



Labrador Iron Mines

*Advancing Development of the
Houston Project in the Labrador Trough*

Corporate Presentation

June 2022



Forward Looking Information and Cautionary Statements



Labrador Iron Mines Holdings Limited ("LIMH", "LIM" or the "Company") has prepared this presentation for information purposes only. It contains forward-looking statements about the Company's plans for the exploration, development, and mining of its properties.

Forward-looking information includes mineral resource estimates, estimates of future production, capital costs, operating costs, 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 maintaining agreements with 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.

Cautionary Statements: The terms "iron ore" and "ore" in this document are used in a descriptive sense and should not be considered as representing current economic viability. A Feasibility Study has not been conducted on any of the Company's Schefferville Projects, including the Houston Project.

The economic analysis contained in the Houston PEA (2021) is based, in part, on Inferred Resources, and is preliminary in nature. Inferred Resources are considered too geologically speculative to have mining and economic considerations applied to them and to be categorized as Mineral Reserves. There is no certainty that economic forecasts on which this PEA is based will be realized.

Canadian dollars and metric units of measurement are used throughout this presentation unless otherwise noted.

Qualified Person: Information in the presentation has been approved by Rodney Cooper, P.Eng., Chief Operating Officer of the Company

Experienced Mine Developer



In 2011, LIM Achieved First Iron Ore Production in the Schefferville Region in **30 years**

LIM's Iron Ore Projects

Schefferville Region, Labrador Trough



LIM's Advantages

17 Years Experience in Labrador

- 5 years in exploration & development (2005 – 2009)
- 5 years construction & mining – James Mine (2010 – 2014)
- 5 years rehabilitation & reclamation (2015 – 2020)
- 2 years development – Houston Project (2021 – 2022)

LIM Mining Experience



James Mine: Three Successful Operating Seasons

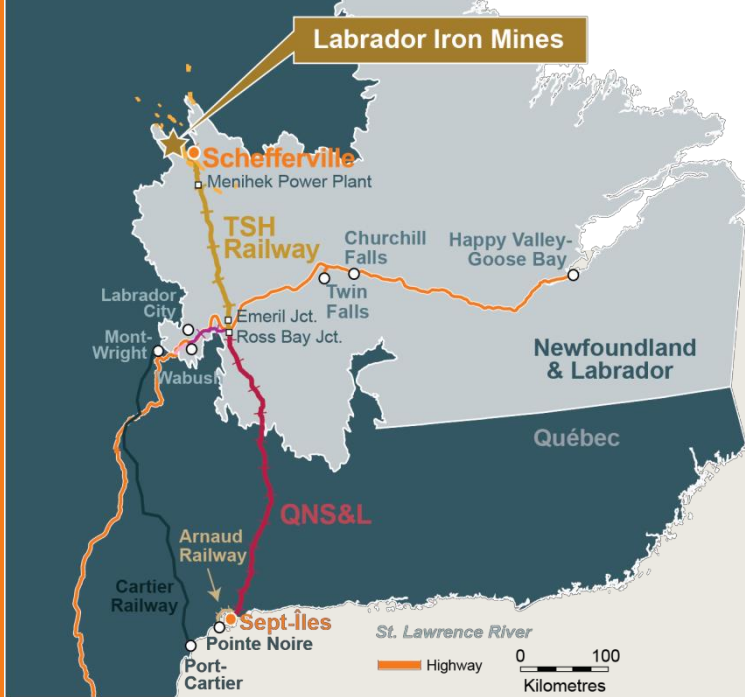
(2011-2013)

~4.6 million tonnes of ore mined

~8.2 million tonnes of waste rock removed

Labrador Iron Mines

Rail Operations




GWRR
(Genesee & Wyoming)

leases locomotives and
operates a **~6 km** spur line

TSH Railway
(Tshiuetin Rail
Transportation Inc.)

to Emeril Junction in
Labrador: **~200 km**



QNS&L 
(Quebec North Shore
& Labrador Railway)

to Port of Sept-Îles: **~360 km**

**Three
Operating
Seasons
(2011 – 2013)**

Transported by Rail to Port of Sept-Îles
300 trains **3.9 million tonnes**



Labrador Iron Mines **5**
Using longer 164-car train sets

LIM Shipping Experience

23 Cape-size shipments to China
(2011-2013)

- 2013 - SamJohn Dream carrying 186,500 wmt of LIM iron ore

Environmental Compliance and Rehabilitation Activities



SILVER YARDS SITE REHABILITATION - 2020



James Mine Pit: Flooded



2017

Current Portfolio of Iron Deposits



Houston & Malcolm

DSO Deposits

20.5 M+I mt 62.7% Fe

14.3 Inf. mt 59.4% Fe

43-101 Compliant Resource¹

~100 mt 62% Fe

Historic Resource²

Elizabeth

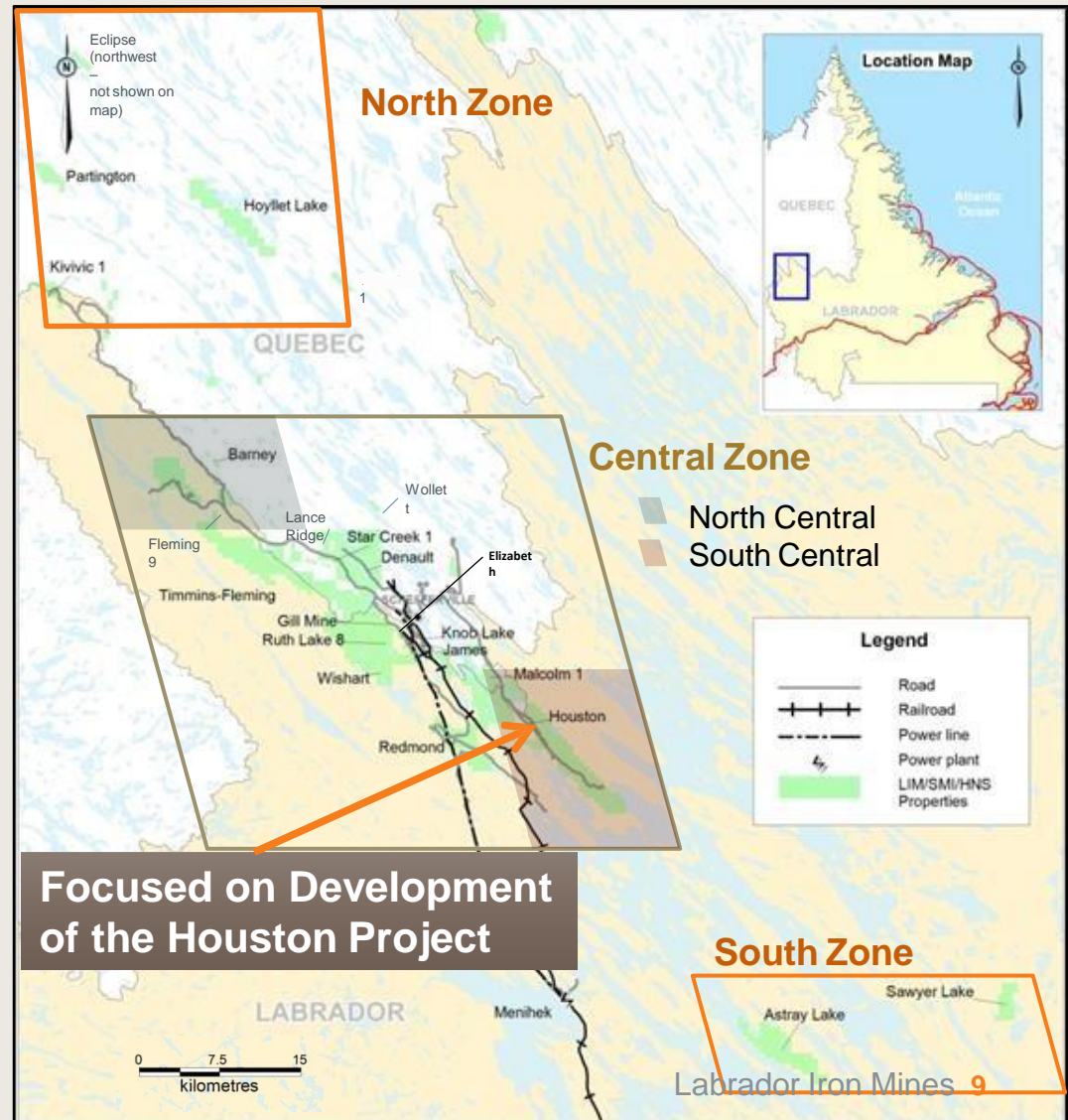
Taconite Deposit

620 mt 32% Fe

Initial Elizabeth

Taconite Resource³

1. Resource as at December 31, 2020, supported by NI-43-101 Report.
2. Historical resources identified by IOC prior to 1983 not supported by NI 43-101 Report. Tonnage in dry tonnes.
3. Resource as at June 15, 2013, supported by NI-43-101 Report



Houston Project

2021 Mineral Resource Estimate



Mineral Resource Estimate						
Category	Tonnes (Mdmmt)	Fe %	SiO ₂ %	Mn %	P %	Al ₂ O ₃ %
Measured	11.4	62.7	6.8	0.52	0.07	0.68
Indicated	9.1	62.7	7.3	0.41	0.06	0.54
M + I	20.5	62.7	7.0	0.47	0.06	0.62
Inferred	14.3	59.4	13.7	1.02	0.07	0.83

Houston and Malcolm deposits remain open along strike

Notes:

- Mineral Resources were classified using the following criteria:
 - Measured Mineral Resources: within an interpreted mineralized domain and within 50 m of the nearest informing sample.
 - Indicated Mineral Resources: within an interpreted mineralized domain and greater than 50 m and less than 100 m of the nearest informing sample.
 - Inferred Mineral Resources: within an interpreted mineralized domain and greater than 100 m of the nearest informing sample.
- CIM (2014) definitions are followed for Mineral Resources.
- Mineral Resources are estimated based on an open pit mining scenario.
- Mineral Resources are estimated based on a cut-off of 50% Fe.
- Mineral Resources are estimated using a long-term benchmark iron price of US\$100/dmt for 62% Fe fines CFR China and a metallurgical recovery of 50% to 100% dependent on mineralization domain.
- Bulk density is based on a formula relating bulk density to iron content.
- Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
- Numbers may not add exactly due to rounding.

Houston Hematite



Houston massive hematite dipping 45°



Houston banded iron formation

Houston Project



Houston Property looking North towards Schefferville

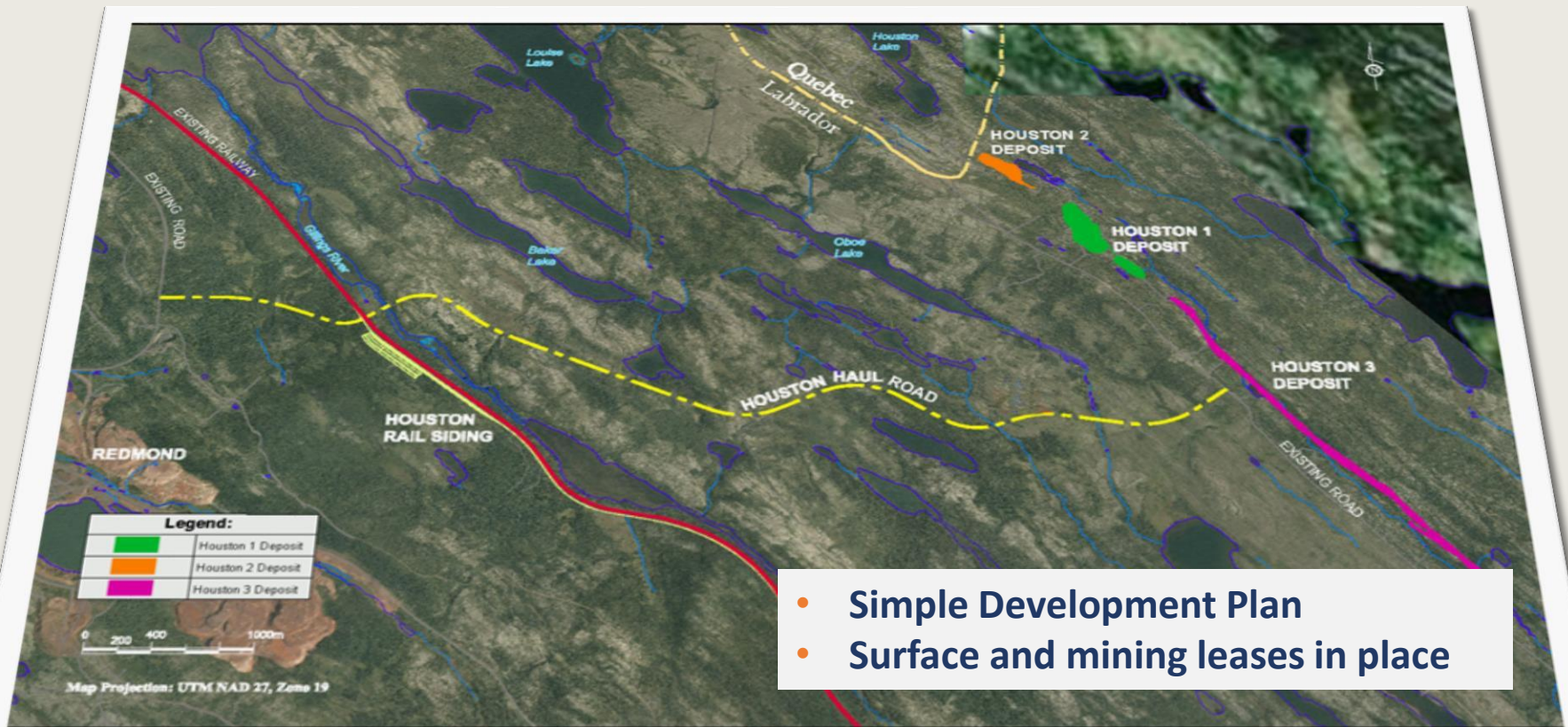
Houston Project PEA Development Plan



- Mining Operations - Year-round
- ~5,500 tonnes / day - Mining
- Dry Crush and Screen
- Rail Operations – May to November
- ~10,000 tonnes /day - Rail
- ~2,000,000 tonnes / year production
- New rail siding
- Houston 1 & 2, rail and road permitted
- New access road already cleared



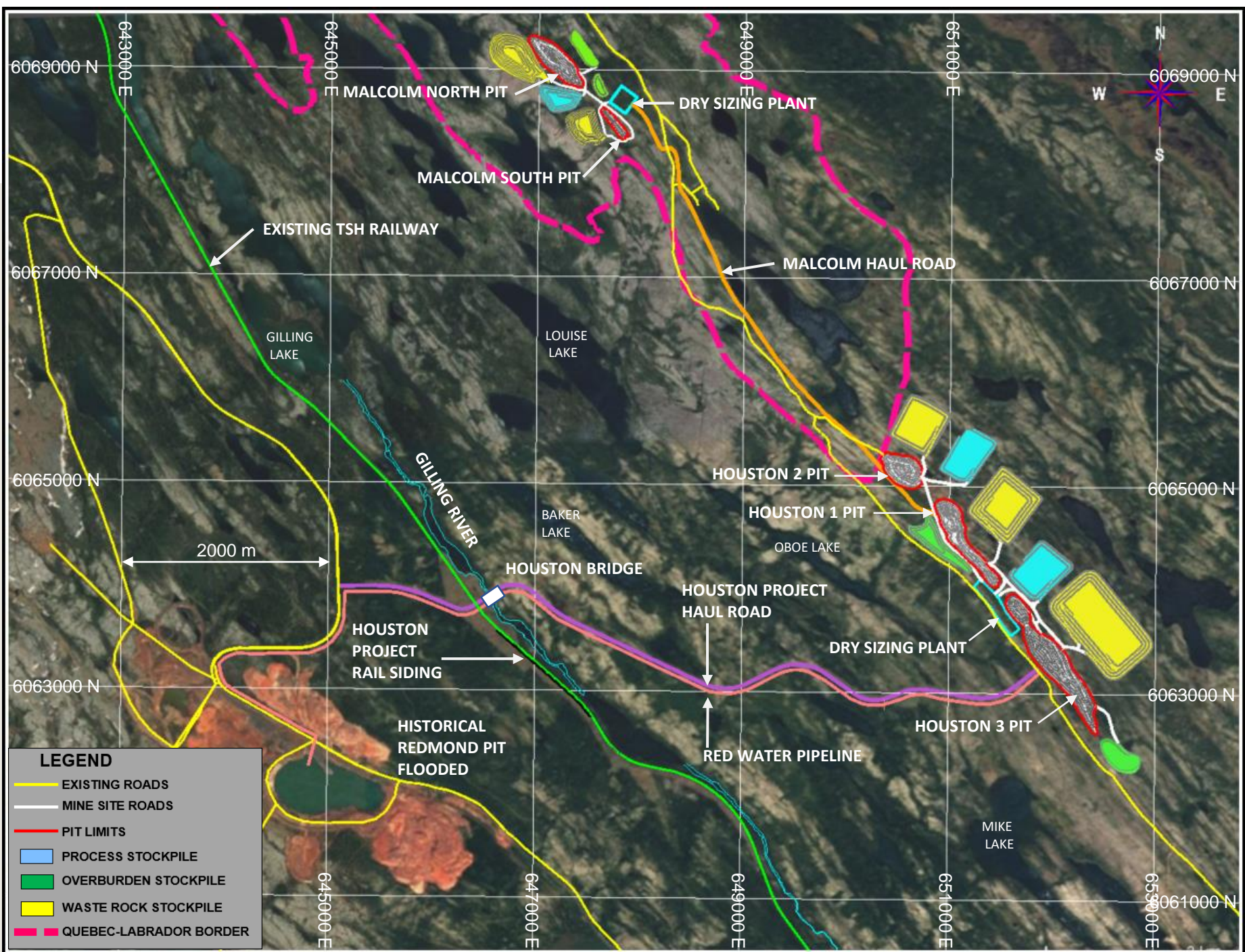
Houston Project



- Simple Development Plan
- Surface and mining leases in place

Low capital development plan:

- Capital investment to put Houston into production relatively modest and lead time for development relatively short, compared with most other iron ore producers under development in the Labrador Trough



PEA Highlights



PEA Highlights	
NPV	<ul style="list-style-type: none"> - NPV_{8%} = C\$109 million (after-tax) using US\$90/t iron ore price (base case) - NPV_{8%} = C\$459 million (after-tax) using US\$160/t iron ore price (current price)
IRR	<ul style="list-style-type: none"> - IRR = 39% (after-tax) using US\$90/t iron ore price (base case) - IRR = 209% (after-tax) using US\$160/t iron ore price (current price including assumed off-take partner participation)
Pay Back	- 2.6 years (after-tax)
Iron ore price	- Base case US\$90/t (62% Fe Sinter Fines CFR China)
Initial CAPEX	- C\$86.8 million (US\$65 million) including EPCM + contingency
Sustaining capital	- C\$67.7 million
Mine life	- 12 years with payback of initial capital at 2.6 years
Production	- 2 million tonnes per annum (“Mtpa”) (62.2% Fe) from 23.4 million tonnes mined
Production Schedule	<ul style="list-style-type: none"> - Mining and processing at 12 months/year at approximately 5,500 tonnes per day (“tpd”) processed - Train loading at approximately 10,000 tpd for 200 days/year (May to November)
Product mix	- 30% lump; 70% sinter

The economic analysis contained in the PEA is based, in part, on Inferred Resources, and is preliminary in nature. Inferred Resources are considered too geologically speculative to have mining and economic considerations applied to them and to be categorized as Mineral Reserves. There is no certainty that economic forecasts on which this PEA is based will be realized.

PEA Strengths



- **LIM's Safety Record is Excellent**
 - FY 2012-2022: 1 lost time injury
- **Low Technical and Execution Risks by Industry Standards**
 - 8 km gravel road, 2 km rail siding, dry crushing and screening
 - Low stripping ratio (waste:ore)
 - Extensive existing local infrastructure
- **Short 18 months construction period**
- **Initial Capital intensity US\$33 per tonne annual production (lowest quartile)**
- **Product Quality is Excellent**
 - 30% lump iron ore at initial 63% Fe content
 - Low Mn, Low P, no S, Low Alumina
- **Environmental and Permitting Approvals**
 - Houston 1 and 2 permitted for construction
 - Houston is a “zero discharge” mining development
 - Record of responsible reclamation of former James Mine
 - Local communities and government support

Houston Project

Key Takeaways



- 2 million tonnes / year for 12-year mine life
- High grade (>62% Fe) lump and sinter fines
- Low Capital Costs
- Strong Projected Economics
- Ready for Construction



Planned Initiatives to Advance Houston Towards Production



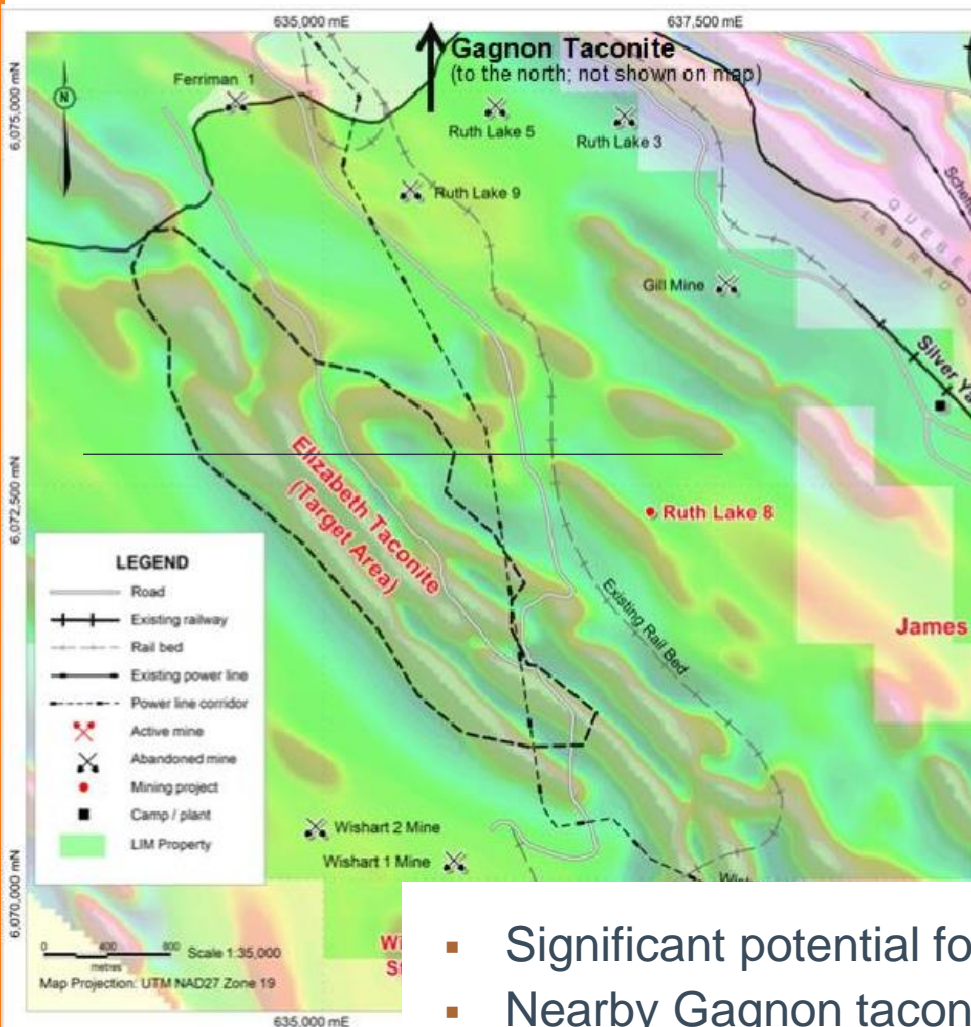
Houston Project Pre-Feasibility Study

- Bulk Sample Metallurgical Testing
 - Lump Ore Characterization
- Hauling Optimization Studies
- Update Hydrogeological Plan
- Activate Regulatory Approvals
- Complete Commercial Negotiations
 - Rail, port and equipment operators
- First Nation re-engagement

- Pre-Feasibility Study incorporating the above
- Development Financing and Offtake Arrangements



Elizabeth Taconite Project



Elizabeth Deposit

Taconite Deposits

620 mt 31.8% Fe

43-101 Compliant Resource¹

350-600 mt 31.9% Fe

Exploration Potential¹

- Significant potential for resource expansion; open to NW and SE
- Nearby Gagnon taconite target (Quebec)

Elizabeth Taconite Project



➤ Close to Infrastructure

➤ Adjacent to railbed

Conceptual Plan

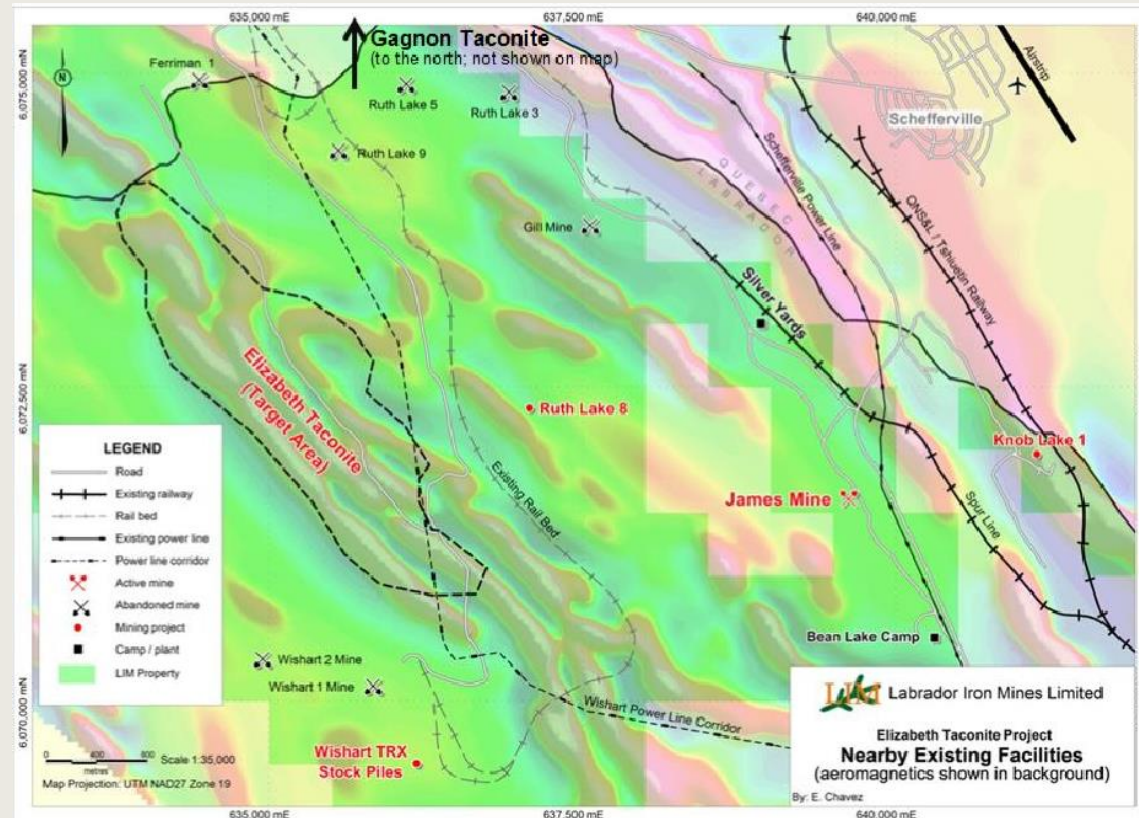
➤ ~5,000,000 tonnes Fe / year

➤ 15 Mt mined / year

➤ Concentrator

➤ Rail to Port

➤ Projected 30-year mine life



Taconite resource targets represent potential project grade **>65% Fe** of concentrate

LIM Advantage

Extensive Existing Infrastructure



- Access roads to property
- Local town with airport
- Direct to port rail access
- Hydro power connection



Hydro Power Connection



Ore Shipment to Port



LIM Substation



Direct to Port Railway



Town of Schefferville with airstrip



Access Road to Project






Relationships with First Nations



Social License to Operate

- Local employment
- Training programs
- Business opportunities
- Community engagement
- Environmental protection

Impact and Benefit Agreements

July 2008	Innu Nation of Labrador (left)	
September 2010	Naskapi Nation of Kawawachikamach (2 nd from left)	
June 2011	Innu Matimekush-Lac John (2 nd from right)	
February 2012	Innu of Uashat (right)	
December 2012	Economic Partnership Agreement with NunatuKavut	



LIM Executive Team



John Kearney <i>Chairman & CEO</i>	Mining executive with 50 years of industry experience. Chairman and CEO of numerous mining companies, including Canadian Zinc Corporation, Anglesey Mining plc., Minco plc., Canadian Manganese Company Inc., Conquest Resources Ltd., Board of Directors, Mining Association of Canada and Director and Former President, NWT & Nunavut Chamber of Mines
Rod Cooper <i>Chief Operating Officer</i>	Mining engineer with over 40 years of experience in resource industry. Previously COO, Baffinland Iron Mines Corporation, VP and Senior Analyst, Mining, Dundee Securities and VP, Technical Services, Kinross Gold.
Richard Pinkerton <i>Chief Financial Officer</i>	Investment banker with 10 years experience in mining sector and five years with PricewaterhouseCooper LLP.
Aiden Carey <i>SVP, Operations</i>	Mining professional which held senior operating positions with Barrick Gold Corporation and Cliffs Natural Resources Inc.
Larry LeDrew <i>VP, Environment and Permitting</i>	Mining professional with 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.



LIM At a Glance



➤ Experienced Operator

- James Mine 2010 – 2013 (~4.6 Mt ore mined)

➤ Proven Track Record of Responsible Mining

- Completion of Reclamation and Rehabilitation

➤ Extensive Iron Ore Resources

- Houston DSO & Elizabeth Taconite

➤ Access to Infrastructure

- Town of Schefferville, Hydro, Airport, Rail to Port

➤ Strategic Relationships

- Government, First Nations & Local Communities

➤ Houston Advancing to Development

- Low CAPEX Development Plan
- Projected 12 Year Mine Life

➤ Preliminary Economic Assessment Completed in 2021





Labrador Iron Mines

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