

## Champion Announces Preliminary Feasibility Study Results Indicating \$3.3 Billion NPV and 30.9% IRR for West and East Deposits of the Consolidated Fire Lake North Project

TORONTO, ONTARIO-(Marketwire – Feb. 7, 2013) – Champion Iron Mines Limited (TSX:CHM)(OTCQX:CPMNF) (FRANKFURT:P02) ("Champion", or the "Company") is pleased to announce the results from its Preliminary Feasibility Study ("PFS") for the West and East deposits of the Consolidated Fire Lake North ("CFLN") Project that was performed by BBA Inc. ("BBA") of Montréal, Québec. The study is based on an initial 20 year mine life and produced a Net Present Value ("NPV") of \$3.295 billion using an 8% discount rate. The financial model shows an Internal Rate of Return ("IRR") of 30.9% and a capital payback period of 3.4 years. The financial results included in this press release are expressed in Canadian dollars and pre-tax (unless otherwise noted).

### Summary of Preliminary Feasibility Study Results

|                                                                                                                                                                |    |                                |   |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|----|--------------------------------|---|
| NPV at 8% discount rate (Pre-tax)                                                                                                                              | \$ | 3,295 million                  |   |
| IRR (Pre-tax)                                                                                                                                                  |    | 30.9                           | % |
| Payback Period at 8% discount rate                                                                                                                             |    | 3.4 years                      |   |
| Pre-production Capital Cost (excluding rail cost)                                                                                                              | \$ | 1,394 million                  |   |
| – Rail capital contribution                                                                                                                                    | \$ | 213 million                    |   |
| Average Operating Cost (loaded at Port of Sept-Îles including rail capital and debt service costs)                                                             | \$ | 44.05 per tonne of concentrate |   |
| FOB Concentrate Selling Price based on CFR China benchmark price at 62 % FeT adjusted for higher CFLN Fe grade @ \$5.00 per percent and \$20.00/t freight cost |    |                                |   |
| Year 1-5                                                                                                                                                       | \$ | 115.00 per tonne               |   |
| Year 6-20                                                                                                                                                      | \$ | 110.00 per tonne               |   |
| Mine Life                                                                                                                                                      |    | 19.6 years                     |   |
| Concentrate Grade (percent contained Fe)                                                                                                                       |    | 66                             | % |
| Process Recovery (Iron)                                                                                                                                        |    | 82                             | % |
| Weight Recovery                                                                                                                                                |    | 39.9                           | % |
| Average Annual Concentrate Production                                                                                                                          |    | 9.3 M Tonnes                   |   |
| In-pit Optimized Measured and Indicated Resources West and East Deposits, CFLN Project (COG of 15 %, 31.5% Total Iron)                                         |    | 691.3 M Tonnes                 |   |
| Engineered Optimized In-Pit Mineable Reserves West and East Deposits, CFLN Project (COG of 15 %, 32.4% Total Iron)                                             |    | 464.6 M Tonnes                 |   |
| Projected Concentrator Plant Start-up and Commissioning                                                                                                        |    | Q1 2016                        |   |
| Projected Start of Nominal Production                                                                                                                          |    | Q2 2016                        |   |

Champion's President and CEO, Tom Larsen commented, "Completion of this Preliminary Feasibility Study is the result of our team's dedicated efforts over the past couple of years and we believe the results confirm the excellent project at our Consolidated Fire Lake North property. The delivery of the Preliminary Feasibility Study is another major milestone for Champion. Our progress in securing port access and material handling capacity at Sept-Îles, advanced negotiations for electric power to the project and permits to start the mine construction camp has resulted in material de-risking of the Fire Lake North Project." Mr. Larsen added, "The recent increase in the estimated mineral resources at Consolidated Fire Lake North to over 2.6 billion tonnes including the Oil Can deposits creates strong support for a potential increase in annual concentrate production to 20 million tonnes with a mine life greater than 20 years. The release of this study on CFLN and what we believe to be a potential world-class mine will accelerate our discussions with potential strategic partners."

### Consolidated Fire Lake North Project Mineral Reserves

The iron process recovery of 82% yields an average production of 9.3 million tonnes per year ("Mtpa") of iron concentrate grading 66% total Iron ("FeT") during a 19.6 years mine life. The current optimized engineered pits

yield reserves of 464.6 M tonnes grading 32.37% FeT at a 15% FeT cut-off grade with a weight recovery of 39.9%. The first five years of production will average 9.8 Mtpa of concentrate.

Table 1 underneath summarizes the reserves and stripping estimates for both the West and East pit.

|                                                            | West Pit        |                  |                         | East Pit        |                  |                         | Both Pits Combined |                  |                         |
|------------------------------------------------------------|-----------------|------------------|-------------------------|-----------------|------------------|-------------------------|--------------------|------------------|-------------------------|
| Consolidated<br>Fire Lake<br>North<br>Table of<br>Reserves | Tonnage<br>(Mt) | Fe<br>Total<br>% | %<br>Weight<br>Recovery | Tonnage<br>(Mt) | Fe<br>Total<br>% | %<br>Weight<br>Recovery | Tonnage<br>(Mt)    | Fe<br>Total<br>% | %<br>Weight<br>Recovery |
| Proven<br>Reserves                                         | 20.7            | 36.2             | 45.7                    | 3.0             | 34.2             | 40.2                    | 23.7               | 36.0             | 45.0                    |
| Probable<br>Reserves                                       | 268.1           | 33.4             | 42.2                    | 172.8           | 30.2             | 35.6                    | 440.9              | 32.2             | 39.6                    |
| Total                                                      | 288.8           | 33.6             | 42.4                    | 175.8           | 30.3             | 35.6                    | 464.6              | 32.4             | 39.9                    |
| Overburden                                                 | 100.8           |                  |                         | 19.4            |                  |                         | 120.2              |                  |                         |
| Waste Rock                                                 | 616.8           |                  |                         | 490.7           |                  |                         | 1,107.6            |                  |                         |
| Inferred<br>Resources<br>(waste)                           | 29.9            |                  |                         | 15.9            |                  |                         | 45.8               |                  |                         |
| Total of<br>Waste<br>Stripping                             | 747.6           |                  |                         | 526.0           |                  |                         | 1,273.5            |                  |                         |
| Stripping<br>Ratio (Waste<br>Striping/Ore)                 | 2.6             |                  |                         | 3.0             |                  |                         | 2.7                |                  |                         |
| Life of Mine                                               | 12.6 years      |                  |                         | 7.1 years       |                  |                         | 19.6 years         |                  |                         |

The engineered pits recover 67% of the current In-pit Optimized Measured and Indicated Resources totalling 691.3 Mt grading 31.5% FeT. The engineered pits limit the inclusion of In-pit Inferred resources to 45.8 Mt which are categorized as waste.

Additional drilling of the 480 Mt grading 30.4% FeT current Inferred Resources within the limits and proximal to the Optimized Pit Shells could provide additional Measured and Indicated resources required to double production capacity and support a second concentrator line that would produce an estimated 20 Mt of concentrate annually for a mine life of 20 years.

#### Financial Analysis

Compared to the result of the Preliminary Economic Assessment (see press release dated November 21st, 2011) the following main differences in the capital costs of the project are as follows:

- Rail costs increased from \$275.4 million to \$1.334 billion, reflecting the estimate for a rail system from the CFLN Project to Point Noire at the Port of Sept-Îles as contained in the 2012 Feasibility Study prepared for Champion by Rail Cantech. However, \$200 million of upfront costs in this rail scenario are attributed to Champion and \$1.134 billion is financed via construction financing and repaid from project cash flows over a 12 year period.
- Concentrator and site infrastructure cost was increased by \$145.9 million to support an increased concentrate production capacity to 10 Mtpa and a dual voltage substation.
- Pointe Noire port facilities cost was increased by \$109.8 million after consideration to a more suitable storage location which could be expanded at minimal cost.
- Environmental cost increased by \$83.4 million due to a cost underestimation in the PEA.
- All mining equipment is capitalized (\$55.4 million) compared to the PEA where the mining equipment was leased.

The addition of these significant cost components clarify the project scope with regards to the project schedule and estimated budget. The financial model illustrates the robust economics of the West and East iron ore deposits on their own merit. With the adjacent resources within the CFLN project boundaries, the mid and long term growth profile of this project are exceptional (refer to Press Release dated January 9th, 2013).

The \$US exchange rate is assumed to be at par value with the Canadian dollar. Table 1 provides the Net Present

Values calculated at various discounted cash flow rates for the Base Case production scenario of 10 Mtpa of iron concentrate. The financial analysis in the PFS study used a sale price of \$115 per tonne of iron concentrate (\$/tonne is FOB Sept-Iles) for the first 5 years, and \$110 per tonne for years 6 to 20. A sale price of \$115 per tonne was used for the Updated PEA.

Table 1: CFLN West and East Deposits Preliminary Feasibility Results (Pre-Tax)

|                                                  |    |             |
|--------------------------------------------------|----|-------------|
| Internal Rate of Return (IRR) (8% Discount Rate) |    | 30.9%       |
| Undiscounted Cash Flow                           | \$ | 9.0 billion |
| Net Present Value @ 5% Discounted Cash Flow      | \$ | 4.7 billion |
| Net Present Value @ 8% Discounted Cash Flow      | \$ | 3.3 billion |
| Net Present Value @ 10% Discounted Cash Flow     | \$ | 2.6 billion |
| Payback Period (8% Discount Rate)                |    | 3.4 years   |

Receipt of the general Certificate of Authorization from the Québec Government is expected in Q1 2014 which will be followed by the construction and start-up. Pre-construction activities are scheduled to take place in 2013. The commissioning period is planned for Q1 2016 and feasibility study production levels are planned for mid-2016 in line with rail transportation availability. The Environmental and Social Impact Assessment study is planned to be submitted to the MDDEFP and CEEA within Q1 2013.

The PFS study has an accuracy of +15/-10%, which is considered industry standard for capital and operating cost estimates in a feasibility study. The only component that is not at a feasibility study precision level is the multi-user rail infrastructure component. Champion has signed a contract with CN Railway Company ("CN") whereby CN would present a feasibility study on this multi-user concept by May 31st, 2013.

In order to complete the PFS in a timely manner, the Company included the metrics from its Rail Cantech feasibility study completed in August 2012. This study is based on a 310 km railway designed for an initial capacity of 20 Mtpa that is located on the east side of the Ste. Marguerite River, starting at the CFLN project loading station and ending in the Pointe Noire area of the Sept-Îles port.

Therefore, the PFS includes an estimated cost of \$9.47/tonne of concentrate for rail debt service in addition to 4.80 \$/tonne for operations, totalling \$14.27/tonne based on 9.3 Mtpa mine-life average production of iron concentrate. This is a higher cost than the initial rates proposed by the CN multi-user rail transportation solution. Nonetheless, it shows that the project economics are strong enough to support the construction of a new 310 km railway on its own.

Excluding the rail transportation capital cost component, the total capital expenditures during the pre-production period were estimated at \$1.39 billion of which \$227.3 million is allocated to the Pointe Noire concentrate stockyard facilities, as itemized in Table 2. The cost to develop the CFLN concentrator and site facilities near Fermont totals \$1.167 billion, which equates to a capital intensity of \$125/tonne for the 9.3 million tonnes of annualized production of iron ore concentrate.

This PFS study takes into consideration the usage of the Sept-Iles multi-user Port facility project that is currently in construction and planned for completion by Q1 of 2014. The Port Authority has communicated in December 2012 that the project is on schedule and on budget.

Table 2: Pre-production Capital Costs

|                                                                                  |             |
|----------------------------------------------------------------------------------|-------------|
|                                                                                  | C\$ million |
| Mine equipment and pre-stripping                                                 | 133.8       |
| Site infrastructure                                                              | 192.0       |
| Concentrator including load out facilities                                       | 410.7       |
| Environmental and Tailings Management                                            | 85.0        |
| Other Pre-production Costs (rail rolling stock lease)                            | 13.4        |
| Port Facilities: Car dumper, stacker/reclaimer, stockyard                        | 158.3       |
| Railway (Owner's cost for 310 km distance including turnaround loop and sidings) | 200.0       |
| Sub Total                                                                        | 1,193.2     |
| Indirect Costs (including Owner's Costs)                                         | 300.2       |
| Contingency (10%)                                                                | 114.6       |
| Grand Total (100% of the project)                                                | 1,607.8     |

Operating costs are outlined in Table 3:

| Table 3: Operating Costs                                  | (\$/Tonne of Concentrate) |                         |
|-----------------------------------------------------------|---------------------------|-------------------------|
|                                                           | Average<br>20 years       | Average<br>years 1 to 5 |
| Mining                                                    | 18.89                     | 12.76                   |
| Concentrator crushing and processing                      | 4.38                      | 3.89                    |
| Site Infrastructure Maintenance, & General Administration | 4.05                      | 3.66                    |
| Environmental Tailings and 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 (\$1,133.6 million)             | 6.22                      | 7.40                    |
| Railway interest payment (\$592.6 million)                | 3.25                      | 7.29                    |
| Total operating cost                                      | 44.05                     | 42.68                   |

Optimization of the mine-life production schedule resulted in a strip ratio of 1.56:1 (waste/ore) for the first three years of production, 2.02:1 for the first five years of operation; and a 2.74:1 strip ratio for the current 20 year mine-life.

As in the 2012 updated PEA study, the mill flowsheet of this PFS is based on a standard three stage spiral iron beneficiation process. The run-of-mine iron ore is crushed in a 60" by 89" gyratory crusher and then ground in a 38' by 21.5' autogenous grinding mill ("AG Mill"). The AG mill diameter and associated horsepower was increased for the PFS in order to optimize the production rate throughput and enhance the economic metrics in comparison to the 2012 PEA study. The AG mill will have two AC variable drive motors totalling 21,450 HP. Larger mills of up to 42' are currently in operation in the mining industry.

The PFS operating costs were reduced by 16% in comparison to the 2012 PEA despite a significant cost increase related to the construction of a new railway and associated debt service of \$1,133.6 million. Mining costs were reduced by \$5.34/tonne of concentrate primarily associated with a reduction in strip ratio (\$4.19/tonne) combined with the removal of the mine equipment lease cost (\$1.15/tonne). Costs at the Pointe Noire Port facilities were reduced by \$1.38/tonne of concentrate following the signing of an agreement with the Port of Sept-Iles Authority. The concentrator, environmental, and general and administration costs were slightly reduced by \$0.14/tonne, \$0.16/tonne and \$0.35/tonne respectively, following a detailed analysis of each cost component by BBA.

Manpower levels are expected to be 508 employees in Year 1 and peak at 688 in Year 15 when the mine reaches maximum production.

There is potential for the CFLN Project to become a significant low cost iron ore producer with a new concentrator equipped with today's advanced mineral processing technologies. The Company continues to analyze lower cost opportunities.

Results from the PFS indicate that the CFLN project is a very technically feasible and economically robust project with a Base Case scenario including one production line yielding 9-10 Mtpa of concentrate from 464.6 M tonnes of in-pit reserves processed over a 20 year mine-life. The PFS study is based on a stand-alone operation at CFLN and does not consider the current Mineral Resources identified at other iron deposits located on the CFLN Property (see Press Release dated Jan. 9th, 2013). The outstanding mid and long term growth profiles for the Company are evident from mineral resources identified within the CFLN Property and surrounding Fermont Holdings.

#### Investor and Analyst Conference Call

Champion will host a conference call today at 8:30 am EST (February 7th, 2013) to discuss the Preliminary Feasibility Study results and address any questions from analysts and shareholders.

The dial-in numbers for the conference call are as follows:

Local / International: (647) 426-1845

North American Toll Free: 1-866-782-8903

The technical information in this news release was prepared by Mr. Jean-Luc Chouinard, ing., M.Sc., VP Project Development for Champion Iron Mines Limited and approved by Dr. André Allaire, ing., M.Eng., Ph.D. and Mr. Patrice Live, ing., from BBA Inc., and all individuals are Qualified Persons under NI 43-101 standards. Mr. Allaire and Mr. Live are both independent of the issuer.

#### About Champion Iron Mines Limited

Champion is an iron exploration and development company with offices in Montréal and Toronto, and is focused on developing its significant iron resources in the provinces of Québec and Newfoundland & Labrador. Champion holds a 100% interest in the Fermont Iron Holdings and a 44% interest in the Attikamagen Iron Project located in both Québec and Labrador. The Attikamagen Project is under option to Labec Century Iron Ore Inc. ("Labec"), a subsidiary of Century Iron Mines Corporation, under which Labec can earn up to a 60% interest.

Champion's Fermont Iron Holdings, including its flagship Consolidated Fire Lake North Project, are located in Canada's major iron ore producing district, in close proximity to five producing iron mines, existing transportation and power infrastructure. Consolidated Fire Lake North is located immediately north of ArcelorMittal's operating Fire Lake Mine and 60 km south of Cliffs Natural Resources Inc.'s Bloom Lake Mine in northeastern Québec. Champion's management and advisory board includes mining and exploration professionals with the mine development and operations experience to build, commission, and operate the future Consolidated Fire Lake North mine.

For additional information on Champion, please visit our website at [www.championironmines.com](http://www.championironmines.com).

*This news release includes certain information that may constitute "forward-looking information" under applicable Canadian securities legislation. Forward-looking information includes, but is not limited to, statements about planned operations at the Company's projects, including its Consolidated Fire Lake North Project. Forward-looking information is necessarily based upon a number of estimates and assumptions that, while considered reasonable, are subject to known and unknown risks, uncertainties, and other factors which may cause the actual results and future events to differ materially from those expressed or implied by such forward-looking information, including the risks identified in Champion's annual information forms, management discussion and analysis and other securities regulatory filings by Champion on SEDAR (including under the heading "Risk Factors" therein). There can be no assurance that such information will prove to be accurate, as actual results and future events could differ materially from those anticipated in such forward-looking information. Accordingly, readers should not place undue reliance on forward-looking information. All forward-looking information contained in this press release is given as of the date hereof and is based upon the opinions and estimates of Champion's management and information available to management as at the date hereof. Champion disclaims any intention or obligation to update or revise any forward-looking information, whether as a result of new information, future events or otherwise, except as required by law. This press release has been prepared by Champion Iron Mines Limited and no regulatory authority has approved or disapproved the information contained herein.*

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