



Quarterly Activities Report – December 2008

Spinifex Ridge Molybdenum Project

Highlights

- US\$150 million Interim Financing Facility completed
- Potential staged development for Spinifex Ridge Molybdenum Project
- Advanced study for Stage I, 8-10 million tonne per annum plant with a future expansion to 20 mtpa and beyond. Advantages include:
 - Enhanced grade profile
 - Lower strip ratio
 - Relaxation of concentrate specifications
 - Significantly reduced capital hurdle improving financing opportunities
 - Current approvals and permits support staged developments
- Manufacture of long lead equipment items 95% complete, full settlement expected end March 2009 quarter
- All other development activities for the 20 mtpa plant suspended with full development approvals in place
- Iron ore resource drilling completed with new zone identified
- The Company's significant cash position allowing it to review other opportunities outside its existing portfolio of assets.



World Financial Crisis and the Molybdenum Market

The first 9-10 months of 2008 were characterized by a resilient world molybdenum market amidst an unprecedented deterioration in world financial markets and the base metals complex. The stability of the molybdenum market and its strong outlook allowed the Company to close the US\$150 million Interim Financing in October.

The Interim Financing was designed to bridge the Company's development expenditure for the Spinifex Ridge Project until the pressure on the financial markets eased and credit became available again. Its maturity date and terms, outlined in the Notice of Meeting and Information Circular for the Company's 2008 Annual General Meeting, reflected the Company's and lenders goals of achieving a full Project financing during 2009.

In the first half of November the world molybdenum oxide price fell dramatically to approximately US\$10.00/lb, where it remains today. The world's largest consumers of ferro-alloy metals cancelled orders across a suite of raw materials including molybdenum. At the same time, or as a result, various metal traders are understood to have encountered credit constraints that caused the immediate liquidation of inventories leading to this collapse in world molybdenum prices.

The world's largest primary and by-product molybdenum producers have reacted quickly to the combined effects of the sudden fall in molybdenum prices, the continued weakness in copper prices and the tightness of capital markets by instigating immediate production cuts and the indefinite deferral of expansions and new project development.

Moreover, of the five major molybdenum projects that were planned for financing, construction and production by 2011, three have been delayed indefinitely leaving Spinifex Ridge as one of two projects active.

Whilst the current molybdenum price is unlikely to support any new molybdenum project development in the short term, the characteristics of the metal and a constrained supply side still supports a strong price outlook. It is anticipated that there will be a significant correction in demand for the metal once the impact of the economy-boosting, infrastructure development programmes of the major countries commences.

In view of the environment, the Company is undertaking detailed investigations modifying the development profile for Spinifex Ridge, re-optimising mine plans and



plant capacity for a staged development that will enhance the Projects execution and prospects for financing in the tight capital markets.

Spinifex Ridge Project Development Program

Project activities during the quarter have focussed on:

- Scoping studies for a smaller Start-up project for Stage 1 of Spinifex Ridge with a reduced capital hurdle.
- Completion of construction and payment for the major long lead items of plant that were on the critical path for the 20 mtpa Project.
- Drilling iron ore and preparation of scoping study.

Full development permits and approvals are in place for the development of Spinifex Ridge. With design and engineering activities having now exceeded 500,000 man-hours, sufficient to commence construction of the larger 20 mtpa project, further engineering has been deferred pending the outcome of the Start-up Project Study.

8-10 mtpa Start Up Scoping Study

Mine Planning, Mill Design and Permits

The Company's internal technical team is now focussing on an optimised staged development profile for Spinifex Ridge that commences with a smaller scale mine and plant, with a capacity in the order of 8-10 mtpa, producing 11 to 13 mlbs Mo per annum.

Mine planning optimizations based on a US\$10.00/lb molybdenum price have identified various 10 year starter pits that rapidly access the higher grades of the core of the deposit. These pits have a significantly lower strip ratio, with much of the "waste" being low grade mineralised material which can be stockpiled for later processing through an expanded mill.

The detailed process design, engineering and costings completed for the 20 mtpa plant were based on a mill consisting largely of two parallel circuits. The start-up plant design utilises one of the circuits with the completed engineering providing high confidence reference numbers.



The new studies are also based on the use of existing ordered long lead equipment, much of it being the largest practical equipment for unit processes in single modules. In addition the new design also minimizes the plant footprint and consequently reduces infrastructure costs. The staged development has significant impacts on infrastructure costs, in particular water supply.

The existing permits in place for the 20 mtpa project should also support an 8-10 mtpa development.

Capital and Operating Cost Estimates

Revised cost estimates are expected to be completed during March/April 2009.

Construction of Long Lead Items

Of the US\$150 million of Interim Financing, approximately US\$69.0 million has been allocated to complete the supply of the primary crusher, secondary crushers, 2 ball mills, 3 high pressure grinding rolls and the accommodation along with associated infrastructure facilities that were ordered in 2007.

At the time of completing the Interim Financing and prior to the slump in molybdenum prices, these items were between 70 and 95% complete.

The Company is examining a sales process for those long lead items of equipment, including accommodation units, which are considered surplus to the requirements for the Stage 1 Start-up.

Iron Ore Activities

Iron Ore explorations continue on the mineralization identified to the west of the planned Spinifex Ridge molybdenum / copper deposit and within the current granted mining leases for Spinifex Ridge. The Company completed the first stage resource definition drilling at the end of 2008 and is awaiting final assays. This will lead to the calculation of a resource estimate during first quarter 2009. Environmental impact assessment studies have commenced and work programs developed for mineralogy classification, metallurgical testwork, mine design, process design and financial modelling.

TCW Interim Financing Structure



The TCW financing structure was outlined in the Notice of Meeting and Information Circular dated October 22, 2008 for the Company's Annual General Meeting held on November 27 2008.

On September 29, 2008 the Company drew down the first tranche of US\$30 million of the US\$150 million Interim Financing. Moly Metals Australia Pty Ltd ("MMA"), a 100% owned subsidiary of Moly Mines and owner of the Spinifex Ridge Molybdenum Project, issued first tranche Notes with an aggregate principal value of US\$30 million on September 29 2008 (First Tranche Notes").

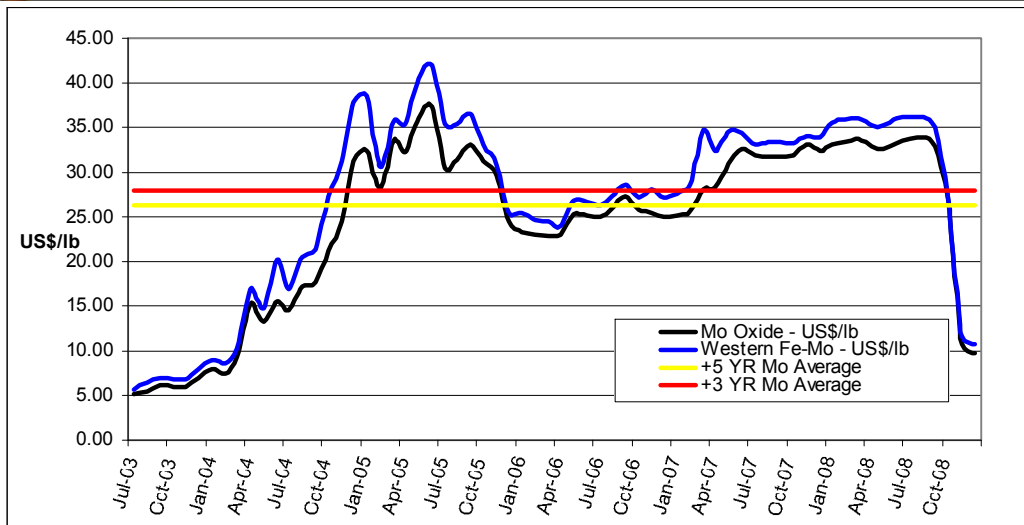
On 31 October 2008, the Company completed all conditions precedent to allow the drawdown of the second tranche of US\$120 million. MMA issued a further series of Notes with an aggregate principal value of US\$120 million on October 31 2008 ("Second Tranche Notes").

The First and Second Tranche Notes totalling US\$150 million are repayable on October 31 2009. Interest accrues on the Notes at the rate of 20% per annum.

At the Annual General Meeting, shareholders ratified the issue and allotment of a total of 17,874,118 Warrants in the Company to the Noteholders with an exercise price of A\$0.0001 as part consideration for the provision of the Interim Financing. In addition, shareholders approved the potential future issue of approximately 5,958,040 Warrants with an exercise price of A\$0.0001 to the Noteholders if Noteholders elect to roll the US\$150 million Interim Financing into the full funding for the Spinifex Ridge Molybdenum Project.

Markets

		Dec Qtr		Year to Date	
		2008	2007	2008	2007
Mo oxide	US\$/lb	15.8	32.5	28.9	30.3
Western Fe-Mo	US\$/kg	35.9	74.3	68.0	72.2



Resources and Reserves

The Company is currently reviewing the Projects Reserves and Resources in light of recent changes in commodity prices.

Corporate

Board Appointment

At December 31 the Company had 86,191,677 shares on issue and 11,860,000 unlisted options on issue. During the quarter, 3,565,000 options were cancelled or expired.

In the previous quarter, the Company indicated that Mr Andy Zhmurovsky would be joining the Board of Moly Mines as the nominee of TCW. The Company has recently been advised that TCW's nominee will now be Mr Kurt Talbot. Upon the completion of the standard requisite appointment documentation, the Company will confirm the appointment to the market.

Issue of Options

On December 31, 3,235,000 employee and director options expired unexercised. As the Company continues to reduce its overhead and maintain tight fiscal control over the coming year, the Board has resolved to issue a total of 2,813,000 new options to



employees and directors at an exercise price of A\$0.40, expiring 31 December 2010. The options will be issued variously under the Company's Employee Incentive Option Scheme and section 708 of the Corporations Act.

The grant date for the options is January 23 2009, at which point the 30 day and 5 day VWAP for Moly Mines shares trading on the ASX was A\$0.33 and A\$0.30 respectively. Of the 2,813,000 new options, 100,000 will be granted to each of the Company's five non-executive directors and 520,000 issued to the Chief Executive Officer.

In due course shareholders will be asked approve options issued to directors in accordance with the Corporations Act and Listing Rules.

Following the issue of options, the Company has 86,191,677 ordinary shares on issue and the following unlisted options and warrants on issue:

Number of Unlisted Options	Class	Expiry Date	Exercise Price
7,500,000	Founder granted Mar-11 2004	Mar-11 2009	A\$0.20
1,290,000	Directors	Dec-31 2010	A\$1.40
2,955,000	Employees	Dec-31 2010	A\$1.40
45,000	Employees	Dec-31 2009	A\$2.50
70,000	Employees	Dec-31 2009	A\$3.50
1,020,000	Directors	Dec-31 2010	A\$0.40
1,793,000	Employees	Dec-31 2010	A\$0.40
14,673,000			

Number of Unlisted Warrants	Expiry Date	Exercise Price
17,874,118	Oct 31-2018	\$0.0001



Corporate Directory

Board of Directors

Paul Willis	Non Executive Chairman
Derek Fisher	Chief Executive Officer / Managing Director
David Constable	Non Executive Director
Peter Thomas	Non Executive Director
Michael Senft	Non Executive Director
David Nixon	Non Executive Director

Officers

Andrew Worland	Company Secretary
Collis Thorp	Chief Operating Officer
John McEvoy	Chief Financial Officer
Mike Gloyne	General Manager Operations

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Stock Exchange Listing

Australian Stock Exchange & Toronto Stock Exchange	
ASX/TSX Code:	MOL

Share Registers

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