

# Tosca Mining Corporation

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## Tosca Mining releases NI 43-101 Resource estimate and Metallurgical results for Red Hills, Texas

Vancouver, British Columbia, February 22, 2012. Tosca Mining Corporation (TSX.V:TSQ, OTCQX:TSMNF, FSE:TQ4) announces the completion by Mine Development Associates (“MDA”) of Reno, Nevada of the first publically reported, NI 43-101 compliant mineral resource estimate for the Red Hills Deposit, located in Presidio County, Texas. The MDA report also summarizes the results of a metallurgical study completed by METCON Research in Tucson, Arizona. The mineralization of interest at Red Hills occurs within a porphyry molybdenum deposit and near surface copper enrichment zone (“copper blanket”) that covers an area about 4,000 ft (1220 m) by 3,000 ft (915 m). **The porphyry molybdenum mineralization has a depth-extent of over 2,000 ft (610 m) though the mineralization is not well-defined past a depth of 1,000 ft (305 m). Both copper and molybdenum mineralization are open to the south under post-mineralization cover.**

### Highlights

#### ● Red Hills Mineral Resources

Category	Cutoff (%MoEq*)	Tons (million)	%MoEq	%Mo	lbs. Mo (million)	%Cu	lbs. Cu (million)
Indicated	0.025	26.7	0.080	0.054	28.7	0.14	77.4
Inferred	0.025	263.8	0.056	0.051	268.5	0.03	151.3
Indicated	0.050	21.7	0.090	0.061	26.6	0.16	68.6
Inferred	0.050	149.8	0.073	0.069	206.6	0.02	68.2

*\*Molybdenum Equivalent Grades (% MoEq) are calculated as follows:  $MoEq\% = Mo\% + (Cu\% \times 0.1806)$ . This formula is based on 1) prices of \$ 14/lb. Mo and \$ 3.25/lb. Cu, and 2) molybdenum and copper recoveries of approximately 90% and 70%, respectively.*

As a term of reference according to [www.metalprices.com](http://www.metalprices.com), the price as of February 17, 2012, of Molybdenum was \$14.51 per pound and Copper \$3.79 per pound.

#### ●Metallurgy: Results of flotation testing

Average molybdenum recovery: 89%

Sadek El-Alfy, PhD, CEO, commented “The results from the 2011 diamond drill campaign confirmed that Red Hills is a large porphyry deposit with commercially attractive grades of both molybdenum and copper. Metallurgical studies have shown that recoveries of this molybdenum/copper resource are encouraging and straightforward.

In 2012 we will continue to develop Red Hills by investigating the economic feasibility of molybdenum/copper extraction and recovery on a large scale; this study will be incorporated in a Preliminary Economic Assessment (“PEA”) currently being prepared by M3 Engineering in Tucson, Arizona. The company is planning a drill program to upgrade the resources and to drill test the potential southern extension of the deposit.”

### **Mineral Resources**

The resource estimate is based on a database of 121 drill holes totaling 60,131 feet (18,328 m) which includes 53,947 feet (16,443 m) of diamond drilling. The copper and molybdenum resources were modeled and estimated by evaluating the drill data statistically, utilizing the geologic interpretations developed by Tosca and MDA to interpret mineral domains on 29 cross sections spaced at 100 ft (30.5 m) intervals, resolving the mineral domain interpretations on longitudinal sections spaced at 20 ft (6.1 m) intervals, analyzing the modeled mineralization statistically to establish estimation parameters, and interpolating grades into a three-dimensional block model. Lithology, oxidation, and copper-molybdenum mineral domains models were created for the Red Hills project. The modeling of the Red Hills Resources was performed using Gemcom Surpac® mining software.

The stated resource is **fully diluted** to 20ft (6.1 m) by 20ft by 20ft blocks. In consideration of the depth limits of any potential open pit mining, **the Red Hills resource was constrained to a bottom elevation of 2,800 ft** (853 m) approximately 1,200 ft (366 m) below the general surface.

Because of the requirement that the resource exists “in such form and quantity and of such a grade or quality that it has reasonable prospects for economic extraction,” MDA is reporting the resources at a cutoff grade (0.025% MoEq) as that is reasonable for deposits mined by open-pit methods. In determining a reasonable cutoff grade, MDA considered metal prices, extraction costs, and metallurgical recoveries. The diluted resources have been reported at additional cutoffs in order to provide a grade distribution. The diluted resources at a 0.05% MoEq cut-off grade is included in the Mineral Resource highlights on page 1 to show the effect of a higher cut-off grade.

The copper resource is fully contained within the near-surface copper blanket, and there is a significant tonnage of molybdenum-only material in the resource. The lower copper grades within the Red Hills resource result from the “spreading” of the copper over the full resource. **If the copper mineralization is evaluated from a copper-only standpoint, the copper resource at a 0.15% Cu cutoff grade (comparable to 0.027%**

MoEq cutoff grade) contains an Indicated Resource of 8 million tons of 0.35% Cu (56.4 million lbs. Cu) and an Inferred Resource of 12.7 million tons of 0.25% Cu (63.4 million lbs. Cu).

In addition to the molybdenum/copper mineralization, multi-element analyses of Tosca's drill samples show elevated rhenium levels associated with molybdenite mineralization. **Rhenium concentrations of 0.5 to >1.0 part per million were encountered over vertical intervals of up to 500 feet (152 m) throughout the mineralized porphyry.**

### Metallurgical Testing

METCON conducted a froth flotation study on seven composite core samples from Tosca's 2011 drilling at Red Hills, using assay rejects. The froth flotation study was conducted at a grind size of approximately 80 percent passing 74 microns, a pulp density of 25 percent solids, and pulp pH at 11. The results of this investigation are tabulated below:

#### Locked Cycle Flotation Testing On Composite Samples Average Metallurgical Results Summary of Results

Sample ID	Head Grade		Grade			Recovery	
	Total Cu (%)	Mo (ppm)	Mass Recovery (%)	Cu (%)	Mo (%)	Cu (%)	Mo (%)
Composite 1	0.46	41	4.75	5.70	0.08	63.37	68.43
Composite 2	0.26	438	1.39	10.66	2.36	64.95	81.41
Composite 3	0.31	513	1.24	10.92	3.07	52.26	86.69
Composite 4	0.78	682	4.28	14.80	1.24	85.61	91.30
Composite 5	0.16	562	2.95	3.70	1.54	64.86	89.48
Composite 6	<0.001	728	0.42	1.11	14.85	63.03	93.23
Composite 7	<0.001	963	0.42	0.28	19.32	30.54	90.50

Head assays of composites 1 to 5 contained significant copper concentrations (0.16% to 0.78% Cu). **Copper recoveries from those five samples ranged from 52.26% to 85.61% (average: 66.2 %).** Composites 6 and 7 did not contain detectable copper in head assays.

Head assays of Composites 2 to 7 contained significant molybdenum concentrations (438 ppm to 963 ppm Mo). **Molybdenum recoveries from those composites ranged from 81.41% to 93.23% (average: 88.8%).**

A complete copy of the NI 43-101 for Red Hills Projects is available on SEDAR and also filed on the OTC-QX website.

## Qualified Person

The mineral resource estimate was prepared by Paul Tietz, Senior Geologist at Mine Development Associates (“MDA”) in Reno, Nevada in accordance with National Instrument 43-101. Paul Tietz is an independent “Qualified Person” as defined by National Instrument 43-101.

The metallurgical studies were supervised by Rodrigo R. Carneiro, a metallurgical engineer with METCON Research (“METCON”) and a “Qualified Person” as defined by NI-43-101.

The mineral Resource estimate and the metallurgical work were reviewed by Luca Riccio, PhD, PGeo and Sadek El-Alfy, PhD, respectively. Both are “Qualified Persons” according to the definitions of NI 43-101. Luca Riccio has supervised the preparation of the technical information and data included in this News Release.

On Behalf of the board of directors,  
"Ron Shenton"

For further information, please visit the company's website at [www.toscamining.com](http://www.toscamining.com) or call 604-687-6562. Email [info@toscamining.com](mailto:info@toscamining.com)

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