▪ If core, whether cut or sawn and whether quarter, half or all core taken. ▪ If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry. ▪ For all sample types, the nature, quality and appropriateness of the sample preparation technique. ▪ Quality control procedures adopted for all sub-sampling stages to maximize representativeness of samples. ▪ Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. ▪ Whether sample sizes are appropriate to the grain size of the material being sampled.	▪ Core samples were split using a hydraulic core splitter. The second half of the split core sample was returned to the core tray. ▪ At SGS Lakefield (2014 and before), the samples were dried at ~70 +/- 10°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.
Quality of assay data and laboratory tests	▪ The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. ▪ For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	▪ Quality control procedures included a number of 170 duplicates coming from the core of the 2010, 2012 and 2013 drilling programs were analysed for major oxides and sulfur. ▪ 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. ▪ 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

	▪ Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	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. ▪ Standard samples made from mineralized material from the Bloom Lake deposit were used in the 2013 drilling campaign. Insufficient description of the material and procedures surrounding the Standard analyses lead to the conclusion that the Standards are not appropriate for the QA/QC.
Verification of sampling and assaying	▪ The verification of significant intersections by either independent or alternative company personnel. ▪ The use of twinned holes. ▪ Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. ▪ Discuss any adjustment to assay data.	▪ BBA performed a basic validation on the entire database. ▪ BBA visited the Bloom Lake project from March 19 to 21, 2019. The site visit included a visual inspection of available core, a field tour, and discussions of the current geological interpretations and block modelling approach with geologists and engineers of Quebec Iron Ore. The site visit also included a review of sampling and assays procedures, QA/QC program, downhole survey methodologies, and descriptions of lithologies ▪ No drilling was underway during the QP's site visit. On-site geologists explained the entire path of the drill core, from the drill rig to the logging and sampling facility and finally to the laboratory. ▪ BBA is of the opinion that the drilling protocols in place are adequate. The database for the Bloom Lake Project is of good overall quality. Minor variations may have been noted during the validation process but have no material impact on the MRE. It is BBA's opinion that the Bloom Lake database is appropriate to be used for a Mineral Resource Estimate.
Location of data points	▪ Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. ▪ Specification of the grid system used. ▪ Quality and adequacy of topographic control.	▪ All data related to drilling done on the property are on the UTM NAD 83 geographical coordinates. The territory is covered by the zone 19. All the previous coordinates were converted in that system. ▪ All the drill hole collars were surveyed using a Trimble R8 instrument by either the surveyors of Roussy Michaud and Consolidated Thompson or the Mine site surveyors. ▪ For hole deviation, 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.
Data spacing	▪ Data spacing for reporting of	▪ The drill holes were planned to cover the mineralized domains with a 3D

and distribution	Exploration Results. ▪ Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. ▪ Whether sample compositing has been applied.	spacing of 150 m. ▪ Assays were composited to 6m length.
Orientation of data in relation to geological structure	▪ Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. ▪ If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	▪ The Bloom Lake West area was drilled following two dominant axes following the mineralized structures. The first one, EW oriented, is located approximately at latitude of 5,855,400 mN and the second, on a NS axis at 613,250 mE and 613,550 mE.
Sample security	▪ The measures taken to ensure sample security.	▪ The sample bags are stored in a core shack until removed to go, via pick-up trucks, to TST Overland Express in Wabush. The bags were then put on pallets that were sealed with plastic wrap-ups. When the sample bags arrive at the laboratory, the security policy of the laboratory applies.

Audits or reviews	▪ The results of any audits or reviews of sampling techniques and data	▪ Several audits from various auditors took place between 2009 and 2014. More recently, during the course of this mandate, BBA performed a basic validation on the entire database. It included visual inspection of available core and a review of sampling and assays procedures, QA/QC program, downhole survey methodologies, and descriptions of lithologies. ▪ BBA is of the opinion that the drilling protocols in place are adequate. The database for the Bloom Lake Project is of good overall quality. Minor variations may have been noted during the validation process but have no material impact on the MRE. It is BBA's opinion that the Bloom Lake database is appropriate to be used for a Mineral Resource Estimate.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	Code explanation	Commentary
Mineral tenement and land tenure status	▪ Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. ▪ The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	▪ The Bloom Lake property is owned by Quebec Iron Ore Inc. (QIO), a wholly owned subsidiary of Champion Iron Limited. ▪ The Bloom Lake property is located in the northeastern part of the province of Quebec, adjacent to the Labrador/Newfoundland border, in Normanville Township, Kaniapiskau County. The Bloom Lake property is located 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. The mining lease boundaries are in compliance with the restriction zones and the claims within the mining lease have been suspended. QIO requested the renewal of 69 claims in October 2016. Those claims outside the mining lease remain active. ▪ In January 2019, 15 claims were let go. QIO now owns 54 active exploration claims north and northwest of the Bloom Lake Mining Lease. ▪ There are no royalties, agreements or encumbrances on the Mining site. ▪ The mine has already been authorized for operation under the federal environmental authority including Fisheries and Oceans Canada, Transport Canada, Natural Resources Canada and Environment Canada. ▪ A total of 38 certificates of authorization have been issued by the provincial government to the Bloom Lake iron mine in the past, and infrastructure such as the pit, waste rock piles, tailing management facilities, water management structure as well as the treatment plant have all been authorized. A few of these authorizations will require modifications to consider the new mine plan. ▪ There are no known significant issues that are believed to materially impact the mine's ability to operate.

Exploration done by other parties	▪ Acknowledgment and appraisal of exploration by other parties.	▪ Exploration was done, starting 1957, by several companies including Cliffs Iron Company (CCIC), Boulder Lake Mines Incorporated, a subsidiary of CCIC, Jalore Mining Company Limited, a subsidiary of J&L, and QCM.
Geology	▪ Deposit type, geological setting and style of mineralisation.	▪ 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 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. ▪ The iron-formation and quartzite are conformable within a metasedimentary series of biotite-muscovite-quartz-feldspar-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 iron-formation units are present; these join northwest of Bloom Lake, but are separated by several hundred feet of gneiss and schist in the southern part of the structure. ▪ Bloom Lake property mineralization style is a deposit typical of the Superior-Lake type. ▪ The mineralization is found in bands of iron formations of different composition including the Hematite Iron Formation, Magnetite Iron Formation and Silicate Iron Formation. The mineralization controls of the deposit are well understood. ▪ 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, aluminium, phosphorus, sulphur and alkalis.

Drill hole Information	- A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: - Easting and northing of the drill hole collar. - Elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar. - Dip and azimuth of the hole. - Down hole length and interception depth. - Hole length. - If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	- 221 drill holes were made between 1957 and 2009 for a total of 42,228 metres and 310 drill holes in 2010, 2012 and 2013 for a total of 93,563 m. Four geotechnical holes have been drilled in 2014 (GT-14-07, GT-14-08, GT-14-09, GT-14-10). 36 drill holes were made in 2018 for a total of 4,938 m. - The drilling covers an area about 4.7 km in length and 1 km to 2 km in width. - All drill holes and associated assays and lithological data are currently held in the Bloom Lake database.
Data aggregation methods	- In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated. - Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.	- The details related to intercepts and assay management for Mineral Resource estimation are to be found under the Mineral Resource estimation of the Table 1 (Section 3).

	The assumptions used for any reporting of metal equivalent values should be clearly stated.	
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').	The geometry of the mineralization with respect to the drill hole angle is known.
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	Maps and geological sections (including the topography, the drill holes with lithology and assays) as well as plan views with drill hole collar locations are included in the FS study.
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	No exploration results in addition to those already published are included in the Mineral Resource estimate. It must be noted here that the 2018 drill program was used for classification purposes although assay results had not been received. BBA does not recommend doing so, but verifications allowed determining that these drillholes affect a very limited amount of material throughout the deposit (less than 1%). Additional verifications allowed confirming that mineralization was identified in the 2018 drillholes at similar visual content as adjacent holes.
Other substantive	Other exploration data, if meaningful and material, should be	All exploration results to date (drilling, geological, geochemical, geotechnical and geophysical data) are included.

exploration data	reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	
Further work	▪ The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). ▪ Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	▪ The geological model should be expanded to include the 23 drill holes located east of the Bloom Lake Project and south of Confusion Lake. The additional drilling information may lead to the modelling of new mineralization domains. ▪ Silica blanks and standard reference material of industry standards, as well as detailed descriptions of the QA/QC procedures should be introduced in the future drilling programs.

Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	Code explanation	Commentary
Database integrity	▪ Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. ▪ Data validation procedures used.	▪ All data entries are compiled in the Geovia Surpac database. The database was retrieved directly from the SQL server where backup files of the project are maintained. The database has internal validation procedures to minimise transcription errors, interval overlaps, duplicate information and missing entries. ▪ QIO proceeded to verifications of the database, including validity checks for out-of-range values, missing intervals and overlapping intervals, visual inspection of drill holes for unusual azimuths, dips and deviations, assay checks for long intervals, extreme high values and reasonable minimum/maximum values, and drill hole checks for duplicate information. ▪ Additional verifications were done with the provided digital copies of the original log books and assay certificates. The database was found to be in good condition.
Site visits	▪ Comment on any site visits undertaken by the Competent Person and the outcome of those visits. ▪ If no site visits have been undertaken indicate why this is the case	▪ As part of the 2019 geological review, BBA has visited the mine site in March 2019. During the visits, the project site was inspected, including the core shack installations and mine facilities, and the open pit mine was visited. BBA has found all facilities visited conform to standard industry best practice. ▪ The geology and controls on mineralization were examined on drill core. ▪ There were no drill rigs operating at the time of the site visits.
Geological interpretation	▪ Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. ▪ Nature of the data used and of any assumptions made. ▪ The effect, if any, of alternative interpretations on Mineral Resource	▪ The confidence in the geological interpretation is based on mostly recent (pre-2018) and historical drilling information, representing 88% and 12% of the database, respectively. Geological maps, ground magnetic surveys, pit mapping and ore control data provided additional information to complete the geological model of the Bloom Lake deposit. ▪ The dataset (DDH, assays, geological maps, ground magnetic surveys and geological data from the open pit mine, etc.) is considered

Criteria	Code explanation	Commentary
	estimation. ▪ The use of geology in guiding and controlling Mineral Resource estimation. ▪ The factors affecting continuity both of grade and geology.	adequate to support a detailed geological model. ▪ The classification of the Mineral Resource estimates is reasonably reflecting the impact of possible alternative interpretations on the resource quantities. ▪ The geological model of the deposit is composed of eight (8) geological domains, and sub-domains dividing the geological model into 22 structural groups. The geological domain boundaries correspond to sharp contacts between the iron formation and host rocks. The Mineral Resource was estimated inside the mineralization domains using interpolation parameters defined for each structural sub-domain. The Mineral Resource estimation is based on the geological model of the deposit. The geological model was initially inherited from Cliffs in 2014 and was reported to be produced in Geovia Gems. The interpretation was based on diamond drillholes (DDH), geological maps, ground magnetic surveys and production data. Cross-sections were generated at 75 m to 150 m spacing, west to east. The geologists at Bloom Lake interpreted two sets of interpretation, vertical cross-section and plan view section. ▪ Through various steps, vertical cross-section interpretation was converted to plan views every 14 m (upper portion of the model; 410 m and up) and every 28 m (lower portion of the model; below 410 m). The interpretation was created at the centre of each bench and then extruded to the bench height to create solids. ▪ QIO revised the geological model in 2018 and 2019 for some local area using Geovia Surpac. Modifications were brought to the “Patte Pignac” and to the north wall of the Pignac pit based on recent drilling and observations made during operation.
Dimensions	▪ The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	▪ The herein MRE covers the whole Bloom Lake project with an east-west strike length of 4.6 km and a north-south width of approximately 2.7 km, down to a vertical depth of 400 m below surface. ▪ The iron-formation units are, in some areas, separated by several dozen meters of host rocks.

Estimation and modelling techniques	- The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used. - The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. - The assumptions made regarding recovery of by-products. - Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation). - In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. - Any assumptions behind modelling of selective mining units. - Any assumptions about correlation between variables. - Description of how the geological interpretation was used to control the resource estimates. - Discussion of basis for using or not	- The composite length (6.0 m) was determined using original sample length statistics, thickness of the mineralized zones, and mining units. - Three dimensional directional variography was carried out on the composites using the Snowden Supervisor v8.9 software. Variograms were modelled in the three orthogonal directions to define a 3D ellipsoid for each structural domain. One search ellipsoid was used for each structural domain in the interpolation of all grade attributes. Ranges and orientations of the ellipses are representative of the anisotropy ratios and directions as determined from the variography analysis. - The block model for the Bloom Lake project was set in Geovia Surpac 2019HF1 v.7.0.1949.0. - The block model was coded using the 50-50 model method, reflecting the proportion of each wireframe inside every block. Rock codes were attributed to each block according to the highest proportion of lithology included in the block. Additionally, blocks which were located at least 50% inside the overburden solid and at least 99% above the topography surface were identified as overburden and air, respectively. - A kriging neighbourhood analysis ("KNA") was conducted on the most representative zones with the Snowden Supervisor software. KNA provides a quantitative method of testing different estimation parameters (i.e. block size, discretization and min/max of composites used for the interpolation) by evaluating their impact on the quality of the results. - The neighborhood search required minimum three composites, allowed a maximum of four composites per hole, and restricted the selection to maximum 32 composites. - Hard boundaries between the mineralized zones were used in order to prevent grades from adjacent zones being used during interpolation. Soft boundary was used between structural domains in order to avoid artificial breaks in the grade distribution. As a block was estimated, it was tagged with the corresponding pass number. - No assumptions were made regarding recovery of by-products. - The following oxides were estimated inside the mineralization domains: CaO (%), MgO (%), MnO (%), Al2O3 (%), TiO2 (%) and P2O5 (%). - Block size was chosen to accommodate the drilling pattern, the thickness of the mineralization units, the folded nature of the lithological

	using grade cutting or capping. ▪ The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	units and the open pit mine planning considerations, i.e. 10 m (X) by 10 m (Y) by 14 m (Z). ▪ Apart from density which is based on iron content, no assumptions about correlation between variables were developed for this resource estimate. ▪ The Mineral Resource estimate is constrained by an overburden cover and topography surface. ▪ There was no top cutting applied to high-grade assays. Higher iron grades are thought to be geologically representative of the mineralization. ▪ Every step of the block modelling process, including assay and composite database, topography, drill hole location, down-hole survey, geology interpretation, geological coding, block model development and resource estimation and classification, was revised to ensure fair representation of the available data in the Bloom Lake resource model. ▪ Visual checks were completed on the block model and consisted of visualization of slices of the block model, mineralization envelopes and drill hole data. The data source was visually compared with the different model attributes (rock type and domains, density, grades) along the strike length of the deposit. Globally, the geology and structural domains are adequately represented in their proper attribute model. The ordinary kriging-based iron resource estimate was found to be a good representation of the drill hole composites. ▪ Descriptive statistics of iron grades were tabulated for the composites and blocks for each mineralized lithology. The average iron grade in the interpolated blocks was found to be slightly higher than the average grade available from the composites. ▪ The Ordinary Kriging (OK) based iron resource model was compared to an Inverse Distance Square (ID2) and a Neareast Neighbour (NN) estimate and results were very close. This information provides a general indication that the resource model is reasonable. ▪ The performance of the block model for the Bloom Lake project to predict resource estimates was evaluated through reconciliation comparisons using the previous block model. Based on this review, the previous block model showed local issues, with higher tonnage and

		lower grades predicted. It is believed that the current block model will provide better predictions.
Moisture	▪ Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	▪ All Mineral Resource tonnages are estimated and reported on a dry basis.
Cut-off parameters	▪ The basis of the adopted cut-off grade(s) or quality parameters applied.	▪ The Mineral Resources are estimated at a cut-off grade of 15% Fe. This cut-off grade is identical to that used for estimating Mineral Reserves.
Mining factors or assumptions	▪ Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	▪ The Mineral Resource is estimated at a cut-off grade of 15% Fe, inside an optimized Hexagon's MineSight open pit shell based on a long-term iron price of USD61.50/dmt for 62% Fe content, a premium of USD12.7/dmt for the 66.2%Fe concentrate and an exchange rate of 1.24 CAD/USD. Mining cost is estimated at CAD2.50/tonne mined and an incremental bench cost of CAD0.039/tonne every 14 m. Ore processing cost including G&A are CAD6.46/tonne milled. ▪ The Mineral Resources are reported without any mining dilution factors.
Metallurgical factors or assumptions	▪ The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions	▪ Bloom Lake concentrate was previously sold into global markets for several years with sales of 7.1 million tonnes in the fiscal year 2019. ▪ The proposed Phase 2 flowsheet improves the overall iron recovery achieved by the existing Phase 1 concentrator and allows for better control of final concentrate grade. ▪ The Phase 2 flowsheet development was based on the initial Phase 2 flowsheet design, on Mineral Technologies design data, on historical Phase 1 (QIO) operation data and on the Phase 2 test work program

	regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	results. ▪ A comprehensive metallurgical testing program has been conducted using three bulk samples collected in the Phase 1 concentrator at the rougher stage feed and tails and at the scavenger stage feed. The sample were taken while feed from the mine was as close as possible from anticipated mine plan. Each of the separation circuit's stages were tested. ▪ An additional five blends were prepared from eight bulk samples taken in the mine and selected based on the anticipated mine plan across the three main zones of the Bloom Lake deposit. The main purpose for treating these blends was to confirm the whole separation circuit performance under various feed conditions. The processing of the blends confirmed the expected plant performance results developed throughout this metallurgical testing campaign. The resulting model predicts that iron recovery of 82.4% will be achieved in a continuous plant operation treating ore of similar characteristics to the sample tested at the expected life of mine feed grade of 29% iron and 2% MgO. Concentrate quality requirements will be met at greater than 66.2% Fe and less than 4.5% SiO2. ▪ The Phase 2 flowsheet is based on proven and tested technologies and includes a Scavenger Cleaner UCC stage, an increased capacity magnetic separation stage to recover fine iron from the gravity circuit tailings, an increased thickening and concentrate filtering capacities. This enables higher throughput and improved iron recovery through the production of a lower grade gravity circuit tailings stream while maintaining high grade concentrate. ▪ The metallurgical program resulted in the following equation for Phase 2 iron recovery: Fe Rec = -0.03593Fe2 + 3.1900Fe -0.59683MgO -0.00495MgO2 + 0.01424FeMgO + 20.678
Environmental factors or assumptions	▪ Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to	▪ In December 2006, an environmental impact assessment of the Bloom Lake mine project was submitted to the agencies. Decree 137-2008 authorizing the project was adopted on February 20, 2008 by the provincial government. Consolidated Thompson Iron Mines Limited (a former owner) began the construction of the mining infrastructures in 2008 and commenced mining operations in 2010 with the phase 1

	consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfield project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	concentrator plant. ▪ The mine was sold to Cliffs Natural Resources Inc. (Cliffs) in 2011, which continued mining operations until they were suspended in December 2014, due to financial distress caused also by a sharp decrease of iron ore prices. ▪ Cliffs maintained the site idled from December 2014 up to April 2016 when QIO became its owner. During the care and maintenance period, Cliffs improved some of the water management infrastructure, in order to meet all legal and environmental obligations. ▪ Permitting process, including environmental impact study at the provincial level and Metal and Diamond Mining Effluent Regulation amendment at the federal level, is ongoing for the new dumps and tailings storage facility required to support the project. Permits related to the new dumps and tailings storage facilities expansion are not required before 2025 and the final approval is expected for 2024.
Bulk density	▪ Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. ▪ The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit. ▪ Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	▪ For mineralized units, density values were calculated based on the formula established and used during the operational period: $SG = \text{Fe\%} \text{ x } 0.0284 + 2.5764$ ▪ Density values were calculated from the density of host rock, adjusted by the amount of iron as determined by metal assays. Waste material was assigned the density of porous dolomite (2.71 g/cm^3). The calculation was made on blocks in the block model.
Classification	▪ The basis for the classification of the Mineral Resources into varying confidence categories. ▪ Whether appropriate account has	▪ All the interpolated Fe % blocks were first categorized as potential resources. Then, according to criteria based on data density and estimation efficiency, inferred, measured and indicated resources were identified. The resources were ranked depending on slope of regression, number of holes and distance between composite and block

<table>
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<td>been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).
• Whether the result appropriately reflects the Competent Person’s view of the deposit.</td>
<td>as follow:
<table>
<tr><th>Data Density and Kriging Efficiency Indicators</th><th>Measured</th><th>Indicated</th><th>Inferred</th></tr>
<tr><td>Slope of regression</td><td>>=0.8</td><td>>=0.5</td><td rowspan="3">All blocks where Fe % > 0and more than 1 hole used and where the measured and indicated resource category criteria are not met</td></tr>
<tr><td>Minimum number of holes</td><td>6</td><td>3</td></tr>
<tr><td>Average distance between composites and block (m)</td><td>–<=150</td><td>–<=250</td></tr>
</table>
• When needed, a series of clipping boundaries were created manually in 3D views to either upgrade or downgrade classification in order to avoid artifacts due to automatically generated classification. All remaining estimated but unclassified blocks were flagged as “Exploration Potential”.
• The Mineral Resource estimate appropriately reflects the Competent Person’s view of the deposit.</td>
</tr>
<tr>
<td>Audits or reviews</td>
<td>• The results of any audits or reviews of Mineral Resource estimates.</td>
<td>• BBA was retained by Quebec Iron Ore to audit the updated Mineral Resource Estimate for the Bloom Lake project. BBA reviewed the resource parameters presented by QIO, including the following items: geological model and domaining strategy, statistical study of assays and composites, variography analysis, interpolation and search ellipse settings, estimation process and classification of the resource.
• BBA reviewed the geological model and is of the opinion that the level of detail to which the geology model was constructed represents adequately the complexity of the folded structures and stratigraphy of the Bloom Lake project for the material contained within the resource pit shell. Some sterile units are currently not taken into account in the block model, but it is not believed to be material to the mineral resource estimate. The geological model at depth (entirely outside the current pit optimization) is not representative of the mineralization and would greatly benefit from a complete review and re-modelling. QIO is</td>
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		currently working towards improving the geological model and recommendations were made in order to improve the model for future updates. ▪ The overall conclusion of the audit is that the model is reasonably robust, provides a reliable resource estimate of the Bloom Lake Project, and is conform to the CIM and JORC regulations. ▪ Recommendations include: improving the QA/QC protocols in future drilling programs, update the 3D model to include the 2018 drill program, and improve the geological model based on recent observations.
Discussion of relative accuracy/confidence	▪ Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate. ▪ The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. ▪ These statements of relative accuracy and confidence of the	▪ The Competent Person has a relatively high confidence in the Mineral Resource estimate for the following reasons: o The database is in good standing with respect to industry standard best practices. o The Mineral Resource estimate is based on a high proportion of recent drilling data of good quality in terms of geological information. o The geological model is based on sufficient drilling. o Iron grades continuity is good within the mineralized domains. o The Mineral Resource is 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. The Mineral Resource is also prepared and classified in accordance with the guidelines of the JORC Code (2012). ▪ The Mineral Resource should be considered as global and regional estimates only. The resource block model is considered reliable to support mining planning studies, but not considered suitable for production planning, or studies focusing on accuracy of local estimates.

	estimate should be compared with production data, where available.	

Section 4 Estimation and Reporting of Ore Reserves

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)

The Ore Reserve at Bloom Lake, as at June 17 2019, presented within the body of this report is reported in accordance with the Australian JORC Code (2012) for reporting Ore Reserves and the Canadian NI 43-101 for the reporting of Mineral Reserves. The Bloom Lake Ore Reserve Estimate uses the 2019 Mineral Resource Estimate as detailed in this report and applies revenue analysis, mining dilution and ore loss, costs and metallurgical recovery assumptions. The Ore Reserve estimate is based on a 15% iron cut-off grade and mining of the Measured and Indicated Mineral Resource and has been classified respectively as Proved and Probable Ore Reserve based on the geological and mining confidence.

Following is a summary of the supporting information for the Ore Reserve estimate in the form of the JORC (2012).

Criteria	Code explanation	Commentary
Mineral Resource Estimate for conversion to Ore Reserves	▪ Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve. ▪ Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.	▪ The Mineral Resource for the Bloom Lake Project was prepared by BBA Inc. Details of this mineral resource are presented in the above sections as well as in Chapter 14 of the National Instrument 43-101 technical report filed under Champion Iron Limited's profile on SEDAR and that has an effective date of June 17, 2019. ▪ The Ore Reserves are based on the December 31, 2020 forecasted topographic surface. The Ore Reserve takes into account the depletion that will be incurred by the current operation of the mine. ▪ The Mineral Resource is estimated at a cut-off grade of 15% Fe, inside an optimized Hexagon's MineSight open pit shell based on a long-term iron price of USD61.50/dmt for 62% Fe content, a premium of USD12.7/dmt for the 66.2%Fe concentrate and an exchange rate of 1.24 CAD/USD. Mining cost is estimated at CAD2.50/tonne mined and an incremental bench cost of CAD0.039/tonne every 14m. Ore processing cost including G&A are CAD6.46/tonne milled. ▪ Ore Reserves are estimated on the basis of detailed design and scheduling of the Bloom Lake mine pits. The mine pit boundaries are defined by optimized pit shells generated using Hexagon's MineSight. ▪ The Mineral Resources are reported inclusive of the Ore Reserves. ▪ Mineral Resources that are not Ore Reserves have not demonstrated economic viability.

Site visits	- Comment on any site visits undertaken by the Competent Person and the outcome of those visits. - If no site visits have been undertaken indicate why this is the case.	- A site visit was completed by the competent person from September 24 to 27, 2018. A thorough understanding of the available infrastructures and general arrangements was achieved. Meetings and pit tours with the mine operation and engineering department took place.
Study status	- The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves. - The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.	- The Bloom Lake mine has been restarted in late 2017 and is currently operating in Pignac and Bloom West pits. The mine is feeding the Phase 1 concentrator at 20 Mtpy and produces approximately 7.4 Mtpy of iron ore concentrate. - The project is at a Feasibility Study level. The reported Ore Reserve is reported based on the work completed in the Feasibility Study. - The Ore Reserves are not reported for the first time under the JORC Code but they have materially changed from when those estimates were last reported in accordance to the JORC Code.
Cut-off parameters	- The basis of the cut-off grade(s) or quality parameters applied.	- The open pit cut-off grades were developed from the mine operations current dataset as well as assumptions developed by MFQ (including commodity prices, exchange rates, recovery factors processing, freight, shipping, G&A, tailings and water management). A cut-off grade of 15% Fe was applied.
Mining factors or assumptions	- The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design). - The choice, nature and	- The ore body is mined using open pit mining techniques with electric hydraulic shovels, large wheel loaders and mining trucks. The open pit is currently being mined and therefore readily accessible and electrified with existing mine roads connecting various mining infrastructure such as waste dumps, crusher, and maintenance facility. Before exporting the block model to the pit optimization software, each block was assigned a material code, following different quality constraints based on iron and oxides content. - The open pit limits were optimized using Hexagon's MineSight which is

	appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc. ▪ The assumptions made regarding geotechnical parameters (e.g. pit slopes, stope sizes, etc.), grade control and pre-production drilling. ▪ The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate). ▪ The mining dilution factors used. ▪ The mining recovery factors used. ▪ Any minimum mining widths used. ▪ The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion. ▪ The infrastructure requirements of the selected mining methods	based on the Lerchs-Grossmann algorithm. The optimisation was performed on the Mineral Resource model using only the Measured and Indicated resource. The Inferred resource was treated as waste. A series of pit shell was generated by varying the base selling price using revenue factors ranging from 0.65 to 1.04. The selected pit shell (serving as a guide for open pit design) uses a revenue factor of 0.99 and was selected to allow a mine life of 20 years without compromising the value of the project. ▪ The pit optimization parameters use for base case pit shell are described as follows and differ slightly from the final Feasibility Study values: o Fe recovery: based on Fe recovery formula presented in the next criteria (‘Metallurgical factors or assumptions’). Same as final FS values. o Concentrate grade: 66.2% o Concentrate price: USD74.20/dmt of concentrate (USD61.50/dmt Platts reference price plus USD12.70/dmt Fe content adjustment) for revenue factor 1. o (Selected pit is based on Revenue Factor 0.99: USD60.89/dmt Platts reference price plus USD12.70/dmt Fe content adjustment) o Exchange rate: 1.24 CAD/USD o Total concentrate logistics cost: CAD33.30/dmt of concentrate o Total ore based cost: CAD7.15/t ore (includes processing, G&A, tailings and water management) o Reference mining cost: CAD2.50/t plus CAD0.039/t per 14 m bench o Mining recovery on a block-by-block basis o Mining dilution on a block-by-block basis ▪ The selected pit shell served as a guide to design the open pit inclusive of ramps and other pit slope design criteria. A double bench configuration with a 28 m final bench height is proposed. Double lane ramps are designed at 35 m wide with single lane ramps reduced to 22 m. ▪ The open pit design is based on Feasibility Level pit slope recommendations provided by Golder in Q4-2018 which consists of the following design criteria

Pit profile	Criteria	Bench configuration height (m)	Bench face angle (°)	Berm width (m)	Inter-ramp angle (°)
Bloom West	RQD > 70, Not Sector XI	Double Bench, 28 m	70	13.3	50.0
	RQD < 70	Single Bench, 14 m	70	8.4	46.1
	Sector XI	Double Bench, 28 m	70	15.0	48.0
	Elevation = 585 m	Double Bench, 28 m	70	20.0	42.8
	Elevation = 585 m	Single Bench, 14 m	70	20.0	29.2
Montagne du Chef	RQD > 70	Double Bench, 28 m	70	13.3	50.0
	RQD < 70	Single Bench, 14 m	70	10.4	42.1
	Elevation = 585m	Double Bench, 28 m	70	20.0	42.8

- Overburden is sloped at 2H:1V
- A mining dilution assessment was made on a block by block basis prior to applying a cut-off grade. A script was developed to assess if the block was ore, what rock type the neighbouring blocks are, and whether to dilute from neighbouring blocks or lose to neighbouring blocks. The dilution or loss skin thickness was chosen to be 1.0 m based on field testing of the ore recovery methodology in 2018. For all blocks within the resource model, diluted grade and density are calculated by taking into account the grade, density and rock type of the surrounding blocks. The average mining dilution is 1.1% at a grade of 0% Fe, but the dilution model shows a wide range of local variability. The average ore loss is 0.8% at a grade of 31% Fe but the ore loss model shows a wide range of local variability.
- The minimum mining width used in the pit design is 35m.
- There is a minimum width of 70 m maintained between mining phases to allow for sufficient working room for equipment.
- All Inferred resources have been treated as waste material in the production schedules and the project economics.
- The following are the proposed infrastructure for Phase 2. They are in addition to the existing mining infrastructure which is suitable for the current mining operations.
  - Mine garage expansion of four additional bays to be constructed in 2023, including a warehouse and office space

		○ Upgraded electrical infrastructure for the mine, including two new 34.5 kV substations and an extended powerlines network dedicated to the supply of electricity to the mine sector; ○ A cafeteria at the Bloom West pit; ○ Additional tailings and waste dumps capacity are explained in section ***Infrastructure*** below.
Metallurgical factors or assumptions	▪ The metallurgical process proposed and the appropriateness of that process to the style of mineralisation. ▪ Whether the metallurgical process is well-tested technology or novel in nature. ▪ The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied. ▪ Any assumptions or allowances made for deleterious elements. ▪ The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole. ▪ For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?	▪ The proposed Phase 2 flowsheet improves the overall iron recovery achieved by the existing Phase 1 concentrator and allows for better control of final concentrate grade. ▪ The Phase 2 flowsheet development was based on the initial Phase 2 flowsheet design, on Mineral Technologies design data, on historical Phase 1 (QIO) operation data and on the Phase 2 test work program results. ▪ A comprehensive metallurgical testing program has been conducted using three bulk samples collected in the Phase 1 concentrator at the rougher stage feed and tails and at the scavenger stage feed. The sample were taken while feed from the mine was as close as possible from anticipated mine plan. Each of the separation circuit's stages was tested. ▪ An additional five blends were prepared from eight bulk samples taken in the mine and selected based on the anticipated mine plan across the three main zones of the Bloom Lake deposit. The main purpose for treating these blends was to confirm the whole separation circuit performance under various feed conditions. The processing of the blends confirmed the expected plant performance results developed throughout this metallurgical testing campaign. The resulting model predicts that iron recovery of 82.4% will be achieved in a continuous plant operation treating ore of similar characteristics to the sample tested at the expected life of mine feed grade of 29% iron and 2% MgO. Concentrate quality requirements will be met at greater than 66.2% Fe and less than 4.5% SiO_2. ▪ The Phase 2 flowsheet is based on proven and tested technologies and includes a Scavenger Cleaner UCC stage, an increased capacity magnetic separation stage to recover fine iron from the gravity circuit tailings, an increased thickening and concentrate filtering capacities. This enables higher throughput and improved iron recovery through the production of a lower grade gravity circuit tailings stream while

		maintaining high grade concentrate. ▪ The metallurgical program resulted in the following equation for Phase 2 iron recovery: Fe Rec = -0.03593Fe2 + 3.1900Fe -0.59683MgO -0.00495MgO2 + 0.01424FeMgO + 20.
Environmental	▪ The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	▪ The Bloom Lake mine is currently operating the mine and the Phase 1 concentrator which have already been authorized for operation under the federal environmental authority including Fisheries and Oceans Canada (DFO), Transport Canada, Natural Resources Canada and Environment Canada. ▪ Permitting process, including environmental impact study at the provincial level and Metal and Diamond Mining Effluent Regulation amendment at the federal level, is ongoing for the new dumps and tailings storage facility required to support the project. Permits related to the new dumps and tailings storage facilities expansion are not required before 2025 and the final approval is expected for 2024.
Infrastructure	▪ The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.	▪ The current infrastructure on site includes but is not limited to the administration building, railcar load-out, tailings pipelines and storage facility, waste water treatment plant, pump stations, megadome warehouse, mine maintenance facility, offices, main gate, truck wash bay, fuel and lube storage, phase 1 concentrator, employee accommodations, high voltage power lines and transformers and site access road. ▪ The 34.5 kV distribution lines that currently serve the mine site will be modified to become two double-circuit overhead lines that connect the existing 315-34.5 kV substation (Substation W owned by QIO) to the new and existing concentrator plants. The independent 34.5 kV mine distribution network will be added to provide increased reliability for the mine power supply. It will supply three (one new and two existing) 34.5-7.2 kV, 7.5 MVA fixed mine substations strategically located on the perimeter of the mine pit to supply 7.2 kV power to the mining and pumping equipment in operation. ▪ Tailings work includes but is not limited to dykes construction, pumping stations, progressive restoration, etc. Bloom Lake's tailings management strategy is developed around the hydraulic deposition of separated coarse and fine tailings streams. The coarse tailings account for approximately 85% of the total tailings feed, while fine tailings account for 15% of the total tailings feed.

Costs	- The derivation of, or assumptions made, regarding projected capital costs in the study. - The methodology used to estimate operating costs. - Allowances made for the content of deleterious elements. - The source of exchange rates used in the study. - Derivation of transportation charges. - The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc. - The allowances made for royalties payable, both Government and private.	- Capital costs (CAPEX) have been estimated by BBA, WSP and QIO. The estimate addresses the engineering, procurement; construction and start-up of a second iron ore concentrator for an additional 7.6M tonne/year iron concentrator to the existing operation to bring the iron concentrate production at the Bloom Lake to a total of 15M tonne/year. - Capital costs also include expenditure for additional tailings facility, port, site water management infrastructure, mine mobile equipment, expansion to the current mine garage, upgrades to the electrical distribution as well as the construction of additional lodging accommodations in Fermont. - The CAPEX for major process equipment was developed based on budget quotes from vendors as part of the feasibility study and in-house data for lesser equipment; - For civil, concrete and structural steel works, the CAPEX is based on engineering material take-offs quantified from the 3D Model developed during the feasibility study and prices benchmarked against similar projects including QIO Phase 1. - For piping, HVAC and electrical distribution works, the CAPEX is based on engineering material take-offs from P&ID's and single line diagrams combined with layouts developed from the 3D Model prepared during the feasibility study and prices benchmarked against similar projects including QIO Phase 1. - The CAPEX estimate qualifies as Class 3 – Feasibility Study Estimate – per AACE recommended practice R.P.47R-11. The accuracy of this CAPEX estimate has been assessed at ±15%. The CAPEX estimate includes all the direct and indirect project costs, complete with the associated contingency. - The operating expenditures ("OPEX") are estimated based on actual costs from the existing mine operation for all activities supported by budget quotes from various vendors. - No allowance has been made for escalation. No estimate contingency has been considered for the OPEX. - • No allowances for deleterious elements are expected to be necessary. - A long-term diesel price of CAD1.18/litre has been used. A long term

		electricity cost of CAD0.049/kwh has been used. ▪ Provincial mining tax, federal and provincial income tax payable to the government is based on the profits and is incorporated in the Financial Model. ▪ An exchange rate of 0.76 USD/CAD has been used where applicable. All calculations are in Canadian dollars. ▪ This project is not subject to any NSR agreement. However, the Project is subject to an impact and benefit agreement with local First Nations communities.
Revenue factors	▪ The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc. ▪ The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.	▪ Life-of-mine average iron price at 66.2% Fe CFR China of USD84.10 was derived from the consensus analyst average for year 1-3 for P65 and the average of analyst consensus and trailing 3-year average of P62% Fe plus a 15% premium as of June 7, 2019 for the remainder of the LOM

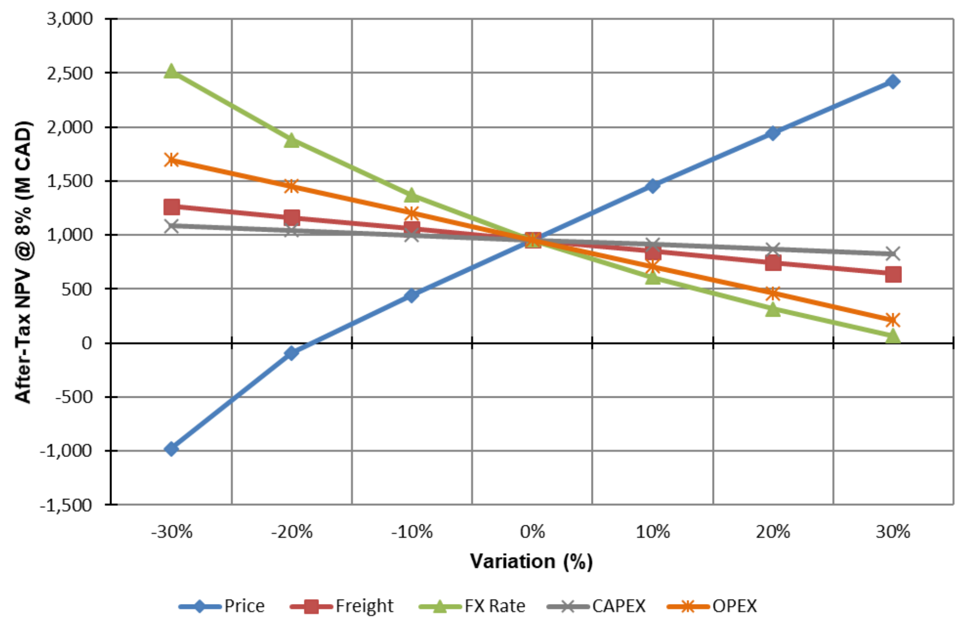
Market assessment	▪ The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future. ▪ A customer and competitor analysis along with the identification of likely market windows for the product. ▪ Price and volume forecasts and the basis for these forecasts. ▪ For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.	▪ An Iron Ore Market Study was prepared by Wood Mackenzie, a United Kingdom based research and consultancy group, to assess the market trends for global iron ore supply and demand, projected steel demand and production and freight rate analysis. ▪ Following detailed review of the Market Study delivered by Wood Mackenzie, the Company has opted for a more conservative iron ore price assumption as determined by the Canadian Institute of Mining, Metallurgy and Petroleum (CIM). The short-term term realized iron ore price assumption for the years 2021 to 2024 is derived from the analyst consensus as of June 7, 2019, while the long-term iron ore price assumption is derived from the average of analyst consensus as of June 7, 2019, and the 3-year trailing average price for the PLATTS-62 (P62) plus 15% premium which better estimates the realized price of the 66.2% Fe concentrate produced at Bloom Lake. ▪ At this time, QIO has an offtake agreement with Glencore International AG and Sojitz Corporation. ▪ Bloom Lake concentrate has a very low alumina level, also characteristic of traditional Canadian concentrates. In addition to a history to supply Chinese consumers prior to a shutdown in 2014, Bloom Lake currently supplies customers in China, Japan, Bahrain, Germany, Singapore, South Korea, India and the United Kingdom. ▪ The Bloom Lake iron ore concentrate specifications are described as typical. The particle size distribution positions the Bloom Lake product as coarse-grained concentrate suitable for use as a sinter feed product and falls within the general sizing range of Canadian concentrates. Bloom Lake concentrate has sold product into global markets for several years with sales of 7,1 dmt in fiscal 2019.

Economic

- The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.
- NPV ranges and sensitivity to variations in the significant assumptions and inputs.

- The main macro-economic assumptions are listed below:

Item	Unit	Value
Avg. LOM Iron Ore Concentrate Price (66.2% CFR China)	USD/tonne	84.10
Exchange Rate (spot rate for cost estimates)	USD/CAD	0.76
Discount Rate	% per year	8



- All operating and capital costs as well as revenue streams were included in the financial model. This process has demonstrated that the Ore Reserves can be processed yielding a positive net present value (NPV).
- Sensitivity was conducted on capital costs, operating costs, iron price and foreign exchange. The project is most sensitive to iron price and foreign exchange rates and less sensitive to capital and OPEX cost

Social	▪ The status of agreements with key stakeholders and matters leading to social licence to operate.	▪ An Impact and Benefit Agreement (IBA) was signed between QIO and Innu Takuaikan Uashatmak Mani-Utenam representing the local first nations in April 2017, which covers the scope of the project.
Other	▪ To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves: ▪ Any identified material naturally occurring risks. ▪ The status of material legal agreements and marketing arrangements. ▪ The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.	▪ As of May 2019, QIO holds 100% of 53 claims located north and northwest of the Mining Lease (BM877). These claims cover a total of 2392.3 ha. ▪ A total of 43 certificates of authorization have been issued by the provincial government to the Bloom Lake iron mine.

Classification	▪ The basis for the classification of the Ore Reserves into varying confidence categories. ▪ Whether the result appropriately reflects the Competent Person's view of the deposit. ▪ The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).	▪ The Ore Reserves was classified in accordance with the JORC Code and the NI43-101 Standard. ▪ The methods used are considered by the competent persons to be appropriate for the style and nature of the deposit. ▪ Probable Ore Reserves entirely derive from indicated mineral resources.
Audits or reviews	▪ The results of any audits or reviews of Ore Reserve estimates	▪ No Audits have been undertaken on the Bloom Lake Project Ore Reserves.
Discussion of relative accuracy/ confidence	▪ Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate. ▪ The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the	▪ The competent person is of the opinion that the Mineral Reserves for the Bloom Lake Mine, which have been estimated using core drill and grade control data, appropriately consider modifying factors and have been estimated using industry best practices. ▪ The accuracy of the estimates within this Ore Reserve is mostly determined by the order of accuracy associated with the Mineral Resource model, metallurgical input, and long-term cost and revenue factors. ▪ Factors that can affect the Ore Reserves estimates are: ○ Ground conditions of certain unexposed slopes may be worse than expected. This may reduce the recovery of the ore in these areas. ○ Dilution and recovery factors are based on assumptions that will be reviewed after mining experiences and have been adjusted based on past reconciliations with the concentrator. ○ As always, changes in commodity price and exchange rate assumptions will have an impact on the cut-off grade and optimal size of the open pit ○ Changes in current environmental or legal regulations may affect the operational parameters (cost, mitigation measures). ○ Montagne du Chef area with high silicate material affecting metallurgical blending requirements for the ore feed. ○ The Ore Reserve estimate is a global estimate of the Bloom Lake mine

	procedures used. ▪ Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage. ▪ It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	and is supported by a Feasibility Study report completed June 2019. ○ The Competent Person is not aware of any environmental, permitting, legal, title, taxation, socio-economic, marketing, or political factors that could materially influence the Ore Reserves other than the modifying factors already described in this section of the report.