

ASX Announcement 9 August 2012 ASX Code: GBZ

# GBM upgrades Rare Earth Resource to over 110,000 tonnes as Milo grows to over a kilometre in length

Highlights:

- Inferred resource increased to 187Mt containing 113,000 tonnes Rare Earth Oxide Resource at an average grade of 600ppm. Resource up to 200m wide and continuous over 1,000m – and still open.
- Over 23% of the TREEYO Resource comprises elements considered to be in undersupply for the medium to long term (Neodymium, Yttrium, Dysprosium and Lanthanum).
- Preliminary metallurgical test work indicates that significant beneficiation of REE's can be achieved through proven technology.
- > These results are significant milestones in unlocking Milo's value.
- Delineation of a maiden copper equivalent resource is in progress and has the potential to add significantly to Milo's value.

Australian resources company **GBM Resources Limited** (ASX:**GBZ**) ("**GBM**" or "the **Company**") is pleased to announce two significant milestones for the Milo Iron Oxide Copper Gold (IOCG) and Rare Earth Elements and Yttrium (REEY) Project in North West Queensland.

Firstly, a major upgrade of the TREEYO resource and secondly, the production of a significant concentration of valuable Total Rare Earth Element and Yttrium Oxides (TREEYO) via heavy medium separation and WHIMS technology from metallurgical test work that is currently underway.

## Rare Earth Resource Summary

The Milo resource model has been updated to include results of recent drilling which returned significant intersections on both the northern and southern limits of the previous resource model. These intersections include: 70 metres @ 0.8% CuEq; including 18 metres averaging 1.3% CuEq in MIL017 and 51 metres averaging 0.8% CuEq in MIL018. Significant Rare Earth element intersections were also recorded in these holes, including 20 metres averaging 3,979 ppm TREEYO in MIL017 and 11 metres averaging 1,382 ppm TREEYO in MIL020A. (refer ASX release dated 3 July 2012)

These results continue to confirm that the mineralisation identified to date is part of a much larger mineralising system (for detailed summary see GBZ ASX Release 3/07/2012). As with the previous model, the zone of REEY mineralisation is broad and coherent over the entire strike length of the resource, now in excess of one kilometre.

Preliminary pit optimisation and metallurgical studies are in progress as part of the Milo scoping study and have provided support for a lower cut-off grade than used in the original resource estimate. In particular, the initial successful heavy media separation test work has demonstrated the potential for significant beneficiation or upgrading of ore by rejection of lighter lower grade fractions. While this work is ongoing, it must be noted that beneficiation using heavy medium separation is a widely used means of increasing the ore grade and lowering treatment costs. Preliminary results from ongoing test work has demonstrated that minerals rich in REE can be concentrated using Wet High Intensity Magnetic Separation (WHIMS) units. In initial testing WHIMS has resulted in high recoveries of up to 80% of TREEYO to a concentrate.

The revised Milo inferred mineral resource contains **113,000 tonnes of TREEYO at an average grade of 600ppm TREEYO based on a 300ppm cut-off grade.** The contained REE are comprised of 23% of REEs deemed to be in critical undersupply (*US Department of Energy Dec 2011: Critical Materials Strategy, elements are;* Nd, Eu, Y, Dy) and 12% Heavy Rare Earth Elements (HREE).

	LREEO									HREEYO				
cutoff			Average	*					*	*				
	(TREEYO)	tonnes	TREEYO	CeO2	La2O3	Nd2O3	Pr2O3	Sm2O3	* Eu2O3	Gd2O3	Y2O3	Dy2O3	Er2O3	Other
	ррт	(Mt)	ррт	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
	300	187	610	260	150	80	24	12	4	10	52	8	5	1350
Contained	d Metal (t)		113,000	48,540	27,100	14,600	4,470	2,280	720	1,870	9,650	1,550	890	1,690
Price (\$/t.	Price (\$/t, metal-pages.com 20/07/2012)				19,000	102,500	105,000	67,500	2,010,000	102,500	97,500	990,000		
	,		,,	20,000		,500		2.,500	_,:_),000	,500	2.,000	222,000		

Table: total tonnages and grades of TREEYO contained within the Milo Inferred Resource.

(\* designates elements assessed as being in critical supply by the US Dept. of Energy, Dec 2011: Critical Materials Strategy, P4.)

The resource estimate was completed using a database of 31 drillholes for 11,464 metres of drilling. Samples were generally analysed for a total TREEY suite, largely from one metre intervals of NQ diamond drill core. Samples selected on nominal one metre intervals were cut using a diamond saw and samples submitted to ALS laboratories in Mt Isa for ICPMS40. The estimation used ordinary Kriging for blocks 5m high, 40m long and 20 metres across strike. A bulk density of 2.84 was used for fresh rock - although this was varied to reflect increased density with sulphur (as pyrite). Oxidation was modelled to be between 10 and 20m deep and a lower bulk density was estimated for this material.

Based on recent drilling, mapping and soil sampling, a revised inferred resource for TREEYO has been estimated by Geomodelling Pty. Ltd., an independent based consultancy.

Geological and geochemical data were used to produce a 3D outline of the broad zone of REEY mineralisation at Milo. The REEY resource is summarised for a range of cut off grades in graphs below. The preliminary work completed as part of the current Milo Scoping Study has supported the use of lower cut-off grades. This has contributed to the increased resource, as has an extension to the mineralisation identified by recent drilling.

For comparison at a 400ppm TREEYO cut-off grade, the new resource contains 90,000 tonnes TREEYO at an average grade of 750ppm TREEYO, an increase of 20% from the Maiden resource announced earlier this year.

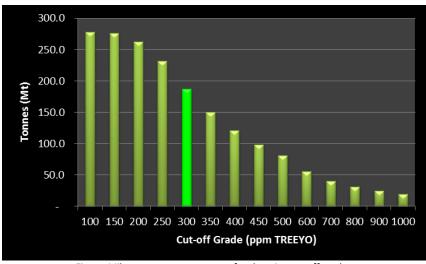


Figure: Milo resource tonnage curve for changing cut-off grades.

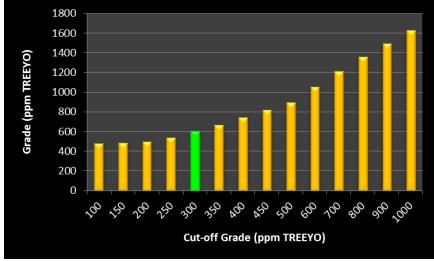


Figure: Milo resource grade curve for varying TREEYO cut-off grades.

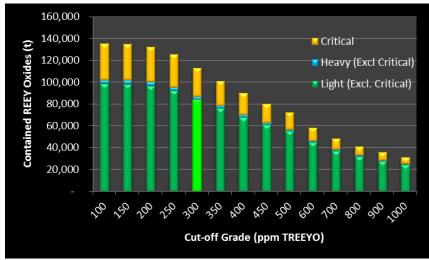


Figure: Milo resource contained REEYO curve for varying TREEYO cut-off grades.

## **Scoping Study Update**

The Milo scoping study is progressing with preliminary mine design, geotechnical and recovery parameters developed. In addition, a concept metallurgical flowsheet has been developed and capital cost estimates are progressing.

Ongoing metallurgical test work to determine the host minerals for TREEYO mineralisation and to investigate potential means of beneficiation and concentration has recently confirmed two key assumptions made in the initial flow sheet development.

Firstly, that heavy media separation does have the capacity to upgrade CuEq and TREEYO elements, and secondly, that WHIMS technology is effective in upgrading TREEYO concentrations. In addition, apatite flotation was demonstrated to be highly effective and should permit a high grade apatite (phosphate) concentrate to be produced as a saleable by-product from any future processing plant at Milo. These processes allow significant beneficiation, essential in developing a competitive treatment cost model for Milo ores.

The Milo Scoping Study has been extended to reflect the revised rare earth resource. Milo is a polymetallic deposit containing significant quantities of a range of metals including REEY, Cu, Mo, Au, Ag and U. An estimate for the relative contribution of these elements is being prepared and is expected prior to the end of the quarter. In addition, significant quantities of phosphate and magnetite are also present in the deposit. The scoping study is designed to +/- 40% accuracy and will address a wide range of key aspects of the Milo Project including:

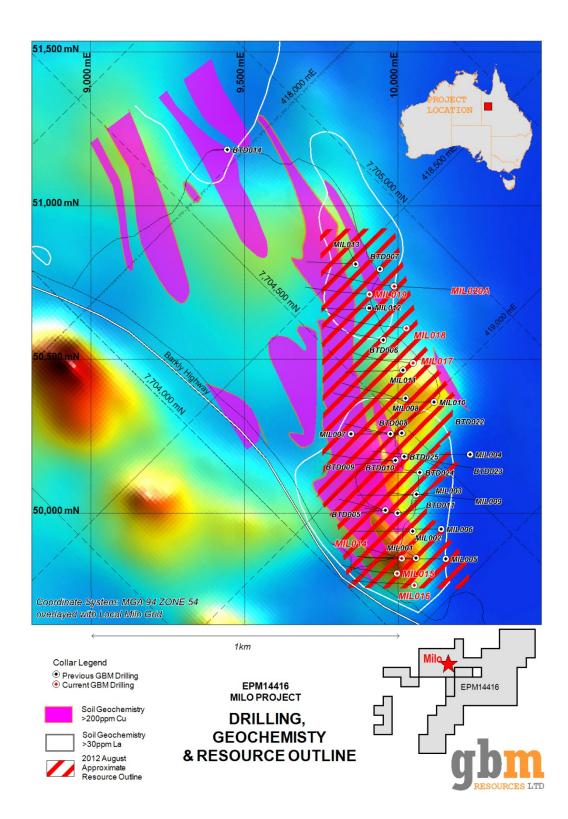
- 1. Delineation of a maiden copper equivalent resource;
- 2. Complete metallurgical testing for both the copper equivalent metals and rare earth elements;
- 3. Preliminary geotechnical review;
- 4. Preliminary mine and processing plant design;
- 5. Financial Modelling; and
- 6. Other preliminary studies.

Key external consultants appointed in February continue to be commissioned with the project. Mining One Pty Ltd will complete the mining studies and have overall management of the scoping study, Brisbane-based Core Process Engineering Pty Ltd continues to manage the metallurgical test work program and Geomodelling Pty Ltd will continue with the development of the resource model covering both the rare earth and copper equivalent mineralisation.

The delineation of a maiden copper equivalent resource and a revised scoping study is expected to be completed by the end of the September Quarter and will provide the basis for the move to the next development phase for Milo being the pre-feasibility study. In conjunction with the scoping study, ongoing semi-regional geological mapping, sampling and soil geochemistry is being completed to further grow the Milo project.

### For further information please contact:

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#### Abbreviations:

REE(O) Rare Earth Elements(oxides). There are 14 rare earth elements; Lanthanum (La), Cerium (Ce), Praseodymium (Pr), Neodymium (Nd), Samarium (Sm), Europium (Eu), Gadolinium (Gd), Terbium (Tb), Dysprosium (Dy), Holmium (Ho), Erbium (Er), Thulium (Tm), Ytterbium (Yb), Lutetium (Lu) but excluding Promethium (Pm).

TREEY(O) Total Rare Earth element and Yttrium (oxides) (Yttrium (Y) is not always considered as a Rare Earth Element but does have many similar properties

CuEq Copper Equivalent, as defined in Note 1 below.

#### Reference Notes

\*1 Copper Equivalent calculation represents the total metal value for each metal, multiplied by the conversion factor, summed and expressed in equivalent copper percentage. These results are exploration results only and no allowance is made for recovery losses that may occur should mining eventually result. However it is the company's opinion that elements considered here have a reasonable potential to be recovered. It should also be noted that current state and federal legislation may impact any potential future extraction of Uranium. Prices and conversion factors used are summarised below, rounding errors may occur.

Commodity	Price	Units		unit value	unit	Conversion factor	
						(unit value/Cu % value)	
copper		6836	US\$/t	68.3	36 US\$/%	1.0000	
gold		1212	US\$/oz	38.9	97 US\$/ppm	0.5700	
cobalt	4	40000	US\$/t	0.0	04 US\$/ppm	0.0006	
silver		18	\$/oz	0.5	58 US\$/ppm	0.0085	
uranium		40	US\$/lb	0.0	08 US\$/ppm	0.0012	
molybdenum	3	38000	US\$/t	0.0	04 US\$/ppm	0.0006	

<sup>22</sup> Intersections quoted are length weighted averages of results for individual sample intervals. Samples were taken at 1 metre intervals in RC drilling by multistage splitter and generally 1 metre intervals of half sawn core with maximum of 2 metres for diamond drilling. Analyses were completed by ALS in Mt Isa for all elements other than gold by ME-MS61r, over limit (>1%) Cu by Cu-OG46 and AU by Au-AA25 in Brisbane. Holes generally range in declination from 50<sup>0</sup> to 70<sup>0</sup> to 225<sup>0</sup> MGA at Milo. Mineralised zones are interpreted to dip steeply in the opposite direction, holes are therefore drilled approximately perpendicular to the interpreted strike of mineralised zones.

The information in this report that relates to Mineral Resources is based on information compiled by Kerrin Allwood, who is a Member or Fellow of The Australasian Institute of Mining and Metallurgy. Mr Allwood is a full-time employee of the Geomodelling Pty. Ltd a New Zealand based consultancy. Mr Allwood has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Allwood consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to Exploration Results is based on information compiled by Neil Norris, who is a Member or Fellow of The Australasian Institute of Mining and Metallurgy. Mr Norris is a full-time employee of the company. Mr Norris has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Norris consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.