

CHAMPION IRON LIMITED (CIA-TSX)

Mining | Iron Ore

Brian MacArthur, CFA | 416.777.4914 | brian.macarthur@raymondjames.ca

Chris Law, (Associate) | 416.777.7144 | chris.law@raymondjames.ca

Initiating Coverage of Champion Iron

RECOMMENDATION

We are initiating coverage of Champion Iron Limited (CIA) with an Outperform rating and a C\$3.00/share target price, implying a 35% return. We believe Champion offers investors good exposure to premium iron ore through its Bloom Lake asset (63.2%-owned), which is a long-life, lower cost asset producing high grade iron ore concentrate (~66% Fe) located in Quebec, Canada, a lower risk jurisdiction. In addition, we believe Champion has potential for growth through its Bloom Lake Phase 2 expansion project at favourable capital costs given the previous owners spent significant capital. Given Champion's exposure to premium iron ore (which we believe should trade at a premium given structural changes in the iron ore industry), high quality asset, growth potential, low jurisdictional risk and current valuation, we rate the shares Outperform.

ANALYSIS

High Quality Production from Long-life, Lower-Cost Asset in Lower Risk Jurisdiction:

Champion's flagship asset, Bloom Lake, is a long-life, lower cost asset, located in Quebec, Canada, producing ~66% Fe iron ore concentrate with low impurities, a high-grade premium product which can be sold at a premium to 62% iron ore benchmark pricing. We believe there have been structural changes in the steel market (especially in China, the world's largest steel producer) as producers focus on larger mills and on reducing pollution which should result in high quality iron ore (65%+ Fe) with low impurities continuing to trade at a premium. At current iron ore prices, we expect Champion to generate over C\$300 mln in EBITDA in fiscal 2020.

Bloom Lake Phase 2: Champion is currently undertaking a feasibility study for a potential expansion of Bloom Lake, which could potentially double Bloom Lake's operational capacity. Champion expects results of the feasibility study to be released in 2H19, which could potentially be a positive catalyst.

Potential to Increase Bloom Lake Ownership at Attractive Terms: We also note that Champion could potentially increase its ownership stake in Bloom Lake through acquiring part of Ressources Quebec's interest based on a valuation that was conducted before the iron ore price spiked following the tailings dam disaster in Brazil.

Longer-term Growth: Post Bloom Lake Phase 2, should the pellet market remain strong, we believe Champion could also upgrade some of its iron concentrate at the port to add additional value. Champion also owns 100% of the Consolidated Fire Lake North project, which could provide longer-term growth or be sold to surface value.

VALUATION

Our target price is based on a 60/40 weighting of: i) a 1.0x multiple (generally in-line with iron ore peers) to our NAVPS estimate of C\$2.74; and, ii) a 5.0x EV/NTM EBITDA multiple (generally in-line with iron ore peers) to our NTM EBITDA forecast of C\$343 mln (see Exhibit 1).

APRIL 15, 2019 | 4:02 PM EDT
INITIATING COVERAGE

Outperform 2
Target Price C\$3.00

Suitability High Risk/ Growth

MARKET DATA

Current Price (Apr-11-19)	C\$2.22
Market Cap (mln)	C\$956
Current Net Debt (mln)	C\$67
Enterprise Value (mln)	C\$1,023
Shares Outstanding (mln)	430.5
30-Day Avg. Daily Value (mln)	1.2
Dividend	C\$0.00
Dividend Yield	0.0%
52-Week Range	C\$0.89 - C\$2.35

KEY FINANCIAL METRICS

	1Q	2Q	3Q	4Q
EPS (C\$, Mar FY)				
2018A	(0.01)	(0.03)	(0.09)	(0.05)
2019E	NA	NA	NA	NA
new	0.02 A	0.09 A	0.05 A	0.06
2020E	NA	NA	NA	NA
new	0.08	0.07	0.05	0.05

	2018A	2019E	2020E
EPS (C\$, Mar FY)			
old	NA	NA	NA
new	(0.19)	0.23	0.25
EBITDA (mln) (C\$, Mar FY)			
old	NA	NA	NA
new	(90)	272	343
EV/EBITDA	NM	3.8x	3.0x
Iron Ore Production (mt) (Mar FY)			
old	NA	NA	NA
new	0.6	6.9	7.7
65% Fe Iron Ore Fines CFR China (\$, Mar FY)			
old	NA	NA	NA
new	85	92	89
Revenue (mln) (C\$, Mar FY)			
old	NA	NA	NA
new	0	636	711
Cash Costs (C\$, Mar FY)			
old	NM	NA	NA
new	NM	49	47

Source: Thomson One, Raymond James Ltd.
Quarterly figures may not add to full year due to rounding.

Exhibit 1: CIA Financial and Operating Summary

Champion Iron Limited

Rating: OP2
Target Price: C\$3.00
Projected Return: 35%

NAVPS: C\$2.74
YR-END: 31-Mar

Investment Thesis
We believe Champion offers investors good exposure to premium iron ore through its Bloom Lake asset (63.2%-owned), which is a long-life, low cost asset producing high grade iron ore concentrate (~66% Fe) located in a Quebec, Canada, a lower risk jurisdiction. In addition, we believe Champion has potential for growth through its Bloom Lake Phase 2 expansion project and post Bloom Lake Phase 2, should the pellet market remain strong, we believe Champion could also upgrade some of its iron concentrate at the port to add additional value. Champion also has longer-term optionality through its Consolidated Fire Lake North project.

Key Attributes
-Long life, lower cost asset that produces high grade iron ore concentrate (~66% Fe) which can be sold at a premium
-Low jurisdictional risk
-potential expansion of Bloom Lake could double Bloom Lake's current operational capacity at an attractive capital investment
-Flexible balance sheet
-Longer term optionality given Champion could upgrade some iron ore concentrate at the port and develop/sell its Consolidated Fire Lake North project
-option to increase ownership in Bloom Lake at an attractive valuation

Key Concerns
-Single asset risk
-Financing and development risk for Bloom Lake Phase 2 expansion
-Lower Share Liquidity

Bloom Lake Reserves & Resources				
	(Mt)	%	(Mt)	
	Tonnage	Fe Grade	Contained	
2P	411.7	30.0%	123.6	
M&I (ex 2P)	499.9	29.4%	147.2	
Inf.	80.4	25.6%	20.6	

Price Assumptions (US\$/t)				
	2018A	2019E	2020E	2021E
Iron Ore (65% Fe)	\$85.3	\$91.6	\$89.4	\$85.0

Operating Summary				
	2018A	2019E	2020E	2021E
Iron Ore Concentrate Production (Mt)	0.6	6.9	7.7	7.6
Cash Costs (C\$/t)	nm	C\$48.9	C\$46.8	C\$49.2
AISC (C\$/t)	nm	C\$56.7	C\$52.1	C\$53.9

Analyst: Brian MacArthur 416.777.4914
Associate: Chris Law 416-777-7144

Management
Michael O'Keefe, Executive Chairman
David Cataford, CEO

Reporting Currency: C\$
11-Apr-19

Market Statistics				
Share Price	C\$2.22	Shares Basic (mln)	430	
52 Week High/Low	C\$0.89-2.35	Shares Fully Diluted (mln)	475	
Market Cap. (mln)	C\$956	Free Float (%)	76%	
Enterprise Value (mln)	C\$1,085	Avg. Daily Vol. ('000)	1,328	
Dividend	C\$0.00	Div Yield %	0.0%	

Financial Metrics				
	2018A	2019E	2020E	2021E
Income statement				
Revenue (mln)	\$0	\$636	\$711	\$626
Corporate EBITDA (mln)	(\$90)	\$272	\$343	\$245
Corporate EBIT (mln)	(\$61)	\$200	\$268	\$188
Net Earnings (mln)	(\$74)	\$102	\$114	\$75
EPS - Adjusted	(\$0.19)	\$0.23	\$0.25	\$0.17
Cash flow statement				
Operating Cash Flow (mln)	(101)	184	190	132
CFPS	(0.20)	0.51	0.44	0.29
Investing Cash Flow (mln)	(132)	(55)	(279)	(175)
Financing Cash Flow (mln)	239	61	20	0
FCF (mln)	(177)	161	(89)	(43)
FCF / Share	(0.44)	0.36	(0.20)	(0.09)
Balance sheet				
Cash & Equivalents (mln)	8	199	130	87
Working Capital (mln)	6	190	122	79
Total Debt (mln)	165	283	304	304
Common Equity (mln)	54	231	413	532

Valuation Metrics				
	2018A	2019E	2020E	2021E
EBITDA Margin	nm	43%	48%	39%
EV / EBITDA	nm	4.0x	3.2x	4.4x
P / CF	nm	4.3x	5.0x	7.6x
FCF Yield	nm	16%	nm	nm
P / E	nm	9.8x	8.8x	13.4x
Current Ratio	1.1x	2.4x	1.9x	1.6x
Price / Book	16.2x	4.0x	2.3x	1.8x
Debt / (Debt + Equity)	0.8x	0.6x	0.4x	0.4x
Net Debt / NTM EBITDA	0.5x	0.2x	0.6x	0.4x
ROE	nm	44%	28%	14%
ROIC	nm	32%	25%	15%

Valuation			
	C\$/mln	C\$/Share	% NAV
Bloom Lake	\$1,297	\$2.73	100%
Mining Asset NAV	\$1,297	\$2.73	100%
Exploration Credit	\$50	\$0.11	
Working Capital	\$190	\$0.40	
Long Term Debt	(\$212)	\$(0.45)	
Other	(\$22)	\$(0.05)	
Total NAV	\$1,303	\$2.74	

Valuation Measures		
	Weight	Target
Price / NAVPS (x)*	60%	1.0x
EV / NTM EBITDA (x)	40%	5.0x
		C\$2.93

Target Price: C\$3.00
*Target NAVPS multiple is applied to the mining assets, with net cash included at par

Operating NAV Breakdown by Geography

Canada 100%

Operating NAV Breakdown by Commodity

Iron Ore 100%

Source: Raymond James Ltd., Champion Iron Limited.

INVESTMENT OVERVIEW

We are initiating coverage of Champion Iron Limited (CIA) with an Outperform rating and a C\$3.00/share target price, implying a 35% return.

We believe Champion offers investors good exposure to premium iron ore through its Bloom Lake asset (63.2%-owned), which is a long-life, lower cost asset producing high grade iron ore concentrate (~66% Fe) located in Quebec, Canada, a lower risk jurisdiction. In addition, we believe Champion has potential for growth through its Bloom Lake Phase 2 expansion project and post Bloom Lake Phase 2, should the pellet market remain strong, we believe Champion could also upgrade some of its iron concentrate at the port to add additional value. Champion also has longer-term optionality through its Consolidated Fire Lake North project. Given Champion's exposure to high grade iron ore, high quality asset, growth potential, low jurisdictional risk and current valuation, we rate the shares Outperform.

Our target price is based on a 60/40 weighting of: i) a 1.0x multiple (generally in-line with iron ore peers) to our NAVPS estimate of C\$2.74; and, ii) a 5.0x EV/NTM EBITDA multiple (generally in-line with iron ore peers) to our NTM EBITDA forecast of C\$343 mln.

Investment Highlights

High Quality Production from Long-life, Lower-cost Asset: Champion's flagship asset, Bloom Lake, is long-life, lower cost asset producing ~66% Fe iron ore concentrate with low impurities, a high-grade premium product which can be sold at a premium to 62% iron ore fines. A feasibility study completed in March 2017 indicates that Bloom Lake could produce ~7.4 Mtpa of 66.2% iron concentrates over a 21 year mine life at average cash costs of about C\$43/t.

High Grade Iron Ore Premium to Persist: We believe there have been structural changes in the steel market (especially in China, which is the world's largest steel producer) which should result in high quality iron ore (65%+ Fe) with low impurities trading at a premium as steel producers focus on larger mills and continue to reduce pollution. We forecast this premium to be ~US\$14/tonne in calendar 2019, ~US\$17.50/tonne in calendar 2020 and ~US\$20/tonne in calendar 2021. For more details on the iron ore market, please refer to page 5.

Lower Jurisdictional Risk: Bloom Lake is located in Quebec, Canada, which ranks well on the Fraser Institute Index, and thus we believe the company has lower jurisdiction risk.

Bloom Lake Phase 2: Champion is currently undertaking a feasibility study for a potential expansion of Bloom Lake, which could potentially double Bloom Lake's current operational capacity. Champion expects results of the feasibility study to be released in 2H19, which could be a positive catalyst.

Option to Increase Ownership in Bloom Lake: We also note that Champion could potentially increase its ownership stake in Bloom Lake at an attractive valuation through acquiring part of Ressources Quebec's interest based on an agreement negotiated before the recent increase in iron ore price following the tailings dam failure in Brazil.

Flexible Balance Sheet: At 2018 calendar year end, Champion had ~C\$168 mln in cash and ~C\$288 mln in debt.

Strong Near-term EBITDA: At current iron ore prices, we expect Champion to generate over \$300 mln in EBITDA in fiscal 2020, which could be used to strengthen its balance sheet and/or partially fund Bloom Lake Phase 2 developments.

Longer-term Growth: Post Bloom Lake Phase 2, should the pellet market remain strong, we believe Champion could also upgrade some of its iron ore concentrate at the port to add

additional value. Champion also owns 100% of the Consolidated Fire Lake North project, which could provide longer-term growth or be sold to surface value.

Key Risks

Single-Asset Risk: Champion's NAV is concentrated in its Bloom Lake asset, any negative news with respect to Bloom Lake could have a material impact on its shares.

Financing and Development Risk: Given Bloom Lake Phase 2 is a development stage project which requires additional capital, parameters could differ from our forecasts materially and significant financing may be required to develop the project.

Lower Share Liquidity

Potential Catalysts

Bloom Lake Phase 2 Feasibility Study: Champion expects results of the feasibility study to be released in 2H19, which could be a positive catalyst.

Potential to Increase Bloom Lake Ownership: We note that Champion could potentially increase its ownership stake in Bloom Lake through acquiring part of Ressources Quebec's interest.

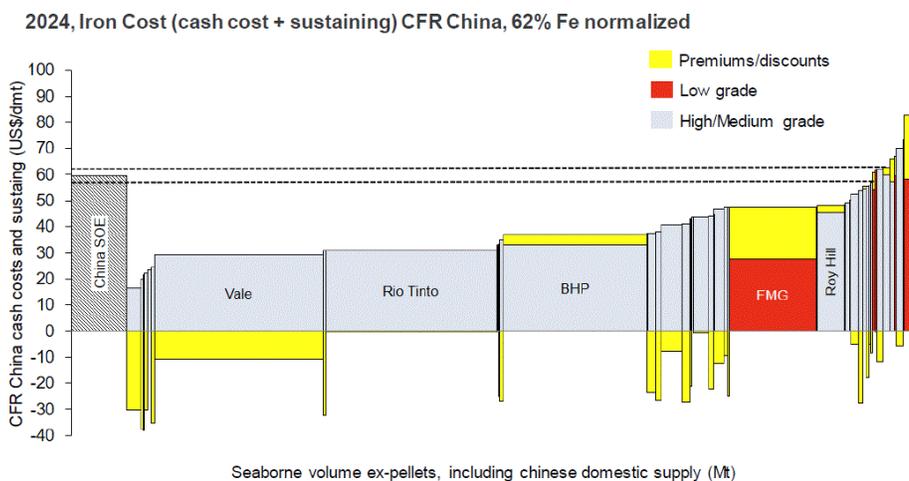
Balance sheet restructuring: We believe the company will likely restructure its balance sheet with lower cost bank debt.

IRON ORE MARKET UPDATE

Impact of the Brumandinho Tailings Dam Failure: The failure of the Brumandinho tailings dam in Brazil on January 25 has created uncertainty about iron ore supply and questions remain about how long current disruptions could last and what the implications are for future production. Following the tailings dam failure, Vale accelerated the closing of about 40 Mtpa of production. In addition, the court order to suspend the concentrator at Brucutu mine removed an additional 30-35 Mtpa. Finally pellet production was impacted, removing high value product. Post Brumandinho and assuming no further closures, Vale now is forecasting iron ore shipments (including pellets) of about 310-330 Mt down from original guidance of 400 Mt. At the same time, the possibility of the other major producers (Rio Tinto, BHP and Fortescue) increasing production to meet the shortfall looks unlikely, especially given Rio Tinto has cut production by about 15 mt due to a tropical storm and fire. As the impact of the tailings dam disaster became more clear in 1Q19, 62% Fe prices increased and averaged about US\$80/tonne for 1Q19.

62% Fe Prices to Decline in the Future. Market Balanced in the Medium-Term: While we believe the production cutbacks from Vale and the ban on upstream tailings dams will impact iron ore production and support prices in the near-term, we note that Vale has excess capacity in its Northern system (especially its low cost S11D mine) and if prices remain high there is potential for closed production to return. Moreover, if high prices remain, margins at steel mills could come under pressure leading to lower demand. Finally, another factor to consider longer-term is China's policy to increase Electric Arc Furnace capacity. Should this occur there would be a reduction in iron ore demand and an increase in ferrous scrap demand over time. On the other hand, longer-term prices should be supported given declining ore grades and tougher environmental and safety requirements (especially given the Vale tailings dam disaster) which should result in higher capex and opex for miners. Overall longer-term, we believe the 62% Fe iron ore benchmark price needs to be above US\$60/t based on the cost curve (see Exhibit 2) to incentivize new capacity and balance the market.

Exhibit 2: Iron Cost Cash Costs

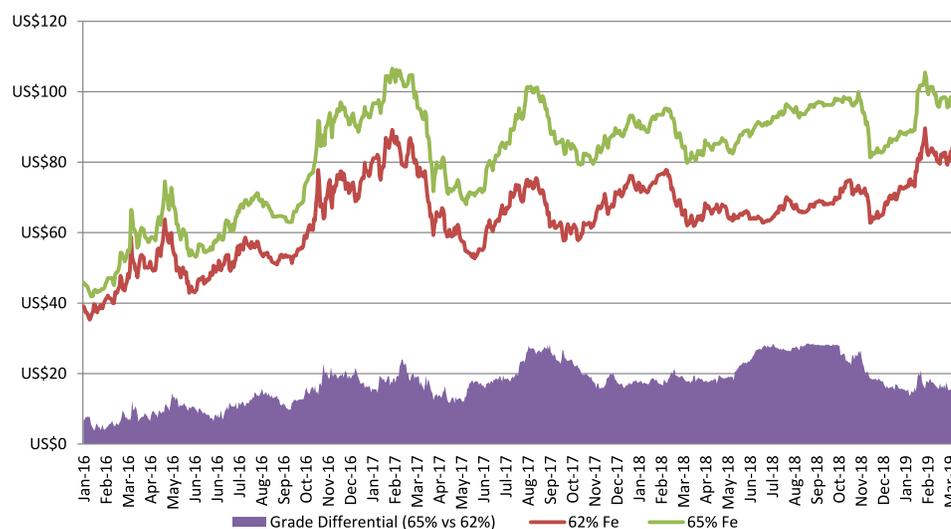


Source: Vale

A Structural Issue: High Grade Iron Ore Premiums to Persist: While all iron ore prices have increased post the tailings dam disaster, we believe there is also a structural change in the steel market (especially in China, the world's largest steel producer) which should continue to support

a premium for higher grade iron ore (65%) with low impurities. High quality iron ore (higher grade, lower impurities) is more valuable in steelmaking as it increases productivity and reduces air emissions. In general, lower silica, alumina and phosphorus lead to higher productivity, lower slag output, lower CO2 emissions and decreased coke rates in Basic Oxygen Furnaces (BOFs). While steel margins, especially in China (the largest steel producer), will continue to have an impact on iron ore prices as lower quality/price material is substituted when steel margins compress, we still believe a premium for higher grade material will exist as China uses larger, more efficient blast furnaces and continues to curb emissions. We note this has been ongoing for a while as the Chinese steel industry goes through a transformation (i.e. shutdown of obsolete capacity, tighter emission controls by the government and consolidation) but even in an environment of lower iron ore prices, we expect this spread to remain higher than in the past. Exhibit 3 shows that 65% iron ore fines have traded at over a US\$15/t premium to 62% iron ore fines since mid 2017. We believe that even if China increases Electric Arc Furnace capacity, the demand for high quality iron ore may be less affected given the overriding goal of cracking down on pollution.

Exhibit 3: Iron Ore High Grade Premiums



Source: Bloomberg, Raymond James Ltd.

In Exhibit 4, we show our iron ore price forecasts. While we expect 62% Fe prices to decrease for reasons mentioned above, we maintain a structural premium for 65% Fe going forward.

Exhibit 4: RJL Iron Ore Price Forecast (Calendar Year)

	2018A	1Q19A	2Q19E	3Q19E	4Q19E	2019E	2020E	2021E	Long-Term
62% Iron Ore Fines	\$66.84	\$79.24	\$85.00	\$75.00	\$70.00	\$77.31	\$67.50	\$65.00	\$60.00
65% Iron Ore Fines	\$90.34	\$93.67	\$97.50	\$90.00	\$85.00	\$91.54	\$85.00	\$85.00	\$80.00

Source: Raymond James Ltd.

COMPANY OVERVIEW

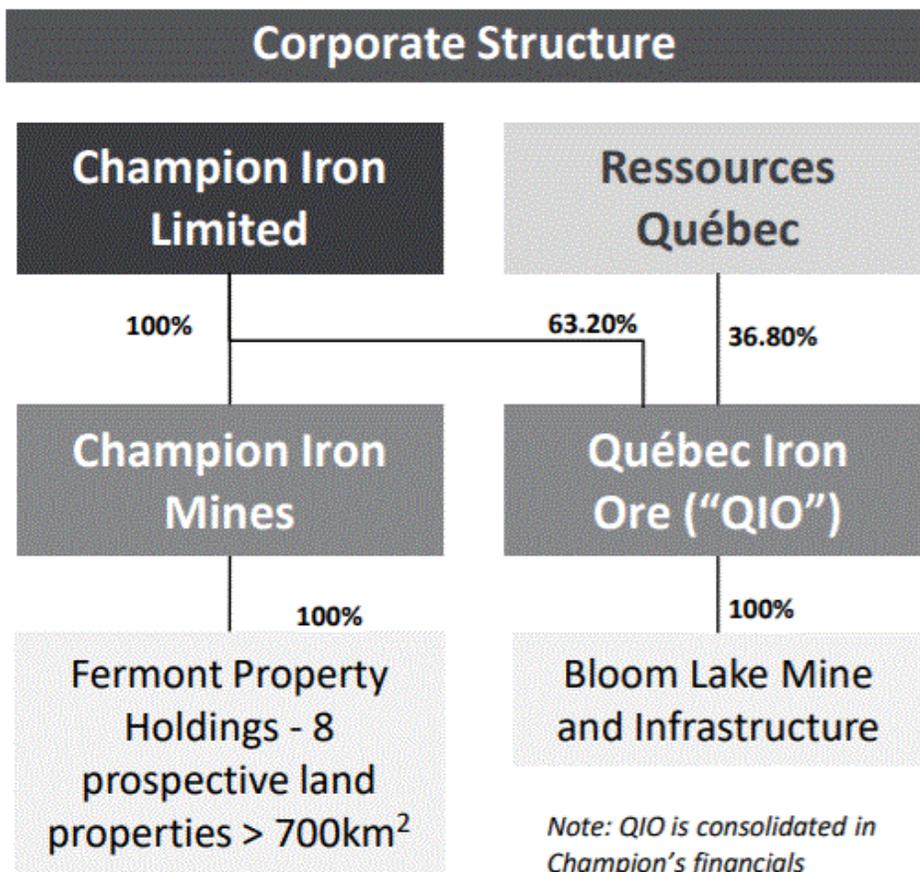
Champion offers exposure to the premium iron ore market through its flagship asset—Bloom Lake, which is located in the southern Labrador Trough in Quebec. In April 2016, Champion completed the acquisition of the Bloom Lake mine through its subsidiary Quebec Iron Ore from affiliates of Cliffs Natural Resource that was subject to restructuring proceedings under CCAA. Following completion of a feasibility study in March 2017, Champion decided to recommence operations at Bloom Lake. Champion started production at Bloom Lake in February 2018, made its first shipment of high grade 66% iron ore concentrate in April 2018, and declared commercial production in June 2018.

Champion is headquartered in New South Wales, Australia and has 2 offices in Canada, located in Toronto and Montreal. Champion is currently listed on the Toronto Stock Exchange and the Australian Stock Exchange (CIA-TSX | CIA-ASX). At fiscal 3Q19 quarter end, Champion had about ~430 mln shares outstanding but we note that if the convertible debentures owned by Glencore are converted, there would be about 458 mln shares outstanding.

Asset Overview

Champion's key asset is its Bloom Lake asset. Champion owns ~63.2% of Bloom Lake while Ressources Québec owns the remaining ~36.8% share.

Exhibit 5: Champion's Corporate Structure



Source: Champion Iron Limited

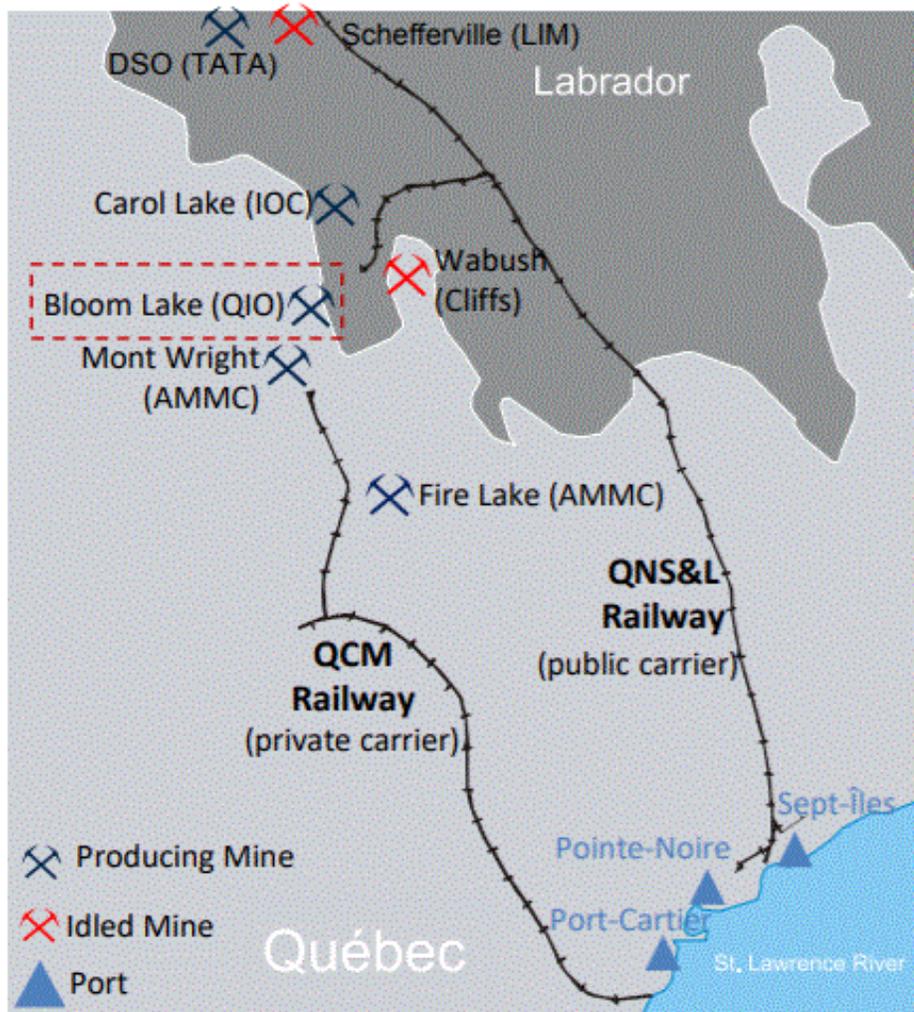
Exhibit 6: Champion's Key Asset

Key Assets	Status	Ownership	Country	Metal	Resource	Grade
Bloom Lake	Production	63.2%	Canada	Iron Ore	412 Mt 2P 500 Mt M&I 80 Mt Inf	30.0% 2P 29.4% M&I 25.6% Inf

Source: Champion Iron Limited, Raymond James Ltd.

Bloom Lake is open pit truck and shovel operation (with a concentrator), located in the Labrador Trough in Quebec, Canada. Bloom Lake has excellent access to power, water, roads in addition to a highly skilled mining labor market. Grid power is from a Hydro Quebec substation 12 km from the mine. Based on the feasibility study completed in 2017, Bloom Lake had 2P reserves of ~412 Mt grading 30% Fe and M&I resources of ~500 Mt grading 29.4% Fe, in addition to inferred resources of 80 Mt grading 25.6% Fe.

Iron ore concentrate is transported by rail from the site to a ship loading port in Sept-Iles, Quebec. The rail access consists of three separate segments. The first is the 31.9 km rail spur on-site that 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-Iles. The third segment is from Arnaud to Pointe-Noire port facilities (Sept-Iles) where the concentrate is unloaded, stockpiled and then loaded onto vessels for export. Renegotiated rail and port contracts, partly facilitated by partner Ressources Quebec, significantly improved transportation costs from previous agreements that had expensive terms including significant take or pay costs.

Exhibit 7: Location of Bloom Lake

Source: Champion Iron Limited, Raymond James Ltd.

Offtake Agreements: On May 1, 2017, Quebec Iron Ore signed an offtake agreement with Sojitz Corporation, pursuant to which Sojitz would purchase up to ~3 mln dmt per year from Quebec Iron Ore after re-commencement of commercial operations at Bloom Lake. The offtake is for an initial 5-year term from the date commercial operations commence at Bloom Lake and shall be automatically extend for successive terms of 5 years. On October 16, 2017, Quebec Iron Ore entered into an off-take arrangement with Glencore, pursuant to which Glencore agreed to purchase all iron production not sold in Japan under the off-take agreement with Sojitz for life-of-mine with fixed commercial terms for a 10-year period.

Bloom Lake Restart: Bloom Lake was previously operated by Cliffs Natural Resources, but was placed on care and maintenance in mid-December 2014. In April 2016, Champion, through its subsidiary, Quebec Iron Ore, acquired Bloom Lake from Cliffs Natural Resources, which was subject to restructuring proceedings under CCAA, for C\$10.5 mln in cash, with Quebec Iron Ore responsible for environmental obligations at the time assessed at C\$41.7 mln as well as replacement of certain bonds securing certain obligations of Bloom Lake totaling ~C\$1.1 mln. The acquisition came with most of the key mining and processing equipment needed to restart (and expand) iron ore concentrate production as well as significant regional infrastructure

(the previous owners--Cliffs and Consolidated Thompson had spent about US\$3.0 bln on mine development and infrastructure during the last iron ore cycle when 65% Fe peaked around US \$200/tonne). Champion decided to recommence operations after completing a feasibility study on the re-start of Bloom Lake in March 2017, which indicated an after-tax NPV@8% of C\$984 mln and an after-tax IRR of 33.3%, with average concentrate production of 7.4 mln tonnes per year over a 21 year mine life and initial CAPEX of C\$326.8 mln.

Exhibit 8: Bloom Lake 2017 Feasibility Study Summary

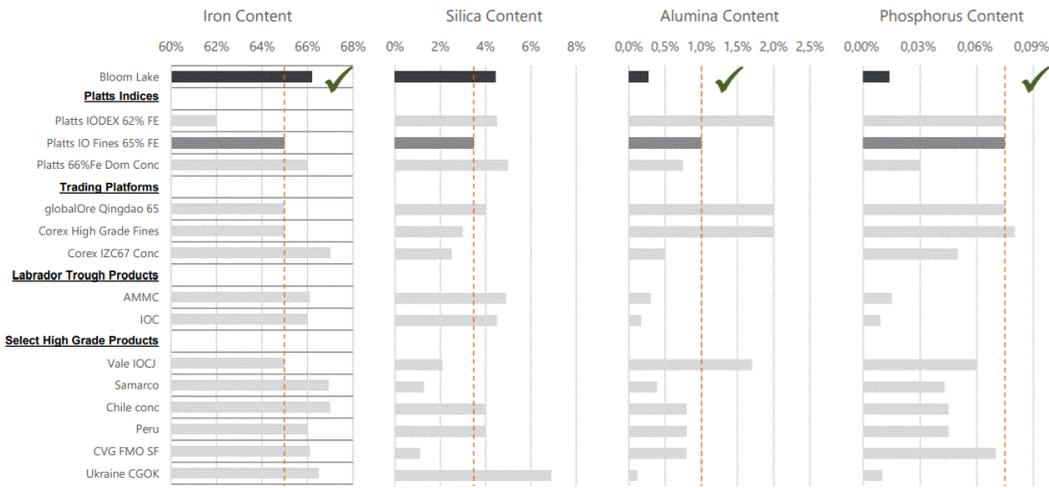
Summary of Economic Parameters and Feasibility Results		
Mining Parameters	Reserve (Mt)	411.7
	Processed Tonnage (Mtpa)	20.0
	Average Stripping Ratio (waste:ore)	0.48
	Average Fe Processing Recovery (%)	83.3%
	Average Mining Dilution (%)	4.3%
	Average Recovered Concentrate (Mtpa)	7.4
	Mine Life (years)	21 years
Cost Parameters	Initial CAPEX Including Working Capital (C\$M)	326.8
	LOM Sustaining CAPEX (C\$M)	329.5
	LOM OPEX (C\$/t of ore)	16.85
	LOM FOB Production Costs (C\$/t dry concentrate)	42.93
	LOM OPEX (C\$/t dry concentrate)	44.62
Revenue Parameters	Gross Revenue (C\$M)	15,116
	Shipping Costs (C\$M)	3,748
	Cash Operating Margin (C\$M)	4,432
	Operating Margin %	29.3%
	Net Cash Flow After Taxes (C\$M)	2,335
Iron Ore Price Parameters	LOM Avg Iron Price at 66.2%Fe CFR China (US\$/t)	78.40
	Average Exchange Rate	0.80 US\$/C\$
Valuation Parameters	NPV – 8% (after-tax) (C\$M)	984
	IRR (after-tax)	33.3%
	Payback (after-tax) (years)	3.1

Source: Champion Iron Limited

Champion started production at Bloom Lake in February 2018, made its first shipment of high grade 66% iron ore concentrate in April 2018 and declared commercial production in June 2018. In fiscal 3Q19, the company produced 1.9 mln tonnes at a cash cost of C\$49.40/tonne.

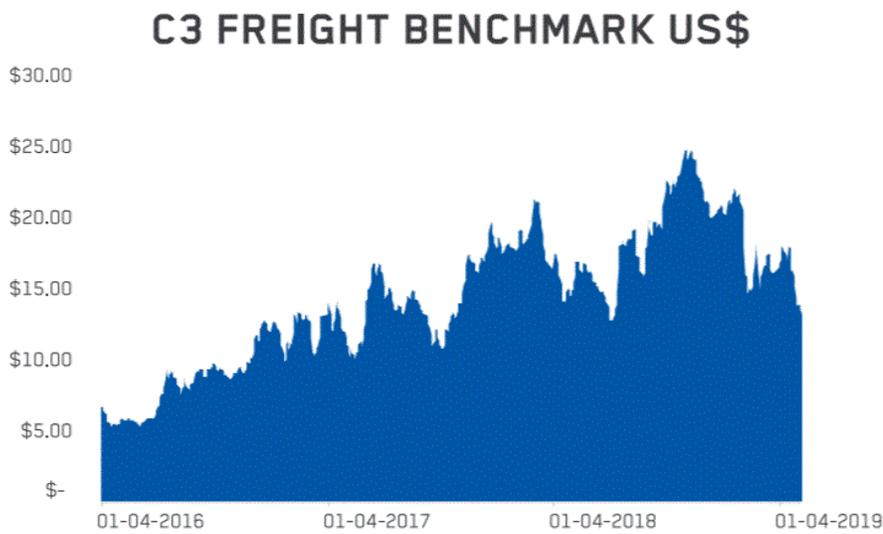
High Quality Production: Champion produces a high grade (approximately 66%) concentrate with low alumina and phosphorus content (see Exhibit 9 for comparative specifications) which allows the company to receive a premium price. On the other hand, while there is no freight rate quoted for Sept-Iles to China, the company usually pays a premium to the Brazil-China freight rate shown in Exhibit 10. Exhibit 11 shows the build up of the realized price used in the feasibility study. We note pricing and transportation costs are currently more favourable than in the feasibility study. In our model, we assume a long-term freight rate of US\$22/tonne and a small premium to the 65% Fe iron price.

Exhibit 9: Champion Production Quality

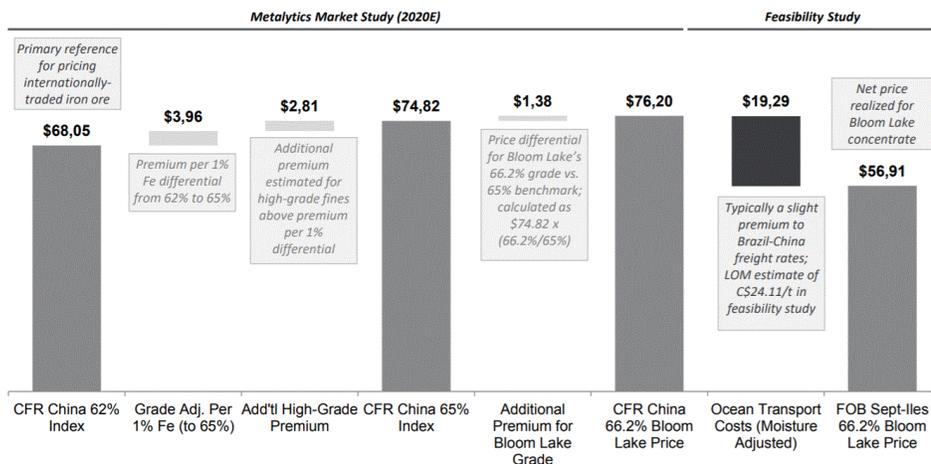


Source: Champion Iron Limited

Exhibit 10: Freight Rates-Brazil to China



Source: Champion Iron Limited

Exhibit 11: Champion Realized Pricing-Feasibility Study

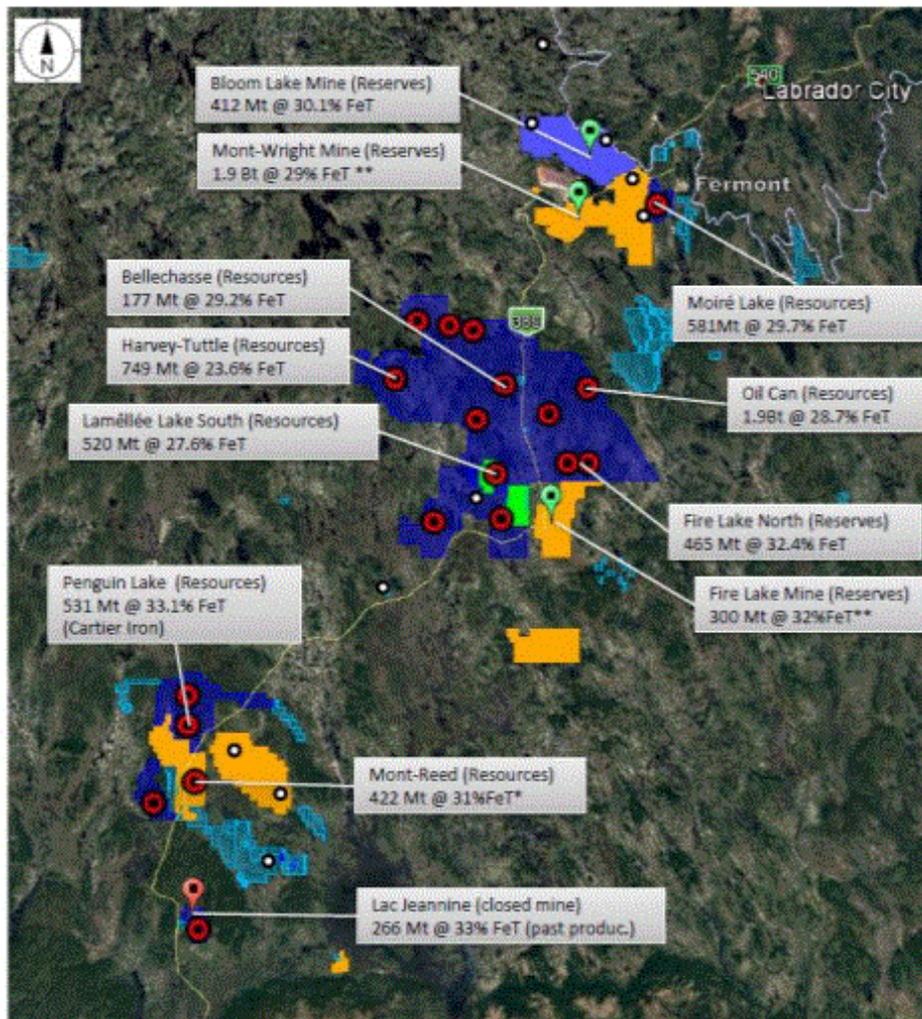
Source: Champion Iron Limited

Bloom Lake Phase 2: Champion's Board approved a budget to undertake a feasibility study for the Bloom Lake Phase 2 Expansion project, which aims at doubling Bloom Lake's annual production, and is targeting summer 2019 for release of feasibility study results. Champion has also submitted the Options Analysis Report to Environment Canada in the beginning of December 2018. Given extensive capital was already sunk by the prior owner, we estimate that an initial CAPEX of ~C\$500 mln will be required. Although we assume the capital is funded with debt, free cash flow and cash on hand, some equity could be needed. Champion believes that a positive decision resulting from the feasibility study could lead to a construction period beginning in 2019 with first ore production beginning in 2021. We have assumed first production in fiscal 2022.

Post Bloom Lake Phase 2: Once the ramp up of phase 2 is completed, assuming pellet premiums remain strong, additional value creation could be possible by grinding the concentrate at the port to create a higher value add product. Should this project proceed, more product could also be sent to the higher netback European market.

Longer-Term Growth: Champion also owns a 100% interest in its Consolidated Fire Lake North project (CFLN). A PEA was released for Fire Lake North, which indicated production of 9.3 Mt of 66% Fe grade iron ore concentrate over a ~20 year mine life, a pre-tax NPV of ~C\$3.3 bln and a pre-tax IRR of ~30.9%.

Exhibit 12: Champion's Regional Optionality



Source: Champion Iron Limited

Operating Forecasts

A summary of our operating forecasts are shown in Exhibit 13.

Exhibit 13: Champion Operating Forecasts

Production (100% Basis, Mt)	2018A	2019E	2020E	2021E	2022E
Bloom Lake	0.6	6.9	7.7	7.6	15.1
Total	0.6	6.9	7.7	7.6	15.1

Cash Cost (C\$/t)	2018A	2019E	2020E	2021E	2022E
Bloom Lake	nm	48.94	46.84	49.22	49.36
Total	nm	48.94	46.84	49.22	49.36

AISC (C\$/t)	2018A	2019E	2020E	2021E	2022E
Bloom Lake	nm	56.71	52.14	53.91	51.28
Total	nm	56.71	52.14	53.91	51.28

Source: Raymond James Ltd., Champion Iron Limited

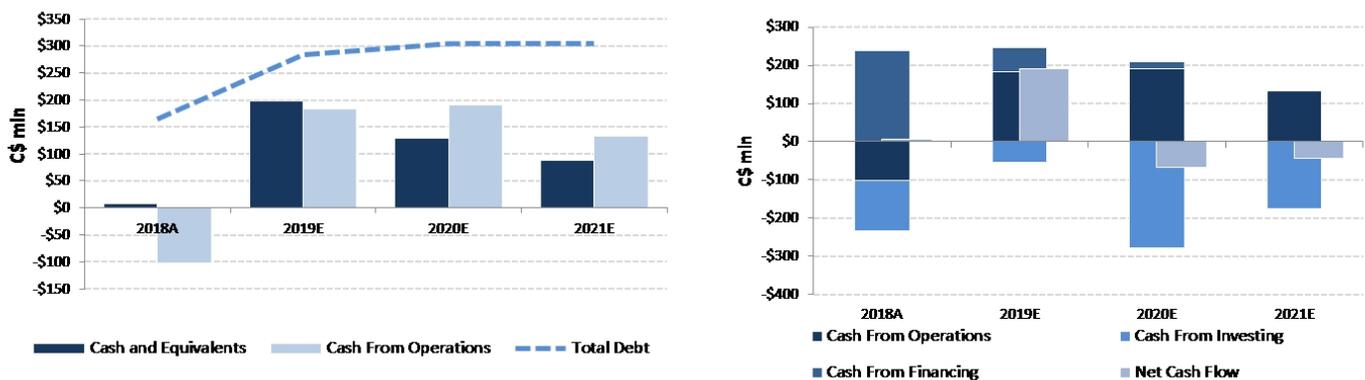
In fiscal 2019, we expect Bloom Lake to produce around 6.9 Mt of iron ore at cash costs below C\$50/t and AISC below C\$60/t. In fiscal 2020 and 2021, we expect similar levels of production,

before production roughly doubles in fiscal 2022 as phase 2 enters production.

Balance Sheet Analysis

In October 2017, Champion completed a financing package of ~C\$326 mln to restart of Bloom Lake, which included railcar financing of ~US\$30 mln, a ~C\$31 mln debenture to Glencore, a US \$80 mln 5-year senior secured loan provided by Sprott Private Resource Lending, a US\$100 mln 7-year subordinated loan provided by Caisse de dépôt et placement du Québec, a ~C\$26 mln equity participation of Ressources Québec as well as a ~C\$19 mln public offering. We note that in connection with the Glencore debentures, Quebec Iron Ore entered into an offtake agreement with Glencore to grant global offtake rights for Bloom Lake's life of mine production not sold in Japan under the Sojitz agreement. On December 31, 2018, Altius exercised its option to retire debt linked to a \$10 mln convertible debenture, which triggered the issuance of 10 mln shares. As of calendar 2018 year end (fiscal 3Q19 quarter end), Champion had ~C\$168 mln in cash and ~C\$288 mln in debt. Our liquidity forecasts are shown in Exhibit 14.

Exhibit 14: Champion Liquidity Forecast



Source: Raymond James Ltd.

Champion currently has a flexible balance sheet, with net debt/NTM EBITDA below 1.0x. We expect the company to refinance its current capital structure replacing the Glencore debenture, the Sprott loan and part of the Caisse loan likely with lower cost bank financing. However we also note that Champion could require additional financing to develop its Bloom Lake Phase 2 Expansion project, and while we expect the banks could provide financing for Bloom Lake phase 2, some equity could be required as well.

Exhibit 15: Champion Balance Sheet Metrics

Financial Metrics	2018A	2019E	2020E	2021E
Current ratio (x)	1.1x	2.4x	1.9x	1.6x
Total debt	\$165	\$283	\$304	\$304
Net debt (cash)	\$140	\$67	\$156	\$199
Net debt / NTM EBITDA	0.5x	0.2x	0.6x	0.4x
FCF Yield	nm	16.0%	nm	nm

Source: Champion Iron Limited, Raymond James Ltd.

Trading Liquidity

Champion has relatively low share liquidity, but we note it is listed on the ASX, which could help share liquidity. Average trading volume is ~1.2 mln shares. The current market capitalization is

~C\$956 mln and the enterprise value is ~C\$1,085 mln.

Exhibit 16: Champion Market Statistics and Liquidity

Market Statistics			
Share Price	C\$2.22	Shares Basic (mln)	430
52 Week High/Low	C\$0.89-2.35	Shares Fully Diluted (mln)	475
Market Cap. (mln)	C\$956	Free Float (%)	76%
Enterprise Value (mln)	C\$1,085	Avg. Daily Vol. ('000):	1,232
Dividend	C\$0.00	Div Yield %	0.0%

Source: Capital IQ, Raymond James Ltd.

Jurisdictional Risk

Almost all of Champion's assets are in Quebec, Canada, which ranks well on the Fraser Institute Index and thus we believe Champion has lower jurisdictional risk.

Exhibit 17: Champion Operating NAV by Geography



Source: Raymond James Ltd.

VALUATION AND RECOMMENDATION

We rate Champion Outperform with a C\$3.00/share price target. Our target is based on a 60/40 weighting of i) a 1.0x multiple to our operating NAVPS estimate (with net corporate adjustments included at 1.0x) and ii) a 5.0x EV/NTM EBITDA multiple to our NTM EBITDA estimate of C\$343 mln, which implies a target price of C\$3.00. Our target price derivation for Champion is shown in Exhibit 18.

Exhibit 18: Champion Valuation Methodology

Valuation		
	Weight	Target
Price / NAVPS*	60%	1.0x
EV / NTM EBITDA	40%	5.0x
P/NAVPS Valuation		C\$2.74
EV / NTM EBITDA Valuation		C\$3.22
Valuation		C\$2.93
Target Price:		C\$3.00

* Target multiple is applied to the mining assets, with net cash included at par

Source: Raymond James Ltd.

P/NAV Valuation: We believe an appropriate way to determine the long-term value of a mining company is the NAV approach, as it takes into account reserve life, cost structures, capital cost requirements, growth prospects, timing and debt structure all in one statistic. Using a discount rate of 8% on the operating assets and adding financial assets and liabilities at par, we have derived a NAV estimate for Champion of ~C\$1,303 mln as shown in Exhibit 19.

Exhibit 19: Champion Net Asset Value Estimate

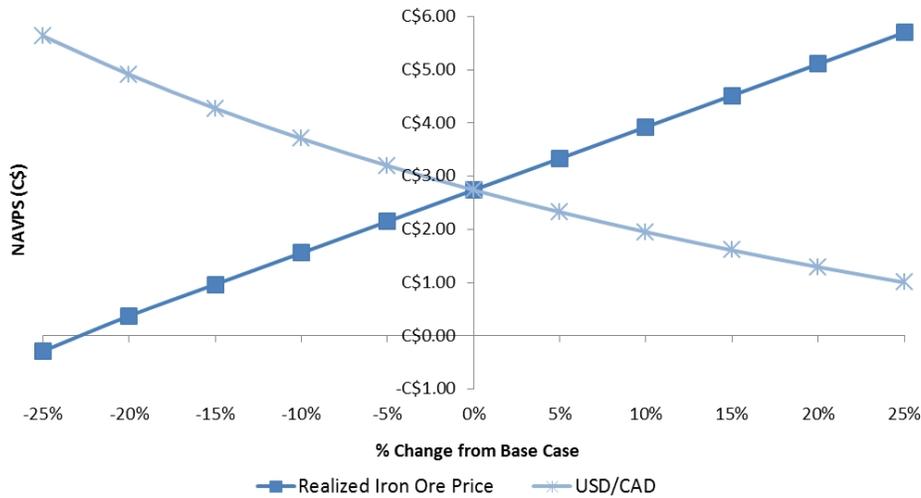
Valuation	C\$ mln	C\$/share	% of minesite NAV
Bloom Lake	1,297	2.73	100%
Mining Asset NAV	1,297	2.73	100%
Exploration Credit	50	0.11	
Working Capital	190	0.40	
Long Term Debt	(212)	(0.45)	
Other	(22)	(0.05)	
Total NAV	1,303	2.74	

Source: Raymond James Ltd.

NAV Sensitivity

We highlight operating NAV sensitivity to Champion’s realized iron ore selling price and USD/CAD in Exhibit 20.

Exhibit 20: Champion NAV Sensitivity



Source: Raymond James Ltd.

EV/EBITDA Valuation: We believe an appropriate way to determine near-term valuation is EV/EBITDA as it considers both capital structure as well as cash flow generation. Applying a EV/EBITDA multiple of 5.0x (generally in-line with its peers) to our NTM EBITDA of C\$343 mln, we derive a valuation of C\$3.22.

Exhibit 21: Peer Comparative Valuation

Company	Ticker	EV/EBITDA
Cleveland-Cliffs	NYSE:CLF	5.4x
Mount Gibson Iron Ltd.	ASX:MGX	6.9x
Fortescue Metals Group	ASX:FMG	4.7x
Average		5.7x

Source: Bloomberg, Raymond James Ltd.

RISKS

Commodity Price Risk: Prices for the commodities that the company produces or plans to produce may fluctuate and may have a large influence on the company's forecasted earnings, cash flows, asset values and share price. Sustained low prices could also have a material adverse impact on the company's financial position and ability to raise capital.

Jurisdictional, Social and Permitting Risk: The company's potential operations could face substantial jurisdictional, social and permitting risk.

Reserve/Resource Risk: Although the company may have NI43-101 compliant resources, there exists a risk that further work leads to a deterioration of the grade and/or size of ore deposits. Also, our outlook may hinge on expansion and/or construction of current and future operations. Further work may show additional resources, expansions and upgrades are not possible.

Cost Estimate, Production & Inflation Risk: Our outlook assumes certain future capital and operating costs for the company's potential operations. Our estimates may prove to be optimistic and we may have underestimated costs, in which case the economic potential of the project and our valuation may be lower than we current forecast. There also remains the risk that costs may increase in the future.

Regulatory Risk: Potential operations may be subject to extensive regulations which could delay or suspend operations.

Environmental Risk: Current operations, historical operations and/or future operations may be subject to stringent environmental regulations which could result in significant costs and/or impact operations.

FINANCIAL STATEMENTS

Exhibit 22: CIA Financial Summary

Financial Summary (C\$ millions)	2018A	2019E	2020E	2021E
Income Statement				
Revenue	\$0	\$636	\$711	\$626
Operating Expense (inc. D&A)	\$4	\$358	\$362	\$381
G&A Other	\$4	\$11	\$8	\$14
Gross Profit	(\$4)	\$278	\$349	\$246
Exploration	\$0	\$0	\$0	\$0
Other expenses	\$90	\$16	\$15	\$14
Earnings from Operations	(\$94)	\$262	\$334	\$232
Net Finance Expense	\$13	\$37	\$29	\$31
Tax Expense	\$0	\$61	\$125	\$82
Non-Controlling Interest	(\$33)	\$61	\$66	\$44
Income from Discontinued Operations	\$0	\$0	\$0	\$0
Net Income - Attributable to S/H	(\$74)	\$102	\$114	\$75
Net Income - Adjusted	(\$74)	\$102	\$114	\$75
Wtd Avg shares outstanding (mln, fd)	398	452	453	453
Earnings per Share - Adjusted	(\$0.19)	\$0.23	\$0.25	\$0.17
EBITDA	(\$90)	\$272	\$343	\$245
Cash Flow Statement				
Cash flow from operations	(\$101)	\$184	\$190	\$132
Changes in working capital	(\$21)	(\$32)	\$0	\$0
Operating cash flow (b/f working capital)	(\$80)	\$216	\$190	\$132
Cash flow per share	(\$0.20)	\$0.51	\$0.44	\$0.29
Capital Expenditures	\$98	\$50	\$279	\$175
Free cash flow	(\$177)	\$161	(\$89)	(\$43)
Free cash flow per share	(\$0.44)	\$0.36	(\$0.20)	(\$0.09)
Balance Sheet				
Cash and equivalents	\$8	\$199	\$130	\$87
Other current assets	\$107	\$126	\$126	\$126
Total current assets	\$115	\$325	\$256	\$214
PP&E	\$172	\$213	\$484	\$645
Other non-current assets	\$115	\$119	\$119	\$119
Total assets	\$402	\$657	\$859	\$978
Current portion of LT debt	\$0	\$33	\$33	\$33
Other current liabilities	\$109	\$101	\$101	\$101
Total current liabilities	\$109	\$134	\$134	\$134
Long-term debt	\$141	\$200	\$220	\$220
Other long-term liabilities	\$97	\$91	\$91	\$91
Total long-term liabilities	\$238	\$291	\$311	\$311
Shareholder equity	\$54	\$231	\$413	\$532
Total liabilities & s/h equity	\$402	\$657	\$859	\$978

Source: Champion Iron Limited, Raymond James Ltd.

MANAGEMENT BIOS

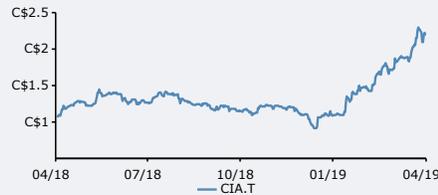
Exhibit 23: Champion Management Bios

Officer	Title	Background
Michael O'Keefe	Executive Chairman	<p>A metallurgist by training, Michael serves as executive chairman and chief executive officer of Champion Iron. His vast knowledge of the mining industry and its issues and his extensive experience managing large companies have given him an impressive track record of rock solid achievements.</p> <p>Riversdale Mining Limited (2004-2011) - As executive chairman, Michael drove the development of this Australian mining company, taking it from a junior company with a market capitalization of \$7 million to a major company acquired by Rio Tinto for the staggering sum of \$4 billion. During his tenure at Riversdale Mining, Michael raised nearly \$780 million for the company.</p> <p>Glencore Australie Limited (1995-2004) - As managing director, Michael was responsible for Glencore's Australian acquisitions. Under his tutelage, company market share in Australia and South Asia increased exponentially, and sales exploded from \$100 million to \$2.4 billion.</p> <p>Mount Isa Mines (1975-1994) - At Mount Isa, Michael rose with determination up to executive management level in commercial activities of this mining company in Queensland, Australia. His mandates included feasibility studies for copper smelting and pursuing refining opportunities in Europe, Asia, North America and South America.</p>
David Cataford	CEO	<p>David has a bachelor's degree in mining engineering from Laval University. He joined Champion Iron in October 2014. His vast knowledge of Quebec iron ore and issues related to mining activities in the Labrador Trough is a major asset to the company's management team. David 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, David played an important role in the management team, which increased drilling capacity by 80%, and he helped in the phase 1 expansion of the plant. His experience in iron ore mining includes mineral characterization projects at Bloom Lake and for ArcelorMittal at Mont Wright, as well as adapting the recovery circuit to meet new customer demands. David is currently president and cofounder of the North Shore and Labrador Mineral Processing Society.</p>
Natcha Garoute	CFO	<p>With nearly 20 years of finance experience as a CPA, Natacha has developed a strong focus on mining and corporations, with extensive international exposure. Thanks to her strong background in IFRS, public company reporting, Sarbanes-Oxley compliance and West African OHADA regulations, Natacha demonstrated active leadership managing financial reporting, tax and budget functions in her previous position as CFO with Roxgold Inc. Natacha has also held senior finance positions at SEMAFO Inc., Canadian Railway, MDD and PWC. Natacha holds a bachelor of commerce degree from the University of Quebec and a law degree from the University of Montreal.</p>
Michael Marcotte	VP, Investor Relations	<p>Michael is a Chartered Financial Analyst, a Calvin C. Potter Fellow and holds a Commerce Degree from Concordia University. Michael joined Champion from Macquarie Capital Markets Canada Ltd., where he spent nearly 15 years focused on Canadian resource equities, engaging institutional investors across North America and Europe. Michael's talents as a leading institutional sales professional have been twice recognized, in 2017 and 2018, when he won the 'TopGun' award by Brendan Wood International.</p>
Jorge Estepa	VP, Corporate Secretary - Canada	<p>Jorge was vice-president and corporate secretary of Champion Iron Mines, Champion Iron's wholly owned subsidiary, from 2006 to 2014. He has over 20 years experience in publicly traded Canadian companies, in business management, development and investor relations. In addition to his duties at Champion Iron Mines, Jorge has held senior management positions in several publicly traded resource companies since 1995. He holds a bachelor of arts degree from the University of Toronto.</p>
Pradipkumar Devalia	Company Secretary - Australia	<p>Mr Devalia joined Champion Iron Limited as Company Secretary in June 2014. Prior to joining Champion Iron Limited, Mr Devalia was a senior tax partner of PwC in Sydney and has expertise in the resources sector reporting to the Executive team and the Board of Directors of major multinational companies. Since leaving PwC, Mr Devalia has worked as a consultant to various companies, including Riversdale Mining Limited and Rio Tinto. Mr Devalia is a member of the Institute of Chartered Accountants in England & Wales and a Fellow of Chartered Accountants Australia New Zealand.</p>

Source: Champion Iron Limited, Raymond James Ltd.

COMPANY DESCRIPTION

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 Quebec.

**IMPORTANT INVESTOR DISCLOSURES**

Raymond James & Associates (RJA) is a FINRA member firm and is responsible for the preparation and distribution of research created in the United States. Raymond James & Associates is located at The Raymond James Financial Center, 880 Carillon Parkway, St. Petersburg, Florida 33716, 727.567.1000. Non-U.S. affiliates, which are not FINRA member firms, include the following entities which are responsible for the creation and distribution of research in their respective areas; In Canada, Raymond James Ltd. (RJL), Suite 2100, 925 West Georgia Street, Vancouver, BC V6C 3L2, 604.659.8200.; In Europe, Raymond James Euro Equities, SAS, 40, rue La Boetie, 75008, Paris, France, +33 1 45 61 64 90, and Raymond James Financial International Ltd., Broadwalk House, 5 Appold Street, London, England EC2A 2AG, +44 203 798 5600.

This document is not directed to, or intended for distribution to or use by, any person or entity that is a citizen or resident of or located in any locality, state, country, or other jurisdiction where such distribution, publication, availability, or use would be contrary to law or regulation. The securities discussed in this document may not be eligible for sale in some jurisdictions. This research is not an offer to sell or the solicitation of an offer to buy any security in any jurisdiction where such an offer would be illegal. It does not constitute a personal recommendation nor does it take into account the particular investment objectives, financial situations, or needs of individual clients. Information in this report should not be construed as advice designed to meet the individual objectives of any particular investor. **Investors should consider this report as only a single factor in making their investment decision.** Consultation with your investment advisor is recommended. Past performance is not a guide to future performance, future returns are not guaranteed, and a loss of original capital may occur.

The information provided is as of the date above and is subject to change, and it should not be deemed a recommendation to buy or sell any security. Certain information has been obtained from third-party sources we consider reliable, but we do not guarantee that such information is accurate or complete. Persons within the Raymond James family of companies may have information that is not available to the contributors of the information contained in this publication. Raymond James, including affiliates and employees, may execute transactions in the securities listed in this publication that may not be consistent with the ratings appearing in this publication.

With respect to materials prepared by Raymond James Ltd. ("RJL"), all expressions of opinion reflect the judgment of the Research Department of RJL, or its affiliates, at this date and are subject to change. RJL may perform investment banking or other services for, or solicit investment banking business from, any company mentioned in this document.

Raymond James ("RJ") research reports are disseminated and available to RJ's retail and institutional clients simultaneously via electronic publication to RJ's internal proprietary websites ([RJ Client Access](#) & [RJ Capital Markets](#)). Not all research reports are directly distributed to clients or third-party aggregators. Certain research reports may only be disseminated on RJ's internal proprietary websites; however, such research reports will not contain estimates or changes to earnings forecasts, target price valuation, or investment or suitability rating. Individual Research Analysts may also opt to circulate published research to one or more clients electronically. This electronic communication distribution is discretionary and is done only after the research has been publically disseminated via RJ's internal proprietary websites. The level and types of communications provided by Research Analysts to clients may vary depending on various factors including, but not limited to, the client's individual preference as to the frequency and manner of receiving communications from Research Analysts. For research reports, models, or other data available on a particular security, please contact your RJ Sales Representative or visit [RJ Client Access](#) or [RJ Capital Markets](#).

Links to third-party websites are being provided for information purposes only. Raymond James is not affiliated with and does not endorse, authorize, or sponsor any of the listed websites or their respective sponsors. Raymond James is not responsible for the content of any third-party website or the collection or use of information regarding any website's users and/or members.

In the event that this is a compendium report (i.e., covers 6 or more subject companies), Raymond James Ltd. may choose to provide specific disclosures for the subject companies by reference. To access these disclosures, clients should refer to: <http://www.raymondjames.ca> (click on Equity Capital Markets/Equity Research/Research Disclosures) or call toll free at 1.800.667.2899.

Analyst Information

Analyst Compensation: Equity Research analysts and associates at Raymond James are compensated on a salary and bonus system. Several factors enter into the compensation determination for an analyst, including i) research quality and overall productivity, including success in rating stocks on an absolute basis and relative to the local exchange composite index and/or sector index, ii) recognition from institutional investors, iii) support effectiveness to the institutional and retail sales forces and traders, iv) commissions generated in stocks under coverage that are attributable to the analyst's efforts, v) net revenues of the overall Equity Capital Markets Group, and vi) compensation levels for analysts at competing investment dealers.

The analyst Brian MacArthur, primarily responsible for the preparation of this research report, attests to the following: (1) that the views and opinions rendered in this research report reflect his or her personal views about the subject companies or issuers and (2) that no part of the research analyst's compensation was, is, or will be directly or indirectly related to the specific recommendations or views in this research report. In addition, said analyst(s) has not received compensation from any subject company in the last 12 months.

Ratings and Definitions

Raymond James Ltd. (Canada) Definitions: Strong Buy (SB1) The stock is expected to appreciate and produce a total return of at least 15% and outperform the S&P/TSX Composite Index over the next six months. **Outperform (MO2)** The stock is expected to appreciate and outperform the S&P/TSX Composite Index over the next 12 months. **Market Perform (MP3)** The stock is expected to perform generally in line with the S&P/TSX composite Index over the next 12 months and is potentially a source of funds for more highly rated securities. **Underperform (MU4)** The stock is expected to underperform the S&P/TSX Composite Index or its sector over the next six to 12 months and should be sold.

Raymond James & Associates (U.S.) Definitions: Strong Buy (SB1) Expected to appreciate, produce a total return of at least 15%, and outperform the S&P500 over the next six to 12 months. For higher yielding and more conservative equities, such as REITs and certain MLPs, a total return of at least 15% is expected to be realized over the next 12 months. **Outperform (MO2)** Expected to appreciate or outperform the S&P 500 over the next 12-18 months. For higher yielding and more conservative equities, such as REITs and certain MLPs, an Outperform rating is used for securities where we are comfortable with the relative safety of the dividend and expect a total return modestly exceeding the dividend yield over the next 12-18 months. **Market Perform (MP3)** Expected to perform generally in line with the S&P 500 over the next 12 months. **Underperform (MU4)** Expected to underperform the S&P 500 or its sector over the next six to 12 months and should be sold. **Suspended (S)** The rating and price target have been suspended temporarily. This action may be due to market events that made coverage impracticable, or to comply with applicable regulations or firm policies in certain circumstances, including when Raymond James may be providing investment banking services to the company. The previous rating and price target are no longer in effect for this security and should not be relied upon.

	Coverage Universe Rating Distribution*		Investment Banking Relationships	
	RJA	RJL	RJA	RJL
Strong Buy and Outperform (Buy)	56%	67%	21%	27%
Market Perform (Hold)	40%	30%	9%	9%
Underperform (Sell)	4%	3%	5%	0%

* Columns may not add to 100% due to rounding.

Suitability Ratings (SR): Medium Risk/Income (M/INC) Lower to average risk equities of companies with sound financials, consistent earnings, and dividend yields above that of the S&P 500. Many securities in this category are structured with a focus on providing a consistent dividend or return of capital. Medium Risk/Growth (M/GRW) Lower to average risk equities of companies with sound financials, consistent earnings growth, the potential for long-term price appreciation, a potential dividend yield, and/or share repurchase program. High Risk/Income (H/INC) Medium to higher risk equities of companies that are structured with a focus on providing a meaningful dividend but may face less predictable earnings (or losses), more leveraged balance sheets, rapidly changing market dynamics, financial and competitive issues, higher price volatility (beta), and potential risk of principal. Securities of companies in this category may have a less predictable income stream from dividends or distributions of capital. High Risk/Growth (H/GRW) Medium to higher risk equities of companies in fast growing and competitive industries, with less predictable earnings (or losses), more leveraged balance sheets, rapidly changing market dynamics, financial or legal issues, higher price volatility (beta), and potential risk of principal. High Risk/Speculation (H/SPEC) High risk equities of companies with a short or unprofitable operating history, limited or less predictable revenues, very high risk associated with success, significant financial or legal issues, or a substantial risk/loss of principal. Note that Raymond James Ltd. (RJL) has developed a proprietary algorithm for risk rating individual securities. The algorithm utilizes data from multiple vendors, and all data is refreshed at least monthly. Accordingly, Suitability Ratings are updated monthly. The Suitability Rating shown on this report is current as of the report's published date. In the event that a Suitability Rating changes after the published date, the new rating will not be reflected in research materials until the analyst publishes a subsequent report.

Raymond James Relationship Disclosures

Certain affiliates of the RJ Group expect to receive or intend to seek compensation for investment banking services from all companies under research coverage within the next three months.

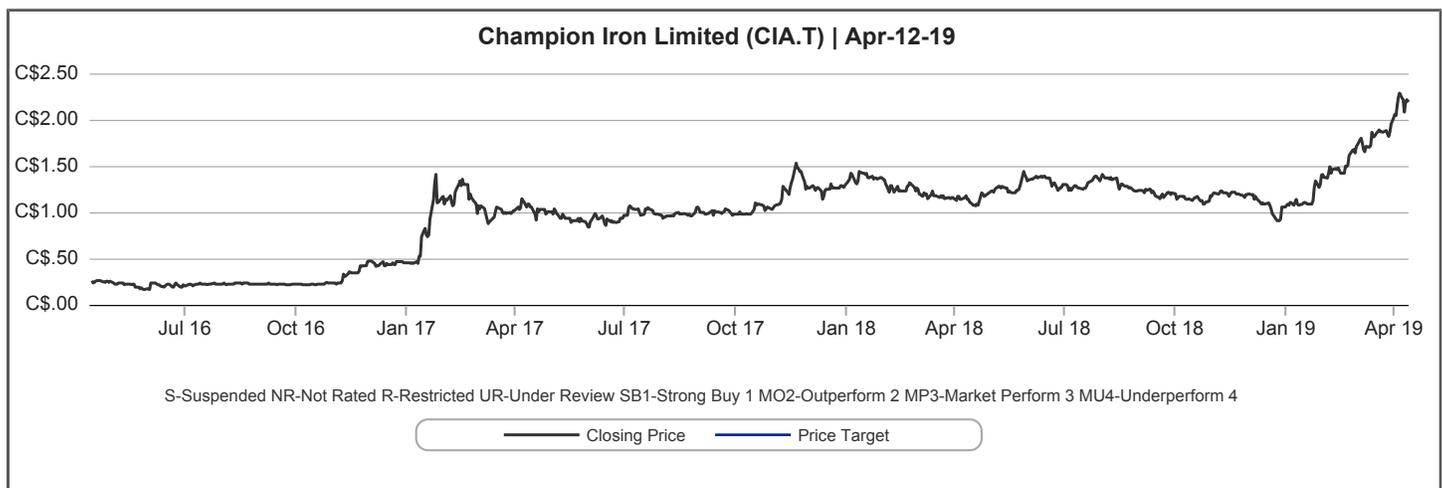
The person(s) responsible for the production of this communication declare(s) that, as far as they are aware, there are no relationships or circumstances (including conflicts of interest) that may in any way impair the objectivity of this recommendation directly or indirectly relates, this has been declared below. This statement applies equally to any persons closely associated with him or her. However, it is possible that persons making communications in relation to a financial instrument may have a holding in that instrument and this will be disclosed. As stated, Raymond James Canada (RJL) has controls in place to manage such risks.

Company Name	Disclosure
Champion Iron Limited	The analyst or associate at Raymond James Ltd. has viewed the material operations of Champion Iron Limited.
Champion Iron Limited	Within the past 12 months, Champion Iron Limited has paid for all or a material portion of the travel costs associated with a site visit by the Raymond James Ltd. analyst and/or associate.

Stock Charts, Target Prices, and Valuation Methodologies

Valuation Methodology: The Raymond James methodology for assigning ratings and target prices includes a number of qualitative and quantitative factors including an assessment of industry size, structure, business trends and overall attractiveness; management effectiveness; competition; visibility; financial condition, and expected total return, among other factors. These factors are subject to change depending on overall economic conditions or industry- or company-specific occurrences.

Target Prices: The information below indicates our target price and rating changes for the subject companies over past three years.



Risk Factors

General Risk Factors: Following are some general risk factors that pertain to the businesses of the subject companies and the projected target prices and recommendations included on Raymond James research: (1) Industry fundamentals with respect to customer demand or product/service pricing could change and adversely impact expected revenues and earnings; (2) issues relating to major competitors or market shares or new product expectations could change investor attitude toward the sector or this stock; (3) Unforeseen developments with respect to the management, financial condition or accounting policies or practices could alter the prospective valuation.

International Disclosures

FOR CLIENTS IN THE UNITED STATES:

Any foreign securities discussed in this report are generally not eligible for sale in the U.S. unless they are listed on a U.S. exchange. This report is being provided to you for informational purposes only and does not represent a solicitation for the purchase or sale of a security in any state where such a solicitation would be illegal. Investing in securities of issuers organized outside of the U.S., including ADRs, may entail certain risks. The securities of non-U.S. issuers may not be registered with, nor be subject to the reporting requirements of, the U.S. Securities and Exchange

Commission. There may be limited information available on such securities. Investors who have received this report may be prohibited in certain states or other jurisdictions from purchasing the securities mentioned in this report. Please ask your Financial Advisor for additional details and to determine if a particular security is eligible for purchase in your state.

Raymond James Ltd. is not a U.S. broker-dealer and, therefore, is not governed by U.S. laws, rules or regulations applicable to U.S. broker-dealers. Consequently, the persons responsible for the content of this publication are not licensed in the U.S. as research analysts in accordance with applicable rules promulgated by the U.S. Self Regulatory Organizations.

Any U.S. Institutional Investor wishing to effect trades in any security should contact Raymond James (USA) Ltd., a U.S. broker-dealer affiliate of Raymond James Ltd.

FOR CLIENTS IN THE UNITED KINGDOM:

For clients of Raymond James Financial International Limited (RJFI): This document and any investment to which this document relates is intended for the sole use of the persons to whom it is addressed, being persons who are Eligible Counterparties or Professional Clients as described in the FCA rules or persons described in Articles 19(5) (Investment professionals) or 49(2) (High net worth companies, unincorporated associations, etc.) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (as amended) or any other person to whom this promotion may lawfully be directed. It is not intended to be distributed or passed on, directly or indirectly, to any other class of persons and may not be relied upon by such persons and is therefore not intended for private individuals or those who would be classified as Retail Clients.

For clients of Raymond James Investment Services, Ltd.: This report is for the use of professional investment advisers and managers and is not intended for use by clients.

For purposes of the Financial Conduct Authority requirements, this research report is classified as independent with respect to conflict of interest management. RJFI, and Raymond James Investment Services, Ltd. are authorised and regulated by the Financial Conduct Authority in the United Kingdom.

FOR CLIENTS IN FRANCE:

This document and any investment to which this document relates is intended for the sole use of the persons to whom it is addressed, being persons who are Eligible Counterparties or Professional Clients as described in "Code Monetaire et Financier" and Reglement General de l'Autorite des Marches Financiers. It is not intended to be distributed or passed on, directly or indirectly, to any other class of persons and may not be relied upon by such persons and is therefore not intended for private individuals or those who would be classified as Retail Clients.

For Clients of Raymond James Euro Equities: Raymond James Euro Equities is authorised and regulated by the Autorite de Controle Prudentiel et de Resolution and the Autorite des Marches Financiers.

For institutional clients in the European Economic Area (EEA) outside of the United Kingdom: This document (and any attachments or exhibits hereto) is intended only for EEA institutional clients or others to whom it may be lawfully submitted.

Proprietary Rights Notice: By accepting a copy of this report, you acknowledge and agree as follows:

This report is provided to clients of Raymond James only for your personal, noncommercial use. Except as expressly authorized by Raymond James, you may not copy, reproduce, transmit, sell, display, distribute, publish, broadcast, circulate, modify, disseminate, or commercially exploit the information contained in this report, in printed, electronic, or any other form, in any manner, without the prior express written consent of Raymond James. You also agree not to use the information provided in this report for any unlawful purpose.

This report and its contents are the property of Raymond James and are protected by applicable copyright, trade secret or other intellectual property laws (of the United States and other countries). United States law, 17 U.S.C. SEC. 501 et seq, provides for civil and criminal penalties for copyright infringement. No copyright claimed in incorporated U.S. government works.

Additional information is available upon request. This document may not be reprinted without permission.

RJL is a member of the Canadian Investor Protection Fund. Copyright 2019 Raymond James Ltd.