Mawson West Limited: Dikulushi Project Mineral Resource Update

05.06.2014 | Marketwired

Highlights:

- Maiden Mineral Resource estimate at Kabusanje and updated Mineral Resource estimate at Kazumbula, both satellite deposits within 15 kilometres of Dikulushi copper mine:

-- Total Measured and Indicated Mineral Resources of 551Kt @ 1.74% Cu and 45.7g/t Ag above 1% Cu cut-off to 80 metres below surface;

-- 9.56Kt contained copper and 0.81Moz contained silver;

-- Metallurgical test work confirms mineralisation at both Kabusanje and Kazumbula conducive for processing through the existing Dikulushi plant

PERTH, AUSTRALIA--(Marketwired - Jun 5, 2014) - Mawson West Ltd. (TSX:MWE) ("Mawson West" or "the Company") is pleased to provide updated estimates of the Mineral Resources at the Company's Kazumbula and Kabusanje deposits, located near the Company's operating Dikulushi mine in the Democratic Republic of Congo ("DRC").

Mawson West Chief Executive Bruce McFadzean said:

"Subject to economic evaluations, additional ore from satellite deposits such as Kazumbula and Kabusanje provides an opportunity to utilise the process plant spare capacity and increase copper production by leveraging off the existing Dikulushi operation, improving the project's overall profitability."

Overview

Kazumbula and Kabusanje are two outcropping copper deposits, 10-15km northeast of Mawson West's operating Dikulushi mine (Figure1). In 2012 the Company applied for a Permit d'Exploitation ("PE"; exploitation permit) in anticipation of progressing the deposits to mining and the resulting ore feed supplementing ore from the Dikulushi underground mine. The PE was granted in late 2013.

Kazumbula features structurally controlled hydrothermal copper (silver) mineralisation hosted by a steeply dipping, east-north-east trending fault. In contrast, copper mineralisation at the Kabusanje deposit is replacement style mineralisation generally conformable with bedding in the host sandstone unit.

Drilling programs completed in 2013 were aimed at upgrading the Mineral Resource confidence categories at Kazumbula, defining a maiden Mineral Resource at Kabusanje and obtaining samples from both deposits for further metallurgical testwork. The 2013 programmes included 329 metres in reverse circulation (RC) holes and 2,502 metres in 12 diamond core holes.

The additional assay data now available, along with updated geological interpretations, have been utilised by Perth-based MPR Geological Consultants Pty Ltd to generate updated Mineral Resource models for both deposits.

The resulting Mineral Resources are reported after applying spatial and cut-off grade constraints in line with the "*reasonable prospect of economic extraction*" criteria required by National Instrument 43-101.

Applying a 1% Cu cut-off grade, Mineral Resources that have potential for extraction by open pit mining in the Kazumbula deposit include:

- 199Kt @ 1.97% Cu and 23.9g/t Ag for 3,920t contained copper and 0.15Moz silver in Indicated Resources.

Also at 1% Cu cut-off grade, estimated Kabusanje Mineral Resources are:

- 206Kt @ 1.79% Cu and 68.6g/t Ag for 3,690t contained copper and 0.45Moz contained silver in Measured Resources;
- 146Kt @ 1.34% Cu and 43.1g/t Ag for 1,960t contained copper and 0.20Moz silver in Indicated Resources; and
- 21Kt @ 1.30% Cu and 30g/t Ag for 300t contained copper and 0.02Moz silver in Inferred Resources.

Subject to economic evaluations, both deposits have potential to convert to Mineral Reserves that would contribute to the mine life and value of the existing Dikulushi operation.

Table 1: Kazumbula and Kabusanje Deposit Mineral Resources

	Cut off	Measured					Indicated				
Deposit	Cu %	Kt	Cu %	Ag g/t	Cu Kt	Ag Moz	Kt	Cu %	Ag g/t	Cu Kt	Ag Moz
Kazumbula	1.0	0	0	0	0	0	199	1.97	23.9	3.92	0.15
Kabusanje	1.0	206	1.79	68.6	3.69	0.45	146	1.34	43.1	1.96	0.20
Total	1.0	206	1.79	68.6	3.69	0.45	345	1.70	32.0	5.88	0.36

	Cut off	Measured + Indicated					Inferred				
Deposit	Cu %	Kt	Cu %	Ag g/t	Cu Kt	Ag Moz	Kt	Cu %	Ag g/t	Cu Kt	Ag Moz
Kazumbula	1.0	199	1.97	23.9	3.92	0.15	3	1.1	24	0.03	0.00
Kabusanje	1.0	352	1.60	58.0	5.64	0.66	21	1.3	30	0.3	0.02
Total	1.0	551	1.74	45.7	9.56	0.81	24	1.3	29	0.3	0.02

Notes: Rounding of figures has resulted in apparent inconsistencies in totals. Contained metals are in situ. Kazumbula Mineral Resources are quoted above 990mRL, approximately 80 metres vertical depth. Kabusanje Mineral Resources are quoted above 980mRL, approximately 80 metres vertical depth.

To view Figure 1: Copper deposits in Dikulushi District, please visit the following link: http://media3.marketwire.com/docs/950380_FIG_1.pdf

Kazumbula Deposit

Kazumbula is a tabular deposit extending over a strike length of 340 metres and dipping steeply to the north. Mineralisation averages 11 metres true width, reaching up to 40 metres true width, and plunges to the east. Primary mineralisation, comprising chalcocite with lesser bornite and chalcopyrite, is hosted within an east-north-east trending fault. Oxidation extends to 20-25 metres depth, above which most copper is present as malachite. Mineralisation is open at depth however the reported Mineral Resource has been limited to a depth of 80 metres below surface, anticipated to be the approximate economic limit of open pit mining.

Kazumbula estimated Mineral Resources are listed in Table 2. Figure 2 shows a cross section through the Kazumbula mineralisation and Figure 3 shows a perspective view of the resource block model.

Table 2: Kazumbula Mineral Resource estimates

Cut off	Indicated					Inferred				
Cu %	Kt	Cu %	Ag g/t	Cu Kt	Ag Moz	Kt	Cu %	Ag g/t	Cu Kt	Ag Moz
0.5	275	1.64	19.4	4.51	0.17	16	0.74	14.0	0.12	0.01
0.6	260	1.70	20.2	4.42	0.17	10	0.87	19.0	0.09	0.01
0.7	244	1.77	21.1	4.32	0.17	8	0.94	21.0	0.08	0.01
0.8	230	1.83	21.9	4.21	0.16	6	1.00	23.0	0.06	0.00
0.9	215	1.90	22.8	4.09	0.16	5	1.00	23.0	0.05	0.00
1.0	199	1.97	23.9	3.92	0.15	3	1.10	24.0	0.03	0.00
1.1	178	2.08	25.5	3.70	0.15	0	-	-	0.00	0.00
1.2	168	2.14	26.2	3.60	0.14	0	-	-	0.00	0.00

Notes: Rounding of figures has resulted in apparent inconsistencies. Contained metals are in situ. Mineral Resources are quoted above 990mRL, approximately 80 metres vertical depth.

A programme of metallurgical test work conducted in 2012 indicated relatively low abrasion and ball mill work indices for both oxide and sulphide materials (Table 3). Flotation tests indicated relatively low copper recoveries in oxide mineralisation and excellent recoveries in sulphide material. The mineralogy at Kazumbula is very similar to that at Dikulushi and no plant modifications are expected to be required to process Kazumbula ores. The low test work copper recoveries are not expected to materially detract from the project economics because oxide mineralisation comprises a relatively small proportion of the total Mineral Resource (20 per cent at 1% Cu cut-off) and, based on operating experience at Dikulushi, scaled-up copper recoveries may prove to be higher than those indicated by the test work.

Table 3: Kazumbula indicative metallurgical test work results

	Units	Oxide	Sulphide
Abrasion index	-	0.0539	0.0791
Ball mill work index 150*um*	kWh/t	8.3	8.5
Copper recovery	%	30	90
Concentrate copper grade	%	28	28

To view Figure 2: Drill cross-section through Kazumbula deposit, please visit the following link: http://media3.marketwire.com/docs/950380_FIG_2.pdf

To view Figure 3: Kazumbula Mineral Resource model perspective view looking NW, please visit the following link: http://media3.marketwire.com/docs/950380_FIG_3.pdf

Kabusanje Deposit

The Kabusanje deposit lies approximately five kilometres south of Kazumbula and, in contrast to both Kazumbula and Dikulushi deposits, comprises a stratiform, replacement-style deposit. The overall geometry of mineralisation is conformable with that of the host Monwesi Sandstone unit.

Mineralisation at Kabusanje extends over 240 metres strike length, ranging between two and 30 metres true width and dipping at 30 degrees to the southeast. Drill coverage extends to approximately 120 metres below surface and mineralisation remains open at that depth (Figure 4).

Kabusanje estimated Mineral Resources at a range of cut-off grades are listed in Table 4. Figure 5 shows a perspective view of the Mineral Resource model.

Table 4: Kabusanje Mineral Resource estimates

Cut off	Measured					Indicated				
Cu %	Kt	Cu %	Ag g/t	Cu Kt	Ag Moz	Kt	Cu %	Ag g/t	Cu Kt	Ag Moz
0.5	321	1.43	48.3	4.59	0.50	347	0.99	26.8	3.44	0.30
0.6	302	1.48	50.8	4.47	0.49	302	1.06	29.3	3.20	0.28
0.7	279	1.55	54.4	4.32	0.49	262	1.12	31.9	2.93	0.27
0.8	257	1.62	58.0	4.16	0.48	218	1.19	35.7	2.59	0.25
0.9	232	1.70	62.8	3.94	0.47	182	1.26	39.2	2.29	0.23
1.0	206	1.79	68.6	3.69	0.45	146	1.34	43.1	1.96	0.20
1.1	179	1.90	75.5	3.40	0.43	118	1.40	45.7	1.65	0.17
1.2	158	2.01	82.5	3.18	0.42	92	1.48	50.3	1.36	0.15

Cut off	Measured + Indicated					Inferred				
Cu %	Kt	Cu %	Ag g/t	Cu Kt	Ag Moz	Kt	Cu %	Ag g/t	Cu Kt	Ag Moz
0.5	668	1.20	37.1	8.03	0.80	150	0.77	12	1.2	0.06
0.6	604	1.27	40.1	7.67	0.78	110	0.85	14	0.9	0.05
0.7	541	1.34	43.5	7.26	0.76	65	0.97	18	0.6	0.04
0.8	475	1.42	47.8	6.76	0.73	42	1.10	22	0.5	0.03
0.9	414	1.51	52.4	6.24	0.70	28	1.20	26	0.3	0.02
1.0	352	1.60	58.0	5.64	0.66	21	1.30	30	0.3	0.02
1.1	297	1.70	63.7	5.05	0.61	17	1.36	34	0.2	0.02
1.2	250	1.81	70.7	4.54	0.57	14	1.42	37	0.2	0.02

Notes: Rounding of figures has resulted in apparent inconsistencies. Contained metals are in situ. Mineral Resources are quoted above 980mRL, approximately 80 metres vertical depth.

Pre-2013 drilling at Kabusanje was sufficient to define mineralisation only over limited strike and dip extents. The 2013 drilling has extended the strike length of defined mineralisation, defined its likely plan-view economic limits and also traced it down-dip, where mineralisation remains open below approximately 120 metres depth. The Mineral Resource estimate has been limited to above the 980mRL (80 metres below surface) in anticipation of the likely economic limits of open pit mining.

Metallurgical test work indicates good copper recoveries from sulphide mineralisation and relatively low recoveries from oxide material (Table 5). Less than ten per cent of the Mineral Resource comprises oxide material. As for Kazumbula, the mineralogy at Kabusanje is very similar to that at Dikulushi and no plant modifications are expected to be required to process Kabusanje mineralisation through the Dikulushi plant.

Table 5: Kabusanje indicative metallurgical test work results

	Units	Oxide	Sulphide
Abrasion index	-	0.0626	0.2101
Ball mill work index 150um	kWh/t	18.8	17.5
Copper recovery	%	44	88
Concentrate copper grade	%	23	25

To view Figure 4: Drill cross-section through Kabusanje deposit, please visit the following link: http://media3.marketwire.com/docs/950380_FIG_4.pdf

To view Figure 5: Kabusanje Mineral Resource model perspective view looking NE, please visit the following link: http://media3.marketwire.com/docs/950380_FIG_5.pdf

Comparisons to Previous Estimates

The February 2011 Kazumbula Mineral Resource estimate is tabulated in Appendix A. The updated

Kazumbula Mineral Resource estimate reported in this release is not directly comparable with the previous estimate because it covers different geographic extents, is informed by an additional 2,115 metres of diamond core drilling and is reported using depth and cut-off grade constraints that, in the Company's view, reflect reasonable economic constraints.

Mineral Resource Estimate Technical Notes:

For each deposit:

- Reliability of assay data was checked by examining assays of reference materials, blanks and duplicate samples and records of sample recoveries;
- Drill hole location and survey data were checked for spatial integrity;
- Drill hole assay data were composited to uniform one metre down-hole lengths;
- Assay composites were domained using wireframes of mineralisation at approximately 0.2% Copper minimum included grade, guided by geological logging;
- Assay composites were also domained using triangulated surfaces representing weathering boundaries;
- Univariate statistics of copper grade populations in each of the (sub)domains were examined and top cuts selected to limit the influence of extreme grades;
- Copper grades were estimated for blocks with dimensions 5mN x 10mE x 5mRL by Ordinary Kriging with only assay composites of the mineralised domain informing the estimates;
- Block grade estimates were checked against informing data for global and conditional bias and for spatial correlation;
- Bulk densities derived by water immersion method of drill core were examined for each of the weathering domains and bulk densities applied to the model on the basis of weathering domain
- Block factors, reflecting the proportion of each block lying inside the constraining mineralisation wireframe and below the surveyed topographic surface, were applied to calculate tonnage estimates; and
- Resource blocks were assigned confidence categories based on the number of data informing each block estimate and the spacing and geometric distribution of those data. Kazumbula estimates with consistently 40 by 40 metre or closer spaced sampling are classified as Indicated and estimates for more broadly sampled mineralisation are categorised as Inferred. Kabusanje estimates with consistently 20 by 20 metre or closer spaced sampling are classified as Measured, and estimates for mineralisation with 20 by 20 to 40 by 40 metre drilling are classified as Indicated. Estimates for more broadly sampled mineralisation are assigned to the Inferred category.

Qualified Persons' Statements

The technical information contained in this document that relates to the updated Kazumbula Mineral Resource estimate and the maiden Kabusanje Mineral Resource estimate is based on information compiled by Mr. Jonathon Abbott, a Member of the Australian Institute of Geoscientists. Mr Abbott is a full-time employee of MPR Geological Consultants Pty Ltd and is independent of Mawson West. Mr. Abbott has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" and as a Qualified Person as defined in National Instrument 43-101 "Standards of Disclosure for Mineral Projects". Mr. Abbott has reviewed and accepts responsibility for the technical information contained in this document that relates to Mineral Resources and has consented to the inclusion of the matters based on his information in the form and context in which it appears in this document.

About Mawson West

Mawson West is a copper and silver-focused resource company listed on the Toronto Stock Exchange (TSX) and based in Perth, Australia.

The Company's two key projects are the Dikulushi copper-silver mine and the Kapulo copper mine located in the South Eastern province of the Democratic Republic of Congo (DRC). Mawson West also continues to focus on exploring multiple prospective targets located within its significant land holding of approximately 7,300km^2 in the DRC's rich copper belt.

Forward-looking statements

This news release contains certain "forward looking statements". These statements reflect management's current beliefs with respect to future events and are based on information currently available to management of the Company. Forward-looking statements involve significant risks, uncertainties and assumptions. Many factors could cause the Company's actual results, performance or achievements to be materially different from any future results, performance or achievements that may be expressed or implied by such forward-looking statements, including (without limitation) the risks identified in the "Risk Factors" section of the Company's Annual Information Form and other public filings (copies of which may be obtained at www.sedar.com). The results or events depicted in these forward-looking statements may differ materially from actual results or events. Any forward-looking statement speaks only as of the date of this news release and, except as may be required by applicable securities laws, the Company disclaims any intent or obligation to update any forward-looking statement, whether as a result of new information, future events or results or otherwise.

The Toronto Stock Exchange has not reviewed and does not accept responsibility for the adequacy or accuracy of the content of this press release.

Appendix A - Previous Kazumbula Mineral Resource Estimate

Kazumbula February 3, 2011 Mineral Resource estimates above 0.5% Cu cut-off grade.

	Volume	Density	Tonnes	Copper	Silver
Category	(m^3 *1,000)	(t/m^3)	(*1,000)	(%)	(g/t)
Indicated Mineral Resources	126	2.5	318	1.8	19

Source: NI43-101 Technical Report on the Dikulushi Underground Project, Democratic Republic of Congo - 12 December 2013.

Contact

Mawson West Ltd.
Bruce McFadzean
Chief Executive Officer and Managing Director
Telephone: +61 8 9485 9800
Email: bmcfadzean@mawsonwest.com
Mawson West Ltd.
Mark Di Silvio
Chief Financial Officer
Telephone: +61 8 9485 9800
Email: mdisilvio@mawsonwest.com
MAGNUS Investor Relations
Kusal Meemeduma
Telephone: +61 2 8999 1010
Email: kmeemeduma@magnus.net.au
Roth Investor Relations Inc.
Michelle Roth
Telephone: +1 732 792 2200
Email: michelleroth@rothir.com