

Forward Looking Information

Labrador Iron Mines Holdings Limited ("LIM") has prepared this presentation for information purposes only. The information contained herein was prepared by management on a best efforts basis and is believed to be accurate. It contains forward-looking statements about the Company's plans for the mining, development and exploration of its properties.

Forward-looking information may include reserve and resource estimates, estimates of future production, unit costs, costs of capital projects and timing of commencement of operations, and is based on current expectations that involve a number of business risks and uncertainties. Factors that could cause actual results to differ materially from any forward-looking statement include, but are not limited to, failure to establish estimated resources and reserves the grade and recovery of ore which is mined varying from estimates, capital and operating costs varying significantly from estimates, delays in obtaining or failures to obtain required governmental, environmental or other project approvals, delays in the development of projects, changes in exchange rates, fluctuations in commodity prices, inflation and other factors.

Forward-looking statements are subject to risks, uncertainties and other factors that could cause actual results to differ materially from expected results. There can be no assurance that the Company will be successful in any agreement with any First Nations groups who may assert aboriginal rights or may have a claim which affects the Company's properties or may be impacted by the Schefferville Projects.

Shareholders and prospective investors should be aware that these statements are subject to known and unknown risks uncertainties and other factors that could cause actual results to differ materially from those suggested by the forward-looking statements. Shareholders are cautioned not to place undue reliance on forward-looking information. By its nature, forward-looking information involves numerous assumptions, inherent risks and uncertainties, both general and specific, that contribute to the possibility that the predictions, forecasts, projections and various future events will not occur. The Company undertakes no obligation to update publicly or otherwise revise any forward-looking information whether as a result of new information, future events or other such factors which affect this information, except as required by law.

Canada's Newest Iron Ore Producer



LIM Advantages

The Labrador Trough: Canada's foremost iron ore producing region

We're currently **one of only four iron ore producers** in Canada

We're the **only independently-owned** iron ore producer in Canada

Our projects are close to extensive & existing infrastructure

Sustainable production + flexible production growth

Superior leverage to iron ore spot price recovery

We're in Production





2011 vs. 2012

Increase in tonnes sold

25x Increase in tonnes railed

Increase in shipments sold

Targeting 1.7 to 2.0 million tonnes iron ore sales

One of Four Producers in the Labrador Trough

Producers	Mine	Ownership	
Iron Ore Company of Canada	Labrador CityCarol Lake	RioTinto 59% ⚠ Mitsubishi Corpo	Labrador Iron Ore ROYALTY CORPORATION 15%
ArcelorMittal	– QCM (Mont Wright)+ Fire Lake)	POSCO CIT CHINASTEEL	15% interest in ArcelorMittal Mines Canada ¹
← CLIFFS	– Wabush– Bloom Lake	Wuhan Iron & Steel (WISCO)	25% interest in Bloom Lake
Labrador Iron Mines	DSO ScheffervilleProjects	100% ownership, Only independent	ly-owned producer in Canada

Developers

New Millennium

Alderon Iron Ore

Adriana Resources

Champion

Century Iron Mines

Oceanic Iron Ore

Baffinland

Strategic Partnerships/Investments

Tata Steel

Hebei Steel

WISCO

TATA STEEL

WISCO and MinMetals (through Century Iron Mines Subsidiary)

WISCO and MinMetals

100% owned

ArcelorMittal 70%; Nunavut Iron 30%

Mine-to-Port Solution

Mine and Process

- James + surrounding deposits
- Sinter and lump products







Rail

- LIM spur line, TSH, QNS&L
- Railcar maintenance facility







Port and Sales

- Ore unloading facilities
- Access to cape-size vessels
- IOC sales arrangement







Iron Ore Sold on Spot Market

2011 & 2012

Shipments totalling ~2 million tonnes sold to Chinese steel mills/customers

Repeat customers

Iron Ore Company of Canada Sales Agreements (IOC)

100% production sold to IOC in 2011 and 2012

Product re-sold in China based on spot, less ocean freight and IOC participation for handling, loading and sales costs



- ✓ Use of ore handling facilities at Port of Sept-Îles
- ✓ Access to cape-size vessels (170,000 dwt)
- ✓ Rio Tinto targeted customers
- ✓ Counterparty and shipping risk mitigated

LIM's Shipping Advantage



Deep sea port on Atlantic seaboard

Access to markets: Europe, Asia and North America



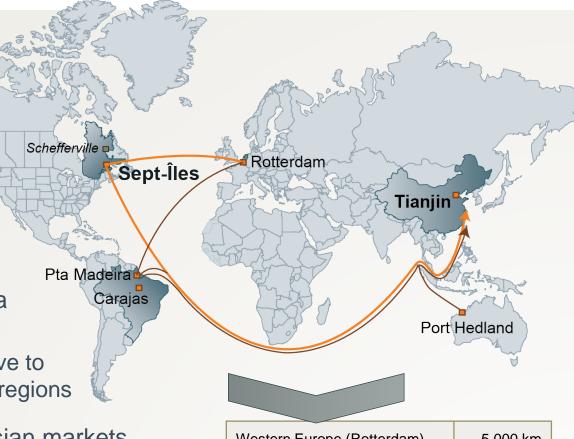
Shipping advantage to markets in North America and Europe

» Shorter distance relative to other primary iron ore regions



Current access to key Asian markets through IOC (Rio Tinto) agreement

- » Use of cape-size vessels
- » Lower counter-party risk



Western Europe (Rotterdam)	5,000 km
Eastern Europe (Constantza)	6,100 km
China (Tianjin)	22,000 km

LIM's Portfolio

DSO Deposits

44.6 mt 57 Fe%

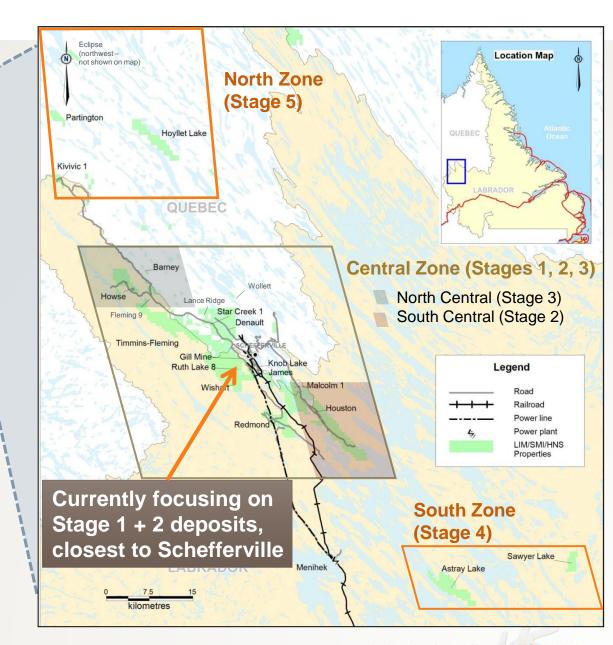
NI 43-101 Resources¹

From 5 DSO deposits

(James, Redmond, Denault, Knob Lake and Houston)

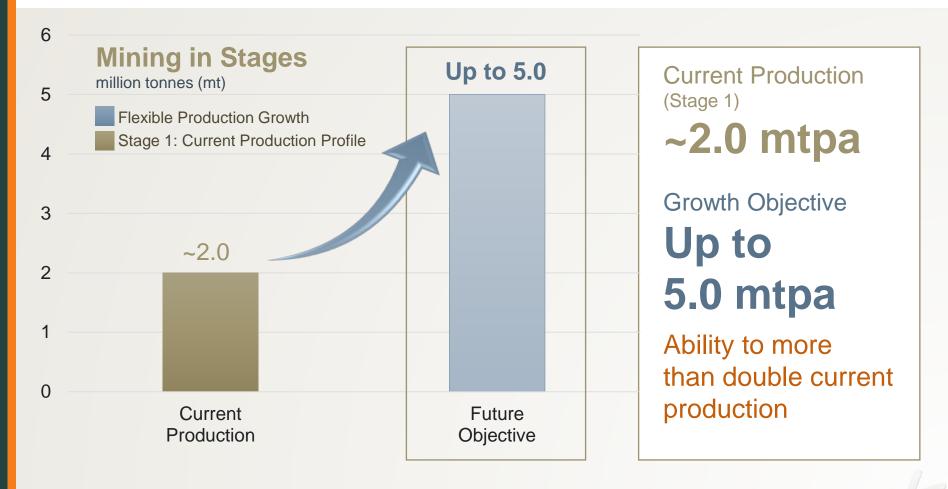
121.3 mt 57 Fe%

Historic Resources²



¹ NI 43-101 compliant resource as at March 31, 2012.

Sustainable production + flexible growth



With access to extensive infrastructure



Direct rail link to port
LIM process plants
Roads, airstrip, town
Hydro power











Strategic Relationship Established



Framework arrangement with **Tata Steel Minerals Canada** (TSMC)

Multi-part cooperation agreements in areas of:

Logistics

Property rationalization

Various ancillary mutual support

Significant cost synergies; key logistics + infrastructure issues

Rebuilding of rail line: Timmins plant to Silver Yards; camp accommodations, sharing ore / freight cars + rail facilities

Access and terminal facilities for the new multi-user dock

LIM's Howse deposit (51% interest to TSMC) and TSMC's Timmins 4 deposit (100% option to LIM)

Potential off-take agreements



Canada's newest iron ore producer

LIM Stage 1

Goal: 10 mt saleable iron ore

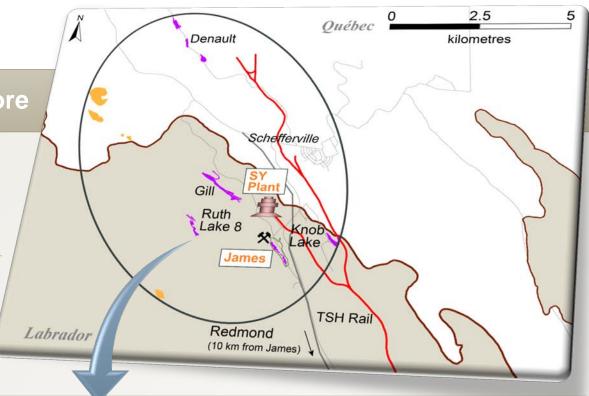
5 Years of ~2.0 mtpa iron ore production from¹:

21 mt NI 43-101 resources²

5 mt historical resources³

~10 mt stockpiles (historical)³

- Crushed, >50% Fe
- Potential to convert to resources



5 smaller satellite deposits + stockpiles within ~15 km radius of James / Silver Yards

Stage 1A and 1B NI 43-101 Compliant ¹	Indicated (000t)	Stage 1B Historical (Non NI 43-101) ²	(000t)
James (Central) Redmond (Central) Denault (Central)	6,700 2,900 6,400	Stage 1B Gill (Central) Ruth Lake (Central)	4,600 400
Knob Lake (Central) TOTAL (1A & 1B)	5,700 21,700	Total (1B Historical)	5,000

¹ Subject to detailed engineering, design, environmental assessment and permitting

² NI 43-101 compliant resource as at Mar 31, 2012

³ Historical resources identified by IOC prior to 1983 were not prepared in accordance with NI 43-101

James Mine

Excellent 2012 results: Sales of 1.6 mt (dry); \$72/t operating cost to port¹

- » 1.83 mt mined @ 61.3%
- Consistently achieved planned operating rate of 28,000 tpd (ore + waste) 1

April 2013: Commenced 3rd Season of Operations

» Forecasting sales of 1.7 – 2 million tonnes; \$65 – \$70/t operating cost to Port¹



Silver Yards Processing

Dry process

Ore processed by crushing and screening



Installed new dry process stream in 2012

Used exclusively in Q3: 183,000 tonnes ore processed and screened, yielding 168,000 tonnes of sinter and lump

New dry screening unit delivered to complement dry process stream in 2013

Wet process

Ore beneficiated by crushing, washing and screening



Phase 1 + 2 commissioned;

Phase 3 commissioning in 2013: expected to increase recoveries and plant capacity

Remaining inventory will be used for 2013 initial wet plant feed for operational flexibility

Connection to grid power in 2013

Cash Operating Cost and Strategy

Current

\$65 - \$70 per tonne

- Cash cost reported as per tonne sold, unloaded at Port
- Includes, mining, processing, transportation and site expenses
- Ocean freight and IOC participation fee additional

Longer-term target

\$50 — \$55 per tonne

- Mining, processing, transportation and site expenses
- Ocean freight additional (and <u>no</u> IOC participation fee)

Developments to further reduce costs over long-term¹



- ✓ Higher volumes ✓ Larger
- Increased efficiencies
- ✓ Larger equipment

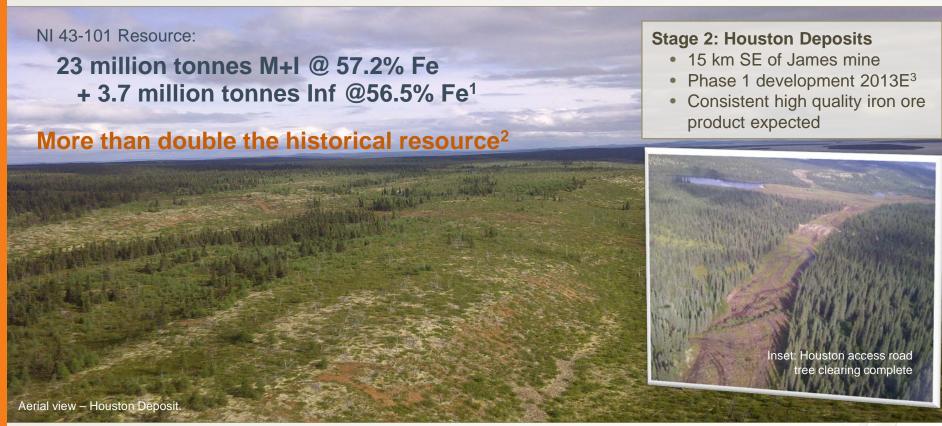
- 2 Rail
- Reduced tariffs
- ✓ Longer train sets
- 3 Port
- ✓ New multi-user dock, Port of Sept-Îles
- ✓ Other port efficiencies

Stage 2 Houston Flagship Deposit

Targetting 15+ year mine-life with potential ~2.0 mtpa

Potential to more than double current production; potential year-round operation

Goal: establish long-term relationships with steelmakers



¹ As at March 31, 2012; See Technical Report filed on SEDAR.

² Historical resources identified by IOC prior to 1983 were not prepared in accordance with NI 43-101.

³ Subject to market conditions, permitting and financing.

Stage 2 Houston Flagship Deposit



Phase 1 Development \$57 million (Year 1 – \$37M and Year 2 – \$20M)

- Access road (10km) + bridge (permits received)
- New dedicated rail siding (6km)
- In-pit crushing and screening

Phase 2 (Year 3)

- Addition of wet process plant
- Registration documents filed (CEAA) Feb '13

Stage 2 Houston Flagship Deposit

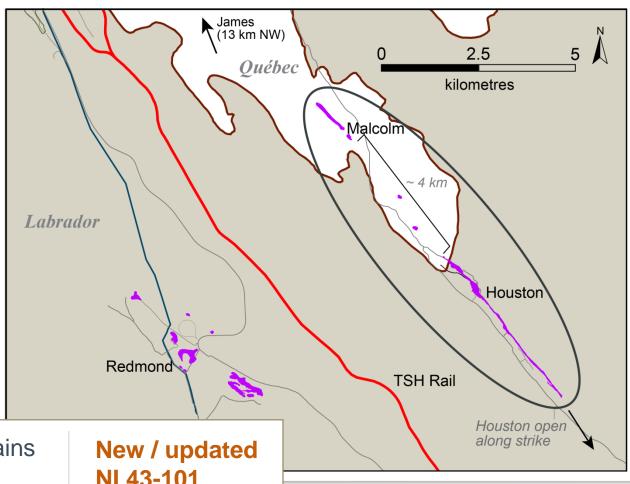
Next Steps

- Advancing the planning, engineering and design in 2013
- Receipt of remaining permits (rail siding)
- Potential strategic partnerships, credit facilities, and/or offtake agreements

Potential Upside

- Houston Deposit remains open along strike
- Nearby Malcolm Deposit (Quebec) NW extension: historical 2.9 mt resource¹

New / updated NI 43-101 resource estimates expected

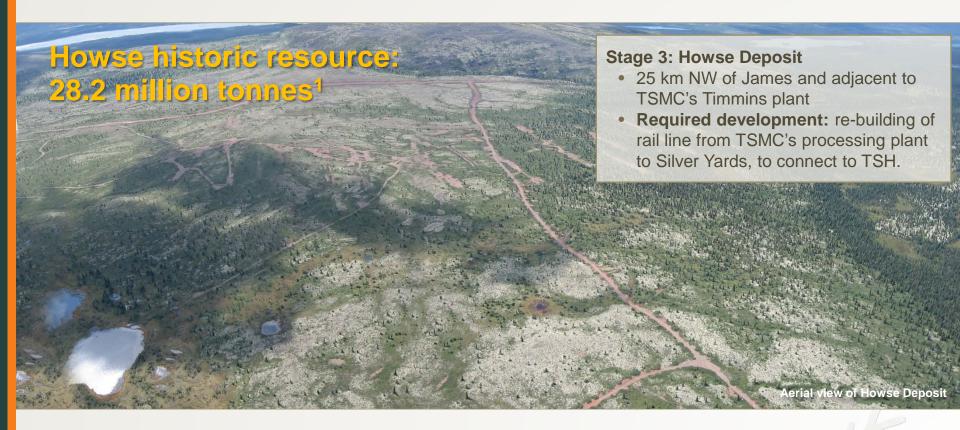


Stage 3 Howse Deposit

TSMC 51% ownership of Howse; \$30 million cash injection to LIM to fund 2013 working capital, capex and exploration.

Significant cost savings using TSMC's Timmins plant (LIM plant relocation not required)

Potential to develop Howse several years sooner at higher production rate



Labrador Iron Mines Menihek Power Plant Churchill Happy Valley-Goose Bay Labrador Mont-Wright O Ross Bay Jct. Newfoundland & Labrador Québec Arnaud Railway Sept-Îles St. Lawrence River O Pointe Noire Port-Highway Cartier

Rail Operations

Life-of-Mine Rail Agreements in Place

GWRR

(Genesee & Wyoming)

leases locomotives and operates LIM's 6 km spur line

TSH Railway

to Emeril Junction

in Labrador:

~200 km

QNS&L +++

to Port of Sept-Îles: ~360 km





Current / **Near-Term** Rail Strategy

- Four train sets planned for 2013 (120 cars each)
- In discussions with Arnaud Railway (connects QNS&L to Pointe Noire)

Mid-Term Rail **Strategy**

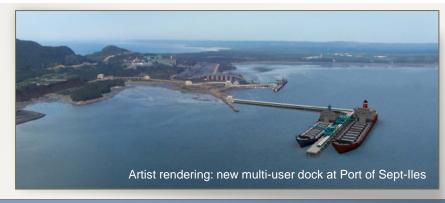
- Iron ore gondolas Longer 240-car trains (20,000 tonnes / train)
- Rotary car dumper: expedite unloading ore

Enhancing Long-term Port Access

Participant in new multi-user berth at Port of Sept-Îles: 5 mt capacity reserved

LIM would benefit from first-mover advantage as only current producer

Two installments of \$6.4M (July '12 & '13)





Agreements with First Nations

Social License to Operate

Local employment
Training programs
Business opportunities
Environmental protection
Community engagement

Impact and Benefit Agreements			
July 2008	Innu Nation of Labrador (left)	INNU NATION	
September 2010	Naskapi Nation of Kawawachikamach (2nd from left)	M	
June 2011	Innu Matimekush-Lac John (2 nd from right)	al-timescass (AC-cola)	
February 2012	Innu of Uashat (right)	NO TITLE OF THE PARTY OF THE PA	
December 2012	Economic Partnership Agreement with NunatuKavut	NunatuKavut	









IBA Implementation Meetings + Consultation with First Nations held 4 times a year

Growth through Exploration

Largest drill program completed in 2012

14,000 m of drilling: 40% more than 10,000 m plan despite reducing budget to \$7 million (from \$8.6 million)

Drill programs on Houston (remains open), Malcolm (remains open), James and historic stockpiles for:

- Further technical information for more detailed mine planning
- New / updated NI 43-101 resource estimates

Initial resource also on Elizabeth taconite target in spring 2013



Resource conversion track record

More than doubled (historical to NI 43-101 resource)

2012 Technical Achievement

Generated core samples through diamond drilling; provides greater technical information for detailed mine planning

Current Strong Recovery in Iron Ore Prices



Strong recovery in prices may have favourable impact on LIM's early sales revenues in 2013

- Severe winter in China, reducing domestic iron ore production and increasing demand for seaborne iron ore
- Iron Ore Demand in China: imported record 71 million tonnes in Dec 2012¹

Guidance + Outlook







2013E Production: 1.7 million – 2 million tonnes

Stage 1: Current sustainable production of ~2.0 mtpa for 5 years

Sales arrangement: Currently in advanced discussions with IOC

Financing: working capital/off-take/other to fund various 2013 expenditures

2013 process plant enhancements: Commissioning SY Phase 3 + new dry screen + grid (hydro) power

Resource Conversion: New/updated resource estimates in 2013

Stage 2 Houston (potential to double production): permitting, detailed engineering, metallurgy, Phase 1 development (Phase 1 subject to financing)



Canada's newest iron ore producer

Appendix

LIM Capital Structure

Simple Capital Structure with No Debt^{1,2}

Share Structure

TSX Symbol	LIM
Share Price ³	\$0.66
Share Price (52 week range) ³	\$0.56 - \$4.86
Issued and Outstanding ³	126.2 million
Fully Diluted ³	144.6 million
Market Capitalization (basic) ³	\$84 million

Strong institutional + management ownership³

Anglesey Mining	14%
Institutions	~30%
Management & Directors	~4%

Coverage	13 Analysts (+1 future)	Buy	\$1.70 avg TP

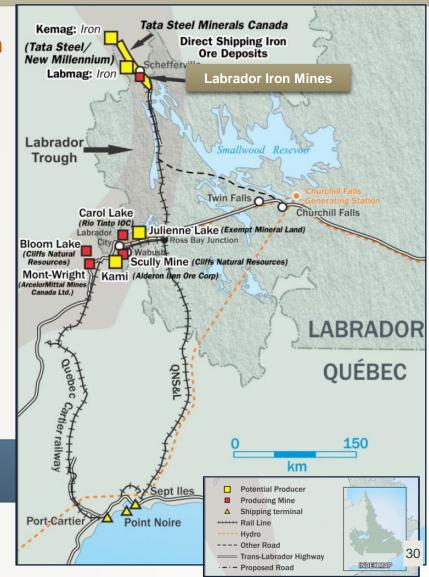
CANACCORD Genuity	Gary Lampard	
Desjardins Capital Markets	Jackie Przybylowski	
Fraser Mackenzie	Wojtek Nowak	
HAYWOOD SECURITIES IN C.	Colin Healey	
Macquarie Capital	Daniel Greenspan	
PARADIGM	Santo Ranieri	
POPE & Company	Jay Turner	
RAYMOND JAMES	Adam Low	
RBC Capital	Robin Kozar	
⑤ Scotiabank™	Mark Turner	
STIFEL NICOLAUS Stifel Nicolaus	Michael Scoon	
STONECAP SECURITIES SECURITIES	Michael Goldberg	
CREDIT SUISSE	Nathan Littlewood	

LIM Advantage: We're in the Labrador Trough

Labrador Trough: Most Prolific Iron Ore Region in Canada

- Canada's foremost iron ore producing region
 - » 99% of Canada's current production
 - » In continuous production since 1954
 - » Existing rail and port infrastructure
 - » Politically stable
 - » Support of Governments and First Nations
 - » Products known to the market
 - » Experienced operators, suppliers and labour force
- Iron ore exports accounted for \$4.2B of Canada's output in 2011¹
- Undergoing major expansions (potential double in 5 years)

2013E production estimated at ~50 million tonnes in the Labrador Trough²



Sources: Natural Resources Canada; Statistics Canada.

^{2.} Estimate based on companies' public reports.

Track record + experience

Proven Track Record:

Rapid road to production 2007 – 2011

Dec 2007: Closed IPO

2008 – 2010: Two year environmental and permitting

2010 – 2011: Mine and plant construction (10 mths)

June 2011: Initial production

Proven Management:

Mining + technical expertise

Baffinland Iron Mines

Cliffs Natural Resources

IOC (Iron Ore Company of Canada)

CN Railway



Proven Experience:

Two operating seasons successfully completed

- ✓ Strengthened key stakeholder relationships
- ✓ Greater efficiencies in future years
- ✓ Valuable marketing intelligence to strategically plan / maximize product revenue

LIM Executive Team

John Kearney Chairman & CEO	Mining executive with over 40 years of industry experience; Chairman and CEO of numerous mining companies
Rod Cooper President & COO	Over 30 years of experience in resource industry; previously held positions as VP and Senior Analyst, Mining, with Dundee Securities and COO with Baffinland Iron Mines Corporation
Richard Pinkerton CFO	10 years as an investment banker in mining sector and five years with PricewaterhouseCooper LLP.
Aiden Carey SVP, Operations	Held senior operating positions with Barrick Gold Corporation and Cliffs Natural Resources Inc.
Michel Cormier VP, Exploration	Close to 40 years of experience in exploration and mine geology, including mineral resource and reserve evaluation. Held positions with Mundoro Capital Inc. and Adamus Resources.
Joseph Lanzon VP, Government & Corporate Affairs	Over 20 years of experience in governmental affairs and development of community partnerships; previously held positions with CGI, GE, Canadian Zinc, Federal Gov't of Canada, NWT Gov't, House of Commons & Senate of Canada.
Larry LeDrew VP, Sustainable Development	Over 30 years of experience in science and environment field; previously held positions with Sikumiut Environmental Management Ltd., Newfoundland and Labrador Hydro and the Department of Fisheries and Oceans.
Bernie Maskerine VP, Transportation	Over 40 years of experience, holding senior positions at CN Railway, CANAC Inc., and SNC-Lavalin O&M Inc. focusing on all aspects of railway operations
Stephen McGinn VP, HR, Health & Safety	Close to 20 years of experience in human resources, general management and consulting. Previous positions held at Kivalliq Marine Transportation Services and Dumas Contracting Ltd.
Neil Steenberg Corporate Secretary & Legal Counsel	Securities lawyer with over 30 years experience in mineral exploration and corporate finance law.
Keren Yun VP, IR, Communications	Over 10 years experience in investor relations and communications; previously held positions with Northgate Minerals Corporation and Brookfield Asset Management.

LIM Board of Directors

John Kearney Chairman & CEO	Mining executive with over 40 years of industry experience; Chairman and CEO of numerous mining companies.
Bill Hooley Vice Chairman	Professional mining engineer with 40 years experience. CEO of Anglesey Mining plc and former President & COO of LIM.
Richard Lister	Over 40 years of experience in mining, metallurgical and chemical industries. Previously President & CEO of Zemex Corporation., Vice Chairman of Dundee Bancorp Inc. and Chairman & President of Campbell Resources.
Matthew Coon Come	Grand Chief of the Grand Council of the Crees (Eeyou Istchee) Quebec. Board member of the Grand Council of the Crees and the Cree Regional Authority. National Grand Chief of the Assembly of First Nations (AFN) from 2000 to 2003.
Eric Cunnigham	Independent mining consultant since 1996. Director of Aurora Energy Resources Inc. and previous director of Viceroy Exploration Ltd. Former joint owner of the Golden Kopje Mine in Zimbabwe.
Gerry Gauthier	Mining engineer. COO of Xtierra Inc. and Director of Conquest Resources Limited. Former COO of Nevsun Resources Ltd.
Danesh Varma	Over 30 years of experience in the mining finance industry. Director of Anglesey Mining plc and Minco plc. Form CFO of LIM and has held senior positions in the banking, corporate finance and accounting fields.

LIM Q3 & 9M Financial Results

(\$ millions, except per share data)	Three Months Ended Dec 31 '12	Nine Nine I	Months 31 '12
Net income (loss)	\$ (16.1)	\$	(58.4)
per share	(0.19)		(0.79)
Depreciation and Depletion	(5.1)		(29.3)
	At December 31, 2012		, 2012
Cash and cash equivalents (unrestricted) \$		\$	10.2
Accounts receivable and prepaids			24.1
Inventory			12.8
Total assets		\$	358.8

- Revenue from three shipments in Q3 (425,500 dry tonnes): \$24.7 million
- Revenue from 10 shipments in 2012 (1.6 million dry tonnes): \$95.8 million
- Q3 net loss includes \$5.1 million or \$0.06 per share amortization charge
- Completed \$29 million equity financing in February 2013

LIM 9M 2012 Operating Results

	Quarter Ended December 31, 2012		Nine Months Ended December 31, 2012 ¹	
(all tonnes are dry metric tonnes)	Tonnes	Grade (% Fe)	Tonnes	Grade (% Fe)
Total Ore Mined	198,500	59.9	1,828,400	61.3
Waste Mined	224,500	<u>—</u>	3,127,100	_
Ore Processed and Screened	183,600	59.8	954,800	58.2
Lump Ore Produced	18,100	64.6	98,700	61.2
Sinter Fines Produced	150,000	61.4	693,200	61.4
Total Product Railed	254,100	61.8	1,493,000	62.3
Tonnes Product Sold	425,500	62.0	1,560,000	62.5
Port Product Inventory	111,000	60.9	111,000	60.9
Site Product Inventory	3,500	58.4	3,500	58.4
Site Run-of-Mine Ore inventory	447,000	56.2	447,000	56.2

Stage 1 and 2 Deposits

Stage 1A and 1B Deposits NI 43-101 Compliant	Indicated (000t)
James (Central) Redmond (Central) Denault (Central) Knob Lake (Central (Stage 1B))	6,700 2,900 6,400 5,700
TOTAL (Stage 1A and 1B)	21,700

Stage 1B and 1C Deposits Historical (Non NI 43-101 Compliant)	(000t)
Stage 1B	
Gill (Central)	4,600
Ruth Lake (Central)	400
Stage 1C	
Wollett (Central)	2,300
Lance Ridge (Central)	1,400
Star Creek (Central)	1,500
Fleming Group (Central)	3,200
Total (Stages 1B and 1C)	13,400

Stage 2 Deposits (South Central)	M&I (000t)
Houston (NI 43-101 Compliant)	22,900
Malcolm (Historical)	2,900

Stage 3 Deposits- North Central

Stage 3 Historical (Non NI 43-101 Compliant)	(000t)
Howse Barney	28,200 6,300
Total (Stage 3)	34,500

Stages 4 – South & Stage 5 North Zones

Stage 4 & 5 Historical (Non NI 43-101 Compliant)	(000t)
Sawyer Lake (South)	12,000
Astray Lake (South)	7,800
Total (Stage 4)	19,800
Kivivic (North)	6,600
Eclipse	37,200
Partington 2	3,400
Trough	2,000
Other	1,600
Total (Stage 5)	50,700

Total NI 43-101 M&I Resources (000t)	44,600
Total Historical Resources (000t)	121,300

¹ NI 43-101 compliant resource as at March 31, 2012.

² Historical resources identified by IOC prior to 1983 were not prepared in accordance with NI 43-101.

³ Resource figures in tables rounded to 000.

Product Mix & Specifications

Sinter Fines:

Size fraction -6 mm

Element	Content %
Fe	63 – 65%
SiO ₂	4 – 6%



Lump:

- Size fraction -32 mm, +6 mm

Element	Content %
Fe	61 – 63%
SiO ₂	5 – 8%

Product Mix
Previous ~10%

Current Plan <20%

- ~62% Fe saleable product
- Near-term: sinter and lump Future: adding ultra fines
- Moisture content typically 6% to 7%
- Typically low phosphorus (P) and alumina (Al2O₃)

Ultra Fines:

- Size fraction -2 mm

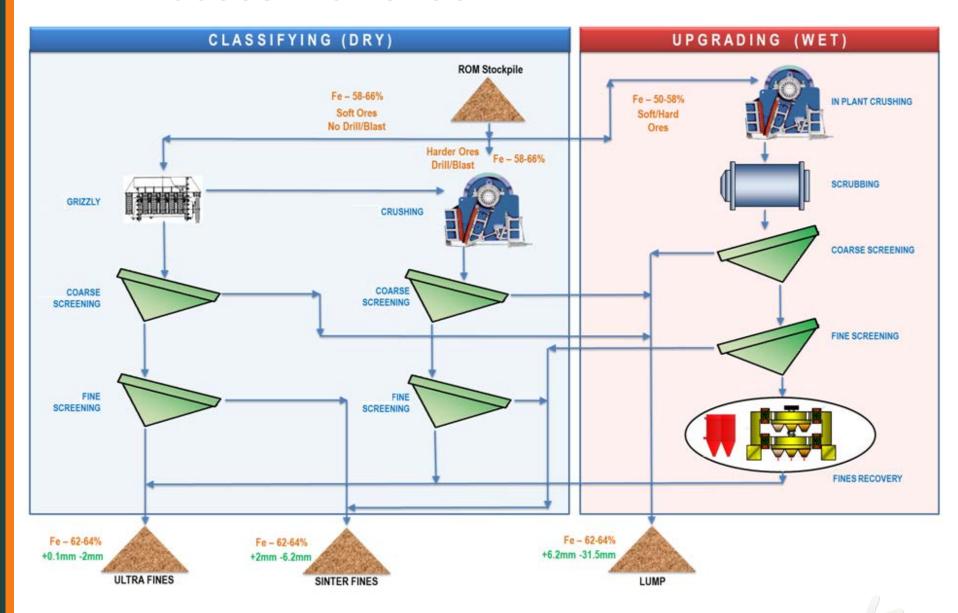
Element	Content %
Fe	62 – 66%
SiO ₂	5 – 8%

Product Mix

Previous n/a

Future¹ ~10%

LIM Process Flowsheet



LABRADOR IRON MINES



Canada's newest iron ore producer

John F. Kearney Chairman and CEO

Rod Cooper President and COO

Investor Relations Contact

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