

Building the Next Major Iron Ore Mine in the Labrador Trough

Corporate Presentation
May 2013



FORWARD-LOOKING STATEMENTS



Certain information contained herein regarding Champion Iron Mines Ltd., including management's assessment of future plans & operations, may constitute forward-looking statements under applicable securities law & necessarily involve risks, including but not limited to risks associated with mining exploration, operating costs, production costs, volatility of share prices, currency fluctuations, imprecision of resource & reserve estimates, environmental risks & ability to access sufficient capital from internal & external sources.

As a consequence, actual results may differ materially from those anticipated in any forward looking statements. Plans, intentions or expectations disclosed in any forward-looking statements or information should not be read as guarantees of future results or events, & will not necessarily be accurate indications of whether or when or by which such results or events will be achieved.

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

The historical mineral resources mentioned are strictly historical in nature & are non-compliant to National Instrument 43-101 mineral resources & mineral reserves standards, & 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.

About Champion Iron Mines

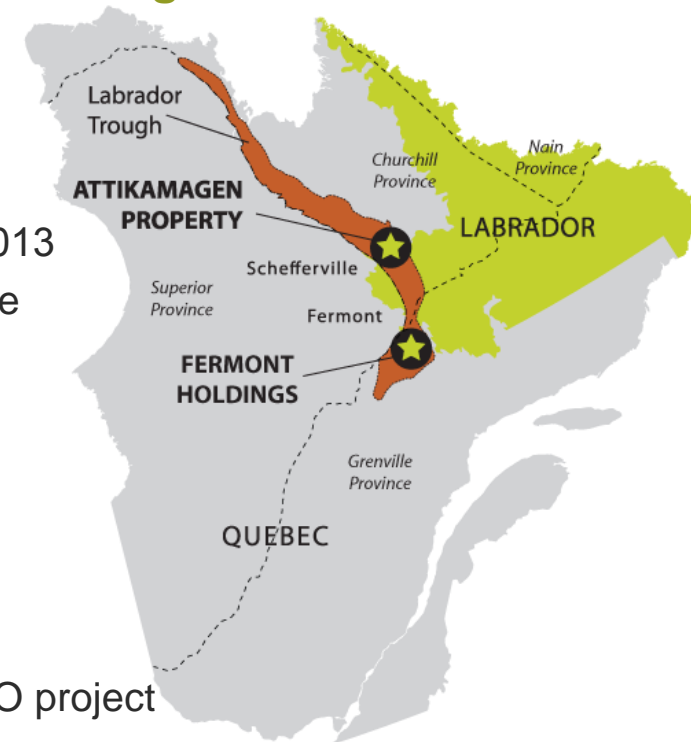
Advanced iron ore exploration & development projects located in Canada's principal iron ore district, the Labrador Trough

Fermont Holdings (751 km²)

- 14¹ projects in the Fermont Iron Ore District
- Flagship Consolidated Fire Lake North ("CFLN") Project Preliminary Feasibility Study ("PFS") announced Feb. 7, 2013
- **5.1 billion** tonnes of NI 43-101 compliant Mineral Resource Estimates of iron ore (**910 MT of Measured + Indicated & 4,185 MT of Inferred Mineral Resources**)
- **100% direct interest**, option to buy back 0.5% of the NSR for C\$1.5 million, resulting in a 2.5% NSR overall)

Attikamagen Project (310 km²)

- 1.7 billion tonnes @ 31.3% FeT & a plan for a 2 Mtpy² DSO project
- Champion Iron Mines holds a 44% interest
- Century Iron Mines Corp. subsidiary has a 56% interest & can earn up to a 60% interest by spending further \$3M on exploration expenditures by May 2014³



1. Champion signed a definitive option agreement with Cartier Iron to earn a 65% interest in 7 of its projects (Cluster 3)
2. As reported by Champion Iron's JV Partner on Mar. 25, 2013 press release
3. Investment by WISCO of 25% (\$60M) & Minmetals of 5% (\$12M)

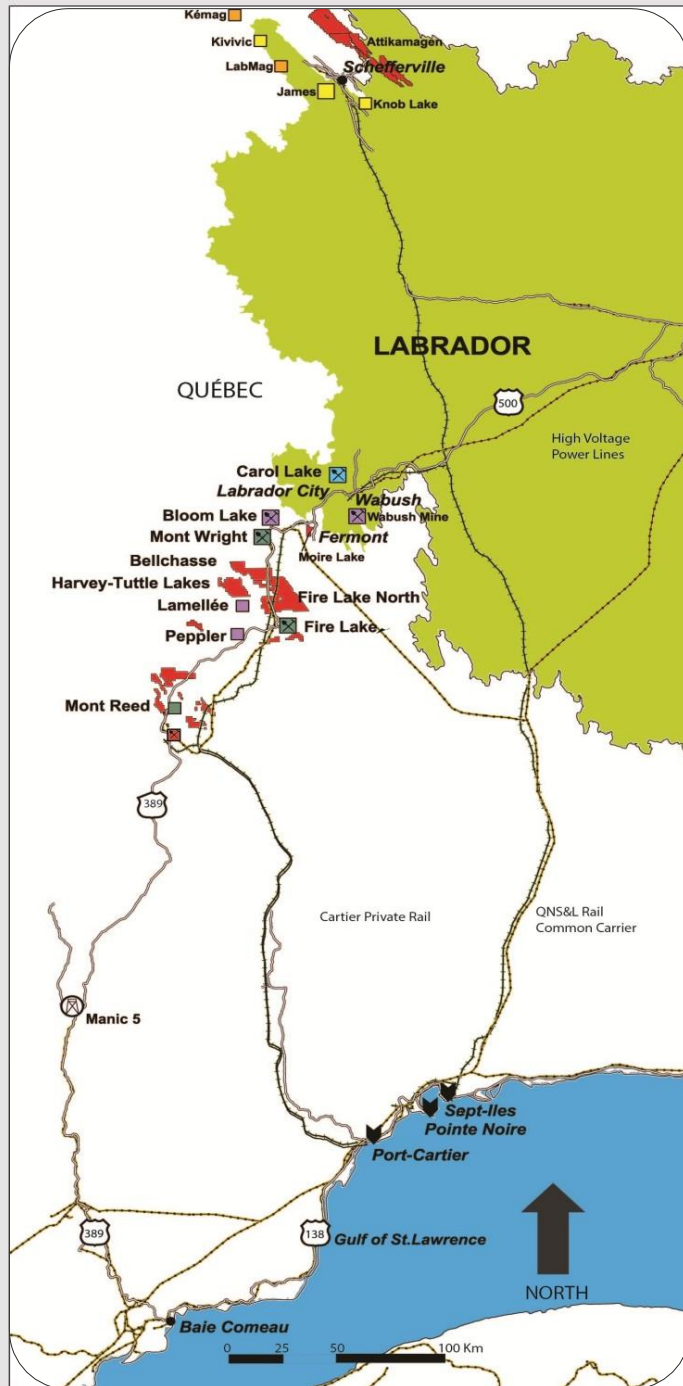
Québec's Next Major Iron Ore Mine

CFLN Preliminary Feasibility Study

- Feb. 7, 2013 PFS indicated an average production rate of 9.3 Mtpy of iron concentrate for the 20 year mine life
 - First 5 year average: 9.8 mtpy
- Net Present Value of \$3.3B at a discounted cash flow rate of 8% with an Internal Rate of Return of 30.9% & a payback period of 3.4 years

Established Fermont Iron Ore District

- Canada produces 44 Mtpy of iron ore concentrate & this is expected to increase to a total of 200 Mtpy over the next 10 years if all proposed development projects are realized
- Established rail, power & port infrastructure
 - Objective of Québec's Plan Nord is to attract \$80B in investments over the next 25 years for various projects including infrastructure
 - Competitive power rates are available
 - Port of Sept-Îles is building a world-class 50 Mtpy multi-user wharf project for the iron ore industry.
 - Jan. 2013: Project is on schedule & on budget



Capital Structure

Share Data & Cash Position as of March 31, 2013.

Total Shares – Outstanding	119.9 M	
Warrants	Issued	Outstanding
	3,333,333 at \$1.20, \$1.50 in Yr 3 (expire Oct. 7, 2013)	2,222,222
	7,000,000 at \$3.00 (expire May 17, 2015) - Fancamp	<u>7,000,000</u>
		9,222,222
Options	9.8 M @ C\$1.03 (avg. exercise price)	
Outstanding Share Market Capitalization (based on \$0.45 share price)	C\$54M	
Cash & Receivables	C\$10M	
Management /Insiders Ownership	~ 17%	
Total Shares – Fully Diluted	139,118,687	

Analyst Coverage

Experienced Management Team



Over 200 years of combined exploration & mine operations experience

Board of Directors

Tom Larsen*

CHAIRMAN

Donald A. Sheldon, LLB., P.Eng.*

DIRECTOR

Alexander Horvath, P.Eng.*

DIRECTOR

William Harding

DIRECTOR

Francis Sauvé

DIRECTOR

Jean Lafleur, P.Geo.

DIRECTOR

*MEMBERS OF THE EXECUTIVE COMMITTEE

Management Team

Tom Larsen

PRESIDENT & CEO

Miles Nagamatsu

CHIEF FINANCIAL OFFICER

Beat Frei

DIRECTOR OF PROJECT FINANCE

Alexander Horvath, P.Eng.

EXECUTIVE VICE PRESIDENT, EXPLORATION & PROJECT DEVELOPMENT

Martin Bourgoin, P.Geo.

EXECUTIVE VICE PRESIDENT, OPERATIONS

Jean-Luc Chouinard, P.Eng., M.Sc.

VICE PRESIDENT, PROJECT DEVELOPMENT

Jeff Hussey, P.Geo.

VICE PRESIDENT, CORPORATE COMMUNICATIONS

Bruce Mitton, P.Geo.

VICE PRESIDENT, EXPLORATION

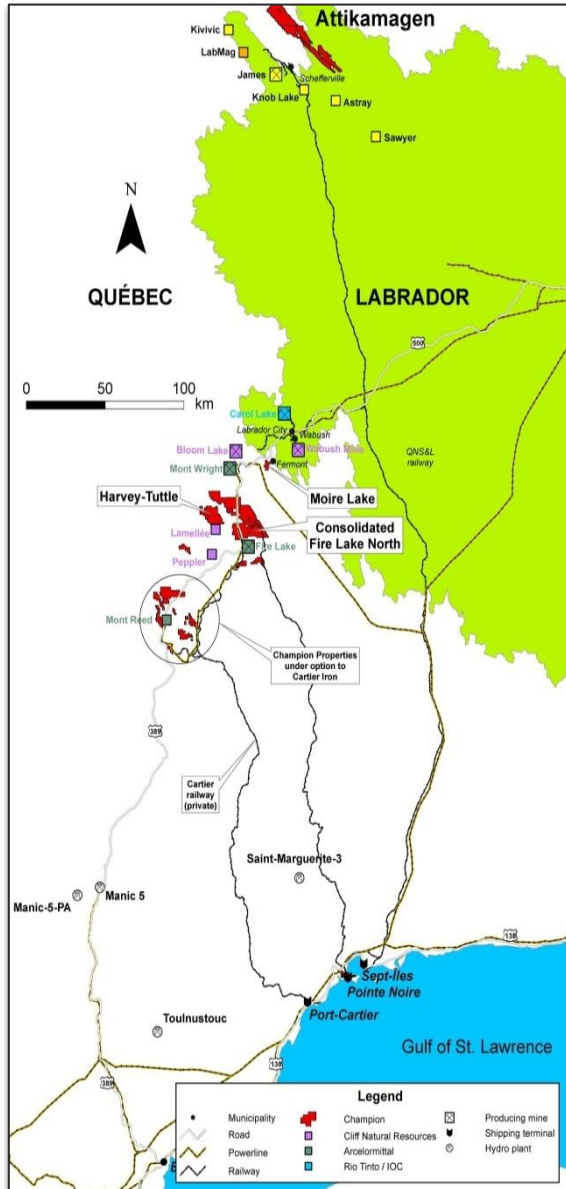
Jorge Estepa

VICE PRESIDENT, SECRETARY & TREASURER

Katrina "Kay" Chua

DIRECTOR OF INVESTOR RELATIONS

Why invest in Champion Iron Mines?



Favourable Operating Environment

- Established iron ore mining district: The southern Labrador Trough
- Favourable tax environment (40% tax rebate on exploration expenditures)
- Access to low-cost power & close to rail & port infrastructure
- Québec's Plan Nord → \$80B over 25 years
- Québec is a very stable jurisdiction to develop & operate mines
- Iron ore prices are expected to remain in a positive price range over the long term
- Skilled labor work force
- Environmental: Iron ore beneficiation includes crushing & grinding to liberate the iron; followed by gravity & magnetic separation of iron ore from gangue minerals rather than reagents

Champion Iron Mines Competitive Advantage

- Fermont Holdings: 14 iron ore Brownfield projects (751 km²)
- **CFLN Preliminary Feasibility Study** of coarse grained specular hematite surficial deposits
 - **Easier to liberate**
 - **Deleterious elements in concentrate are well below industry specifications limits**
- Experienced team of project developers & mine builders
- Upside potential for short, mid, & long term growth is high with 5.1 billion tonnes
- Several de-risking initiatives underway including a rail solution, 2012 port agreement, Environmental & Social Impact Study & permit applications (See Press Release Jan. 9, 2013)
- Closest to the St. Lawrence Seaway & electrical power infrastructure

Global Mineral Resource (NI 43-101 Resource Compliant)



Fermont Holdings Mineral Resources @ 15% FeT cut-off

Deposit	Measured tonnes (millions)	Grade FeT%	Indicated tonnes (millions)	Grade FeT%	Inferred tonnes (millions)	Grade FeT%
FLN - West	24	35.4	405	32.6	329	30.9
FLN - East	3	34.2	262	29.6	192	28.7
FLN - Don Lake	0	21.4	52	26.5	188	25.3
Bellechasse					215	28.7
Oil Can - Oxide	-	-	-	-	972	33.2
Oil Can - Mixed					924	24.1
Harvey-Tuttle					947	23.2
Moire Lake			164	30.5	417	29.4
Total	27	35.0	883	30.9	4,185	27.6
Total Resource Tonnes (millions)	5,095					

Consolidated Fire Lake North Property Mineral Resources @ 15% FeT cut-off

Deposit	Measured tonnes (millions)	Grade FeT%	Indicated tonnes (millions)	Grade FeT%	Inferred tonnes (millions)	Grade FeT%
FLN - West*	24	35.4	405	32.6	329	30.9
FLN - East*	3	34.2	262	29.6	192	28.7
FLN - Don Lake	0	21.4	52	26.5	188	25.3
Bellechasse					215	28.7
Oil Can - Oxide	-	-	-	-	972	33.2
Oil Can - Mixed					924	24.1
Total	27	35.0	719	31.0	2,821	28.8
Total Resource Tonnes (millions)	3,567					
*Total Resource under Preliminary Feasibility Study	1,215					

2.6 billion tonnes, out of Champion's 5.1 billion tonnes of global resource, are within the confines of the Consolidated Fire Lake North project; which alone has the resource base to produce up to 30-40 Mtpy of iron concentrate; & capable of supporting an independent rail solution, if necessary.

World Class Port of Sept-Îles Infrastructure



Expanding to Meet Demand

Pointe Noire Multi User Wharf

- **Announced long term agreement between CHM & Port of Sept-Îles (20-40 years) on Jul. 18, 2012**
- 10 Mt ship loading capacity reserved with the possibility to increase tonnage
- Completion Mar. 31, 2014; 18 months prior to "CFLN" startup
- Phase 1: 50 Mtpy for \$220M & 25% project cost
- Federal Government announced \$55M funding or 25% of project
- Phase 2: Planning for 100 Mtpy

Port of Sept-Îles

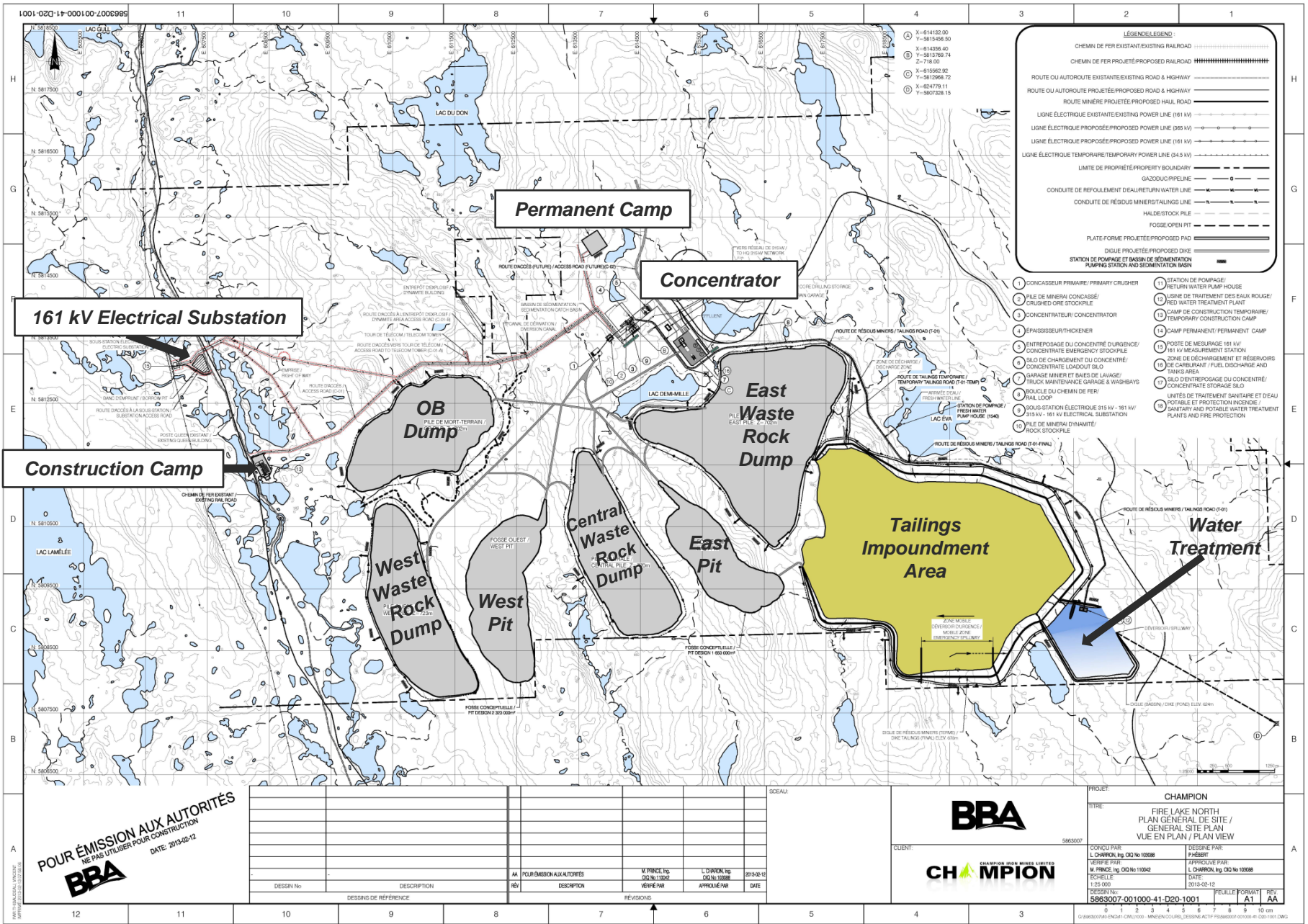
- RTZ-IOC shipping facility

Port-Cartier

- ArcelorMittal shipping facility
- \$2.1B expansion is underway & will include concentrator expansion with port & rail infrastructure upgrades
- Located 62 km west of Sept-Îles



Site Layout of Consolidated Fire Lake North Project



POUR ÉMISSION AUX AUTORITÉS
NE PAS UTILISER POUR CONSTRUCTION
BBA
 DATE: 2015-02-12

DESIGN No.	DESCRIPTION	REV.	DESCRIPTION	REV.	DATE

NO.	DESCRIPTION	REV.	DATE

BBA
CHAMPION

CLIENT: CHAMPION

PROJET: CHAMPION

TITRE: FIRE LAKE NORTH
 PLAN GÉNÉRAL DE SITE /
 GENERAL SITE PLAN
 VUE EN PLAN / PLAN VIEW

CONÇU PAR: L. CHARON, Ing. OIQ No 10088
 DÉSSINÉ PAR: P. HÉBET
 VÉRIFIÉ PAR: M. PRINCE, Ing. OIQ No 10042
 ÉCHELLE: 1:25,000
 DATE: 2015-02-12
 PROJET: 5863007

NO.	DESCRIPTION	REV.	DATE

CFLN East & West Deposit Development

February 2013 Preliminary Feasibility Study– Highlights



Key Results	Feb. 2013 PFS Pre-Tax Basis
Internal Rate of Return (IRR) (8% Discount Rate) ¹	30.9%
Undiscounted Cash Flow	\$9.0B
Net Present Value @ 5% Discounted Cash Flow	\$4.7B
Net Present Value @ 8% Discounted Cash Flow	\$3.3B
Net Present Value @ 10% Discounted Cash Flow	\$2.6B
Payback Period (8% Discount Rate)	3.4 Years

Pre-production Capital Expenditures: Direct Operating Costs ²	US\$1,394.4M (Fire Lake North & Pointe Noire) US\$34.58 per tonne (average 20 years); US\$27.99 per tonne (average years 1 to 5)
Price Assumptions	US\$115 per tonne of concentrate at 66% Fe (years 1 -5) US\$110 per tonne of concentrate at 66% Fe (years 6-20)
Mine-Life	19.6 years
Exchange Rate	\$1.00 USD to \$1.00 CDN
Overall Stripping Ratio	2:74:1 for the current 20 year mine-life 1:56:1 (years 1-3 of production); 2:02:1 (years 1-5 of operation)
Mineral Resource Estimate (MRE) East & West Pits	Measured & Indicated Resources 693.5 Mt grading 31.5% FeT (NI43-101) Inferred Resources 521.6 Mt grading 30.1% FeT @ 15% FeT cut-off (NI43-101)
Proven & Probable Reserves	464.6 million tonnes grading 32.4% Fe at a 15% cut-off grade; % Weight Recovery = 39.9%

1. This includes railway capital repayment and interest

2. Direct operating costs excludes railway capital repayment & interest

Consolidated Fire Lake North Project

Preliminary Feasibility Study



OPERATING EXPENDITURES (US\$/TONNE OF CONCENTRATE)

COST PARAMETERS	AVERAGE 20 YEARS	AVERAGE YEARS 1 to 5
Mining	18.89	12.76
Concentrating, crushing & processing	4.38	3.89
Site infrastructure, sales & general administration	4.05	3.66
Environmental tailings & management	0.13	0.12
Rail transport including lease for rolling stock	4.80	5.42
Port facilities	2.34	2.14
Total Direct Operating Cost	34.58	27.99
Railway capital repayment (\$1,133.6M)	6.22	7.40
Railway interest payment (\$592.6M)	3.25	7.29
Total Operating Cost	44.05	42.68

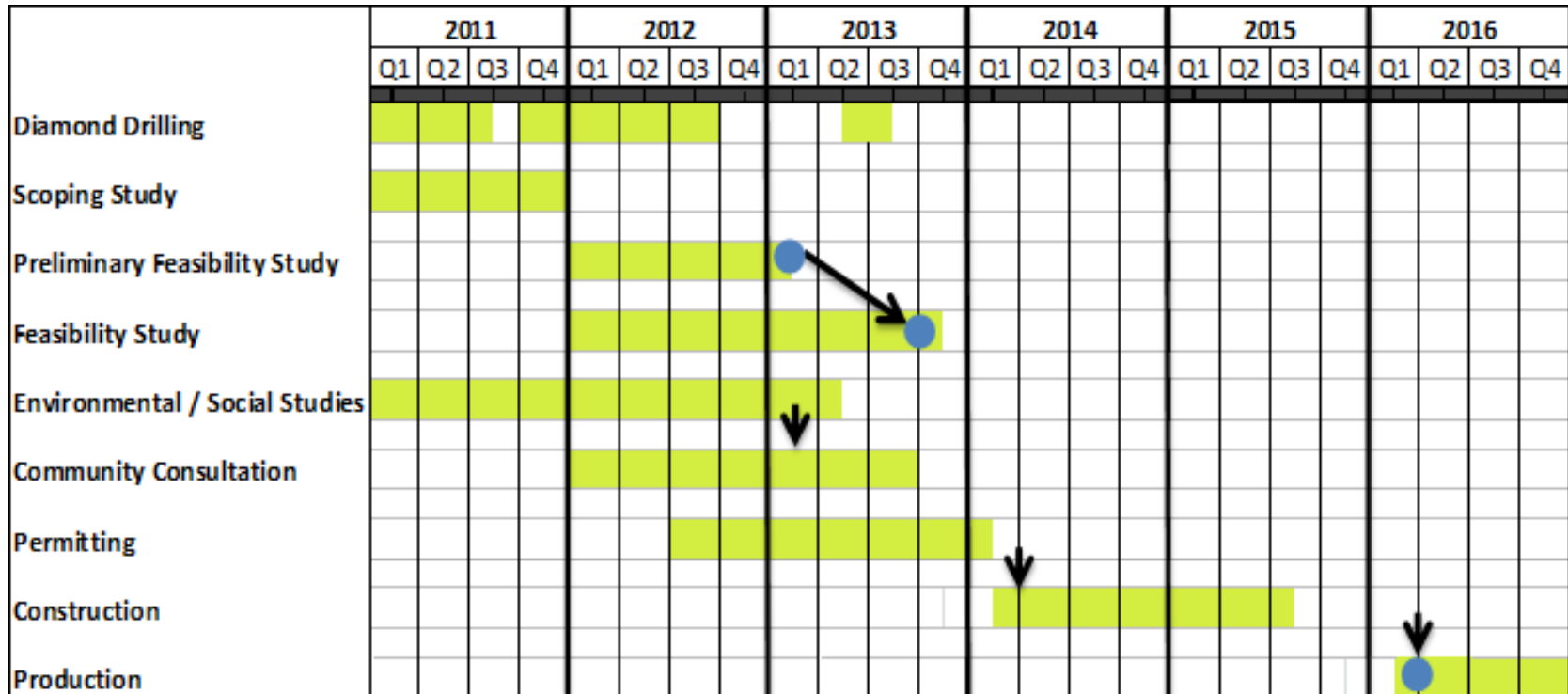
PRE-PRODUCTION CAPITAL EXPENDITURES (US\$ MILLIONS)

Fire Lake North & Pointe Noire			Railway	
COST AREA		Total Capital in \$ MILLIONS	COST AREA	Total Capital in \$ MILLIONS
Direct Costs	Mining	133.7	Railway	200.0
	Concentrator & FLN Site Infrastructure	687.7		
	Pointe Noire	158.2		
Indirect Costs	Owner's Cost	53.2	Rolling Stock Leasing	13.4
	Engineering, Procurement, Construction & Mgmt. (EPCM)	106.5		
	Project Indirect Costs	140.5		
	Contingency	114.6		
Sub-total		1,394.4	Sub-total	213.4
Grand Total (100% of the project)			1,607.9	

Consolidated Fire Lake North Project Schedule



Development, Construction, & Production



Consolidated Fire Lake North Project

Growth through Development

- Preliminary Feasibility Study results/released Feb. 7, 2013
- Feasibility Study with 20 Mtpa production rate scope underway
- West (3500m) & East (2400m) Pits are both synformal fold closures that are open along strike length & depth
- New Mineral Resource Estimate (MRE) announced Jan. 9, 2013 (COG 15% FeT):

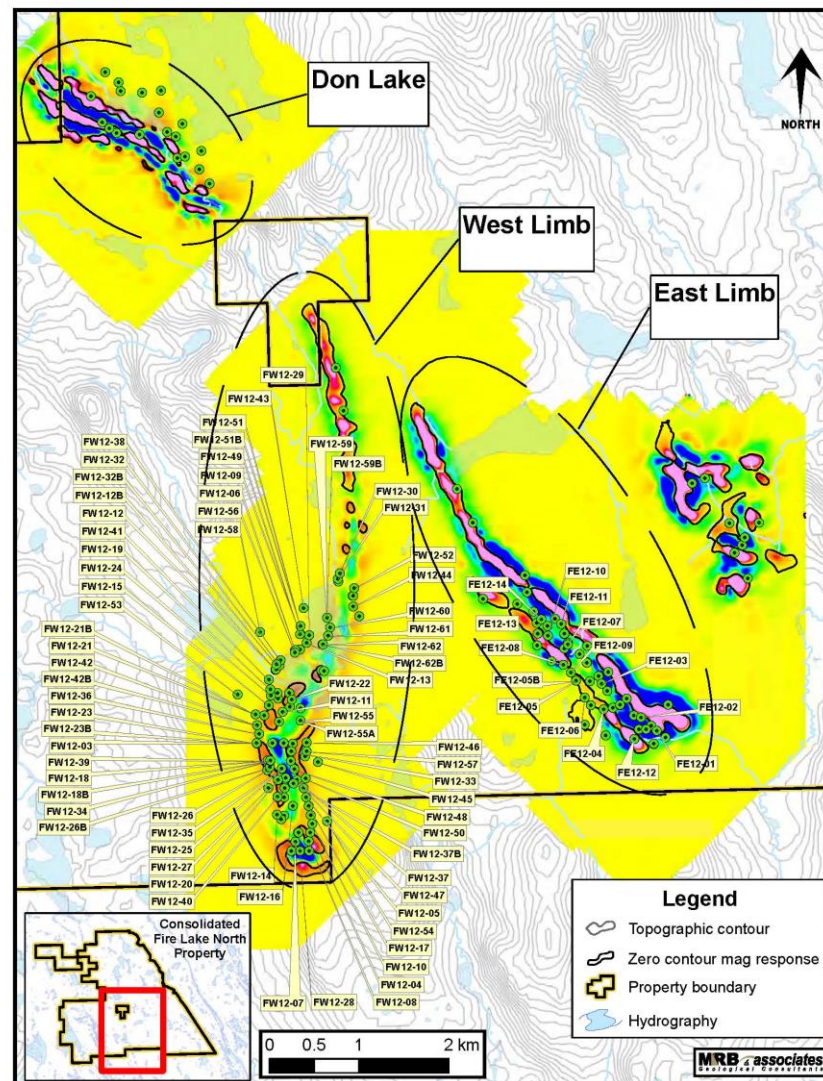
Measured & Indicated Resources

693.5 M tonnes grading 31.5% total iron (FeT)

Inferred Resources

521.6 M tonnes grading 30.1% total iron (FeT)

- Several de-risking initiatives are underway associated to the project development of Consolidated Fire Lake North (CFLN)



Consolidated Fire Lake North Metallurgy

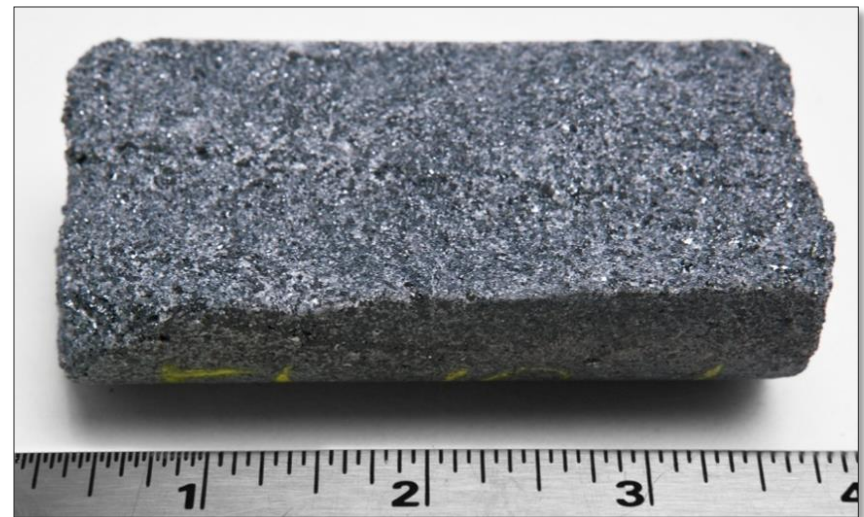
Press Release, August 1, 2012



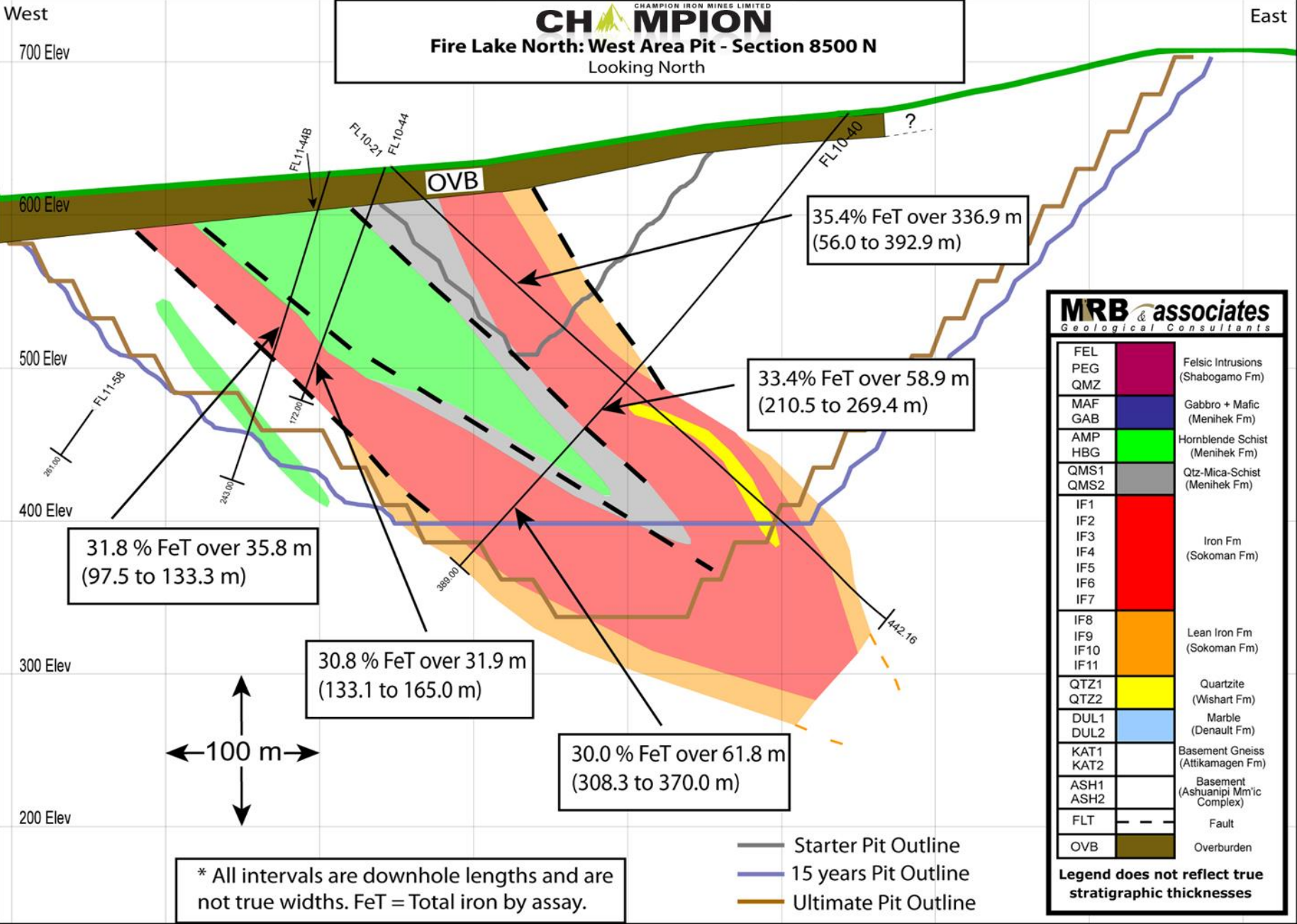
- High quality sinter concentrate with very low deleterious elemental content
- Liberates at 850 micron (-20 mesh) & produces a 65-66% iron concentrate
- Assuming a concentrate with 66% Fe ; No magnetic separation circuit required
 - Alumina is 0.52% versus industry standard of 2%
 - Silica content is < 5%
 - Al_2O_3 : SiO_2 ratio of 0.14 versus the upper industry specification limit of 1
- This very low alumina to silica ratio is an ideal blending product for steel mills



High Grade, Coarse Specular Hematite

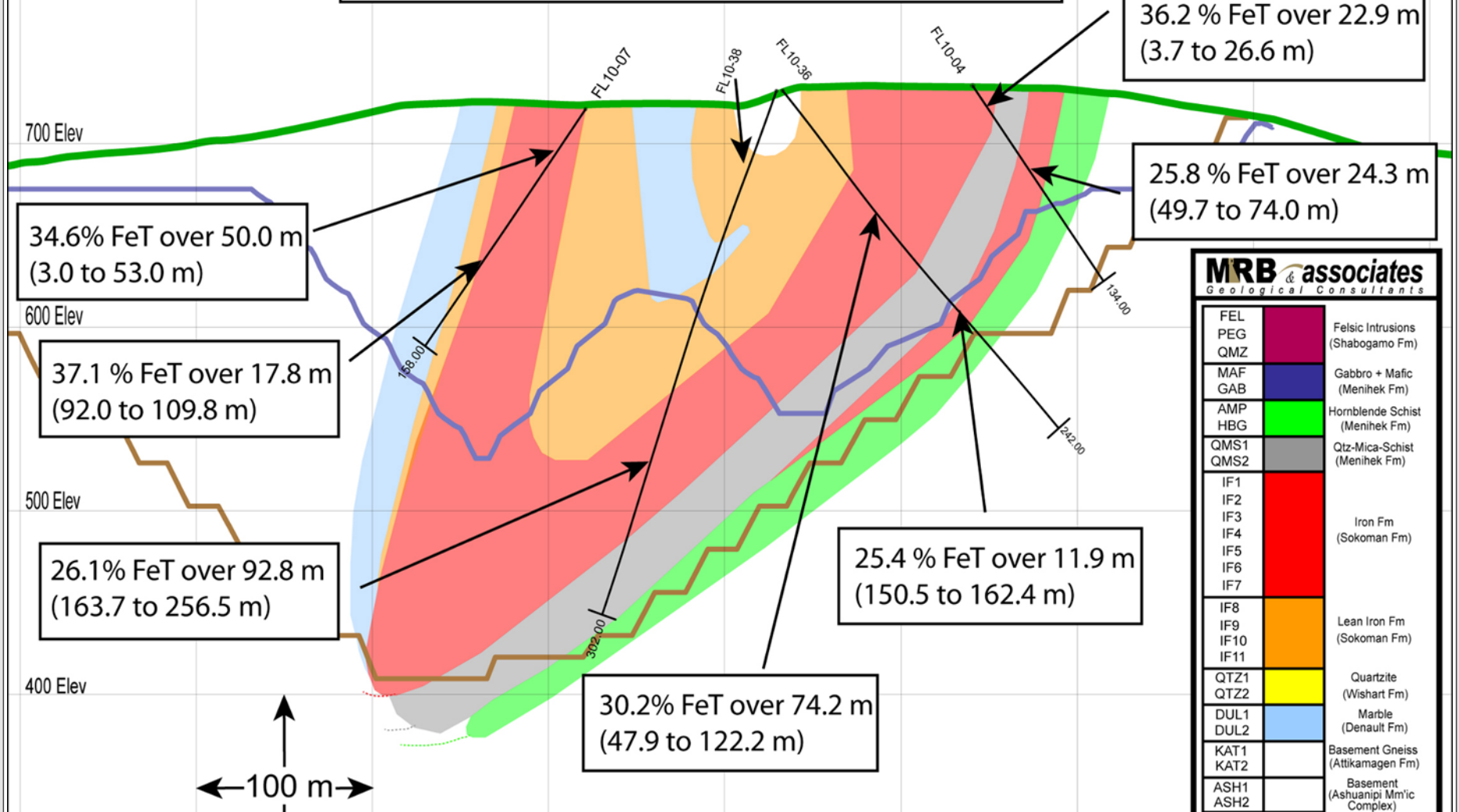


Quartz Specular Hematite



SW
800 Elev
700 Elev
600 Elev
500 Elev
400 Elev
300 Elev

CHAMPION
CHAMPION IRON MINES LIMITED
Fire Lake North: East Area Pit - Section 2600 NW
Looking Northwest



* All intervals are downhole lengths and are not true widths. FeT = Total iron by assay.

— 15 years Pit Outline
— Ultimate Pit Outline

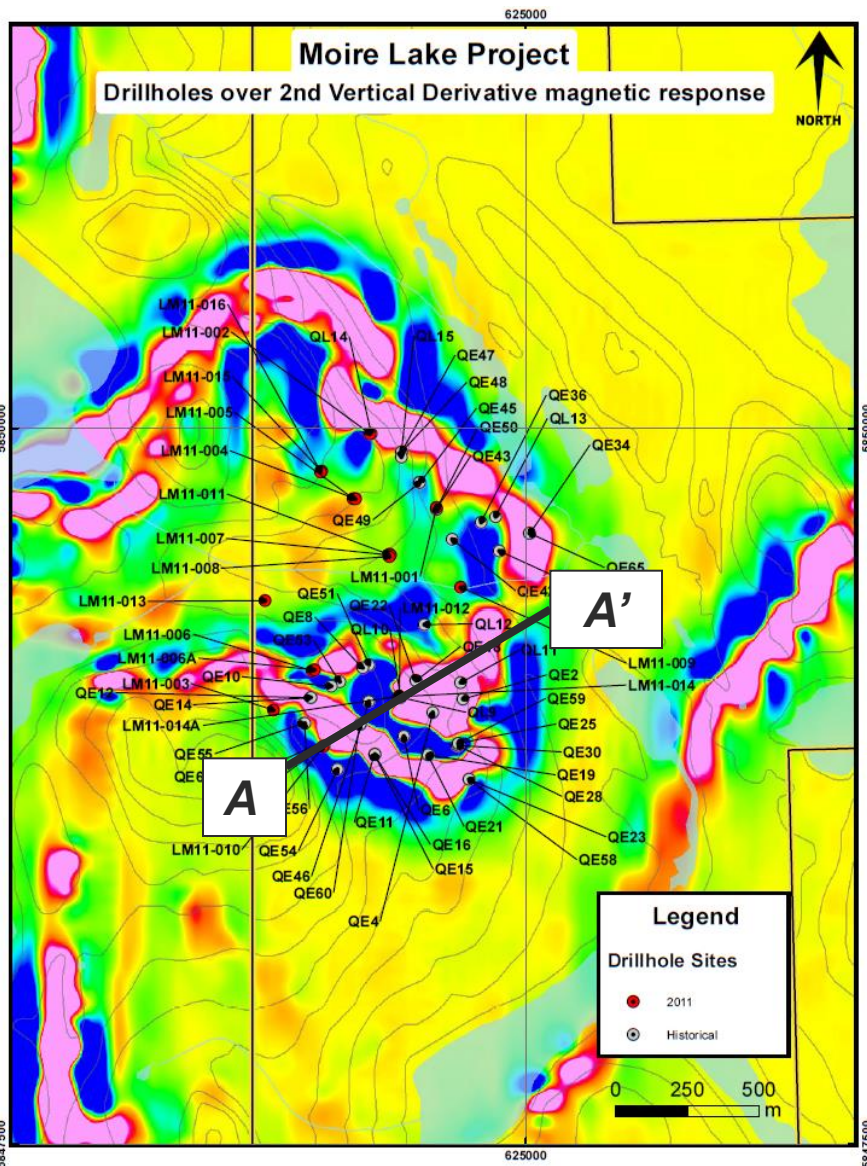
MRB & associates
Geological Consultants

FEL		Felsic Intrusions (Shabogamo Fm)
PEG		
QMZ		
MAF		Gabbro + Mafic (Menihok Fm)
GAB		
AMP		Hornblende Schist (Menihok Fm)
HGB		
QMS1		Qtz-Mica-Schist (Menihok Fm)
QMS2		
IF1		Iron Fm (Sokoman Fm)
IF2		
IF3		
IF4		
IF5		
IF6		
IF7		
IF8		Lean Iron Fm (Sokoman Fm)
IF9		
IF10		
IF11		
QTZ1		Quartzite (Wishart Fm)
QTZ2		
DUL1		Marble (Denault Fm)
DUL2		
KAT1		Basement Gneiss (Attikamagen Fm)
KAT2		
ASH1		Basement (Ashuanipi Mm'ic Complex)
ASH2		

Legend does not reflect true stratigraphic thicknesses

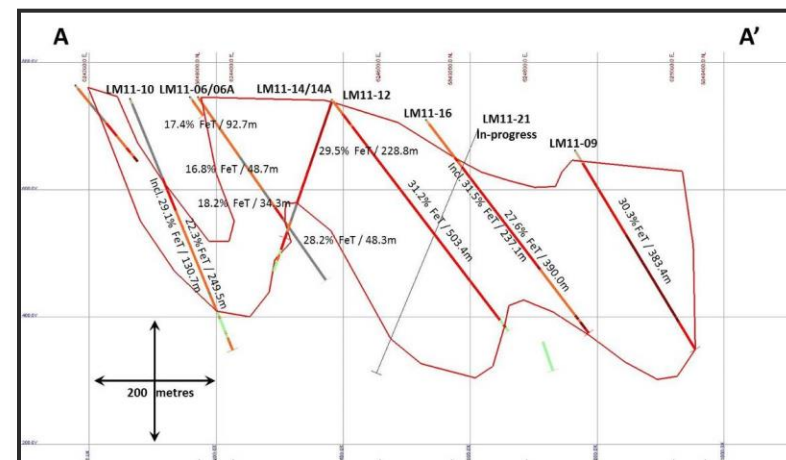
Moiré Lake Project

Initial Mineral Resource Estimate: March 29, 2012



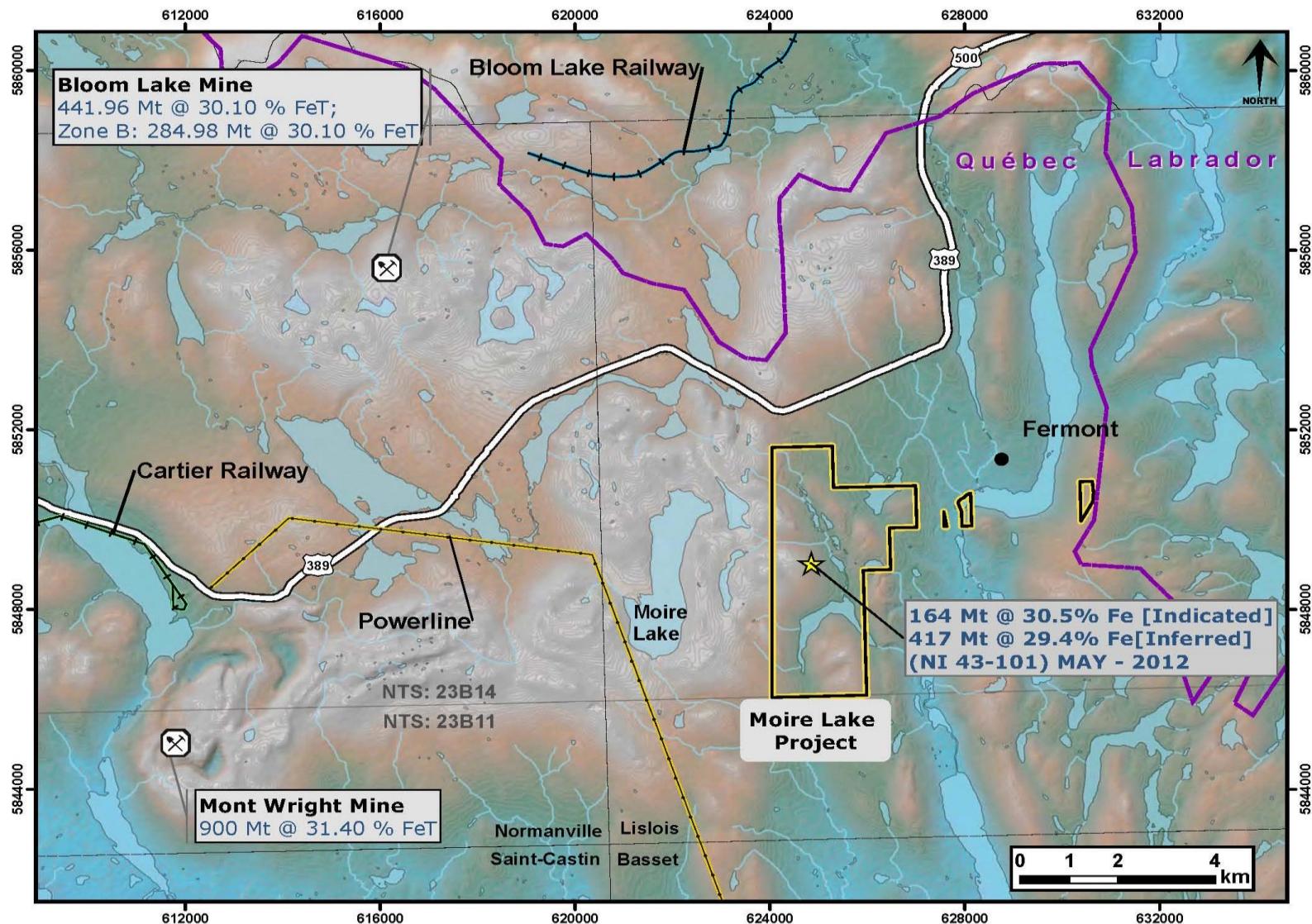
Mineral Resource Estimate:

- **Indicated Resources:** 164 M tonnes grading 30.5% FeT
- **Inferred Resources:** 417 M tonnes grading 29.4% FeT
- DDH LM11-12: 503 M @ 31% FeT
- Kilometric synform with hematite & magnetite outcrops at surface
- Adjacent to ArcelorMittal Mont-Wright mine



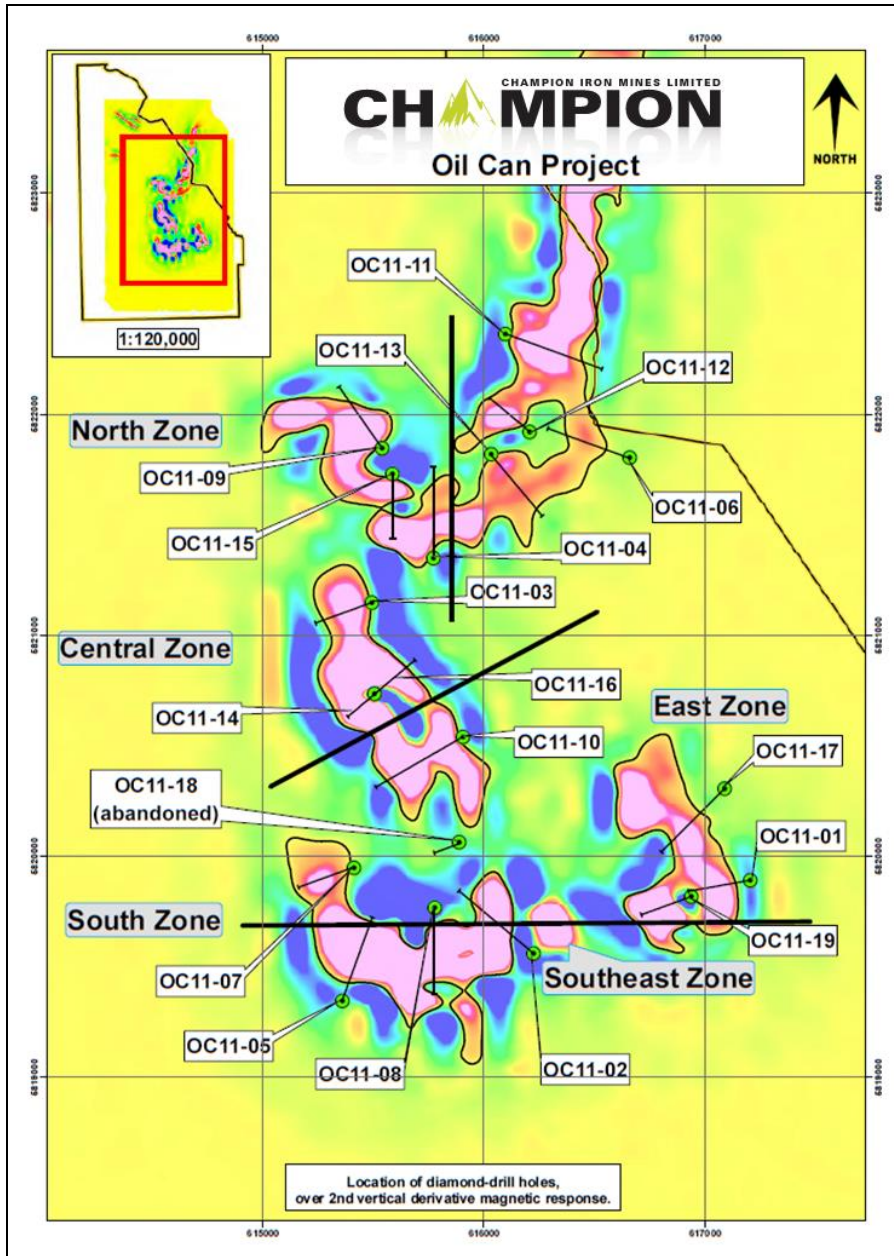
Moiré Lake Project

Infrastructure: Adjacent to Bloom Lake Railway (8km), road, & power



Oil Can Project

Initial Mineral Resource Estimate



- Potential for low strip ratio < 1 : 1
- 972 Mt of iron oxide grading 33.2% at a 15% iron cut-off
- 924 Mt of mixed iron oxide-silicate mineralization
- This deposit is open at depth
- Orientation metallurgical tests indicate a relatively coarse liberation grind size
- Commercial grade magnetite sinter feed concentrate can be produced
- 2011 drill program returned long magnetite-hematite iron formation intersections up to 545 metres in length
- Inferred Resources drilled on 400 metre sections

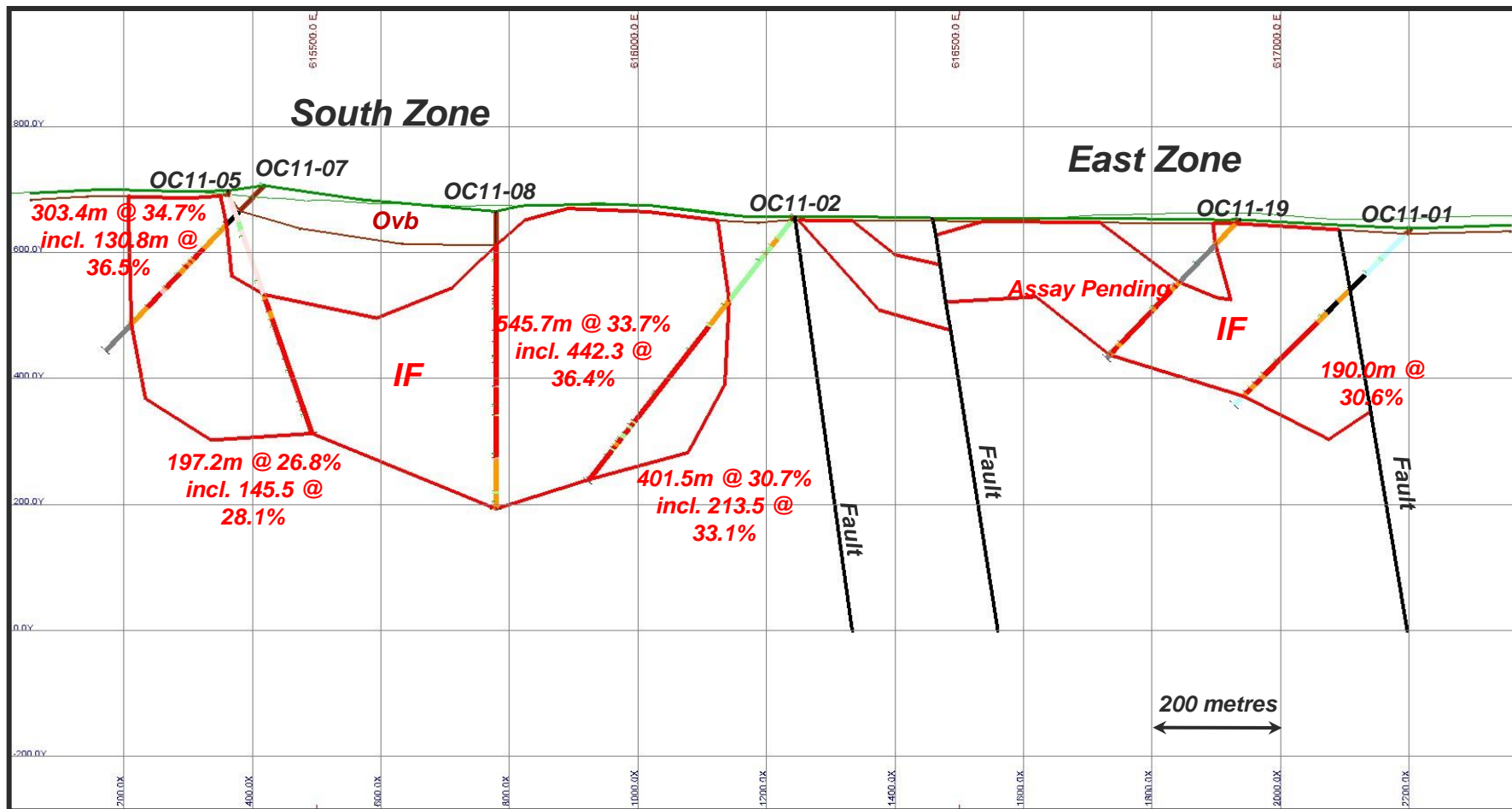
Oil Can Project

Exploration Upside



South & East Zones

Section 9800N (Facing North)

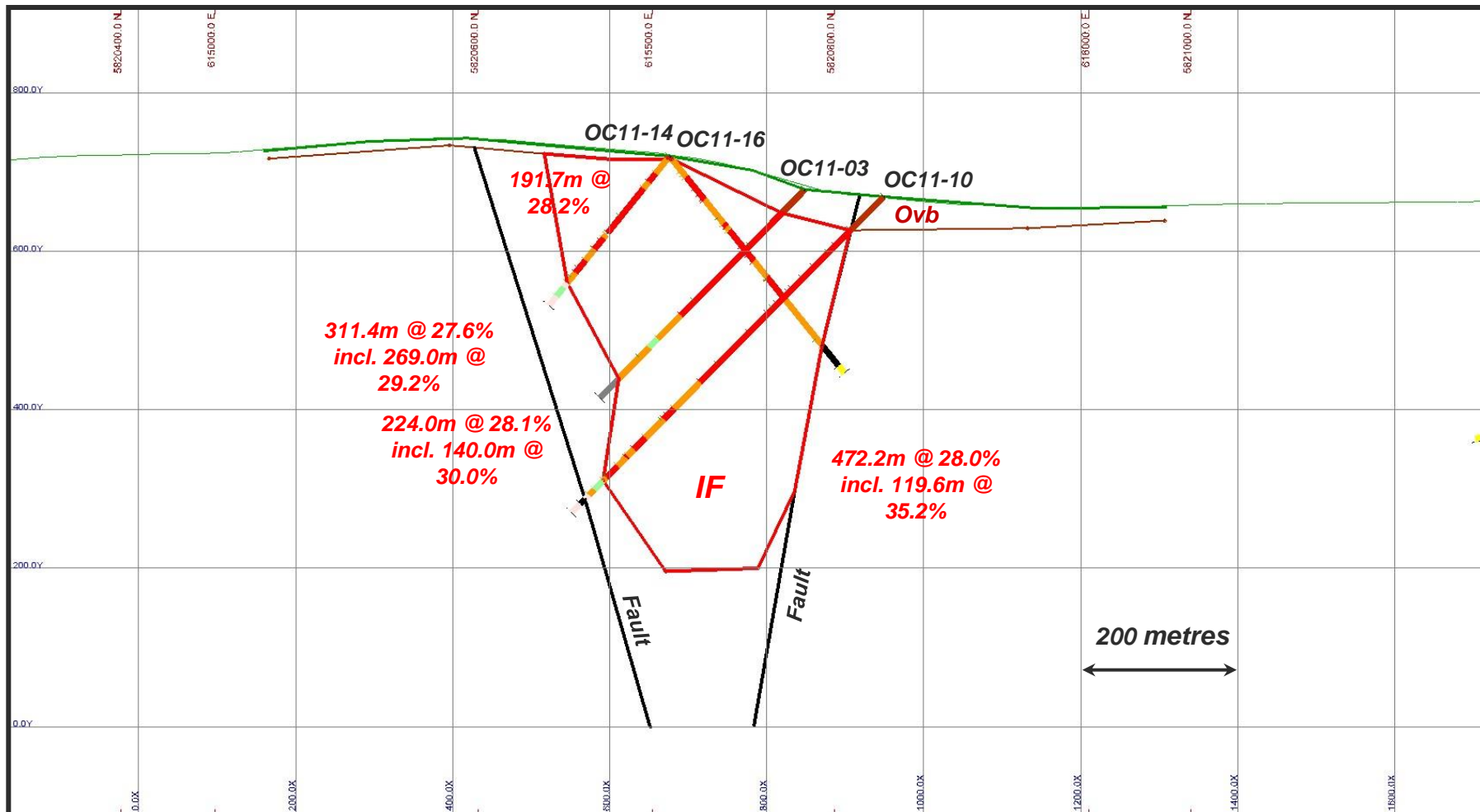


Oil Can Project

Exploration Upside



Central Zone (Facing Northwest)



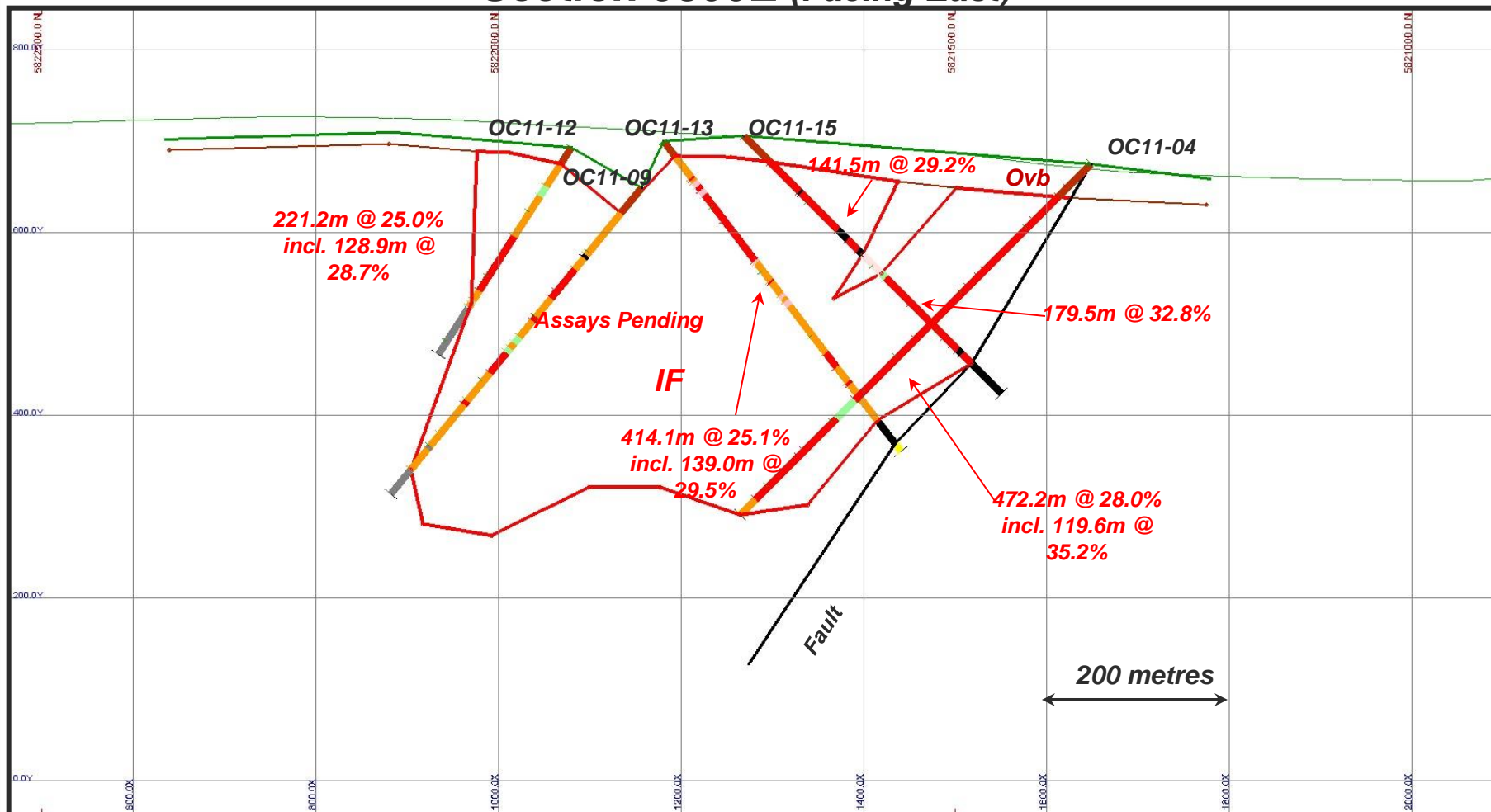
Oil Can Project

Exploration Upside



North Zone

Section 5800E (Facing East)



Champion 2013 Expected Milestones

Consolidated Fire Lake North Definition Drilling	COMPLETED
Updated PEA on Consolidated Fire Lake North	COMPLETED
Initial NI 43-101 Mineral Resource Estimate for Oil Can Project (adjacent to FLN Project)	COMPLETED
Metallurgical results – Consolidated Fire Lake North, Moiré Lake, Oil Can Projects	COMPLETED
Consolidated Fire Lake North Preliminary Feasibility Study	COMPLETED
Phase 2 Definition Drilling Program: Delineate 1 B tonnes of engineered in-pit reserves	Q2-Q3 2013
Environmental & Social Impact Assessment Study	Q2 2013
Consolidated Fire Lake North Feasibility: Expand production capacity up to 20 Mtpy¹	Q4 2013
Consolidated Fire Lake North Construction Start	Q1-Q2 2014
Consolidated Fire Lake North Production	Q1-Q2 2016

Assumptions: ¹Production expansion plan will economically justify a second production line at the CFLN concentrator. The table below shows the combined expected result of the 2 production line model (not NI 43-101 compliant):

IRR = 34.7%		
Discount Rate	NPV (M\$)	Payback (yrs)
0%	\$18,441 M	3.9
5%	\$9,400 M	4.1
8%	\$6,465 M	4.3²
10%	\$5,081 M	4.4

²Payback period at 8% is estimated from the production start of the 1st production line, the payback for the 2nd line is 1.9 years after production start on CAPEX of US\$587M including indirect costs, railway capital repayment and interest.

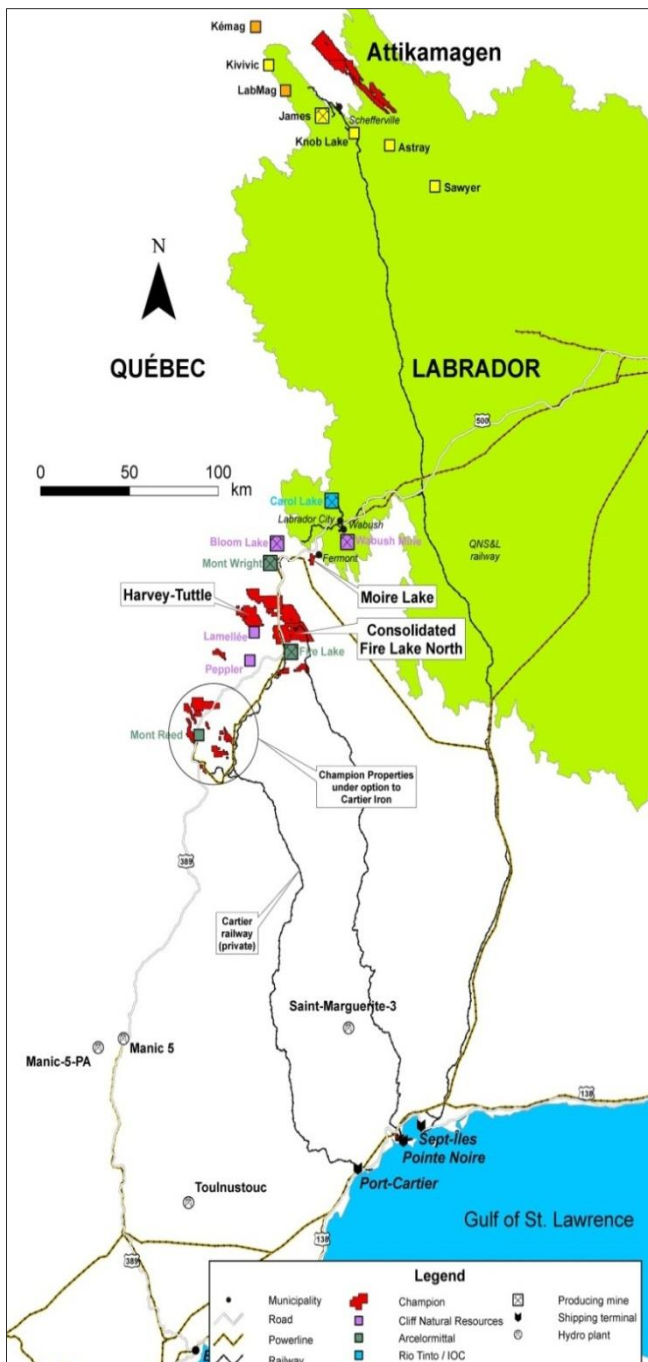
Expected Challenges to be met for 2013

Reduce the sustaining capital.

- Continue with the East pit test work with the objective of eliminating the second AG mill (US\$100M sustaining capital)
- Continue the negotiation with Hydro-Québec with the objective of reducing the US\$217.5M (sustaining capital) participation of CHM into the construction of a new 315 kV power line

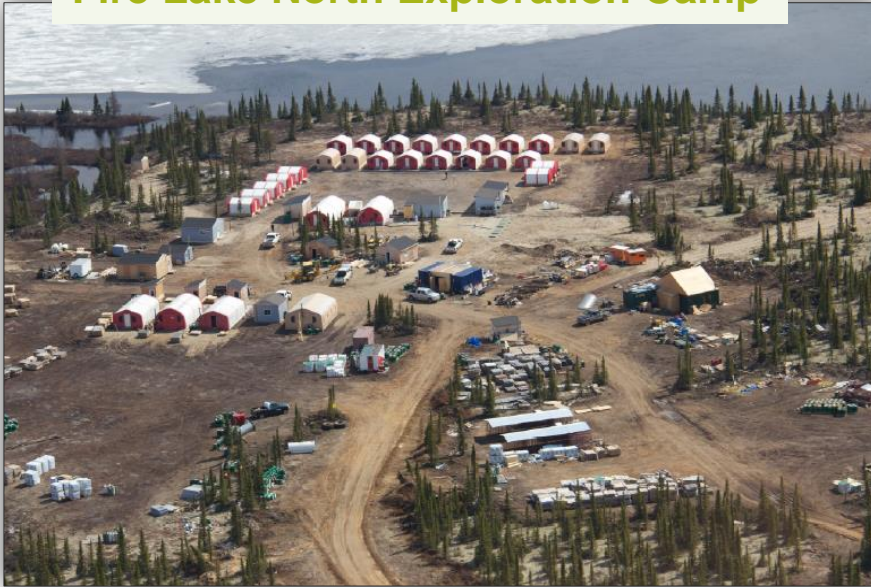
Conversion of 1 B tonnes of M&I resources into engineered in-pit reserves while maintaining a stripping ratio that is <3:1 during the first 10 years of the 20 year mine life (<3.75:1 for the remaining life of mine).

Why Invest in Champion Iron Mines?



- ✓ Robust Economics: (CFLN NPV, US\$3.3B @ 8% DCF (PFS Feb. 2013)
- ✓ 14 Projects (751 km²) near 5 operating mines; 5.1 billion tonnes of NI 43-101 compliant resource
- ✓ Oil Can Deposit: Initial Resource Estimate 1,896 Mt @ 28.7%
- ✓ High-Quality concentrate @ 66%Fe, with low impurities
- ✓ Signed agreement with Sept-Îles Port Authority for 10 Mt ship loading capacity with option to increase tonnage
- ✓ Experienced team: Exploration, development, construction, commissioning & operations management
- ✓ Financed through to feasibility; Favourable tax regime; political support; & operating environment near 5 existing mines

Fire Lake North Exploration Camp



Coarse Specular Hematite in Drill Core



Coarse Grained Specular Hematite



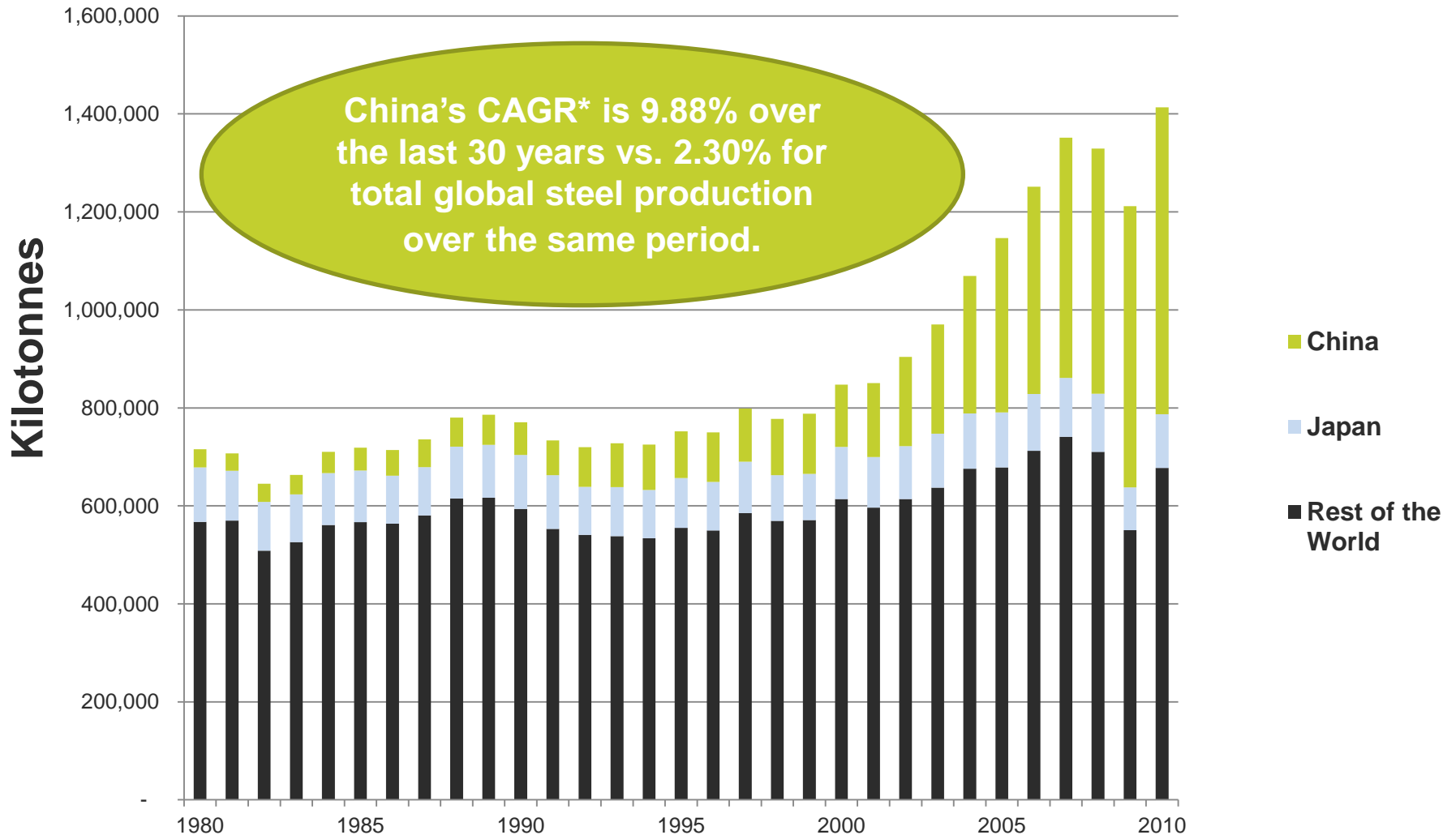
Thank You

TSX: CHM | www.championironmines.com
FSE: P02; OTCQX: CPMNF

CHAMPION
CHAMPION IRON MINES LIMITED



Global Steel Production Shows Continued Demand for Iron Ore



Source: World Steel Association website

* CAGR: Compound annual growth rate

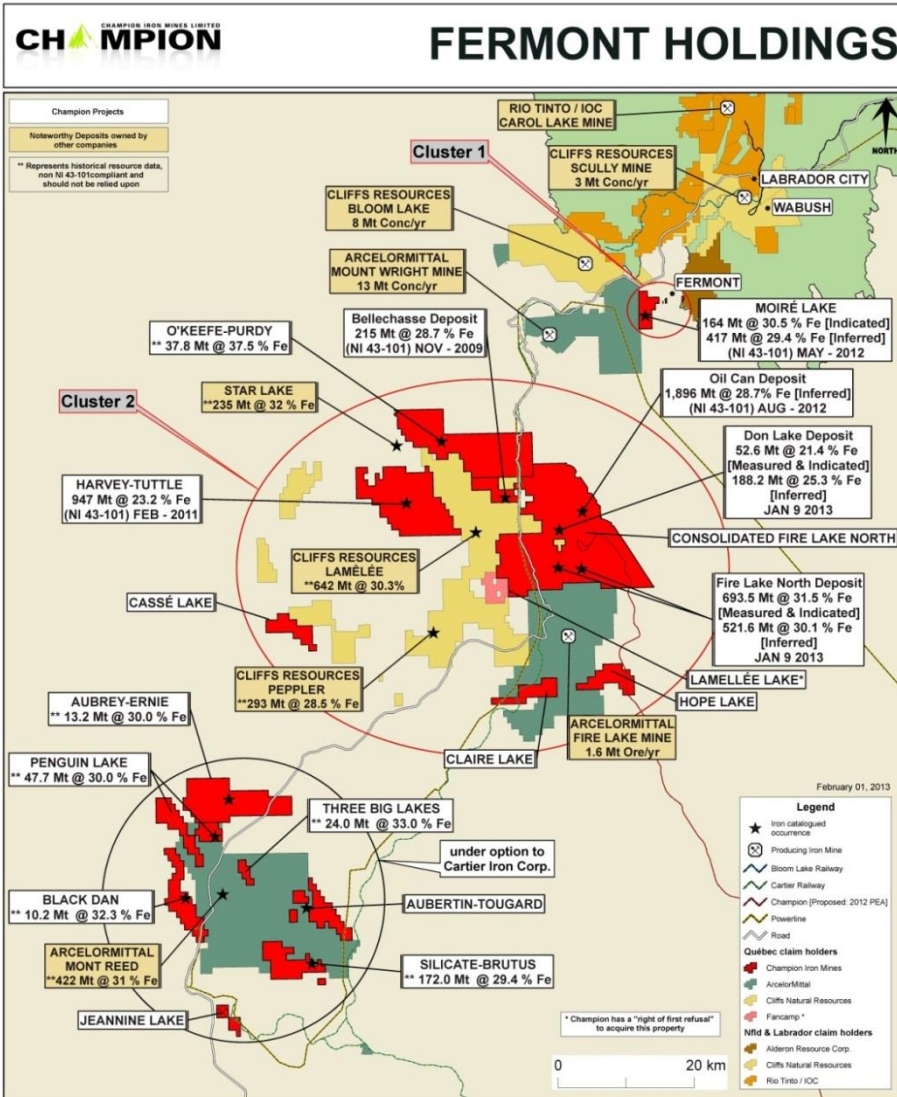
Labrador Trough Annual Production

Iron Ore Production Upside



Company	Current Annual Production	Future Annual Forecast
IOC/RTZ	17 mtpy	26 mtpy
ArcelorMittal	13 mtpy	24 mtpy
Cliffs Natural Resources (Wuhan)	12 mtpy	20 mtpy
Labrador Iron Mines	2 mtpy ¹	5 mtpy ¹
Adriana Resources (Wuhan)	0	50 mtpy ²
New Millennium (Tata)	0	4 mtpy ¹
		24 mtpy ²
Century Iron Mines (Wuhan)	0	2 mtpy ¹
		20 mtpy ²
Champion Iron Mines Limited	0	~20 mtpy
Alderon Iron Ore Corp.	0	~16 mtpy
Total Current & Forecasted Production	44	~211 mtpy

1. Direct shipping ore
2. Taconite fine grained material



Fermont Iron Ore District (“FIOD”)

Historically the Fermont & Labrador mining camps have produced 33 Mtpa.

RTZ/IOC = 17 Mtpa
 ArcelorMittal = 13 Mtpa
 Wabush = 3 Mtpa

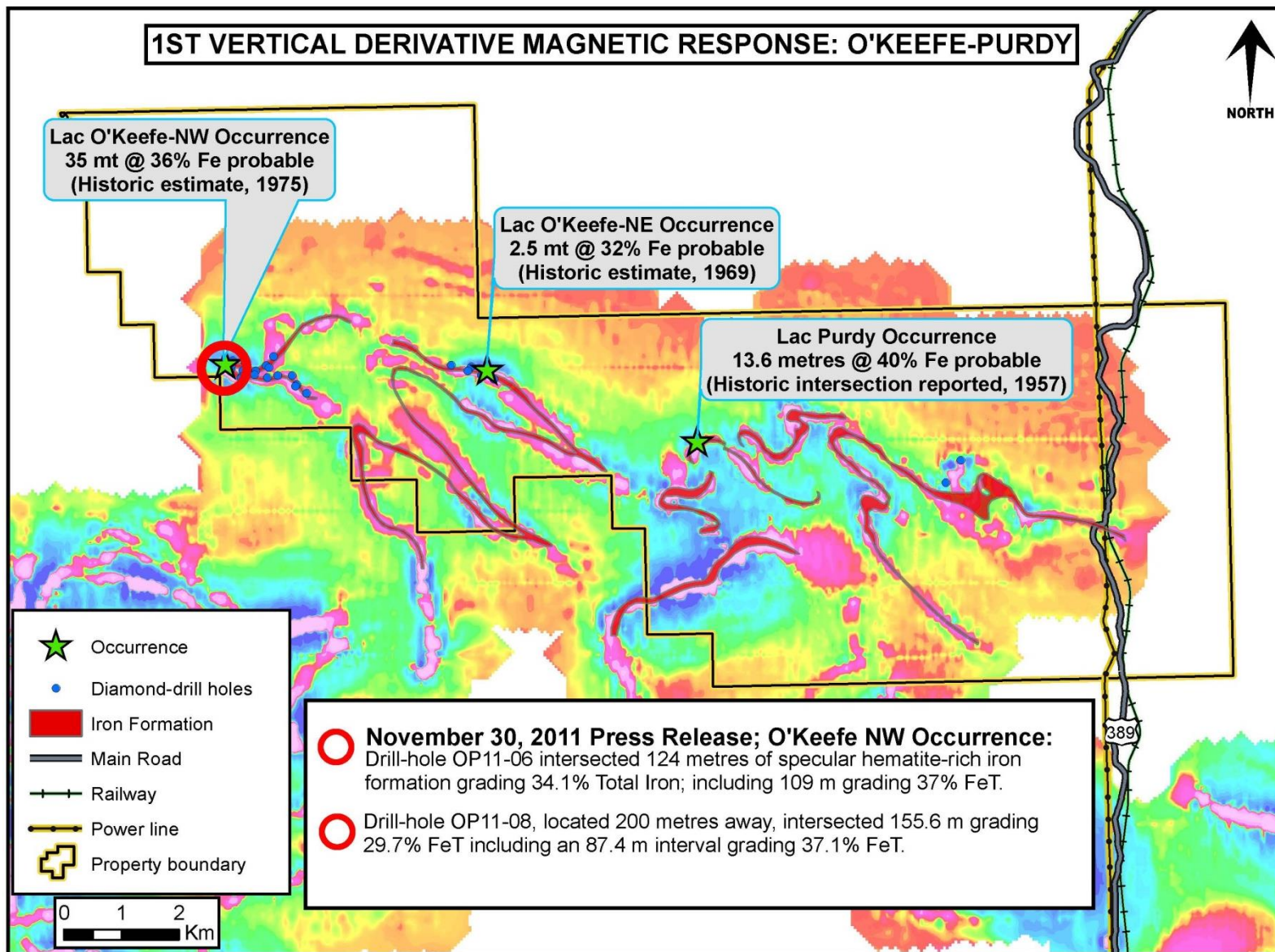
“ Marginal Era”:
 For 30-40 years pre-2003
 the price per tonne of concentrate
 was \$25- \$30/tonne,
 costs per tonne were similar.

Current 3 year moving average is
 \$115/tonne

Current Spot price average ~\$136/tonne
 (Mar. 25, 2013)

O'Keefe Purdy Project

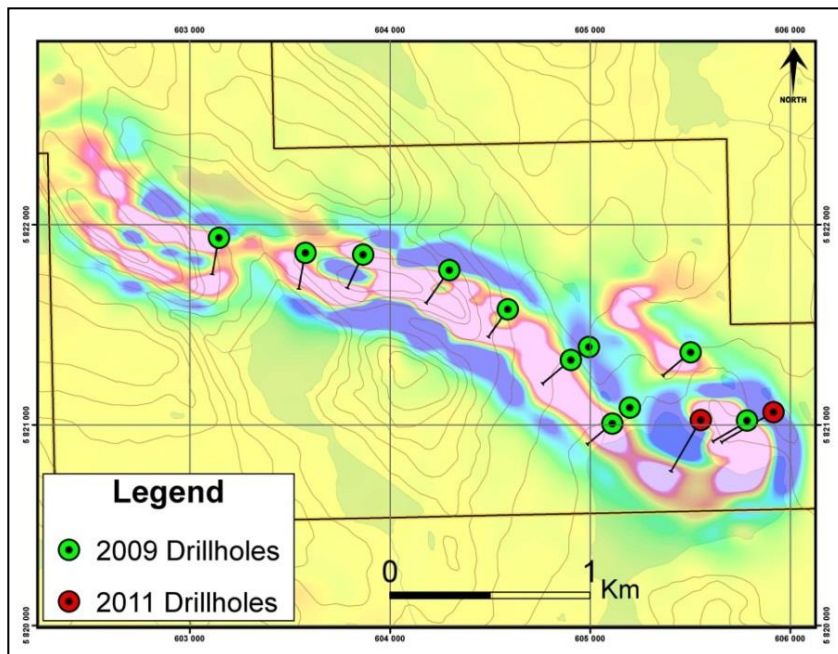
Exploration Upside



Advanced Exploration

Bellechasse Deposit

- Deposit located within CFLN
- NI 43-101 Resource Estimate: Inferred Resources estimate; 215 Mt @ 29% Fe; potential for more
- Magnetite rich iron formation
- Adjacent to Hwy 389
- Synform geometry is favorable for open pit mining



Harvey Tuttle Project

- NI 43-101 Inferred Resource Estimate: 717 Mt @ 25% Fe; magnetite rich iron formation
- Intersected multiple significant iron formation intervals in 2010 drill program
- Total of 13,165 m of drilling completed
- Less than 50% of the kilometeric scale magnetic anomalies have been tested
- 25 km W-NW of CFLN
- Within conveying distance from CFLN planned concentrator (20-30 km)

