

PREMIUM PRODUCT, TIER 1 JURISDICTION, HIGH QUALITY INFRASTRUCTURE

CHAMPION IRON 🖎

#### **DISCLAIMER**



This presentation contains certain forward-looking information and statements within the meaning of applicable securities laws. The use of any of the words "expect", "anticipate", "continue", "estimate", "may", "will", "project", "should", "believe", "plans", "intends", "forecast" and similar expressions are intended to identify forward-looking information or statements. In particular, but without limiting the forgoing, this presentation contains forward-looking information and statements pertaining to Champion Iron Limited including: future development, exploration, development activities, infrastructure build-out and related capital expenditures and the timing thereof, the amount and timing of capital projects, operating cost, the total future capital associated with development of reserves and resources, access to labour and infrastructure, realized price, structural shift in iron ore industry, cost curve assumptions, ability to exceed nameplate capacity, additional training for personnel, accelerated tailings raising and re-vegetation plan. In this presentation, reference is made to the Company's Bloom Lake Iron Mine growth scenario and economic analysis. All information derived therefrom are not estimates or forecasts of metrics that may actually be achieved. Such information reflects internal projections used by management for the purposes of making capital investment decisions and for internal long range planning and budget preparation. Accordingly, undue reliance should not be placed on same. The recovery, reserve and resources estimates of Champion Iron's reserves and resources provided herein are estimates only and there is no quarantee that the estimated reserves or resources will be recovered. In addition, forward-looking statements or information are based on a number of material factors, expectations or assumptions of Champion Iron which have been used to develop such statements and information but which may prove to be incorrect. Although Champion Iron believes that the expectations reflected in such forward-looking statements or information are reasonable, undue reliance should not be placed on forward-looking statements because Champion Iron can give no assurance that such expectations will prove to be correct. In addition to other factors and assumptions which may be identified herein, assumptions have been made regarding, among other things; the impact of increasing competition; the general stability of the economic and political environment in which Champion Iron operates; the timely receipt of any required regulatory approvals; the ability of Champion Iron to obtain qualified staff, equipment and services in a timely and cost efficient manner, drilling results, the ability of the operator of the projects in which Champion Iron has an interest in to operate the field in a safe, efficient and effective manner; the ability of Champion Iron to obtain financing on acceptable terms; field production rates and decline rates; the ability to replace and expand oil and natural gas reserves through acquisition, development and exploration; risks associated with the degree of certainty in resource assessments; future commodity prices; currency, exchange and interest rates; and the regulatory framework regarding royalties, taxes and environmental matters in the jurisdictions in which Champion Iron operates. Our objective will be to proactively manage our capital program as it relates to operational success and fluctuating commodity prices with a priority to maintain financial flexibility and achieve our production guidance. Champion Iron will closely monitor the budget and financial situation throughout the year to assess market conditions and will quickly adjust budget levels or pace of development in accordance with commodity prices and available funds from operations. The forward-looking information and statements included in this presentation are not guarantees of future performance and should not be unduly relied upon. Such information and statements; including the assumptions made in respect thereof, involve known and unknown risks, uncertainties and other factors that may cause actual results or events to defer materially from those anticipated in such forward-looking information or statements including, without limitation: changes in commodity prices; the potential for variation in the quality of the Bloom Lake formation; changes in the demand for or supply of Champion Iron's products; unanticipated operating results or production declines; changes in tax or environmental laws, royalty rates or other regulatory matters; changes in development plans of Champion Iron or by third party operators of Champion Iron's properties, increased debt levels or debt service requirements; limited, unfavourable or a lack of access to capital markets; increased costs; a lack of inadequate insurance coverage; the impact of competitors; and certain other risks detailed from time-to-time in Champion Iron's public disclosure documents, (including, without limitation, those risks identified in this presentation and Champion Iron's Annual Information Form). The forward-looking information and statements contained in this presentation speak only as of the date of this presentation, and Champion Iron does not assume any obligation to publicly update or revise any of the included forward-looking statements or information, whether as a result of new information, future events or otherwise, except as may be required by applicable securities laws.

Except as required by law, Champion Iron Limited expressly disclaims any intention and undertakes no obligation to update any forward looking statements or information as conditions change.

The historical mineral resources mentioned are strictly historical in nature and are non-compliant to National Instrument 43-101 mineral resources and mineral reserves standards, and should therefore not be relied upon. A qualified person has not done sufficient work to upgrade or classify the historical mineral resources as current National Instrument NI-43-101 compliant

All amounts are in Canadian dollars unless otherwise stated.

.

### CHAMPION IRON 🖎

### **CORPORATE OVERVIEW**

#### Largest publicly listed pure-play high-grade iron ore producer globally



- → Top Tier Jurisdiction
- → Established production in region since 50's
- → 2<sup>nd</sup> largest hub of high-grade production globally
- → Access to infrastructure



- → Nearly US\$4 Billion invested
- → 7.4 Mtpa nameplate capacity
- → Short-term opportunity to double production
- → High-grade 66.2% Fe with low impurities
- → 20+ years mine life



- → Proven management team
- → 10.9% insider ownership



- → Current realized price ~ US\$95+/t\*
- → Total Cash cost ~US\$37/t FOB\*
- → C\$791.6M Revenue in last 4 quarters
- → C\$373.8M EBITDA in last 4 quarters

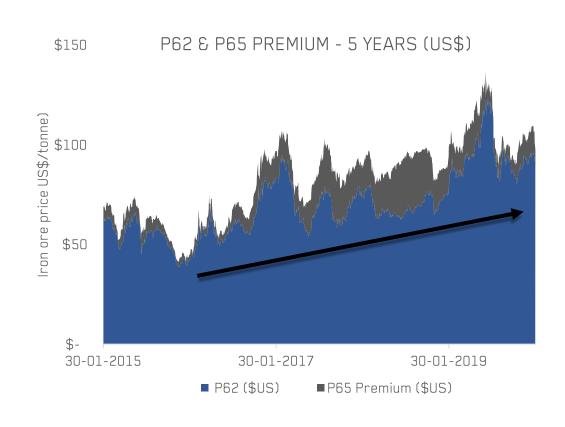


#### STRUCTURAL SHIFT IN IRON ORE



#### HIGH QUALITY & LOW CONTAMINANT PRODUCT IN RISING DEMAND

- ✓ Champion sells based on Platts 65% Fe premium benchmark
- > China implemented "Blue-Sky" initiative to reduce emissions
- More complex steel focus in China and increasing consumption of white goods demanding higher quality input with low impurities
- > Potential for higher standards in tailings management to limit new entrants for high-grade supply
- Rising contaminant issues in other major hubs globally

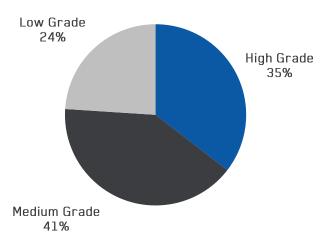


## CANADA - 2<sup>ND</sup> LARGEST EXPORT REGION IN HIGH GRADE

#### CHAMPION IRON 🖎

- Active producers in the region for decades including Rio Tinto, ArcelorMittal and Tata Steel
- > Quebec ranks Top-10 mining jurisdiction globally as per Fraser Institute
- > VALE dominates the high-grade market with 60%+ market share

#### Global Seaborn Iron Ore Market



GLOBAL SEABORN HIGH-GRADE MARKET (65%+Fe, WMT/YEAR)

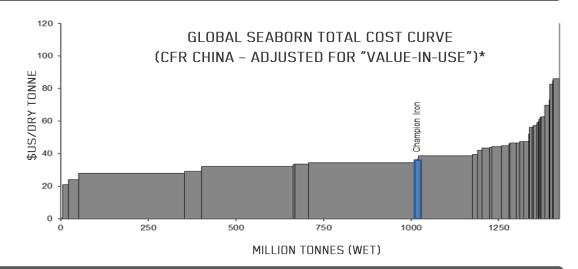


#### **COMPETING ON COST CURVE**



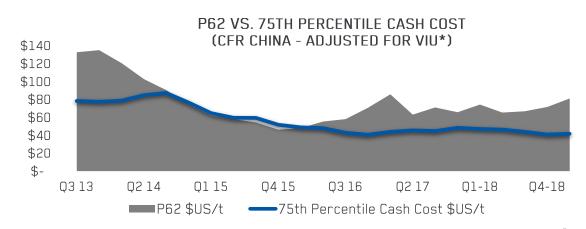
#### PROVEN COST STRUCTURE<sup>1</sup>

- > Bloom Lake has proven cost structure
- > Product quality premium offsets freight differential when compared to Australian operators
- Major producers act as price setters as top four producers control over 70% of global seaborne supply



#### POSITIONED FOR PROFITABILITY

- > Iron Ore has traded on 'spot' basis since 2008
- Producers within 75<sup>th</sup> percentile of the cost curve have remained profitable in biggest downturn of 2015



<sup>6</sup> 

#### **CORPORATE SNAPSHOT**

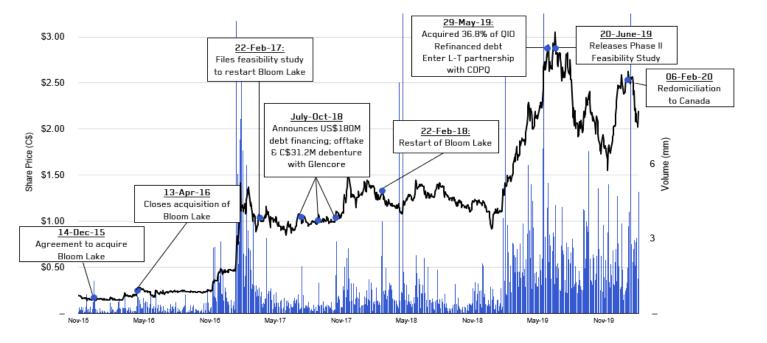
#### CHAMPION IRON 🖎

#### **MARKET STATISTICS (C\$M)**

(C\$ millions, unless otherwise noted)

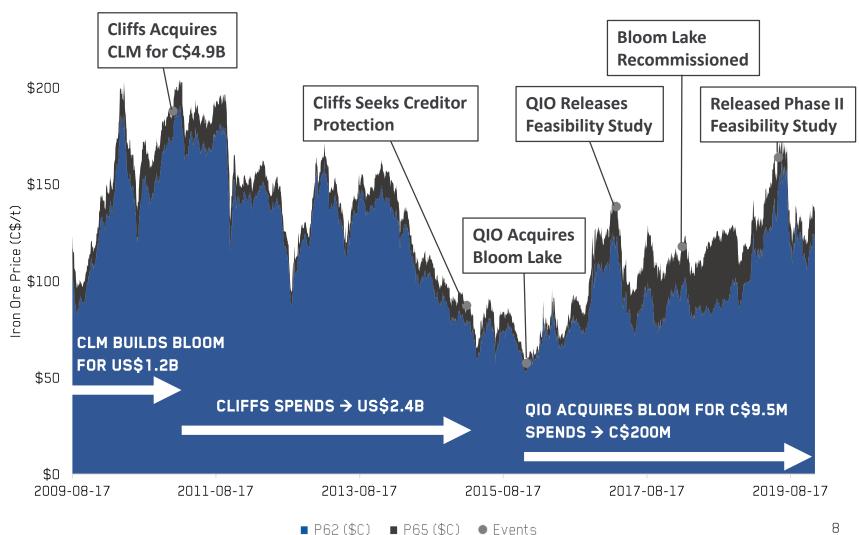
Share Price as at February 5, 2020	\$2.19
52-Week High	\$3.15
52-Week Low	\$1.31
Basic Shares Outstanding	467.7
Market Capitalization	\$1,024.3
Long-Term Debt as of December 31, 2019	\$237.7
Cash as of December 31, 2019	\$187.6





#### CHAMPION IRON 🖎

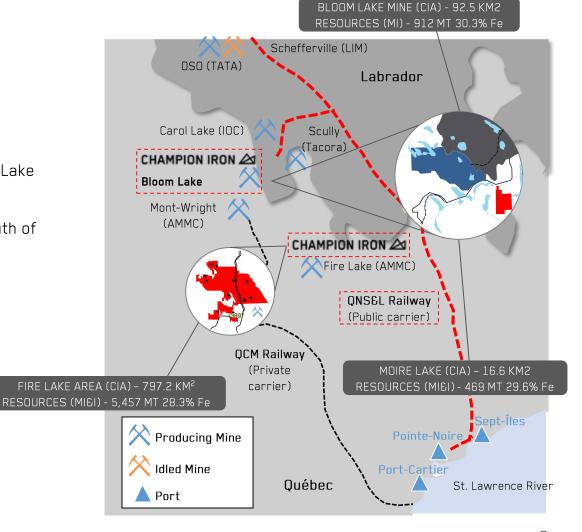
## **HISTORY OF BLOOM LAKE** VS IRON ORE PRICE (C\$/T)



## LABRADOR TROUGH = WORLD-CLASS OPPORTUNITY

#### CHAMPION IRON 🖎

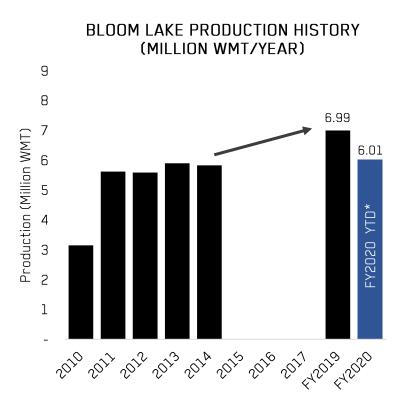
- > Access to railway
- > Newly built deep-water port
- > Access to skilled labour
- > Low-cost electricity @ \$0.045/Kwh
- > 383.5M\* tonnes reserves at Bloom Lake
- > 20+ years mine life
- > 5.4B tonnes of resources 60km south of Bloom Lake



#### **BLOOM LAKE TODAY**

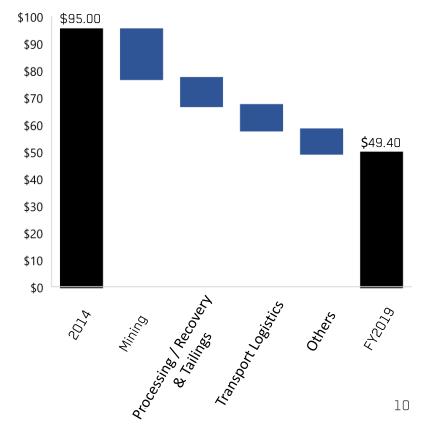
### CHAMPION IRON 🖎

> Achieved highest annual production on record



- > Structural changes implemented
- > Achieved lowest cash cost on record in FY2019





#### **DIVERSIFIED CUSTOMER BASE**



## Product sold to 21 different customers since 1<sup>st</sup> shipment

Sojitz & Glencore sells our product on an agency basis

- > Access to larger customer base
- > Reduce execution risk
- > Access to preferential freight

Champion retains the right to deal directly with end buyers and arrange shipping

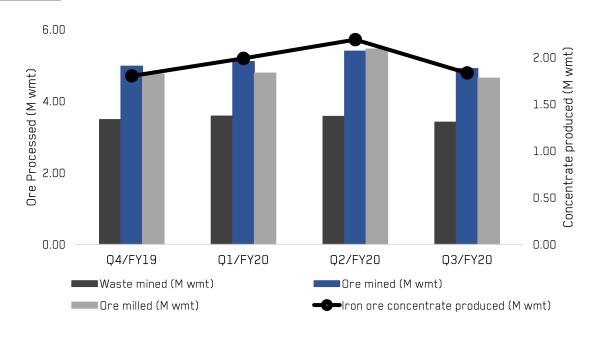


### **OPERATIONAL RESULTS**

## CHAMPION IRON 🖎

## SETTING HISTORICAL RECORDS AT BLOOM LAKE

- > Set new quarterly production record in Bloom Lake's history (Q2/FY20)
- Achieved target recovery rate of 83%
- > Proven ability to exceed nameplate capacity
- Focus on quality with continuous improvement in ore recovery
- > No penalties for contaminants since restart
- > Proven ability to operate in all seasons



FISCAL PERIODS	Q4/FY19	Q1/FY20	Q2/FY20	Q3/FY20
Iron ore concentrate produced (Million wmt)	1.80	1.99	2.19	1.83
Iron ore concentrate sold (Million dmt)	1.74	1.91	1.86	1.92
Waste mined (Million wmt)	3.48	3.58	3.57	3.41
Ore mined (Million wmt)	4.98	5.11	5.39	4.91
Strip ratio	0.70	0.70	0.66	0.70
Ore milled (Million wmt)	4.75	4.78	5.45	4.64
Head grade Fe (%)	30.6	32.5	32.3	32.0
Recovery (%)	80.4	82.1	83.9	81.7
Fe (%)	66.3	66.2	66.3	66.4

YEAR TO DATE
6.01
5.69
10.56
15.40
0.70
14.87
32.3
82.7
66.3

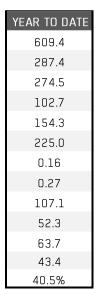
#### **FINANCIAL RESULTS**

### CHAMPION IRON 🖎

- > Generated C\$262.9M in cash flow from operations in last 4 quarters
- > Proven ability to produce at total cash cost below C\$50/t (<US\$38/t)
- > Strong cash operating margin of C\$43.4/tonne YTD
- > Not incumbered by stream or royalties

YEAR TO DATE	
(9-MONTHS ENDING DEC 31,	2019)

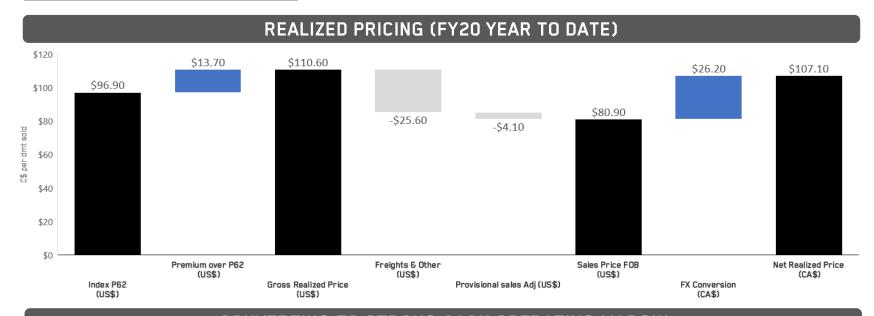
Financial Results (\$ MILLION)	Q4/FY19	Q1/FY20	Q2/FY20	Q3/FY20
Revenue	182.2	277.9	160.4	171.1
EBITDA	86.5	166.9	62.6	57.9
Operating profit	83.1	163.3	57.9	53.3
Net profit	28.2	74.2	-1.7	30.2
Adjusted Net profit	28.2	74.2	49.9	30.2
Cash flow from operation	38.0	91.9	104.9	28.1
Earnings per share - basic	0.02	0.09	0.00	0.07
Adjusted Earnings per share - basic	0.02	0.09	0.11	0.07
Average realized selling price (\$/dmt)	104.4	145.7	86.2	89.0
Total cash cost (\$/dmt)	48.4	54.3	48.3	54.2
All-in sustaining cost (\$/dmt)	55.4	62.8	66.2	62.2
Cash operating margin (\$/dmt)	49.0	82.9	20.0	26.8
Cash operating margin (%)	46.9%	56.9%	23.2%	30.1%





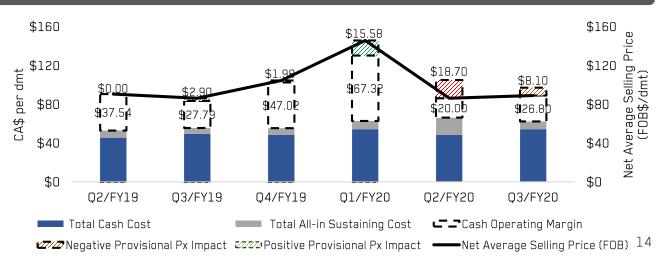
#### PREMIUM PRICING





#### CONVERTING TO STRONG CASH OPERATING MARGIN

- > Proven positive cash operating margin despite volatile iron ore prices
- > EBITDA margin of 47% fiscal year to date



#### STRONG FINANCIAL POSITION

#### CHAMPION IRON 🖎



C\$187.6M Cash & S-T Investments C\$28.7M Working Capital





C\$237.7M Long-Term Debt (Face Value)\*









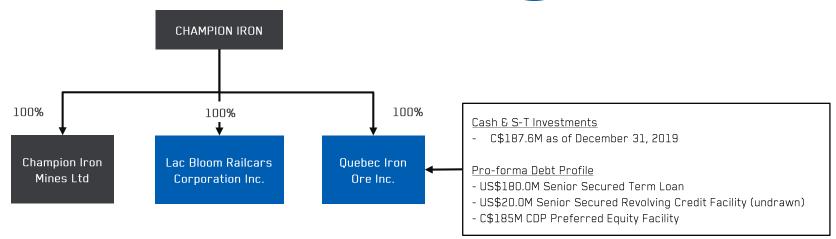










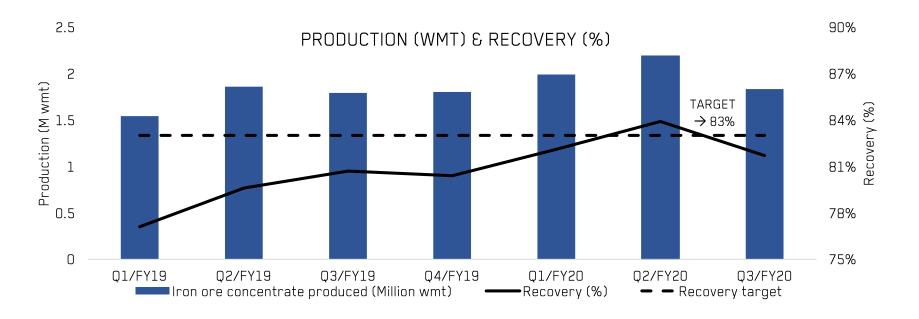




## **BLOOM LAKE PHASE I (7.4 MTPA)**

#### Phase I positions Champion as a strong free cash flow generator with 20+ years mine life

- > Focus on quality with continuous improvement in ore recovery
- > Achieved nameplate capacity within 4 months
- > Set quarterly production record in Bloom Lake history of 2.19M wmt in Q2/FY20
- > Achieved target recovery of 83%
- > Proven ability to operate in all seasons



## BLOOM LAKE PHASE II ROBUST ECONOMICS

#### CHAMPION IRON 🖎

- > Proposed plan to double capacity from 7.4 Mtpa to 15 Mtpa
- > Takes advantage of US\$1.2B already invested and infrastructure already in place
- > Phase II NPV8% of \$956M and 33.4% IRR after-tax
- > 2.4 years payback on initial capital
- > Life of mine total cash cost of \$46.6/t (US\$35.4/t)
- > Initial CAPEX of \$589.8M (US\$446.8M)
- > 20 years mine life
- > Combined Phase I & II NPV8% of \$3.76B pre-tax and \$2.38B after-tax
- > Economics based on P65 life of mine iron ore price of US\$83.9/t or a discount of ~35% to the P65 index when the Study was released on June 20, 2019











## PHASE II - CAPITAL SPENDING

### CHAMPION IRON 🖎

#### LOW CAPITAL REQUIREMENT DUE TO PRIOR INVESTMENT OF -US\$1.2B

#### **CAPEX PRE-PRODUCTION**

	(C\$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

#### **OPERATING COSTS**

	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	46.6	35.4
Sustainability & other community expense	1.3	1.0
Sustaining CAPEX	4.4	3.3
ALL-IN SUSTAINING COSTS	52.3	39.7



#### RAPID TIMELINE TO PRODUCTION



#### **PHASE II - EXECUTION UPDATE**

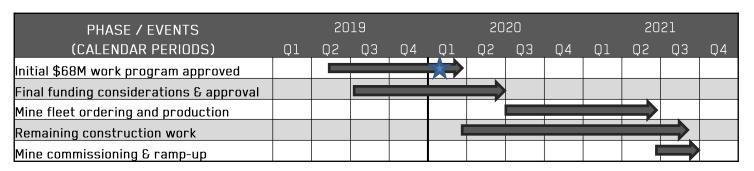
 $\sqrt{158,000}$ h worked  $\sqrt{3,800}$ m $^3$  of concrete  $\sqrt{18,000}$ m $^3$  of backfill

- > Construction work progressing in accordance with initial budget of C\$68M (C\$47.2M spent to date)
- > Evaluating market conditions and financing alternatives to fund balance of Phase II capex

#### Work completed include:

- > Civil work related to silo and conveyor
- > Electrical and mechanical work inside the plant
- > Spirals manufactured and ready to be shipped
- > Detailed engineering progressed as scheduled

#### **CURRENT CONSTRUCTION TIMELINE**

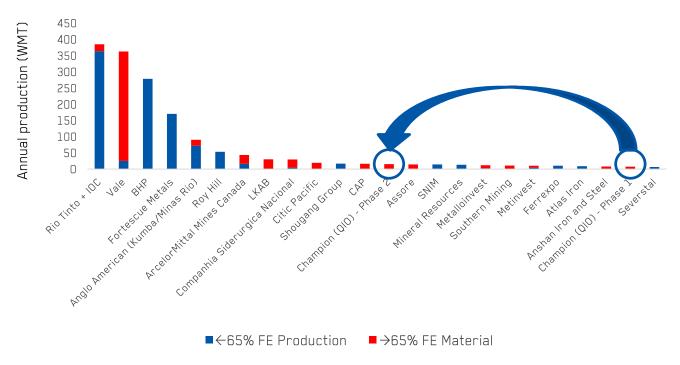




# BLOOM LAKE PHASE II POSITIONING AS A GLOBAL LEADER

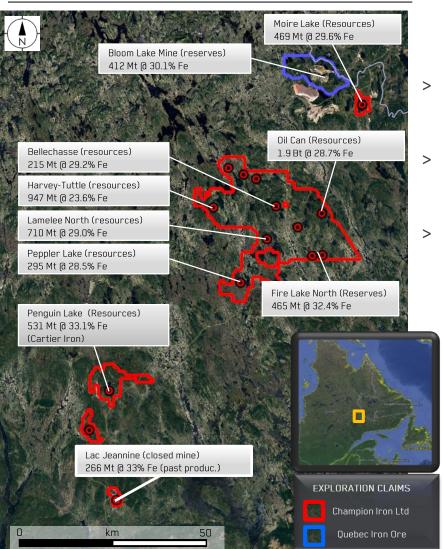
- > Focus on creating value per share
- > Further position Champion as one of the largest high-grade iron ore producers in the world

#### GLOBAL SEABORN PRODUCERS (WMT/YEAR)



# REGIONAL OPPORTUNITIES PHASE III

### CHAMPION IRON 🖎



- Only 60 km south of Bloom Lake, Champion controls over 5.4 Billion tonnes of additional resources
- A feasibility study was completed on Fire Lake North in 2013 considering a 9.3 Mtpa project over a 19.6-year life of mine
- Completed railway feasibility (completely funded by Quebec Government)

### **CHAMPION IRON △**

#### **FY2020 HEALTH & SAFETY**

- > QIO's statistics in line with open pit mining benchmarks as set by ASPM
- > Initiated new simulation programs to optimize emergency response time
- > Additional measures in place to train new personnel arriving at site
- > Continuous monitoring and improvement of protocols

QUEBEC IROI FINAN	BENCHMARK					
	2019*					
Lost Time Injury Frequency Rate (LTIFR)	4,28	4,85	4,37	-	4,5	3,38
Disability Injury Severity Rate (DISR)	6,85	33,99	26,62	-	25,94	9

<sup>\*</sup>ASPM: Association paritaire pour la santé et la sécurité au travail du secteur minier http://aspmines.qc.ca/

### **ENVIRONMENTALLY FOCUSED**

#### CHAMPION IRON 🖄

- > No occurrence of major environmental issue to date
- > Implemented new initiatives that resulted in over 12 million litres (ML/yr) of fuel reduction, representing 33,000 t/yr of greenhouse gas reduction
- > Completed C\$30M accelerated dam rising program improving tailings management
- > Conducted trials with new blasting compound to reduce Nitrogen Oxide (NOx)
- > Revegetation plan now covers 40 hectares
- > Completed work in streams surrounding Fermont to improve fish habitat
- > Initiated detailed analysis of energy utilisation at site in Q3/FY20













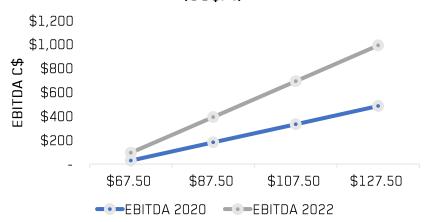


## CHAMPION IRON 🖎

# STRONG LEVERAGE TO COMMODITY PRICE

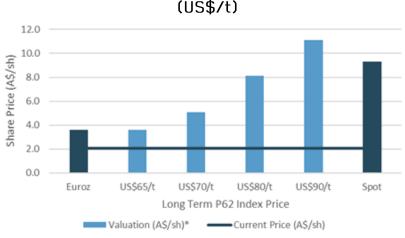
- > Well positioned for downturn with cost competing with global majors and substantial cash operating margin
- > Strong leverage to higher commodity price

## EBITDA SENSITIVITY TO REALIZED PRICE (US\$/t)



\*Source: Cormark Securities, November 8, 2019

## VALUATION SENSITIVITY TO REALIZED PRICE (US\$/t)



\*Val. based on Realized Price (P62 + 15% HG Premium)

\*Source: EUROZ Securities, November 6, 2019

## **EXPERIENCED TEAM**



	INDIVIDUAL	EXPERIENCE				
		MANAGEMENT TEAM				
500	<b>Michael O'Keeffe</b> Executive Chairman	<ul> <li>Former Executive Chairman of Riversdale Mining Limited (2004-2011) where Mr. O'Keeffe led the development of Riversdale Mining from a junior unt it was acquired by Rio Tinto for A\$4 billion.</li> <li>Prior to joining Riversdale, Mr. O'Keeffe was a Managing Director with Glencore Australia Limited (1995-2004) and was responsible for Glencore's Australian trading acquisitions. Previously, held a series of senior operating positions with MIM Holdings (Mt. Isa).</li> </ul>				
	<b>David Cataford</b> CEO	> Mr. Cataford was appointed to the position of President and Chief Executive Officer on April 1, 2019. Mr. Cataford had been Chief Operating Officer of the Company since March 20, 2017. Prior to joining Champion in 2014, Mr. Cataford held several management positions within Cliffs Natural Resources Inc., including key positions in their main iron ore deposit at Bloom Lake Mine in Fermont, Quebec. At Bloom Lake, Mr. Cataford played an important role in the management team including phase 1 expansion of the plant. His experience in iron ore mining includes mineral characterizatio projects at Bloom Lake and for ArcelorMittal at Mont Wright, as well as adapting the recovery circuit to meet new customer demands. Mr. Cataford was president and cofounder of the North Shore and Labrador Mineral Processing Society.				
	Natacha Garoute CFO  Natacha Garoute CFO  Natacha Garoute CFO  Solid background in public company reporting and corporate finance expertise implementing financing and international tax structure.  Strong experience including CFO of Roxgold, senior finance positions at SEMAFO Inc., Canadian Railway, MDD and PWC.					
		BOARD OF DIRECTION				
	Andrew J. Love, FCA Director	<ul> <li>More than 30 years of accounting experience in reorganizing and redesigning companies in Australia.</li> <li>Over 25 years' experience as a consultant to public companies, particularly in mining and resource industries.</li> <li>Managed two companies in the energy and mining sectors and served as Vice-President at Riversdale Mining.</li> </ul>				
3	Gary Lawler, LLB, LLM Director	<ul> <li>Experience as an M&amp;A lawyer for over 30 years.</li> <li>Advised numerous companies and investment banks on transactions, including hostile takeovers and anti-takeover measures.</li> <li>Served on the boards of Dominion Mining and Riversdale Mining.</li> </ul>				
	Wayne Wouters (The Honourable), PC Director	<ul> <li>Strategic advisor to McCarthy Tétrault LLP.</li> <li>Worked in private sector as Clerk of the Privy Council, Secretary to the Cabinet and Head of the Federal Public Service.</li> <li>Previously served as deputy minister for several departments including Human Resources and Development of Skills Canada.</li> </ul>				
	<b>Michelle Cormier</b> Director	<ul> <li>Operating partner for Wynnchurch Capital, a \$2.3 billion private equity fund.</li> <li>Former CFO of a private company and a publicly traded forest products company operating in Canada and the United States.</li> <li>Vast experience in senior management roles including corporate strategy, finance, human resources and reorganization.</li> </ul>				
30	<b>Jyothish George</b> Director	<ul> <li>Joined Glencore in London in 2006 and is currently head of the iron ore department.</li> <li>Serves as Vice-Chairman of the board of directors of Jumelles Limited, the holding company of the Zanaga iron ore mine in the Republic of Congo.</li> </ul>				

## **TRACK-RECORD OF SUCCESS**



Michael O'Keeffe has a track record of successful turnarounds on out-of-consensus calls







- > Acquired BHP's Zululand anthracite colliery for \$14M, funded with credit from BHP
- > Repaid BHP within the year and expanded operation
- > After expanding into Mozambique, Riversdale was bought by Rio Tinto in 2011 for \$3.9bn, or A\$16.20/sh
  - > ~7,200% return to shareholders



positive mine restart

Source: Capital IQ and Bloomberg

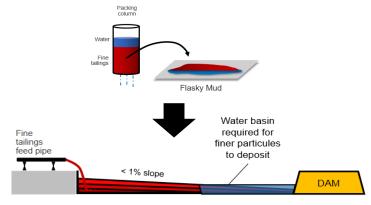


#### **TAILINGS MANAGEMENT**

### CHAMPION IRON 🖎

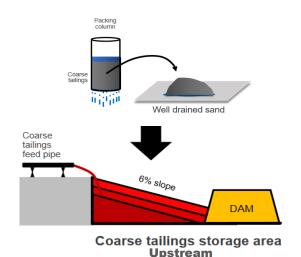
## CHAMPION'S TAILING MANAGEMENT IS ADOPTING A CONSERVATIVE APPROACH

- > Fine and coarse tailings separation representing 12% & 88%, respectively
- > 10:1 slope for upstream dam construction vs. industry standard of 6:1
- > Fines managed with center line dam systems
- > Real time monitoring consoles + robust daily inspections and annual audits
- Low seismic area reducing risk of events sitting on the Canadian Shield being old stable bedrock



Fine tailings storage area Centerline/Downstream



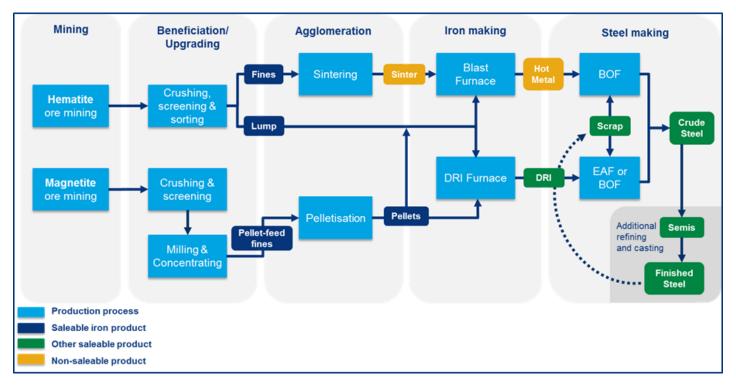


#### **IRON ORE VALUE CHAIN**

#### CHAMPION IRON 🖄

> Bloom Lake produces concentrate fines primarily used in sintering process, but also grinded further for pellet feed by some customers





\*Source: WoodMackenzie»

#### **INFRASTRUCTURE AND LOGISTICS**



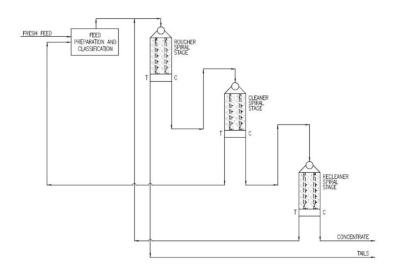
#### Mining Fleet Acquired entire mining fleet with capacity to mine 30Mtpa of ore/waste Conveyor New fully operational 3.45km conveyor system delivers crushed ore from the mine site to the processing facility System Two concentrators (one operative to be revamped for higher recovery plus **Processing Plant** one 70% complete for future expansion) Rail access to port consisting of three separate segments: > Rail spur on site (32km), that is operational and connects to the Quebec North Shore and Labrador (QNS&L) railway at the Wabush Mines facilities QNS&L railway from Wabush to Arnaud Junction in Sept-Iles Rail Arnaud junction to Pointe-Noire (Sept-Iles), where the concentrate will be unloaded, stockpiled, and loaded onto vessels > Own 735 specialized iron ore railcars used to transport concentrate from Bloom Lake to Port of Sept-isles. > Agreement with Government of Quebec for port area (Arnauld rail, car Port dumper, stacker/reclaimer) > Service agreement with Port of Sept-Iles for ship loading As part of the purchase of the Bloom Lake mine, QIO acquired the following accommodations, which are in the town of Fermont: Lodging > 26 fully furnished houses > Two blocks (motels) of 99 rooms of lodging Facilities can host up to about 700 people on a fly-in-fly-out basis QIO owns a 315 kV station including two 80 MVA transformers > As part of previous expansion plans, the high voltage power lines were upgraded to be able to handle a further 30 MW Power Current plans for a moderate increase in production capacity and further tailings pumping will use only a small fraction of surplus electrical power availability (68 MW authorized by Hydro-Québec) A spare parts inventory representing a total of C\$43.6M, as estimated in October 2014 before mining operations shut down, is currently available for Other

future operations

#### REGIONAL LOCATION AND INFRASTRUCTURE MAP Lac Otetnu Property Champion retains a 2% ne. smelter return rovaltv on LABRADOR BOUNDARY OF Churchill Falls QUÉBEC ✓ Hydroelectric line QNS&L Railway Carter Raiway QNSSL Raiwa 100 km Producing Mine Shipping Terminal Port Hydro Plant spion Iron Ltd Properti Champion Iron Mine ArcelorAtttal Ciffs Natural Resources Rio Tinto / IOC Labrador Iron Mines Lac Ofernuk Mining Lis Fancamp

#### CHAMPION IRON 🖄

## BLOOM LAKE UPDATED RECOVERY FLOWSHEET





FRESH FEET

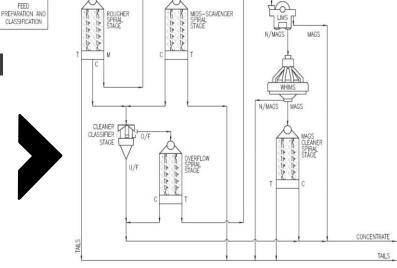
#### INITIAL FLAW OF FLOWSHEET INSTALLED AT BLOOM LAKE

- > The rougher spirals originally used in the Bloom Lake concentrator only had five (5) turns compared to seven (7) turns spirals more commonly used in the Labrador Trough
- > No possibility for dilution at cleaner and recleaner stages feed
- > Higher than designed spiral feed rate

#### **UPGRADED RECOVERY CIRCUIT FLOWSHEET**

In addition to installing new spiral system, Mineral Technologies proposed two processing routes for the Phase 1 upgrade flowsheet:

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





## **UPDATED FEASIBILITY ECONOMICS**

**COMBINED PHASE I & II (JUNE 2019)** 

SUMMARY O	F ECONOMIC PARAMETERS AND FEASIBILITY RESULTS – PHASE I & II (CO	OMBINED)
	Reserve (Mt)	807.0
	Processed Tonnage (Mtpa)	41.6
	Average Stripping Ratio (waste:ore)	0.88
Mining Parameters	Average Fe Feed Grade (% Fe)	29.0
Milling Fal ameters	Average Fe Processing Recovery (%)	82.4%
	Average Mining Dilution (%)	1.2%
	Average Recovered Concentrate (Mtpa)	15
	Mine Life (years)	20 years
	Initial CAPEX, pre-production (C\$M)	589.8
	Initial CAPEX, total including deposits (C\$M)	633.8
Cost Parameters	LOM Sustaining CAPEX (C\$M)	1,220
Cost Parameters	LOM FOB Sept-Îles Production Costs (C\$/t dry concentrate)	46.6
	LOM OPEX FOB Sept-Îles, all-in sustaining (C\$/t dry concentrate)	52.3
	LOM freight cost (US\$/t dry concentrate)	21.54
Davis Davis davis	Gross Revenue (C\$M)	32,281
Revenue Parameters	Net Cash Flow After Taxes (C\$M)	5,186
Inon One Onice Denometers	LOM Avg Iron Price at 66.2%Fe CFR China (US\$/t)	84.1
Iron Ore Price Parameters	Average Exchange Rate	0.76 US\$/C\$
	NPV – 8% (after-tax) (C\$M)	2,384
Valuation Parameters	IRR (after-tax)	33.4%
	Payback (after-tax) (years)	2.4

# BLOOM LAKE RESERVES & RESOURCES

#### CHAMPION IRON 🖎

#### PHASE I (MARCH 31, 2019)

#### March 31, 2019 Bloom Lake Mineral Resources Estimate (at 15% Fe Cut-off)

			-	-	
Category	Tonnage (dmt)	Fe (%)	CaO (%)	Mg0 (%)	AI203 (%)
Measured	401.8	31.0	0.6	0.7	0.3
Indicated	471.6	28.5	2.5	2.3	0.4
M+l Total	883.4	29.7	1.6	1.5	0.4
Inferred	80.4	25.6	1.9	1.7	0.3

#### March 31, 2019 Bloom Lake Mineral Reserves Estimate (at 15% Fe Cut-off)

Category	Tonnage (dmt)	Fe (%)	CaO (%)	MgO (%)	Al203 (%)
Proven	236.3	30.7	0.5	0.6	0.3
Probable	47.3	28.7	2.8	2.7	0.4
Total	383.5	29.9	1.4	1.4	0.4

#### PHASE II - FEASBILITY STUDY (JUNE/19)

#### Mineral Resource Estimate for Bloom Lake

Classification	Tonnage	Fe	CaO	Sat	Mg0	Al <sub>2</sub> O <sub>3</sub>
	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

#### Mineral Reserve Estimate

Classification	Diluted Ore Tonnage (dmt)	Fe %	CaO %	Sat %	Mg0 %	AI203 %
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

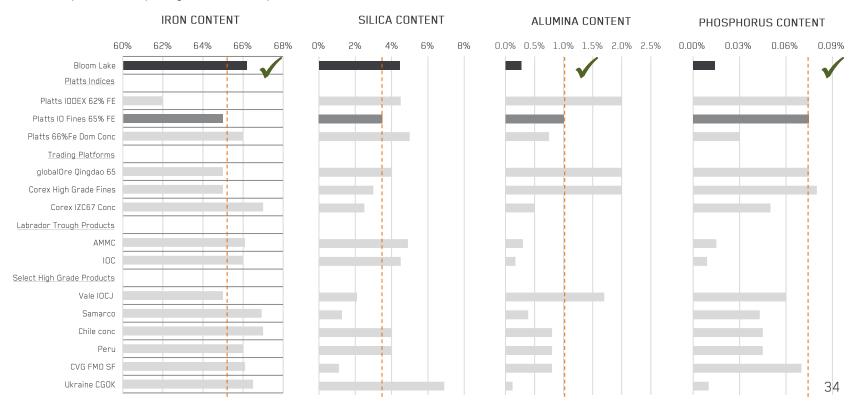


## VALUABLE AND SOUGHT-AFTER PRODUCT

Source: Metalytics Market Study

HIGH-GRADE, LOW-IMPURITY PRODUCT PERMITS STEEL MILLS TO OPTIMIZE BLENDS, BALANCING LOWER-QUALITY ORES, REDUCING COSTS, INCREASING EFFICIENCY AND REDUCING CO, EMISSIONS

- > Bloom Lake's concentrate product expected to be very attractive in the global high-grade fines market
- > Silica level similar to other Labrador Trough concentrates, but above the Platts index base specification, although more than offset by lower alumina and phosphorus
- > Very low levels of alumina, phosphur, and sulphur compared to other concentrates and the Platts index
- > Quite beneficial when mixed with lower quality ores when mixed during sintering process
- > History of successfully selling into China for ~4 years



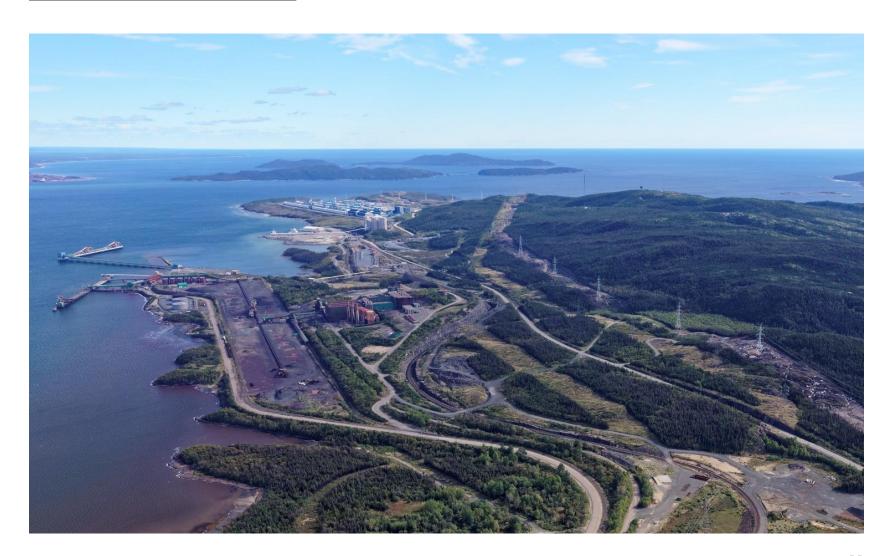
## CHAMPION IRON 🖎

# BLOOM LAKE MINE COMPLEX



## CHAMPION IRON 🖎

## **MULTI-USER PORT**



# STRUCTURAL IMPROVEMENTS 2018 RECOMMISSIONING

#### CHAMPION IRON 🖄

> New multi-user berth



> Re-engineered recovery circuit



> New 3.5km overland conveyor



> New tailings pumping system



## THANK YOU!

Contact us for more information.

DAVID CATAFORD,

CEO

dcataford@championrionmines.com

MICHAEL MARCOTTE,
VP INVESTOR RELATIONS

mmarcotte@championironmines.com

1100 René-Lévesque Blvd. West, Suite 610 Montreal OC H3B 4N4

Tel.: +1 514 316 4858 Fax.: +1 514 819 8100

CHAMPIONIRON.COM

