



Mining at Zeta Pit

ASX ANNOUNCEMENT

Discovery Metals Limited

Kalahari Copper Belt Mineral Resources and Ore Reserves Update

ASX/BSE: DML

MARKET CAPITALISATION

Shares on Issue	487m
Share Price	A\$0.165
Market Cap	A\$80m
Cash (30/6)	US\$21.2m
Debt	US\$153.9m

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DISCOVERY METALS LIMITED

Highlights

- Kalahari Copper Belt Mineral Resources of 177 Mt @ 1.3% Cu and 15 g/t Ag
- Boseto Copper Project Mineral Resources of 101 Mt @ 1.4% Cu and 14 g/t Ag
- Boseto Copper Project Ore Reserves of 15.0 Mt @ 1.3% Cu and 18 g/t Ag
- Mineral Resources and Ore Reserves reported in compliance with JORC 2012

Boseto Mineral Resources and Ore Reserves Estimates Updated

Discovery Metals Limited (**Discovery Metals** or **Company**) reports updated Mineral Resources and Ore Reserves estimates for all of its deposits in the Kalahari Copper Belt.

The independent consultants, Quantitative Group, Xstract and Mining Plus, completed these estimates of Mineral Resources and Ore Reserves in accordance with the principles of the *Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, 2012 Edition (JORC 2012)*.

Discovery Metals' Managing Director, Mr Brad Sampson, commented, "***This work represents a comprehensive update of the Mineral Resources and Ore Reserves in the Kalahari Copper Belt, incorporating all the information gathered since the commencement of grade control drilling and mining activity.***"

The material removed from the Mineral Resources and Ore Reserves at the Zeta Deposit as a result of the changed estimation philosophy does not change the overall development strategy for Zeta as none of the material removed had been scheduled for mining.

The Zeta Underground Ore Reserves remain effectively unchanged from the feasibility study and increases to Inferred Mineral Resources below the Underground Ore Reserves now create additional upside potential for the Zeta Underground mine."

The Zeta and Plutus Deposits are located adjacent to the Boseto Copper Concentrator (Figures 1 and 2) in north-western Botswana.

The Selene, Zeta NE, Ophion, NE Mango 1 and NE Mango 2 Deposits are located outside the Boseto mining licence but within the Company's prospecting licences in north-western Botswana in the Kalahari Copper Belt and within potential trucking distance to the Boseto Copper Concentrator.

Kalahari Copper Belt Mineral Resources

The Kalahari Copper Belt Mineral Resources are shown in the table below. Accompanying this release is summarised technical information and complete JORC 2012 Table 1 commentary for all Mineral Resources estimates. The Zeta and Plutus Mineral Resources estimates include the application of new economic and metallurgical recovery factors to assess the potential for economic exploitation.

Mineral Resources	2013 Estimate ¹			Previous Estimate ²		
	Mt	Cu (%)	Ag (g/t)	Mt	Cu (%)	Ag (g/t)
Plutus	82.1	1.3	12	86.9	1.4	13
Zeta	18.8	1.5	24	44.1	1.3	22
Total Boseto Copper Project	100.9	1.4	14	131.0	1.3	16
Selene ³	16.0	1.0	16	16.0	1.0	16
Zeta NE ³	12.9	1.3	22	12.9	1.3	22
Ophion ³	14.0	1.0	12	14.0	1.0	12
NE Mango 1 ³	4.8	1.2	13	4.8	1.2	13
NE Mango 2 ³	28.5	1.3	14	28.5	1.3	14
TOTAL KALAHARI COPPER BELT MINERAL RESOURCES⁴	177.1	1.3	15	207.2	1.3	16

¹ Mineral Resources are reported as at 31 May 2013 and exclude material mined to this date. Mineral Resources reported here include any Open Pit and Underground Ore Reserves declared. The 2013 Plutus and Zeta Open Pit Mineral Resources reported at cut-off grades of 0.5% Cu in fresh rock, 0.7% Cu in transitional material, and 1.0% Cu in oxide; and Underground Mineral Resources reported above a cut-off grade of 1.07% Cu equivalent ($CuEq = Cu + Ag \cdot 0.0113$) and a 5m minimum mining width. Plutus and Zeta Open Pit Mineral Resources are constrained within a pit optimisation run at 1.5 times the Ore Reserves commodity price. Zeta Underground Mineral Resources are constrained within the limits of geological interpretation.

² The previous estimates are reported at a cut-off grade of 0.6% Cu at dates prior to commencement of mining activity.

³ Inferred Mineral Resources estimates are reported at a cut-off grade of 0.6% Cu and exclude oxide material.

⁴ Please refer to Competent Persons Statement.

Plutus Mineral Resources

Plutus Mineral Resources	2013 Estimate ¹			Previous Estimate ²		
	Mt	Cu (%)	Ag (g/t)	Mt	Cu (%)	Ag (g/t)
Measured	6.46	1.3	12	11.1	1.4	14
Indicated	12.0	1.3	13	8.1	1.4	13
Total M&I	18.5	1.3	13	19.2	1.4	14
Inferred	63.6	1.4	12	67.7	1.3	13
TOTAL MINERAL RESOURCES³	82.1	1.3	12	86.9	1.4	13

¹ 2013 Plutus Mineral Resources are reported as at 31 May 2013. Open Pit Mineral Resources reported at cut-off grades of 0.5% Cu in fresh rock, 0.7% Cu in transitional material, and 1.0% Cu in oxide; and Underground Mineral Resources reported above a cut-off grade of 1.07% Cu equivalent ($CuEq = Cu + Ag \cdot 0.0113$) and a 5m minimum mining width. Open Pit Mineral Resources are constrained within a pit optimisation run at 1.5 times the Ore Reserves commodity price. Underground Mineral Resources are constrained within the limits of geological interpretation and extend to 500m below surface. Underground Mineral Resources are exclusive of Open Pit Mineral Resources. The Mineral Resources reported here include any Open Pit and Underground Ore Reserves declared for this Deposit.

² Previous Mineral Resources are reported as at 2 May 2012 at a cut-off grade of 0.6% Cu.

³ Please refer to Competent Persons Statement.

Copper-silver mineralisation at the Plutus Deposit remains open along strike and down dip.

An Exploration Target mineralised with copper and silver, containing between 6 and 19 Mt at 1.2% to 1.3% Cu and 10 to 15 g/t Ag, remains outside of the stated Mineral Resources and is based on existing drill hole data and very high geological continuity both along strike and down dip of the declared Mineral Resources. The potential quantity and grade of Exploration Targets is conceptual in nature, there has been insufficient exploration conducted to complete a Mineral Resource, and it is uncertain if further exploration will result in the estimate of a Mineral Resource.

Please refer to the attached “2013 Plutus Mineral Resource, Ore Reserve and Exploration Target Statements” document which includes summarised technical information and complete JORC 2012 Table 1 commentary. Figure 3 shows a stylised long section of the Plutus Deposit illustrating the location of Exploration Target areas in relation to the location of the 2013 Plutus Resources Model.

Zeta Mineral Resources

Zeta Mineral Resources	2013 Estimate ¹			Previous Estimate ²		
	Mt	Cu (%)	Ag (g/t)	Mt	Cu (%)	Ag (g/t)
Measured	3.1	1.4	22	4.6	1.6	24
Indicated	7.2	1.4	25	12.4	1.5	26
Total Measured & Indicated	10.3	1.4	24	17.0	1.5	25
Inferred	8.5	1.7	25	27.1	1.2	20
TOTAL MINERAL RESOURCES³	18.8	1.5	24	44.1	1.3	22

¹ 2013 Zeta Mineral Resources are reported as at 31 May 2013 and exclude material mined to this date. Open Pit Mineral Resources reported at cut-off grades of 0.5% Cu in fresh rock, 0.7% Cu in transitional material, and 1.0% Cu in oxide; and Underground Mineral Resources reported above a cut-off grade of 1.07% Cu equivalent ($CuEq = Cu + Ag \times 0.0113$) and a 5m minimum mining width. Open Pit Mineral Resources are constrained within a pit optimisation run at 1.5 times the Ore Reserves commodity price. Underground Mineral Resources are constrained within the limits of geological interpretation and extend to 800m below surface. Underground Mineral Resources are exclusive of Open Pit Mineral Resources. The Mineral Resources reported here include any Open Pit and Underground Ore Reserves declared for this Deposit.

² 2011 Mineral Resources reported as at 24 August 2011 at a cut-off grade of 0.6% Cu prior to commencement of mining activity.

³ Please refer to Competent Persons Statement.

The Zeta Deposit remains open along strike and down dip.

An Exploration Target mineralised with copper and silver, containing between 7 and 15 Mt at 1.1% to 1.5% Cu and 20 to 25 g/t Ag, remains outside of the stated Mineral Resources and is based on existing drill hole data and very high geological continuity both along strike and down dip of the declared Mineral Resources. The potential quantity and grade of Exploration Targets is conceptual in nature, there has been insufficient exploration conducted to complete a Mineral Resource, and it is uncertain if further exploration will result in the estimate of a Mineral Resource.

Please refer to the attached “2013 Zeta Mineral Resource, Ore Reserve and Exploration Target Statements” document which includes summarised technical information and complete JORC 2012 Table 1 commentary.

The adoption of improved Mineral Resources classification supported by geostatistical analysis of the updated drill hole database (which includes close-spaced grade control drilling results), the use of a constraining pit optimisation (run at 1.5 times the Ore Reserves commodity prices) to report Open Pit Mineral Resources categories for the first time, along with accounting for mining depletion to 31 May 2013,

have led to a reduction in tonnage for all Mineral Resources categories at Zeta. The copper and silver grades in the Measured and Indicated Mineral Resources Categories have decreased due to confirmation from mine production data of a positive grade estimation bias within the 2011 Mineral Resources estimate.

The decrease in tonnes and increase in copper and silver grades in Inferred Mineral Resources arises through the adoption of improved Mineral Resources classification supported by geostatistical analysis of the updated drill hole database and through the use of a constraining pit optimisation for reporting, resulting in the exclusion of lower grade copper-silver mineralised material previously categorised as Inferred Mineral Resources. Portions of previously classified Inferred Mineral Resources have now been reclassified as Exploration Targets in accordance with JORC 2012.

The material removed from the Zeta Mineral Resources is depicted in a stylised Zeta Long section in Figure 4 which also identifies Zeta Exploration Target areas.

Additional Kalahari Copper Belt Mineral Resources

To ensure complete, early adoption of JORC 2012 reporting requirements, accompanying this release are individual reports for Zeta NE, Selene, Ophion, NE Mango 1 and NE Mango 2 Deposits, in which summarised technical information and complete JORC 2012 Table 1 commentary are provided.

No new data has been incorporated into these Inferred Mineral Resources estimates. Therefore there are no changes to the previously announced Mineral Resources estimates.

Additional Kalahari Copper Belt Inferred Mineral Resources ¹			
Prospect	Mt	Cu (%)	Ag (g/t)
Selene ²	16.0	1.0	16
Zeta NE ³	12.9	1.3	22
Ophion ⁴	14.0	1.0	12
NE Mango 1 ⁵	4.8	1.2	13
NE Mango 2 ⁶	28.5	1.3	14
TOTAL⁷	76.2	1.2	15

¹ Mineral Resources reported as at 31 May 2013, at a cut-off grade of 0.6% Cu, and are exclusive of interpreted oxide material.

² Drill hole data as at 12 January 2012.

³ Drill hole data as at 2 August 2012.

⁴ Drill hole data as at 11 October 2012.

⁵ Drill hole data as at 1 August 2012.

⁶ Drill hole data as at 16 October 2012.

⁷ Please refer to Competent Persons Statement.

Boseto Copper Project Ore Reserves

Ore Reserves estimates make use of the updated Mineral Resources estimates and include updated cost, revenue, metallurgical recovery, mining dilution and ore loss assumptions.

The Ore Reserves at the Boseto Copper Project, as at 31 May 2013 and reported in accordance with JORC 2012 are:

Boseto Ore Reserves

Ore Reserves ¹	ZETA			PLUTUS			TOTAL		
Open Pit ²	Mt	Cu (%)	Ag (g/t)	Mt	Cu (%)	Ag (g/t)	Mt	Cu (%)	Ag (g/t)
Proved	1.7	1.3	20	4.8	1.2	11	6.5	1.2	13
Probable	0.05	1.2	17	1.2	1.4	16	1.3	1.4	16
Open Pit Ore Reserves	1.8	1.3	20	6.0	1.2	12	7.7	1.2	14
Underground ³	Mt	Cu (%)	Ag (g/t)	Mt	Cu (%)	Ag (g/t)	Mt	Cu (%)	Ag (g/t)
Proved	0.9	1.2	21				0.9	1.2	21
Probable	6.4	1.3	23				6.4	1.3	23
Underground Ore Reserves	7.3	1.3	23				7.3	1.3	23
TOTAL ORE RESERVES⁴	9.0	1.3	22	6.0	1.2	12	15.0	1.3	18

¹ All Ore Reserves are reported as at 31 May 2013 and exclude material mined to this date.

² Due to the relationship between the metallurgical copper recovery and the block S:Cu ratio, no traditional cut-off grade was applicable. The determination of ore was made by calculating the cash flow that would be produced by processing material and the cash flow which would be produced by mining it as waste. If the cash flow from processing was higher, the material was considered as ore; if not, it was considered waste.

³ The economic cut-off grade used to determine the Zeta Underground Ore Reserves is 1.07% Copper Equivalent (CuEq), where $CuEq\% = Cu\% + 0.0113 \times Ag\ (g/t)$.

⁴ Please refer to Competent Persons Statement.

Accompanying this release is summarised technical information and complete JORC 2012 Table 1 commentary for all Ore Reserves estimates.

Plutus Open Pit Ore Reserves

	2013 Plutus Ore Reserves ¹			Previous Plutus Ore Reserves ²		
	Mt	Cu (%)	Ag (g/t)	Mt	Cu (%)	Ag (g/t)
Proved	4.8	1.2	11	1.3	1.5	16
Probable	1.2	1.4	16	12.0	1.3	13
TOTAL PLUTUS ORE RESERVES³	6.0	1.2	12	13.3	1.3	13

¹ 2013 Plutus Open Pit Ore Reserves are reported as at 31 May 2013. Due to the relationship between the metallurgical copper recovery and the block S:Cu ratio, no traditional cut-off grade was applicable. The determination of ore was made by calculating the cash flow that would be produced by processing material and the cash flow which would be produced by mining it as waste. If the cash flow from processing was higher, the material was considered as ore; if not, it was considered waste.

² Previous Plutus Ore Reserves are reported at a 0.6% Cu cutoff.

³ Please refer to Competent Persons Statement.

The inclusion of grade control drilling data into the Ore Reserves estimation process has resulted in a significant increase in the tonnage of the Plutus Proved Open Pit Ore Reserves. The decrease in tonnage of ore classified as Probable and changes in the copper and silver grades of the Plutus Ore Reserves, are a result of the application of new economic assumptions, changes to the Mineral Resources estimate and mining dilution and ore loss assumptions, along with updated mine design requirements driven by these changes.

Zeta Open Pit and Underground Ore Reserves

2013 Zeta Ore Reserves ¹				Previous Zeta Ore Reserves ²		
Open Pit	Mt	Cu (%)	Ag (g/t)	Mt	Cu (%)	Ag (g/t)
Proved	1.7	1.3	20	4	1.6	22
Probable	0.05	1.2	17	6.5	1.5	24
Total Open Pit Ore Reserves	1.8	1.3	20	10.5	1.5	23
Underground	Mt	Cu (%)	Ag (g/t)	Mt	Cu (%)	Ag (g/t)
Proved	0.9	1.2	21	1.0	1.3	24
Probable	6.4	1.3	23	6.3	1.3	25
Total Underground Ore Reserves	7.3	1.3	23	7.3	1.3	25
TOTAL ZETA ORE RESERVES³	9.0	1.3	22	17.8	1.4	24

¹ 2013 Zeta Ore Reserves are reported as at 31 May 2013 and exclude material mined to this date. Due to the relationship between the metallurgical copper recovery and the block S:Cu ratio, no traditional cut-off grade was applicable to Open Pit Ore Reserves. The determination of ore was made by calculating the cash flow that would be produced by processing material and the cash flow which would be produced by mining it as waste. If the cash flow from processing was higher, the material was considered as ore. If not, it was considered waste. The Open Pit Ore Reserves for Zeta is >99% sulphide ore and the average S:Cu ratio for this material results in the application of the maximum allowable copper recovery of 93%. This would result in a cut-off grade (ignoring silver contributions) of 0.5%. The economic cut-off grade used to determine the Zeta Underground Ore Reserves is 1.07% Copper Equivalent (CuEq), where $CuEq\% = Cu\% + 0.0113 \times Ag\ (g/t)$.

² The previous Zeta Ore Reserves estimates are reported at a cut-off grade of 0.6% Cu and prior to commencement of mining activity.

³ Please refer to Competent Persons Statement.

The Zeta Underground Ore Reserves are effectively unchanged from those reported previously. The Zeta Open Pit Ore Reserves reported previously have now changed significantly with subsequent mining of the Deposit and the restatement of Mineral Resources.

The copper and silver grades reported in the Zeta Open Pit Ore Reserves have decreased in line with the changes in Mineral Resources estimates and the application of updated mining dilution and ore loss parameters. A tabulation of tonnage changes in the Zeta Open Pit Ore Reserves is provided below to aid understanding of these changes.

Historical Zeta Open Pit Ore Reserves Tonnage Comparison

Zeta Open Pit Ore Reserves Tonnage Comparison	
Zeta Open Pit Ore Reserves	Mt
Previous Zeta Open Pit Ore Reserves	10.5
Mining Depletion to 31 May 2013	2.2
Previously Reported Misallocation ¹	5.7
Change in economics/grade	0.8
2013 Zeta Open Pit Ore Reserves	1.8

¹ Previously reported as approximately 5 Mt. Refer to the Company's announcement "Third Supplementary Target's Statement" released on 1 February 2013 for further details.



Impacts on Boseto Copper Project Mining Plan

The material removed from Mineral Resources and Ore Reserves at the Zeta Deposit as a result of the changed estimation philosophy above does not change the overall mining or development strategy for Zeta. None of the material removed had been scheduled for mining.

The Zeta Underground Ore Reserves remain effectively unchanged from the feasibility study and increases to Inferred Mineral Resources below the Zeta Underground Ore Reserves in this latest Mineral Resources estimate have generated additional upside potential for the Zeta Underground mine.

The change in Plutus Ore Reserves demonstrates the Ore Reserves' sensitivity to operating cost, metallurgical recovery and metal price assumptions.

The overall Open Pit mining sequence for the next two and a half years remains unchanged with mining continuing at the Zeta and Plutus Open Pits. Further development of the Inferred Mineral Resources in the Kalahari Copper Belt into Measured and Indicated categories requires additional drilling which is planned to be progressed as funding becomes available.



Competent Persons Statement

The information in this announcement that relates to Additional Kalahari Copper Belt Mineral Resources (Selene, Zeta NE, Ophion, NE Mango 1 and NE Mango 2) is based on information compiled by Mr Matthew Readford, a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy (MAusIMM). Matthew Readford is a full time employee of Xstract Mining Consultants Pty Ltd, and has no interest in, and is entirely independent of, Discovery Metals Limited. Matthew Readford 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 JORC 2012. Matthew Readford 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 the Zeta and Plutus Mineral Resources and Exploration Targets is based on information compiled by Mr Michael Stewart, a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy (MAusIMM). Michael Stewart is a full time employee of the Quantitative Group, and has no interest in, and is entirely independent of, Discovery Metals Limited. Michael Stewart 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 JORC 2012. Michael Stewart 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 the Zeta Open Pit and Plutus Ore Reserves is based on information compiled by Mr David Purdey, a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy (MAusIMM). David Purdey is a full time employee of the Quantitative Group, and has no interest in, and is entirely independent of, Discovery Metals Limited. David Purdey 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 JORC 2012. David Purdey 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 the Zeta Underground Ore Reserves is based on information compiled by Mr Andrew Gasmier, a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy (MAusIMM). Andrew Gasmier is a full time employee of the Mining Plus Pty Ltd, and has no interest in, and is entirely independent of, Discovery Metals Limited. Andrew Gasmier 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 JORC 2012. Andrew Gasmier consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Messrs Readford, Stewart, Purdey and Gasmier consent to the inclusion in this report of the matters based on information provided by them and in the form and context in which it appears.

Further information on the Company including Mineral Resources and Ore Reserves is available on its website:
www.discoverymetals.com



Dump truck transporting a load of ore



Workers at the Boseto Copper Project



Concentrate shed



Bagged concentrate

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DISCOVERY METALS LIMITED

Forward looking statements

This release includes certain statements that may be deemed “forward-looking statements”. All statements in this discussion, other than statements of historical facts, that address future activities and events or developments that Discovery Metals expects, are forward-looking statements. Although Discovery Metals believes the expectations expressed in such forward-looking statements are based on reasonable assumptions, such statements are not guarantees of future performance and actual results or developments may differ materially from those in the forward-looking statements. Factors that could cause actual results to differ materially from those in forward-looking statements include market prices, continued availability of capital and financing, and general economic, market or business conditions. Investors are cautioned that any such statements are not guarantees of future performance and that actual results or developments may differ materially from those projected in forward-looking statements.

Discovery Metals Background

Discovery Metals is an ASX/BSE listed copper exploration and production company focused on the emerging Kalahari Copperbelt in north-west Botswana. The Company is a copper producer at its 100% owned Boseto Copper Project.

The Kalahari Copperbelt sediment-hosted mineralisation of the Boseto Copper Project is similar in style to the well-known and large deposits of the Central African Copperbelt of Zambia and the Democratic Republic of the Congo.

Discovery Metals has prospecting licences covering approximately 26,191km² in Botswana.

Further information on the Company including Mineral Resources and Ore Reserves is available on our website: www.discoverymetals.com

For further information on this release and Discovery Metals Limited, please contact:

Brad Sampson Managing Director Ph: +61 7 3218 0222 brad@discoverymetals.com

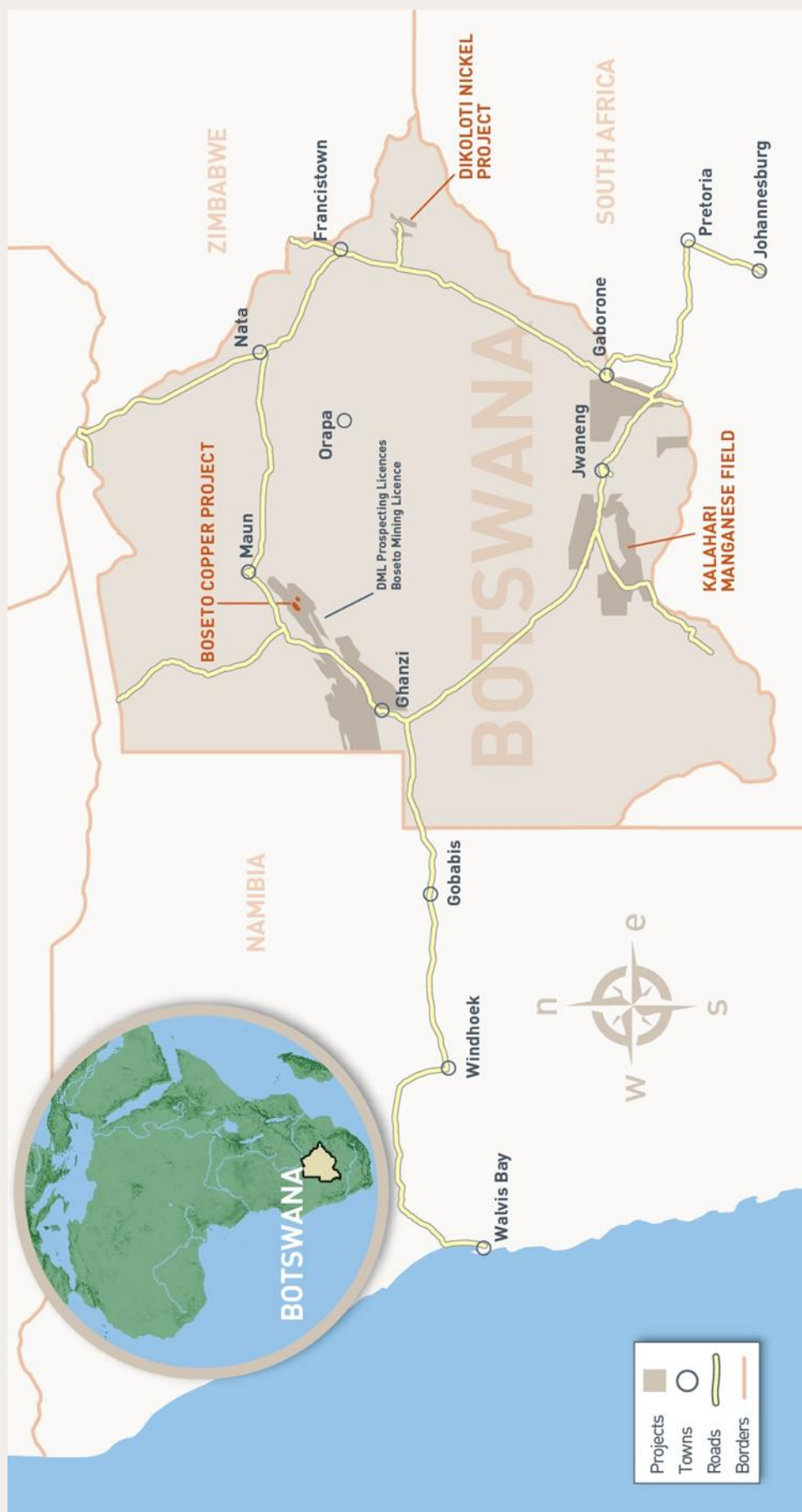
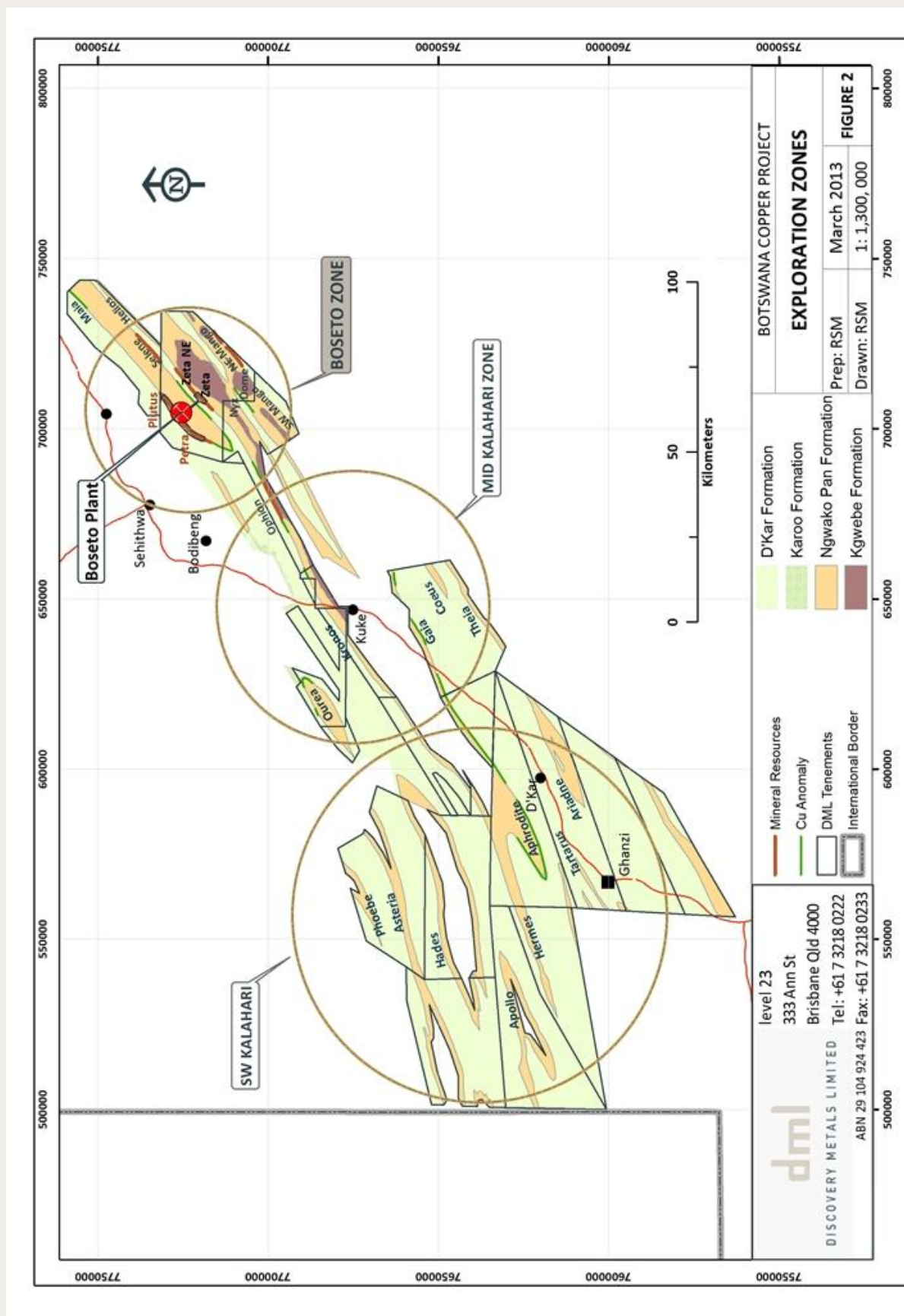


Figure 1. Discovery Metals' Botswana Projects



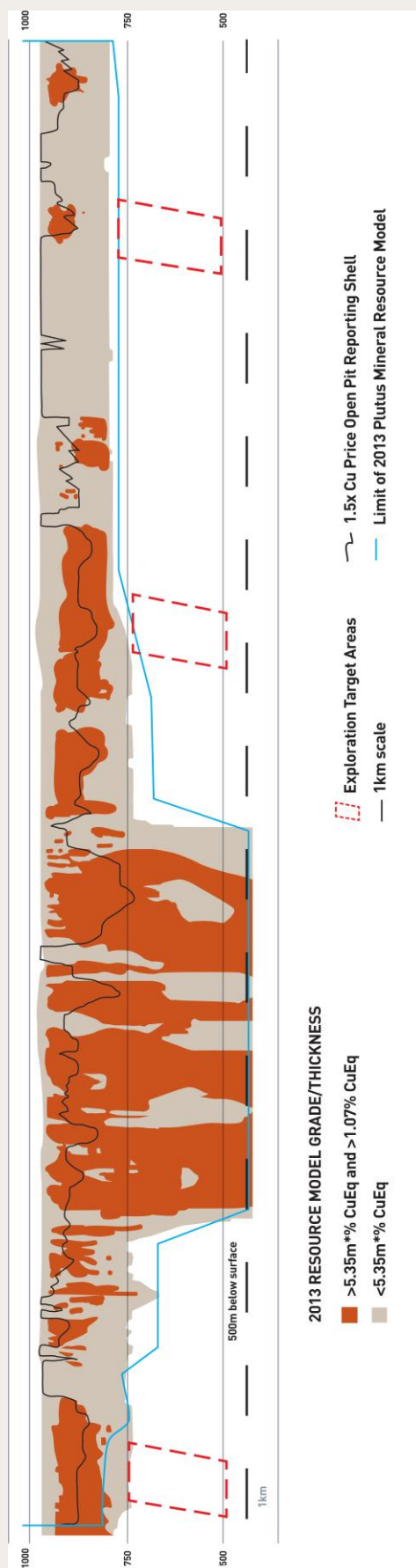


Figure 3. Stylised long section of Plutus Deposit

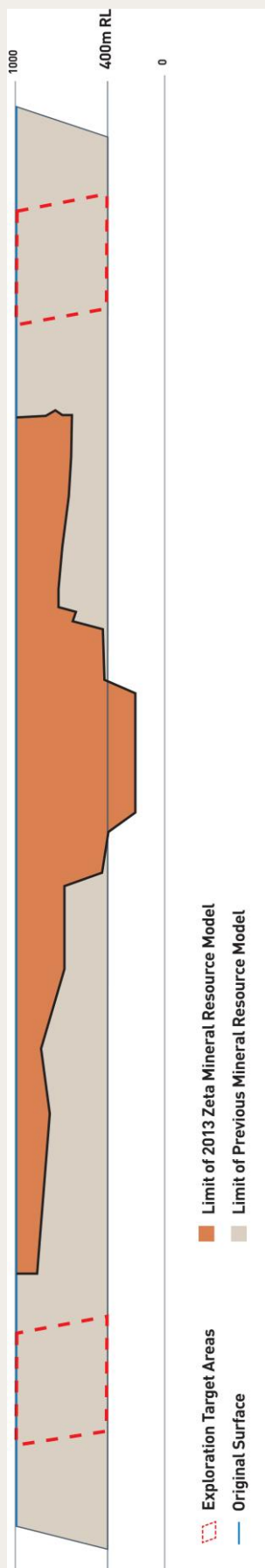


Figure 4. Stylised long section of Zeta Deposit



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risk analysis
geometallurgy
audit
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project evaluation

Memorandum

To: Discovery Metals
From: Michael Stewart
Date: 18 July 2013
Subject: Zeta Mineral Resource, Ore Reserve and Exploration Target Statements

This document presents Mineral Resource, Ore Reserve and Exploration Target statements for the Zeta deposit, Botswana.



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project evaluation

Zeta Mineral Resources Statement

Quantitative Group (QG) have provided Discovery Metals Limited (DML) with an updated resource model for the Zeta Deposit. The estimate is based on new geological interpretations that incorporate Reverse Circulation (RC) grade control drill holes and knowledge gained during the mining of the deposit to date.

The Zeta copper deposit, a sediment hosted stratiform copper deposit, is one of a number of deposits which together form the Boseto project. It is located about 80km southwest of the town of Maun, Botswana. Mining production commenced in early 2012 and processing began in June of that year.

A total of 656 drill holes (353 diamond core, 23 RC resource drill holes and 280 RC grade control drill holes) have been used to define the mineral resource. QG reviewed the quality of drill data (location, sampling and assay quality) and conclude that the data is of acceptable quality for use in resource estimation. New wireframe solid model interpretations were made of mineralisation using thresholds of ~0.3% and 1.5% copper. New surfaces were also interpreted for the base of complete oxidation and the top of fresh rock. Grade estimation used ordinary kriging to estimate copper, silver, sulphur, acid soluble copper and density into blocks constrained within the wireframe models. Hard boundaries were applied to estimation within mineralisation domains, and the oxide/transition boundary was also treated as hard for all variables except copper. Top cuts were applied to grades of silver and acid soluble copper

The model has been classified according to the JORC Code (2012).

QG's estimate of Mineral Resources for the Zeta deposit as at 31st May 2013 is summarised in Table 1. A summary of the material aspects of the 2013 Mineral Resource estimate in the context of the 2012 Edition of the 'Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves', using the format of 'Table 1 Checklist of Assessment and Reporting Criteria' is appended.



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Zeta - Mineral Resource Estimate as of 31 st May 2013				
Remaining open pit and underground Mineral Resource below EOM April pit pickup				
Category	Mt	Cu (%)	Ag(ppm)	S (%)
Measured	3.1	1.4	22	0.37
Indicated	7.2	1.4	25	0.45
Subtotal M&I	10.3	1.4	24	0.43
Inferred	8.5	1.7	25	0.55
Total Mineral Resource	18.8	1.5	24	0.48

Table 1: Zeta Mineral Resource Estimate

Notes: Mineral resource estimates include: Open Pit resources reported at cut-off grades of 0.5% Cu in fresh rock, 0.7% Cu in transitional material, and 1.0% Cu in oxide; and Underground resources reported above a cut-off grade of 1.07% Cu equivalent ($CuEq = Cu + Ag \times 0.0113$) and a 5m minimum mining width. Open pit resources are constrained within a pit optimisation run at 1.5 times the Reserve commodity price. Underground resources are constrained within the limits of geological interpretation and extend to 800m below surface. Underground resources are exclusive of open pit resources. This estimate is inclusive of such open pit and underground reserves as may be declared.



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risk analysis
geometallurgy
audit
training & mentoring
project evaluation

Zeta Open Pit Ore Reserves Statement

Quantitative Group Pty Ltd (QG) provided Discovery Metals Limited (DML) with an update of the Ore Reserve for the Zeta open pit, part of the Boseto project in Botswana.

QG prepared a new Mineral Resource estimate in May 2013 and subsequently constructed a mineable block model that included appropriate dilution skins. QG analysed this mineable model and recommended a pit shell around which a design could be produced for Ore Reserve reporting purposes. However DML requested that the existing Zeta design be used and QG considers this acceptable given that the design is almost entirely contained within the optimised pit shell and is 28% smaller overall when compared to the optimised shell.

QG's calculation of the Zeta Ore Reserve as at 31 May 2013 is not based on traditional cut-off grade practise (due to a grade dependent formula for the metallurgical recovery for copper) but is determined on a profit basis whereby ore is selected by comparing the cash flow which would be produced by processing material and the cash flow which would be produced by mining it as waste. If the cash flow from processing is higher, the material is treated as ore. If not, it is treated as waste. QG's estimate of the Ore Reserves is provided in Table 2.

Classification	Mt	Cu (%)	Ag (g/t)
Proven	1.7	1.3	20
Probable	0.05	1.2	17
Zeta Open Pit Ore Reserve	1.8	1.3	20

Table 2. Zeta Open Pit Ore Reserve estimate as at end of May 2013

Greater than 99% of the Ore Reserve is sulphide mineralisation with a sulphur to copper ratio high enough to limit the metallurgical recovery to 93% for copper, meaning that the cut-off grade (ignoring silver credits) would be about 0.5% Copper.

The Zeta open pit has been operating since early 2012, using standard and typical mining practices. Zeta ore is the primary feed to the Boseto concentrator which produces a copper and silver concentrate. The modifying factors used to estimate the Ore Reserve are based upon recent operating performance and the experience of DML and QG employees in this type of deposit and style of mineralisation. The table appended below summarises the material aspects of the May 2013 Ore Reserve estimate in the context of the 2012 Edition of the 'Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves', Table 1 Checklist of Assessment and Reporting Criteria.



Zeta Exploration Target

In addition to the Mineral Resource estimates declared above, an Exploration Target of 7-15Mt at 1.1-1.5 % Cu is declared for Zeta. It must be noted that the potential quantity and grade is conceptual in nature, that there has been insufficient exploration to estimate a Mineral Resource in the area of the declared Exploration Target and that it is uncertain if further exploration will result in the estimation of a Mineral Resource.

Exploration Target	Mt	Cu%	Ag%
Zeta exploration target	7-15	1.1-1.5	20-25

Table 3: Zeta Exploration Target

Drilling at Zeta confirms the presence of mineralisation within the same stratigraphic horizon over a strike length of 9.5km. The structure has been traced and confirmed by drilling a further 7km to both north and south. Three drill-holes confirm the continuity of stratigraphy and mineralisation to a depth to 600m below surface (400mRL). Across the entire strike length, the stratigraphy is remarkable for both continuity and planarity. Figure 1 below shows the location of drill intersections through the mineralised horizon. The majority of drilling is focussed on the area of Zeta pits and down dip. This area hosts both the widest and highest grade sections tested to date. It is apparent that the drilling to north and south of the pit areas is of generally narrower width and lower copper grade, but is also only to shallow depths. There remain large areas that have not been tested which have potential to host shoots of higher tenor.

The target tonnage defined is based on the presence of 2 shoots with the potential dimensions and grade tabulated below. The grade and width were derived from the average of the drill hole intercepts occurring an area of 500m strike by 500m depth in the centre of Zeta pits, weighted to account for clustering – 8.5m true width and 1.33% Cu. This area is shown as a solid red box on the top long section shown in Figure 1. The dashed red boxes show the assumed dimensions of the exploration targets, to illustrate the size of these with respect to existing drilling. The location of these boxes is not meant to imply the location of mineralisation, but to illustrate the size of target sought.



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	Low case	High case	Units
Number of shoots	2	2	
Size of mineralised 'shoot'	400	600	m strike
	500	500	m depth
Thickness	6	9	m
Density	2.8	2.8	t/m3
Tonnage per shoot	3,360,000	7,560,000	t
Average grade	1.1	1.5	%
Total Tonnage	6,720,000	15,120,000	t
Average Grade	1.1	1.5	%

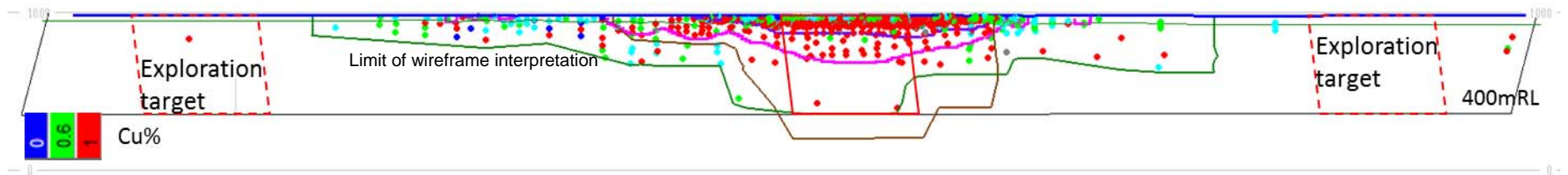
Table 4: Basis of calculation of Exploration Target tonnage and grade



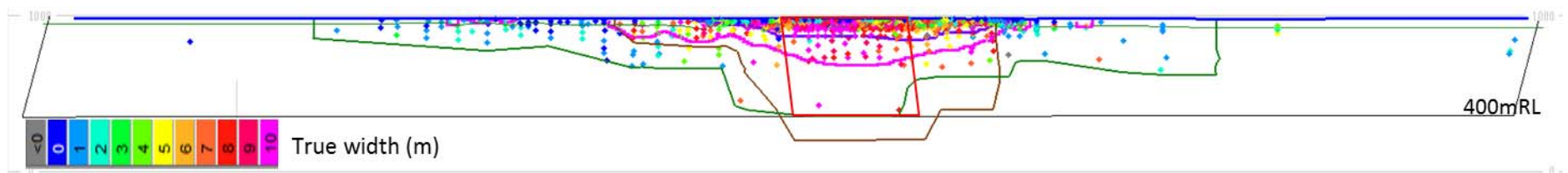
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Cu grade of >0.3% mineralised intercept



Thickness of >0.3% mineralised intercept



Cu%*m of >0.3% mineralised intercept

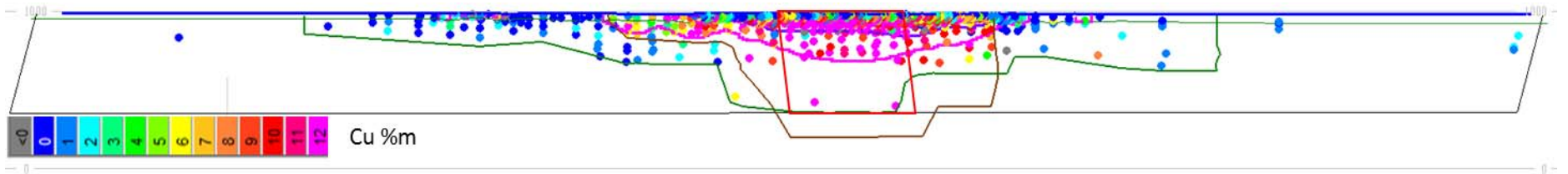


Figure 1: Long section view showing exploration target areas in relation to existing drilling and resource boundaries

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Competent Persons Statements

The information in this announcement that relates to Mineral Resources and Exploration Targets for Discovery Metals Limited's Zeta Deposit in Botswana is based on information compiled by Michael Stewart, a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy (Membership No. 209311) and the Australian Institute of Geoscientists (Membership No. 3119). Michael Stewart is a full time employee of Quantitative Group Pty Ltd, and has no interest in, and is entirely independent of, Discovery Metals Limited. Michael Stewart 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 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code). Michael Stewart 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 the Zeta open pit Ore Reserve is based on information compiled by David Purdey a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy. David Purdey is a full time employee of Quantitative Group Pty Ltd, and has no interest in, and is entirely independent of, Discovery Metals Limited. David Purdey has sufficient experience that is relevant to the style of mineralisation and type of deposit and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves'. David Purdey consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.



JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	Commentary
Sampling techniques	<ul style="list-style-type: none"> No surface sampling techniques are used in Resource estimates. Diamond core is ½ core sampled after cutting. Samples are crushed and pulverized to produce the aliquots required for analysis. RC samples (1m length) are reduced to 3kg at the drill rig using a cone splitter. This is further reduced at the laboratory to 800g before pulverization in a mixer mill to yield a bagged pulp sample, from which a number of aliquots are extracted for different analytical processes.
Drilling techniques	<ul style="list-style-type: none"> The majority of earlier drilling was by diamond coring, with only a small number of RC holes (52 of 487). RC grade control commenced in June 2012, and at the time of estimation a total of 311 angled RC holes had been completed. These average 36m in length, with the longest being 72m.
Drill sample recovery	<ul style="list-style-type: none"> Core recovery within the Zeta mineralized zones averages 90.3%. No discernible relationship exists between core recovery and either sample length or Cu grade. No systematic recording of RC sample recovery has been undertaken. Sample recovery observed at the rig was generally adequate, although was somewhat lower than optimal. The RC grade control rig in use was not fitted with dust suppression, and loss of fines is higher than desirable. RC recovery and sampling is an area that needs some improvement in future. Within the zone of oxidation copper minerals have largely been converted to the oxide species chrysocolla (and malachite). The brittle nature of chrysocolla means that in percussion sampling this mineral may preferentially report to the fine fraction, and if fines loss occurs this may result in low bias of Cu grades.
Logging	<ul style="list-style-type: none"> All drill holes have been geologically logged. Logging is focused on identification of underlying stratigraphic units. Specific logging of mineralization is not undertaken. While logging provides a guide to subsequent interpretation of mineralization it is not of adequate resolution for defining estimation domains, and these rely on grades of Cu, Ag and S.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> Diamond drill core is sawn longitudinally and half core samples submitted for analysis. All subsequent sample preparation was undertaken at commercial laboratory facilities in Johannesburg and Perth using industry standard crushing and pulverizing equipment and protocols. QG have not directly reviewed pulp duplicate data reported by the laboratory, but scatter plots presented in earlier reported indicate that these data are of suitable precision for use in resource estimates. RC grade control drill samples are initially split at the rig using a cone splitter. Samples are prepared and analysed at the onsite laboratory managed by Set Point. Samples are crushed to 2mm, split to 800g using riffle splitter, pulverized to 90% passing 75µm. Field duplicate samples are collected at a ratio of 1:20. Laboratory duplicates are collected at the ratio of 1:25.



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Criteria	Commentary
	<ul style="list-style-type: none"> Laboratory duplicates show a typically high level of precision with a coefficient of variation (CV) for Cu of 4% for samples greater than 10x level of detection. The precision of field duplicates is only moderately good for a base metal deposit (22% CV for Cu), and improvement should be investigated.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> Information about the analytical methods and quality control measures applied to resource drilling up until mid-2012 is contained in previous resource reports. No significant issues were noted, and QG concur with the conclusion that data is of acceptable quality for use in resource estimates. Analysis of RC grade control drilling is carried out at Set Point Laboratories onsite facility. The following analytical methods are employed <ul style="list-style-type: none"> Cu and Ag - 3 acid digest with AAS finish; Acid Soluble Cu - sulphuric acid digest with AAS finish; S – LECO (CS-230) DML insert commercial certified reference materials (CRM's) and blanks at a ratio of 1:20. Interpretation of the results of CRM's is hampered by a large number of mis-labelled samples. The majority of results are of CRM's supplied by African Mineral Standards (1235) with 100 results OREAS CRM's. Once the most obvious errors have been filtered out or re-assigned, there does not appear to be any significant problem with analytical accuracy. Analytical precision is poor. It is not clear whether this is the result of poor laboratory practice or poor homogeneity of the CRM's in use and the matter needs to be investigated urgently. Only the acceptable level of accuracy and high density of grade control sampling make RC grade control data acceptable for use in resource estimates.
Verification of sampling and assaying	<ul style="list-style-type: none"> As far as QG are aware, no verification by independent assaying has been undertaken. However, the analytical grades are consistent with the tenor of mineralization observed which is confirmed by subsequent phases of drilling and production. A number of diamond and RC holes are close enough to be considered twinned holes pairs. Additionally the average thickness and grade of RC versus diamond intercepts within a large common volume is possible. No systematic variation in grade and or intercept length is apparent. The only adjustment to assay data is translation between units of % and ppm for copper.
Location of data points	<ul style="list-style-type: none"> Drilling completed by DML has been located using DGPS. Down hole surveys are dominantly collected using electronic single shot instruments. Diamond holes are mostly surveyed at regular intervals downhole. RC holes generally only have an in rods dip survey near collar, but as holes are short and at a high angle to structure this is considered adequate. Topographic survey data was obtained from LIDAR survey, and has an accuracy of +/- 0.6m. Post commencement of mining, surface pickups are made using DGPS. The grid system used is WGS84, Zone 34K.
Data spacing and distribution	<ul style="list-style-type: none"> Intercept spacing at Zeta is variable. The broadest regular spacing is some 200m along strike by 60m vertical, which is progressively infilled to 100m by 30m with some areas to 50mx 30m. Grade control drilling intercepts are spaced at 25m along strike by approximately 10m vertical. Geological continuity is very high. This is seen in a very consistent planar geometry of



Criteria	Commentary
	<p>mineralization over 10's of km, and is confirmed by exposure from open pit. Continuity of grades within the mineralised horizons is typically lower, which can be seen as fluctuations around a fairly consistent average grade.</p> <ul style="list-style-type: none"> • Samples are composited to 1m prior to estimation.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> • The vast majority of drilling crosses the mineralization at a moderate to high angle (>45°) and provides excellent definition of the margins of mineralization.
Sample security	<ul style="list-style-type: none"> • The chain of custody applied to diamond core sampling is not known. RC samples are collected in plastic bags, bar-coded, sealed using zip-lock fasteners and submitted in batches. • Sample security is not considered a major issue given the nature of the mineralization.
Audits or reviews	<ul style="list-style-type: none"> • Previous inspections of RC sampling conducted by CS-2 Pty Ltd and Snowden recommended that the sampling equipment and protocols be reviewed and improved. This recommendation remains in place.

Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	Commentary
Database integrity	<ul style="list-style-type: none"> • QG understand that raw data is stored in an underlying acQuire database. The acQuire database structure contains numerous internal consistency checks, as do the softwares into which drill-holes were imported (Minesight and Datamine). No major inconsistencies were identified. • The data provided to QG by DML was in the form of MS Access databases extracted from the acQuire database. A number of dated iterations were provided, which contained different subsets of information. This caused confusion and rework. In particular, the downhole survey information in later extractions consisted of processed values not the underlying observations. It was necessary to retrieve apparently original DH survey information from an earlier version of the database.
Site visits	<ul style="list-style-type: none"> • Mike Stewart visited site between Tuesday 25 and Friday 29th September, 2012. • Inspections were made of the geology department, exploration core storage, grade control drilling operations, Zeta open pit mining area, Zeta low grade stockpiles and ROM stockpile area and the processing plant. • Discussions were held with senior site Geological, Mining, Processing, and Laboratory staff, and covered the following: <ul style="list-style-type: none"> ○ mine geology practices and reconciliation; ○ data management and ore blocking ○ visits to the RC grade control rig; ○ a visit around the Set Point Laboratory facility. ○ mining practices, blasting and mine planning; ○ an overview and tour of the process plant; • All staff were open, receptive and helpful during discussions.



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Criteria	Commentary
Geological interpretation	<ul style="list-style-type: none"> The geological interpretation is regarded as reliable. QG re-interpreted mineralization domains from first principles. The general disposition of mineralization is remarkable for its continuity and tabular planar geometry, being dominantly hosted in a single thin stratigraphic horizon. The footwall contact is reliably marked by a pronounced jump in grade. It is also clearly apparent in open pit exposure being marked by a changed in blockiness and colour. The hangingwall contact is also generally well-marked by a pronounced step in grade. QG used a threshold of ~0.3% Cu to define a mineralized envelope, also taking into consideration the thickness of mineralization and consistency of geometry. An internal zone of consistently higher Cu grades was also differentiated, using a threshold of ~1.5%Cu. Again lateral thickness changes, and continuity of geometry internal to the enclosing 0.3% envelope, were taken into consideration as well as grade. Analysis of grade behavior across defined provides strong support for the choice for thresholds used.
Dimensions	<ul style="list-style-type: none"> The mineralized stratigraphic horizon at Zeta has been identified by drilling over a strike length of some 9.5km. Wireframe interpretations have been extended along this entire length. In the centre of the deposit, mineralization has been identified to a depth of >600m and is open at depth. On average the zone of Cu mineralization is some 5.5m wide.
Estimation and modelling techniques	<ul style="list-style-type: none"> Copper, silver, acid soluble copper, sulphur and density were estimated using ordinary kriging into blocks of 5m East, by 25m North by 10m RL. These block dimensions were selected to match the existing grade control model definition. Subcells to a minimum dimension of 0.3125m E by 3.125m N by 1.25m RL were used to represent volume. Estimates were performed in Datamine software, while exploratory data analysis was undertaken in Isatis software. Estimation parameters were chosen after taking into account output kriging estimation statistics, variogram models and data geometry. Grade estimates were constrained separately within a high grade (>1.5%Cu) and low grade (>0.3% Cu) domains. All variables except copper were also estimated separately above the interpreted base of complete oxidation. Top cuts were applied to Ag and S in some domains. The cut-values were based on examination of the tail of the histogram. An estimate was also made of the ratio of S:Cu. Previous estimates have used the ratio of estimated S to Cu in block estimates to defined oxidation state. In this estimate, oxidation state is determined by interpreted base of oxidation and top of fresh rock surfaces. Estimates were validated visually in Datamine's 3D graphical environment, by examining reproduction of global estimation statistics, and by comparing semi-local reproduction of grade in swath plots.
Moisture	<ul style="list-style-type: none"> Tonnages are estimated on a dry basis.
Cut-off parameters	<ul style="list-style-type: none"> For open pit resources, a variable cutoff is applied on Cu grades depending on oxidation state (1% Cu in oxide, 0.7% Cu in transition material, and 0.5% in sulphide ores). These cutoff's were calculated based on application of a simple economic model (Cu price \$5700/t. mining cost of \$2/t, processing cost of \$25/t and Cu recovery of 45% in oxide, 65% in transition and 90% in fresh).



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Criteria	Commentary
	<ul style="list-style-type: none"> For underground resources, a minimum mining width of 5m and a cutoff of 1.07%Cu equivalent was applied, where $CuEq = Cu + Ag * 0.0113$. This cutoff grade is derived from a more complex economic analysis incorporating taxation, transport smelting and refining charges.
Mining factors or assumptions	<ul style="list-style-type: none"> Open pit resources are reported within a shell optimized at 1.5x the reserve copper price (\$5700/t). Open pit mining is already underway. Underground resources are largely constrained to the limits of the interpreted high grade domain. A feasibility study has demonstrated economic viability of underground mining at Zeta, and it is planned to commence underground mining in the near future.
Metallurgical factors or assumptions	<ul style="list-style-type: none"> Cu recoveries applied in calculation of open pit cutoffs are derived from mill reconciliation.
Environmental factors or assumptions	<ul style="list-style-type: none"> No issues noted.
Bulk density	<ul style="list-style-type: none"> Bulk density has been estimated into the model from a database of measurements obtained using the Archimedeian weight in air, weight in water method. Subsequent to commencement of open pit mining, a number of grab samples from the pit have been tested, which confirm earlier core measurements Bulk density estimates are regarded as adequate.
Classification	<ul style="list-style-type: none"> The estimates have been classified into Measured, Indicated and Inferred Resources according to the JORC 2012 code, taking into account data quality, data density, geological continuity, grade continuity and estimation confidence. Long section polygons were used to defined zones of different classification. Measured Resources are largely restricted to the area of grade control drilling, where drill spacing is 25m along strike by 10m vertically. Measured Resource has been cautiously extended beyond the limits of grade control drilling where resource drilling is present at 50m (strike) by 25m RL. Indicated Resources are defined where drilling is at 100m centres along strike, by 50-70m RL or better. Inferred Resources are defined around the margins of Indicated resource.
Audits or reviews	<ul style="list-style-type: none"> No audit or review has been undertaken of this estimate.
Discussion of relative accuracy/ confidence	<ul style="list-style-type: none"> No studies have been performed to quantify the relative confidence in the estimate.



Section 4 Estimation and Reporting of Ore Reserves

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)

Criteria	Commentary
Mineral Resource estimate for conversion to Ore Reserves	<p>QG prepared the updated Zeta Mineral Resource estimate in May 2013. The Zeta Mineral Resource estimate includes material below the existing design and constrained within a Whittle shell optimised at 1.5 times the Ore Reserve copper price.</p> <p>It comprises a Measured Resource of 1.4 Mt at 1.27 % Cu and 17 g/t Ag, an Indicated Resource of 5.2 Mt at 1.31 % Cu and 19 g/t Ag, and no Inferred Resource, for a total of 6.6Mt at 1.31 % Cu and 19 g/t Ag at a cut-off grade of 0.5% Cu in fresh rock, 0.7% Cu in transitional and 1% in oxide.</p> <p>QG subsequently prepared a mineable model for Zeta that incorporated appropriate dilution and used a reasonable SMU block size.</p>
Site visits	<p>No specific site visit was undertaken for this Ore Reserve update.</p> <p>A previous site visit between 25 - 29 September 2012 by Michael Stewart (the QG CP for Resources) was deemed sufficient to confirm site infrastructure and the ongoing, working nature of the operation. This visit included a tour of the operating Zeta open pit and plant.</p>
Study status	<p>The Boseto operation commenced production late in the first half of 2012. QG undertook the following for this Ore Reserve estimate:</p> <ul style="list-style-type: none"> defined an economic pit shell around which to base a pit design using commercial optimisation software that uses the Lerches-Grossman algorithm; compared this pit shell with the existing Zeta pit design and concluded that the existing design was essentially contained within the pit shell; and prepared a mining sequence to test the financial results.
Cut-off parameters	<p>Due to the relationship between the metallurgical copper recovery and the block S:Cu ratio, no traditional cut-off grade was applicable. The determination of ore was made by calculating the cash flow that would be produced by processing material and the cash flow which would be produced by mining it as waste. If the cash flow from processing was higher, the material was considered as ore. If not, it was considered waste. The calculation of cash flow was based on:</p> <ul style="list-style-type: none"> a copper price of US\$7,250 per tonne; a royalty of 3% of gross revenue; a total transport, smelting and refining cost of US\$378 per tonne of concentrate produced; payable copper metal of %96.65%; a variable metallurgical recovery dependent on the S:Cu ratio; a variable process cost dependent on the material type, with the majority being sulphide rock with a process cost of US\$7.00 per tonne; and minor contributions from silver. <p>However, the Ore Reserve for Zeta is >99% sulphide and the average S:Cu ratio for this material results in the application of the maximum allowable copper recovery of 93%. This would result in a cut-off grade (ignoring silver contributions) of 0.5%.</p>



Criteria	Commentary
Mining factors or assumptions	<p>The key factors in the open pit mining of the Zeta pit are:</p> <ul style="list-style-type: none"> an industry standard mining method, using excavators and trucks; pit slopes designs were based upon geotechnical investigation and recommendations and have supported mining during the past year. With less than 1 year remaining these slope designs are expected to be conducive to continued mining; the mining dilution incorporated in the calculation of the Zeta Ore Reserves was included as hangingwall and footwall dilution skins of 0.5m and 0.3m respectively applied to the Resource block model, equating to an approximate average of 7% dilution. This diluted model was then regularised to an SMU of 5m x 10m x 6m; the ore loss incorporated in the calculation of the Zeta Ore Reserves was 2%; a minimum mining width of 30m was applied during pit shell selection and in pit design; Inferred Mineral Resources were not included in the optimisation process for the Zeta pit. There is no Inferred Mineral Resource within the current Zeta pit design.
Metallurgical factors or assumptions	<p>The Boseto processing plant is targeting 3.2Mtpa throughput, although it has not yet achieved that level. The process path is:</p> <ul style="list-style-type: none"> the comminution circuit comprises three stage crushing and ball milling. ROM material is trucked from the open pit into either ROM stockpiles and then rehandled by front-end-loader into a bin, or tipped directly into the bin. Ore gravitates via an apron feeder into a jaw crusher. Crushing incorporates a three stage crushing plant with a crushing capacity of 500dtp/h to product size (P80) size of 15mm; Flotation includes a flash flotation cell and separate sulphide and oxide flotation circuits with copper sulphide rougher flotation, regrinding of the unit cell concentrate in a regrind circuit to a product size (P80) size of 38µm. This is followed by two stages of sulphide cleaning and then oxide copper flotation of the sulphide rougher tails followed by three stages of cleaning of the oxide rougher concentrates; Concentrate handling includes dewatering of both the oxide and sulphide copper concentrates via a concentrate thickening circuit and filtration of the concentrate via a single vertical plate filter; and Disposal includes tailings thickening in a 20m diameter thickener with disposal of the underflow to the Tailings Storage Facility (TSF). <p>The process metallurgical recovery for copper is dependent on the S:Cu ratio and calculated for each block using the following formula:</p> <ul style="list-style-type: none"> $2.961 \times (\text{S:Cu Ratio \%}) + 14.439$, with a maximum recovery of 93%. <p>The process metallurgical recovery for silver is fixed by material type:</p> <ul style="list-style-type: none"> oxide = 50% transitional = 70%



Criteria	Commentary
	<ul style="list-style-type: none"> • sulphide = 75% <p>The origin of the copper recovery formula is described in a report by Metallicon, provided by DML (20100114-CH-PRO-Metallicon_Disc001.028 Discovery Boseto Sulphur Copper R....pdf). Historical performance of the plant has resulted in fluctuating copper recovery due mainly to fluctuating blends of material type (oxide, transitional and sulphide). More recent results during blends with higher percentage of sulphide material support the estimation of copper recovery based on the S:Cu dependent formula. The remaining Zeta Ore Reserve comprises > 95% sulphide material leading to greater confidence in the expected copper recovery estimate.</p>
Environmental	<p>DML has appropriate and approved waste dump designs in place and in operation, of sufficient size to store the expected quantities of mine waste rock associated with the Zeta Ore Reserve.</p> <p>Likewise, Boseto has sufficient capacity in it's purpose designed and approved tailings storage facility to meet the requirements generated from mining and processing the Zeta Ore Reserve.</p>
Infrastructure	<p>The Boseto operation has all of the required infrastructure in place to mine and process the Zeta Ore Reserve.</p>
Costs	<p>No capital costs were considered in the Zeta Ore Reserve estimate, because all of these expenditures have previously been made.</p>
Revenue factors	<p>The copper and silver prices used in the derivation of the Zeta Ore reserves falls below the US SEC rolling 3 year average and close to the US SEC rolling 5 year average, which is sufficient justification for the relatively short life of the Zeta pit.</p> <p>The transportation, treatment, refining and penalty charges are all taken from the Transamine contract mentioned below.</p> <p>All costs and prices are in US\$, negating the need for the use of exchange rates.</p>
Market assessment	<p>DML has an arrangement for sale of the Boseto concentrate to metal trader Transamine that has an initial term expiring in early 2015, automatically renewed for successive 12 month periods thereafter.</p>
Economic	<p>DML supplied an annual discount rate of 10% to be used in financial analysis, which QG considered appropriate for an operating mine in Botswana.</p> <p>No inflation was used due to the relatively short mine life of the Zeta pit.</p>
Social	<p>DML have established relevant agreements with local stakeholders.</p> <p>The majority of the workforce is sourced locally.</p>
Other	<p>DML has received the relevant Mining License from the government of the Republic of Botswana (Mining License No. 2010/99L), which is valid until 19 December 2025. This license covers the area incorporating Zeta pit and associated waste dumps and haul roads, the plant and tailing facility, and offices.</p> <p>DML has contracts in place for the provision of some materials and supplies for the operation. QG does not expect any unmanageable risks to arise during the remainder</p>



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Criteria	Commentary
	of the operation of the Zeta pit.
Classification	The Ore Reserve is classified as Proved and Probable in accordance with the JORC Code, corresponding to the resource classifications of Measured and Indicated. No Measured Mineral Resources were downgraded to Probable Ore Reserves. No Inferred Mineral Resources were included in the Ore Reserve estimate.
Audits or reviews	QG has completed an internal review of the Ore Reserve estimate.
Discussion of relative accuracy/confidence	QG has used estimates based on operational performance from mid 2012 to April 2013, sometimes modified based on newly implemented improvements. The accuracy of many of these estimates is therefore very good but the overall accuracy is reduced due to the high variability month by month in some costs. QG considers that the overall accuracy is therefore -5% to +10%



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Memorandum

To: Discovery Metals
From: Michael Stewart
Date: 17 July 2013
Subject: Plutus Mineral Resource, Ore Reserve and Exploration Target Statements

This document presents Mineral Resource, Ore Reserve and Exploration Target statements for the Plutus deposit, Botswana.



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Plutus Mineral Resources Statement

Quantitative Group (QG) have provided Discovery Metals Limited (DML) with an updated resource model for the Plutus Deposit. The estimate is based on new geological interpretations that incorporate Reverse Circulation (RC) grade control drill holes.

The Plutus copper deposit, a sediment hosted stratiform copper deposit, is one of a number of deposits which together form the Boseto project. It is located about 80km southwest of the town of Maun, Botswana. Mining production from the adjacent Zeta deposit commenced in early 2012 and processing began in June of that year, while production from Plutus commenced in early 2013.

A total of 1118 drill holes (566 diamond core, 4 RC resource drill holes and 548 RC grade control drill holes) have been used to define the mineral resource. A further 31 holes (20 diamond, 10 RC and 1 GC) have been excluded from the estimate due to problems with location. QG reviewed the quality of drill data (location, sampling and assay quality) and conclude that the data is of acceptable quality for use in resource estimation. New wireframe solid model interpretations were made of mineralisation using a threshold of ~0.3% copper. In contrast to Zeta, no consistent high grade core could be confidently identified at Plutus. New surfaces were also interpreted for the base of complete oxidation and the top of fresh rock. Grade estimation used ordinary kriging to estimate copper, silver, sulphur, acid soluble copper and density into blocks constrained within the wireframe models. Hard boundaries were applied to estimation within mineralisation domains, and the oxide/transition boundary was also treated as hard for all variables except copper. Top cuts were applied to grades of silver and acid soluble copper.

The model has been classified according to the JORC Code (2012).

QG's estimate of Mineral Resources for the Plutus deposit as at 31st May 2013 is summarised in Table 1. A summary of the material aspects of the 2013 Mineral Resource estimate in the context of the 2012 Edition of the 'Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves', using the format of 'Table 1 Checklist of Assessment and Reporting Criteria' is appended.



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Plutus - Mineral Resource Estimate as of 31 st May 2013				
Remaining Mineral Resource below EOM May pit pickup				
Category	Mt	Cu (%)	Ag(ppm)	S (%)
Measured	6.5	1.27	11.7	0.25
Indicated	12.0	1.30	13.1	0.28
Subtotal M&I	18.5	1.29	12.6	0.27
Inferred	63.6	1.36	12.0	0.36
Total Mineral Resource	82.1	1.34	12.1	0.34

Table 1: Plutus Mineral Resource Estimate at 31st May 2013.

Notes: Mineral resource estimates include: Open pit resources reported at cut-off grades of 0.5% Cu in fresh rock, 0.7% Cu in transitional material, and 1.0% Cu in oxide; and Underground resources reported above a cut-off grade of 1.07% Cu equivalent ($CuEq = Cu + Ag \times 0.0113$) and a 5m minimum mining width. Open pit resources are constrained within a pit optimisation run at 1.5 times the Reserve commodity price. Underground resources are constrained within the limits of geological interpretation and extend to 600m below surface. Underground resources are exclusive of open pit resources. This estimate is inclusive of such open pit and underground reserves as may be declared.



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Plutus Open Pit Ore Reserves Statement

Quantitative Group Pty Ltd (QG) provided Discovery Metals Limited (DML) with an update of the Ore Reserve for the Plutus open pit, part of the Boseto project in Botswana.

QG prepared a new Mineral Resource estimate in May 2013 and subsequently constructed a mineable block model that included appropriate dilution skins. QG analysed this mineable model and recommended a pit shell around which a design could be produced for Ore Reserve reporting purposes.

QG's calculation of the Plutus Ore Reserve as at 31 May 2013 is not based on traditional cut-off grade practise (due to a grade dependent formula for the metallurgical recovery for copper) but is determined on a profit basis whereby ore is selected by comparing the cash flow which would be produced by processing material and the cash flow which would be produced by mining it as waste. If the cash flow from processing is higher, the material is treated as ore. If not, it is treated as waste. QG's estimate of the Ore Reserves is provided in Table 2.

Classification	Mt	Cu (%)	Ag (g/t)
Proven	4.8	1.2	11
Probable	1.2	1.4	16
Plutus Open Pit Ore Reserve	6.0	1.2	12

Table 2. Plutus Open Pit Ore Reserve estimate as at end of May 2013

The Plutus open pit has been operating since early 2013, using standard and typical mining practices. At the time of reporting a small area of the pit had mined down to fresh rock, but the volume processed is insufficient to allow reconciliation of the model against actual performance. The modifying factors used to estimate the Ore Reserve are based upon recent operating performance and the experience of DML and QG employees in this type of deposit and style of mineralisation. The table appended below summarises the material aspects of the May 2013 Ore Reserve estimate in the context of the 2012 Edition of the 'Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves', Table 1 Checklist of Assessment and Reporting Criteria.



Plutus Exploration Target

In addition to the Mineral Resource estimates declared above, an Exploration Target of 6-19 Mt at 1.1-1.5% Cu is declared for Plutus. It must be noted that the potential quantity and grade is conceptual in nature, that there has been insufficient exploration to estimate a Mineral Resource in the area of the declared Exploration Target and that it is uncertain if further exploration will result in the estimation of a Mineral Resource.

Exploration Target	Mt	Cu%	Ag%
Plutus exploration target	6-19	1.2-1.3	10-15

Table 3: Plutus Exploration Target

Drilling at Plutus confirms the presence of mineralisation within the same stratigraphic horizon over a strike length of nearly 30 km. Depth continuity has been confirmed down to ~450m below surfaces over a strike length of 13km, by holes at 600-900m spacing. There is a strong geological likelihood that the mineralisation hosting horizon will continue to a depth of 600m below surface along the whole strike length. Some 16km of the known strike length has not been tested below around 100m.

To date, the drilling has not identified any consistently elevated core of grade, suitable for differentiating, wire-framing and estimating separately. However, a significant area/volume of the interpreted structure meets cut off criteria of >1.07%CuEq and > 5m width.

It is considered highly likely that further mineralisation that meets the underground cutoff criteria demonstrated for Zeta deposit will be present beneath the areas of shallow surface testing. The target tonnage defined is based on the presence of 2 to 4 shoots with the potential dimensions and grade tabulated below. The grade and width were derived from the average of the drill hole intercepts occurring within the well tested portions of Plutus – between 5.5 and 7.5m true width and 1.2-1.3% Cu. This area is shown as a solid red box on the top long section shown in Figure 1. The dashed red boxes show the assumed dimensions of the exploration targets, to illustrate the size of these with respect to existing drilling. The location of these boxes is not meant to imply the location of mineralisation, but to illustrate the size of target sought



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	Low case	High case	Units
Number of shoots	2	4	
Size of mineralised 'shoot'	800	1200	m strike
	250	250	m depth
Thickness	5.5	7.5	m
Density	2.8	2.8	t/m3
Tonnage per shoot	3,080,000	4,620,000	t
Total Tonnage	6,160,000	18,900,000	t
Average Grade	1.2%	1.3	%

Table 4. Basis of calculation of Exploration Target tonnage and grade.

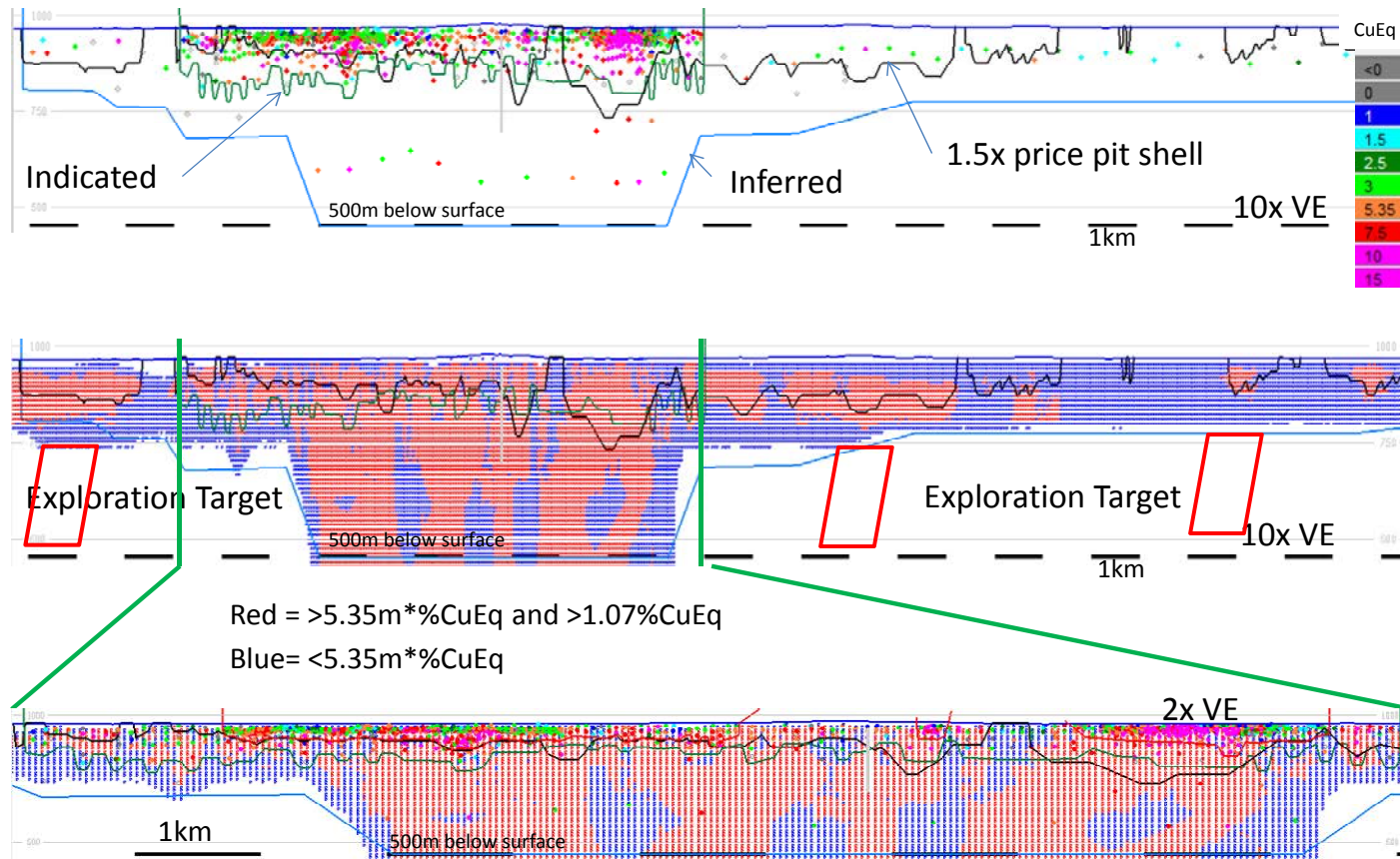


Figure 1: Long section view showing exploration target areas in relation to existing drilling and resource boundaries



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Competent Persons Statements

The information in this announcement that relates to Mineral Resources and Exploration Targets for Discovery Metals Limited's Plutus Deposit in Botswana is based on information compiled by Michael Stewart, a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy (Membership No. 209311) and the Australian Institute of Geoscientists (Membership No. 3119). Michael Stewart is a full time employee of Quantitative Group Pty Ltd, and has no interest in, and is entirely independent of, Discovery Metals Limited. Michael Stewart 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 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code). Michael Stewart 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 the Plutus open pit Ore Reserve is based on information compiled by David Purdey a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy. David Purdey is a full time employee of Quantitative Group Pty Ltd, and has no interest in, and is entirely independent of, Discovery Metals Limited. David Purdey has sufficient experience that is relevant to the style of mineralisation and type of deposit and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves'. David Purdey consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.



JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	Commentary
Sampling techniques	<ul style="list-style-type: none"> No surface sampling techniques are used in Resource estimates. Diamond core is ½ core sampled after cutting. Samples are crushed and pulverized to produce the aliquots required for analysis. RC samples (1m length) are reduced to 3kg at the drill rig using a cone splitter. This is further reduced at the laboratory to 800g before pulverization in a mixer mill to yield a bagged pulp sample, from which a number of aliquots are extracted for different analytical processes.
Drilling techniques	<ul style="list-style-type: none"> The majority of earlier drilling was by diamond coring, with only a small number of RC holes (4 of 570). RC grade control commenced in June 2012, and at the time of estimation a total of 548 angled RC holes had been completed. These average 35m in length, with the longest being 112m.
Drill sample recovery	<ul style="list-style-type: none"> Core recovery within the Plutus mineralized zones averages 94%. No discernible relationship exists between core recovery and either sample length or Cu grade. No systematic recording of RC sample recovery has been undertaken. Sample recovery observed at the rig was generally adequate, although was somewhat lower than optimal. The RC grade control rig in use was not fitted with dust suppression, and loss of fines is higher than desirable. RC recovery and sampling is an area that needs some improvement in future. Within the zone of oxidation copper minerals have largely been converted to the oxide species chrysocolla (and malachite). The brittle nature of chrysocolla means that in percussion sampling this mineral may preferentially report to the fine fraction, and if fines loss occurs this may result in low bias of Cu grades.
Logging	<ul style="list-style-type: none"> All drill holes have been geologically logged. Logging is focused on identification of underlying stratigraphic units. Specific logging of mineralization is not undertaken. While logging provides a guide to subsequent interpretation of mineralization it is not of adequate resolution for defining estimation domains, and these rely on grades of Cu, Ag and S.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> Diamond drill core is sawn longitudinally and half core samples submitted for analysis. All subsequent sample preparation was undertaken at commercial laboratory facilities in Johannesburg and Perth using industry standard crushing and pulverizing equipment and protocols. QG have not directly reviewed pulp duplicate data reported by the laboratory, but scatter plots presented in earlier reported indicate that these data are of suitable precision for use in resource estimates. RC grade control drill samples are initially split at the rig using a cone splitter. Samples are prepared and analysed at the onsite laboratory managed by Set Point. Samples are crushed to 2mm, split to 800g using riffle splitter, pulverized to 90% passing 75µm. Field duplicate samples are collected at a ratio of 1:20. Laboratory duplicates are collected at the ratio of 1:25.



Criteria	Commentary
	<ul style="list-style-type: none"> Laboratory duplicates show a typically high level of precision with a coefficient of variation (CV) for Cu of 4% for samples greater than 10x level of detection. The precision of field duplicates is only moderately good for a base metal deposit (22% CV for Cu), and improvement should be investigated.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> Information about the analytical methods and quality control measures applied to resource drilling up until mid-2012 is contained in previous resource reports. No significant issues were noted, and QG concur with the conclusion that data is of acceptable quality for use in resource estimates. Analysis of RC grade control drilling is carried out at Set Point Laboratories onsite facility. The following analytical methods are employed <ul style="list-style-type: none"> Cu and Ag - 3 acid digest with AAS finish; Acid Soluble Cu - sulphuric acid digest with AAS finish; S – LECO (CS-230) DML insert commercial certified reference materials (CRM's) and blanks at a ratio of 1:20. Interpretation of the results of CRM's is hampered by a large number of mis-labelled samples. The majority of results are of CRM's supplied by African Mineral Standards (1235) with 100 results OREAS CRM's. Once the most obvious errors have been filtered out or re-assigned, there does not appear to be any significant problem with analytical accuracy. Analytical precision is poor. It is not clear whether this is the result of poor laboratory practice or poor homogeneity of the CRM's in use and the matter needs to be investigated urgently. Only the acceptable level of accuracy and high density of grade control sampling make RC grade control data acceptable for use in resource estimates.
Verification of sampling and assaying	<ul style="list-style-type: none"> As far as QG are aware, no verification by independent assaying has been undertaken. However, the analytical grades are consistent with the tenor of mineralization observed which is confirmed by subsequent phases of drilling and production. A number of diamond and RC holes are close enough to be considered twinned holes pairs. Additionally the average thickness and grade of RC versus diamond intercepts within a large common volume is possible. No systematic variation in grade and or intercept length is apparent. The only adjustment to assay data is translation between units of % and ppm for copper.
Location of data points	<ul style="list-style-type: none"> Drilling completed by DML has been located using DGPS. Down hole surveys are dominantly collected using electronic single shot instruments. Diamond holes are mostly surveyed at regular intervals downhole. RC holes generally only have an in rods dip survey near collar, but as holes are short and at a high angle to structure this is considered adequate. Topographic survey data was obtained from LIDAR survey, and has an accuracy of +/- 0.6m. Post commencement of mining, surface pickups are made using DGPS. The grid system used is WGS84, Zone 34K.
Data spacing and distribution	<ul style="list-style-type: none"> Intercept spacing at Plutus is variable. The broadest regular spacing is some 600m along strike by 60m vertical, which is progressively infilled to 100m by 30m with some areas to 50mx 30m. Grade control drilling intercepts are spaced at 25m along strike by approximately 10m vertical. Geological continuity is very high. This is seen in a very consistent planar geometry of



Criteria	Commentary
	<p>mineralization over 10's of km, and is confirmed by exposure from open pit. Continuity of grades within the mineralised horizons is typically lower, which can be seen as fluctuations around a fairly consistent average grade.</p> <ul style="list-style-type: none"> • Samples are composited to 1m prior to estimation.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> • The vast majority of drilling crosses the mineralization at a moderate to high angle (>45°) and provides excellent definition of the margins of mineralization.
Sample security	<ul style="list-style-type: none"> • The chain of custody applied to diamond core sampling is not known. RC samples are collected in plastic bags, bar-coded, sealed using zip-lock fasteners and submitted in batches. • Sample security is not considered a major issue given the nature of the mineralization.
Audits or reviews	<ul style="list-style-type: none"> • Previous inspections of RC sampling conducted by CS-2 Pty Ltd and Snowden recommended that the sampling equipment and protocols be reviewed and improved. This recommendation remains in place.

Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	Commentary
Database integrity	<ul style="list-style-type: none"> • QG understand that raw data is stored in an underlying acQuire database. The acQuire database structure contains numerous internal consistency checks, as do the softwares into which drill-holes were imported (Minesight and Datamine). No major inconsistencies were identified. • The data provided to QG by DML was in the form of MS Access databases extracted from the acQuire database. A number of dated iterations were provided, which contained different subsets of information. This caused confusion and rework. In particular, the downhole survey information in later extractions consisted of processed values not the underlying observations. It was necessary to retrieve apparently original DH survey information from an earlier version of the database.
Site visits	<ul style="list-style-type: none"> • Mike Stewart visited site between Tuesday 25 and Friday 29th September, 2012. • Inspections were made of the geology department, exploration core storage, grade control drilling operations, Zeta open pit mining area, Zeta low grade stockpiles and ROM stockpile area and the processing plant. At that stage mining had not commenced on Plutus. • Discussions were held with senior site Geological, Mining, Processing, and Laboratory staff, and covered the following: <ul style="list-style-type: none"> ○ mine geology practices and reconciliation; ○ data management and ore blocking ○ visits to the RC grade control rig; ○ a visit around the Set Point Laboratory facility. ○ mining practices, blasting and mine planning; ○ an overview and tour of the process plant;



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Criteria	Commentary
	<ul style="list-style-type: none"> All staff were open, receptive and helpful during discussions.
Geological interpretation	<ul style="list-style-type: none"> The geological interpretation is regarded as reliable. QG re-interpreted mineralization domains from first principles. The general disposition of mineralization is remarkable for its continuity and tabular planar geometry, being dominantly hosted in a single thin stratigraphic horizon. The footwall contact is reliably marked by a pronounced jump in grade. It is also clearly apparent in open pit exposure being marked by a changed in blockiness and colour. The hangingwall contact is also generally well-marked by a pronounced step in grade. QG used a threshold of ~0.3% Cu to define a mineralized envelope, also taking into consideration the thickness of mineralization and consistency of geometry. Unlike at Zeta, no consistent zone of consistently higher Cu grades could be differentiated. Analysis of grade behavior across defined provides strong support for the choice for thresholds used.
Dimensions	<ul style="list-style-type: none"> The mineralized stratigraphic horizon at Plutus has been identified by drilling over a strike length of some 28km. Wireframe interpretations have been extended along this entire length. In the centre of the deposit, mineralization has been identified to a depth of >500m and is open at depth. On average the zone of Cu mineralization is some 5.5m wide.
Estimation and modelling techniques	<ul style="list-style-type: none"> Copper, silver, acid soluble copper, sulphur and density were estimated using ordinary kriging into blocks of 5m East, by 25m North by 10m RL. These block dimensions were selected to match the existing grade control model definition. Subcells to a minimum dimension of 0.3125m E by 3.125m N by 1.25m RL were used to represent volume. Estimates were performed in Datamine software, while exploratory data analysis was undertaken in Isatis software. Estimation parameters were chosen after taking into account output kriging estimation statistics, variogram models and data geometry. Grade estimates were constrained the low grade (>0.3% Cu) domains. All variables except copper were also estimated separately above the interpreted base of complete oxidation. Top cuts were applied to Ag and S in some domains. The cut-values were based on examination of the tail of the histogram. An estimate was also made of the ratio of S:Cu. Previous estimates have used the ratio of estimated S to Cu in block estimates to defined oxidation state. In this estimate, oxidation state is determined by interpreted base of oxidation and top of fresh rock surfaces. Estimates were validated visually in Datamine's 3D graphical environment, by examining reproduction of global estimation statistics, and by comparing semi-local reproduction of grade in swath plots.
Moisture	<ul style="list-style-type: none"> Tonnages are estimated on a dry basis.
Cut-off parameters	<ul style="list-style-type: none"> For open pit resources, a variable cutoff is applied on Cu grades depending on oxidation state (1% Cu in oxide, 0.7% Cu in transition material, and 0.5% in sulphide ores). These cutoff's were calculated based on application of a simple economic model (Cu price \$5700/t. mining cost of \$2/t, processing cost of \$25/t and Cu recovery of 45% in oxide, 65% in transition and 90% in fresh). For underground resources, a cutoff of 5.35m*CuEq% and 1.07%Cu equivalent



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Criteria	Commentary
	was applied, where $CuEq = Cu + Ag * 0.0113$. This equates to a minimum mining width of 5m. This cutoff grade is derived from a more complex economic analysis incorporating taxation, transport, smelting and refining charges.
Mining factors or assumptions	<ul style="list-style-type: none"> Open pit resources are reported within a shell optimized at 1.5x the reserve copper price (\$5700/t). Open pit mining is already underway. Underground resources are constrained within the limits of the interpreted Cu grade domains. No economic feasibility study has yet been completed for Plutus, but at nearby Zeta the economic viability of underground mining has been demonstrated, and the same cut-off assumptions have been applied to Plutus.
Metallurgical factors or assumptions	<ul style="list-style-type: none"> Cu recoveries applied in calculation of open pit cutoffs are derived from mill reconciliation.
Environmental factors or assumptions	<ul style="list-style-type: none"> No issues noted.
Bulk density	<ul style="list-style-type: none"> Bulk density has been estimated into the model from a database of measurements obtained using the Archimedeian weight in air, weight in water method. Subsequent to commencement of open pit mining, a number of grab samples from the pit have been tested, which confirm earlier core measurements Bulk density estimates are regarded as adequate.
Classification	<ul style="list-style-type: none"> The estimates have been classified into Measured, Indicated and Inferred Resources according to the JORC 2012 code, taking into account data quality, data density, geological continuity, grade continuity and estimation confidence. Long section polygons were used to defined zones of different classification. Measured Resources are largely restricted to the area of grade control drilling, where drill spacing is 25m along strike by 10m vertically. Measured Resource has been cautiously extended beyond the limits of grade control drilling where resource drilling is present at 50m (strike) by 25m RL. Indicated Resources are defined where drilling is at 100m centres along strike, by 50-70m RL or better. Inferred Resources are defined around the margins of Indicated resource.
Audits or reviews	<ul style="list-style-type: none"> No audit or review has been undertaken of this estimate.
Discussion of relative accuracy/ confidence	<ul style="list-style-type: none"> No studies have been performed to quantify the relative confidence in the estimate.



Section 4 Estimation and Reporting of Ore Reserves

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)

Criteria	Commentary
Mineral Resource estimate for conversion to Ore Reserves	<p>QG prepared the updated Plutus Mineral Resource estimate in June 2013. The Plutus Mineral Resource estimate includes material below the existing design. Open-pittable resources are constrained within a Whittle shell optimised at 1.5 times the Ore Reserve copper price.</p> <p>The open pit Mineral Resource comprises a Measured Resource of 6.4 Mt at 1.27 % Cu and 12 g/t Ag, an Indicated Resource of 7.0 Mt at 1.32 % Cu and 13 g/t Ag, and an Inferred Resource of 13.8Mt at 1.26%Cu and 11 g/t Ag, for a total of 27.2Mt at 1.28 % Cu and 12 g/t Ag at a cut-off grade of 0.5% Cu in fresh rock, 0.7% Cu in transitional and 1% in oxide.</p> <p>QG subsequently prepared a mineable model for Plutus that incorporated appropriate dilution and used a reasonable SMU block size.</p>
Site visits	<p>No specific site visit was undertaken for this Ore Reserve update.</p> <p>A previous site visit between 25 - 29 September 2012 by Michael Stewart (the QG CP for Resources) was deemed sufficient to confirm site infrastructure and the ongoing, working nature of the operation. This visit included a tour of the operating Zeta open pit and plant.</p>
Study status	<p>The Boseto operation commenced production late in the first half of 2012. QG undertook the following for this Ore Reserve estimate:</p> <ul style="list-style-type: none"> defined an economic pit shell around which to base a pit design using commercial optimisation software that uses the Lerches-Grossman algorithm; compared this pit shell with the existing Plutus pit design and concluded that new a design was required; and prepared a mining sequence to test the financial results.
Cut-off parameters	<p>Due to the relationship between the metallurgical copper recovery and the block S:Cu ratio, no traditional cut-off grade was applicable. The determination of ore was made by calculating the cash flow that would be produced by processing material and the cash flow which would be produced by mining it as waste. If the cash flow from processing was higher, the material was considered as ore. If not, it was considered waste. The calculation of cash flow was based on:</p> <ul style="list-style-type: none"> a copper price of US\$7,250 per tonne; a royalty of 3% of gross revenue; a total transport, smelting and refining cost of US\$378 per tonne of concentrate produced; payable copper metal of 96.65%; a variable metallurgical recovery dependent on the S:Cu ratio; a variable process cost dependent on the material type, with the majority being sulphide rock with a process cost of US\$7.00 per tonne; and minor contributions from silver.



Criteria	Commentary
Mining factors or assumptions	<p>The key factors in the open pit mining of the Plutus pit are:</p> <ul style="list-style-type: none"> an industry standard mining method, using excavators and trucks; pit slopes designs were based upon geotechnical investigation and recommendations and have supported mining at the similar Zeta pit during the past year. These slope designs are expected to be conducive to continued mining; the mining dilution incorporated in the calculation of the Plutus Ore Reserves was included as hangingwall and footwall dilution skins of 0.5m and 0.3m respectively applied to the Resource block model. This diluted model was then regularised to an SMU of 5m x 10m x 6m; the ore loss incorporated in the calculation of the Plutus Ore Reserves was 2%; a minimum mining width of 30m was applied during pit shell selection and in pit design; Inferred Mineral Resources were not included in the optimisation process for the Plutus pit
Metallurgical factors or assumptions	<p>The Boseto processing plant is targeting 3.2Mtpa throughput, although it has not yet achieved that level. The process path is:</p> <ul style="list-style-type: none"> the comminution circuit comprises three stage crushing and ball milling. ROM material is trucked from the open pit into either ROM stockpiles and then rehandled by front-end-loader into a bin, or tipped directly into the bin. Ore gravitates via an apron feeder into a jaw crusher. Crushing incorporates a three stage crushing plant with a crushing capacity of 500dtp to product size (P80) size of 15mm; Flotation includes a flash flotation cell and separate sulphide and oxide flotation circuits with copper sulphide rougher flotation, regrinding of the unit cell concentrate in a regrind circuit to a product size (P80) size of 38µm. This is followed by two stages of sulphide cleaning and then oxide copper flotation of the sulphide rougher tails followed by three stages of cleaning of the oxide rougher concentrates; Concentrate handling includes dewatering of both the oxide and sulphide copper concentrates via a concentrate thickening circuit and filtration of the concentrate via a single vertical plate filter; and Disposal includes tailings thickening in a 20m diameter thickener with disposal of the underflow to the Tailings Storage Facility (TSF). <p>The process metallurgical recovery for copper is dependent on the S:Cu ratio and calculated for each block using the following formula:</p> <ul style="list-style-type: none"> $2.0755 \times (\text{S:Cu Ratio } \%) + 36.285$, with a maximum recovery of 93%. <p>The process metallurgical recovery for silver is fixed by material type:</p> <ul style="list-style-type: none"> oxide = 40% transitional = 47% sulphide = 65% <p>The origin of the copper recovery formula is described in a report by Metallicon,</p>



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Criteria	Commentary
	provided by DML (20100114-CH-PRO-Metallicon_Disc001.028 Discovery Boseto Sulphur Copper R....pdf). Historical performance of the plant has resulted in fluctuating copper recovery due mainly to fluctuating blends of material type (oxide, transitional and sulphide). More recent results during blends with higher percentage of sulphide material support the estimation of copper recovery based on the S:Cu dependent formula. It is therefore expected that Plutus copper recovery estimate is reasonable.
Environmental	DML has appropriate and approved waste dump designs in place and in operation, of sufficient size to store the expected quantities of mine waste rock associated with the Plutus Ore Reserve. Likewise, Boseto has sufficient capacity in it's purpose designed and approved tailings storage facility to meet the requirements generated from mining and processing the Plutus Ore Reserve.
Infrastructure	The Boseto operation has all of the required infrastructure in place to mine and process the Plutus Ore Reserve.
Costs	No capital costs were considered in the Plutus Ore Reserve estimate, because all of these expenditures have previously been made.
Revenue factors	The copper and silver prices used in the derivation of the Plutus Ore reserves falls below the US SEC rolling 3 year average and close to the US SEC rolling 5 year average, which is sufficient justification for the relatively short life of the Plutus pit. The transportation, treatment, refining and penalty charges are all taken from the Transamine contract mentioned below. All costs and prices are in US\$, negating the need for the use of exchange rates.
Market assessment	DML has an arrangement for sale of the Boseto concentrate to metal trader Transamine that has an initial term expiring in early 2015, automatically renewed for successive 12 month periods thereafter.
Economic	DML supplied an annual discount rate of 10% to be used in financial analysis, which QG considered appropriate for an operating mine in Botswana. No inflation was used due to the relatively short mine life of the Plutus pit.
Social	DML have established relevant agreements with local stakeholders. The majority of the workforce is sourced locally.
Other	DML has received the relevant Mining License from the government of the Republic of Botswana (Mining License No. 2010/99L), which is valid until 19 December 2025. This license covers the area incorporating Plutus pit and associated waste dumps and haul roads, the plant and tailing facility, and offices. DML has contracts in place for the provision of some materials and supplies for the operation. QG does not expect any unmanageable risks to arise during the remainder of the operation of the Plutus pit.
Classification	The Ore Reserve is classified as Proved and Probable in accordance with the JORC Code, corresponding to the resource classifications of Measured and Indicated. No



Quantitative Group
Our Skills On *Your* Team™

resources & reserves
reconciliation
strategic mine planning
risk analysis
geometallurgy
audit
training & mentoring
project evaluation

Criteria	Commentary
	Measured Mineral Resources were downgraded to Probable Ore Reserves. No Inferred Mineral Resources were included in the Ore Reserve estimate.
Audits or reviews	QG has completed an internal review of the Ore Reserve estimate.
Discussion of relative accuracy/confidence	QG has used estimates based on operational performance from mid 2012 to April 2013, sometimes modified based on newly implemented improvements. The accuracy of many of these estimates is therefore very good but the overall accuracy is reduced due to the high variability month by month in some costs. QG considers that the overall accuracy is therefore -5% to +10%



ZETA UNDERGROUND JORC Reserve Statement



MINING PLUS

Document Control Information

	JORC RESERVE STATEMENT		REVISION	
	MCDISZ27-GTPR-001		NO.	DATE
			01	24/02/2012

Revision Tracking

Revision:	Prepared By:	Reviewed By:	Issued For:	Approved By:	Date:	Signature:
1.0	Andrew Gasmier	Roy Kidd	FV			
1.1						
1.2						
1.3						
1.4						
1.5						

Issued for: Review and Comment (RC), Information Only (IO), Implementation (IM), Final Version (FV).

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ZETA UNDERGROUND ORE RESERVE STATEMENT – 31ST MAY 2013

As at 31st May 2013 the Ore Reserve for the Zeta Underground Project is 7.30 million tonnes at 1.28% Copper and 22.52 g/t Silver and is in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore reserves (the JORC Code) 2012 edition.

Table 1 – Zeta Underground Ore Reserve

Classification	Mt	Cu (%)	Ag (g/t)
Proven	0.86	1.24	21.0
Probable	6.44	1.28	22.72
Zeta Underground Ore Reserve	7.30	1.28	22.52

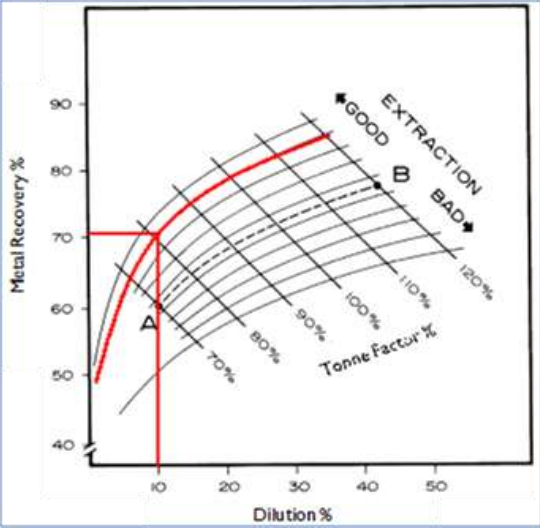
Mining Plus Pty conducted an underground mine development and stoping design in May 2013 for the purposes of providing DML with an update to the Zeta Underground Reserve. The underground mine design was based on the revised resource block model for the Zeta deposit at 31st May 2013 produced by Quantitative Group Pty Ltd (QG) and forms part of the Boseto Copper Project in Botswana.

JORC CODE, 2012 EDITION – TABLE I

Criteria	Explanation																																							
Mineral Resource estimate for conversion to Ore Reserve	QG prepared the updated Zeta Mineral Resource estimate in May 2013.																																							
	The Zeta Mineral Resource estimate includes material below the existing design and constrained within a Whittle shell optimised at 1.5 times the Ore Reserve copper price.																																							
	Zeta Resource Estimate – May 2013																																							
	The revised estimate of Mineral Resources for the Zeta deposit at 31 st May 2013 is:																																							
	<p style="text-align: center;">Table 2 - Zeta Mineral Resource Estimate</p> <table><tr><th colspan="5">Zeta - Mineral Resource Estimate as of 31st May 2013</th></tr><tr><td colspan="5">Remaining open pit and underground Mineral Resource below EOM May pit pickup</td></tr><tr><th>Category</th><th>Mt</th><th>Cu (%)</th><th>Ag(ppm)</th><th>S (%)</th></tr><tr><td>Measured</td><td>3.1</td><td>1.4</td><td>22</td><td>0.37</td></tr><tr><td>Indicated</td><td>7.2</td><td>1.4</td><td>25</td><td>0.45</td></tr><tr><td>Subtotal M&I</td><td>10.3</td><td>1.4</td><td>24</td><td>0.43</td></tr><tr><td>Inferred</td><td>8.5</td><td>1.7</td><td>25</td><td>0.55</td></tr><tr><td>Total Mineral Resource</td><td>18.8</td><td>1.5</td><td>24</td><td>0.48</td></tr></table> <p>Notes: Mineral resource estimates include: Open Pit resources reported at cut-off grades of 0.5% Cu in fresh rock, 0.7% Cu in transitional material, and 1.0% Cu in oxide; and Underground resources reported above a cut-off grade of 1.07% Cu equivalent ($CuEq = Cu + Ag \times 0.0113$) and a 5m minimum mining width. Open pit resources are constrained within a pit optimisation run at 1.5 times the Reserve commodity price. Underground resources are constrained within the limits of geological interpretation and extend to 800m below surface. Underground resources are exclusive of open pit resources. This estimate is inclusive of such open pit and underground reserves as may be declared.</p>	Zeta - Mineral Resource Estimate as of 31 st May 2013					Remaining open pit and underground Mineral Resource below EOM May pit pickup					Category	Mt	Cu (%)	Ag(ppm)	S (%)	Measured	3.1	1.4	22	0.37	Indicated	7.2	1.4	25	0.45	Subtotal M&I	10.3	1.4	24	0.43	Inferred	8.5	1.7	25	0.55	Total Mineral Resource	18.8	1.5	24
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Total Mineral Resource	18.8	1.5	24	0.48																																				
Site visits	<p>No specific site visit was undertaken for this Ore Reserve update.</p> <p>No underground mining has been commenced on the Zeta deposit and therefore such a site visit is not considered warranted at this point.</p>																																							

Criteria	Explanation																																																															
Study Status	<p>A definitive feasibility study (DFS) of the Zeta underground mine was completed by Mining Plus in conjunction with Grow Mining Services Pty Ltd in February 2012.</p> <p>Mining Plus has conducted an update to the DFS using the June 2013 QG Resource estimate. This Ore Reserve update is therefore based on both the relevant sections of the DFS and the update work. Table 3 below shows the areas of the DFS that have been updated.</p> <p style="text-align: center;">Table 3 – Areas of DFS Updated in June 2013</p> <table><tr><th>DFS Headings</th><th>Covered by DFS</th><th>Covered By Update</th></tr><tr><td>Site Description</td><td>✓</td><td></td></tr><tr><td>Geology</td><td></td><td>✓</td></tr><tr><td>Hydrogeology</td><td>✓</td><td></td></tr><tr><td>Hydrology</td><td>✓</td><td></td></tr><tr><td>Geotechnical Study</td><td>✓</td><td></td></tr><tr><td>General Mine Planning Criteria</td><td></td><td>✓</td></tr><tr><td>Mining Method</td><td>✓</td><td></td></tr><tr><td>Mining Method Selection</td><td>✓</td><td></td></tr><tr><td>Ore and Waste Determination</td><td></td><td>✓</td></tr><tr><td>Mine Design</td><td></td><td>✓</td></tr><tr><td>Ventilation</td><td>✓</td><td></td></tr><tr><td>Pumping System</td><td>✓</td><td></td></tr><tr><td>Dilution Modeling</td><td></td><td>✓</td></tr><tr><td>Mine Schedule</td><td></td><td>✓</td></tr><tr><td>Ore Reserve Statement</td><td></td><td>✓</td></tr><tr><td>Operations Summary</td><td></td><td>✓</td></tr><tr><td>Site Infrastructure</td><td>✓</td><td></td></tr><tr><td>Risk Management</td><td>✓</td><td></td></tr><tr><td>Operating and Capital Cost Estimates</td><td>✓</td><td></td></tr><tr><td>Project Execution</td><td>✓</td><td></td></tr></table>	DFS Headings	Covered by DFS	Covered By Update	Site Description	✓		Geology		✓	Hydrogeology	✓		Hydrology	✓		Geotechnical Study	✓		General Mine Planning Criteria		✓	Mining Method	✓		Mining Method Selection	✓		Ore and Waste Determination		✓	Mine Design		✓	Ventilation	✓		Pumping System	✓		Dilution Modeling		✓	Mine Schedule		✓	Ore Reserve Statement		✓	Operations Summary		✓	Site Infrastructure	✓		Risk Management	✓		Operating and Capital Cost Estimates	✓		Project Execution	✓	
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Criteria	Explanation																																																																											
Cut-off parameters	<p>The economic cut-off grade used to determine the Zeta underground Ore Reserve is 1.07% Copper Equivalent (CuEq),</p> <p>where $\text{CuEq\%} = \text{Cu\%} + 0.0113010227896945 \times \text{Ag (g/t)}$</p> <p>The economic cut-off grade used to determine the Zeta underground Ore Reserve is based on the budget operating cost per tonne breakdown, Table 4 below, provided by DML which is in turn based on the cost estimation work undertaken as part of the Zeta Underground DFS.</p> <p>Table 4 – Zeta Underground Reserve Cut Off Grade Calculation</p> <table><tr><th>Cost Item</th><th>Unit</th><th>Unit Rate</th></tr><tr><td>Mining contractor costs - operating</td><td>\$/t</td><td>\$ 27.65</td></tr><tr><td>Owner's costs - mining</td><td>\$/t</td><td>\$ 13.34</td></tr><tr><td>Capital infrastructure - MIA</td><td>\$/t</td><td>\$ 1.06</td></tr><tr><td>Capital development costs - contractor</td><td>\$/t</td><td>\$ 9.25</td></tr><tr><td>Plant processing costs</td><td>\$/t</td><td>\$ 7.00</td></tr><tr><td>Processing power costs</td><td>\$/t</td><td>\$ 8.20</td></tr><tr><td>Concentrate Transport costs</td><td>\$/t</td><td>\$ 7.00</td></tr><tr><td>Admin Cost</td><td>\$/t</td><td>\$ 0.30</td></tr><tr><td>Treatment charges</td><td>\$/t</td><td>\$ 2.08</td></tr><tr><td>Cu & Ag Refining Charges</td><td>\$/t</td><td>\$ 2.27</td></tr><tr><td>Cu & Ag Royalty Costs</td><td>\$/t</td><td>\$ 3.30</td></tr><tr><td>Total Cost/tonne</td><td>\$/t</td><td>\$ 81.45</td></tr><tr><td>Silver Credit at \$25/oz</td><td>\$/t</td><td>-\$ 14.67</td></tr><tr><td>Capital - infrastructure & development</td><td>\$/t</td><td>-\$ 10.31</td></tr><tr><td>Royalty - Cu & Ag</td><td>\$/t</td><td>-\$ 3.30</td></tr><tr><td>CI Cash Cost/tonne</td><td>\$/t</td><td>\$ 53.17</td></tr><tr><td>Return before tax</td><td></td><td>14%</td></tr><tr><td>tax @ 30%</td><td>\$/t</td><td>\$ 2.28</td></tr><tr><td>Return after tax</td><td></td><td>10%</td></tr><tr><td>Total + markup and tax</td><td>\$/t</td><td>\$ 63.04</td></tr><tr><td>Copper Price</td><td>\$/t Cu</td><td>6615</td></tr><tr><td>Copper Recovery x Payable Percentage</td><td></td><td>89%</td></tr><tr><td>Recovered Payable Copper Price</td><td>\$/t Cu</td><td>\$5,881.93</td></tr><tr><td>CuEq Cut off grade %</td><td></td><td>1.07%</td></tr></table>	Cost Item	Unit	Unit Rate	Mining contractor costs - operating	\$/t	\$ 27.65	Owner's costs - mining	\$/t	\$ 13.34	Capital infrastructure - MIA	\$/t	\$ 1.06	Capital development costs - contractor	\$/t	\$ 9.25	Plant processing costs	\$/t	\$ 7.00	Processing power costs	\$/t	\$ 8.20	Concentrate Transport costs	\$/t	\$ 7.00	Admin Cost	\$/t	\$ 0.30	Treatment charges	\$/t	\$ 2.08	Cu & Ag Refining Charges	\$/t	\$ 2.27	Cu & Ag Royalty Costs	\$/t	\$ 3.30	Total Cost/tonne	\$/t	\$ 81.45	Silver Credit at \$25/oz	\$/t	-\$ 14.67	Capital - infrastructure & development	\$/t	-\$ 10.31	Royalty - Cu & Ag	\$/t	-\$ 3.30	CI Cash Cost/tonne	\$/t	\$ 53.17	Return before tax		14%	tax @ 30%	\$/t	\$ 2.28	Return after tax		10%	Total + markup and tax	\$/t	\$ 63.04	Copper Price	\$/t Cu	6615	Copper Recovery x Payable Percentage		89%	Recovered Payable Copper Price	\$/t Cu	\$5,881.93	CuEq Cut off grade %		1.07%
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Criteria	Explanation
Mining factors or assumptions	<p>The method used to convert the Zeta Mineral Resource to an Ore Reserve was as follows;</p> <ul style="list-style-type: none"> • Development – Detailed Mine Design with Dilution Factor • Stopping – Detailed Mine Design with an Optimisation of the sub level caving factor for every stopping ring. <p>The selected underground mining method is longitudinal sub level caving (LSLC) which is appropriate to the Zeta deposit and has been determined by a mining method trade off study conducted by Mining Plus in February 2011.</p> <p>The geotechnical parameters used in the mine design have been determined by a study conducted by Tuner Mining and Geotechnical Pty Ltd, Zeta Underground Geotechnical Study, September 2011.</p> <p>Grade control will be conducted using underground diamond drilling, face sampling of the ore drives and grab samples from the cave draw.</p> <p>The mine schedule is based on just in time drilling therefore it is assumed that no pre-production drilling will be used.</p> <p>The stope design process used is as follows</p> <ul style="list-style-type: none"> • Use of Datamine Mineable Stope Optimiser (MSO) with a minimum mining width of 5m, sub level spacing of 25m and cut off grade of 1.07%CuEq. • Detailed mine design to produce stopes based on the MSO output wireframes. • Slicing of each stope to produce 3m ring solids for each stope. • Cave draw factor optimisation of each ring using the unit costs used to determine the economic cut off grade above. <p>The first major assumption used in the stope evaluation process is the relationship between the LSLC tonne factor, the metal recovery and dilution. The relationship assumption is shown by the red curve in Figure 1 below.</p>
	 <p>Figure 1 – SME Handbook, Typical LSLC Caving</p>

Criteria	Explanation																
Mining factors or assumptions (cont.)	<p>The next major assumption is that all rings will be bogged to their optimum tonne factor from the brow of the level that they were drilled from (Primary Extraction) except for;</p> <ul style="list-style-type: none">• rings in the upper most stopes and• within 15m either side of each cross cut, where the extraction is limited due to the development geometry <p>In both of these cases the assumption is that 40% of the material will be bogged as primary extraction and the remaining material up to the optimum tonne factor will be cascaded down to the ring directly below (Secondary Extraction).</p> <p>The mining factors used to convert the Zeta Mineral Resource to an Ore Reserve are shown in Table 5 below.</p> <p style="text-align: center;">Table 5 – Mining Factors</p> <table><tr><th></th><th colspan="3">Modifying factors</th></tr><tr><th>Stope Type</th><th>Dilution</th><th>Recovery</th><th>Tonne Factor</th></tr><tr><td>Development</td><td>10%</td><td>100%</td><td>110%</td></tr><tr><td>Sub Level Cave</td><td>14.9%</td><td>75.8%</td><td>90.7%</td></tr></table> <p>The cost models for the Zeta Underground DFS included both Inferred Mineral Resources and Unclassified Material for budgetary purposes. The inclusion of this material in the cost model does not affect the economics of the reserve because the project payback period, 3.7 years, is based entirely from mining reserve material.</p>		Modifying factors			Stope Type	Dilution	Recovery	Tonne Factor	Development	10%	100%	110%	Sub Level Cave	14.9%	75.8%	90.7%
		Modifying factors															
	Stope Type	Dilution	Recovery	Tonne Factor													
	Development	10%	100%	110%													
	Sub Level Cave	14.9%	75.8%	90.7%													

Criteria

Explanation

Figure 2 below shows a long section of the mine schedule where the numbers represent the year that each block is mined out. The boundary of the reserve is shown as a black line. The reserve material is mined from year 3 through to year 11. None of the material below the reserve is scheduled to be mined before year 7.

Mining factors or
assumptions
(cont.)

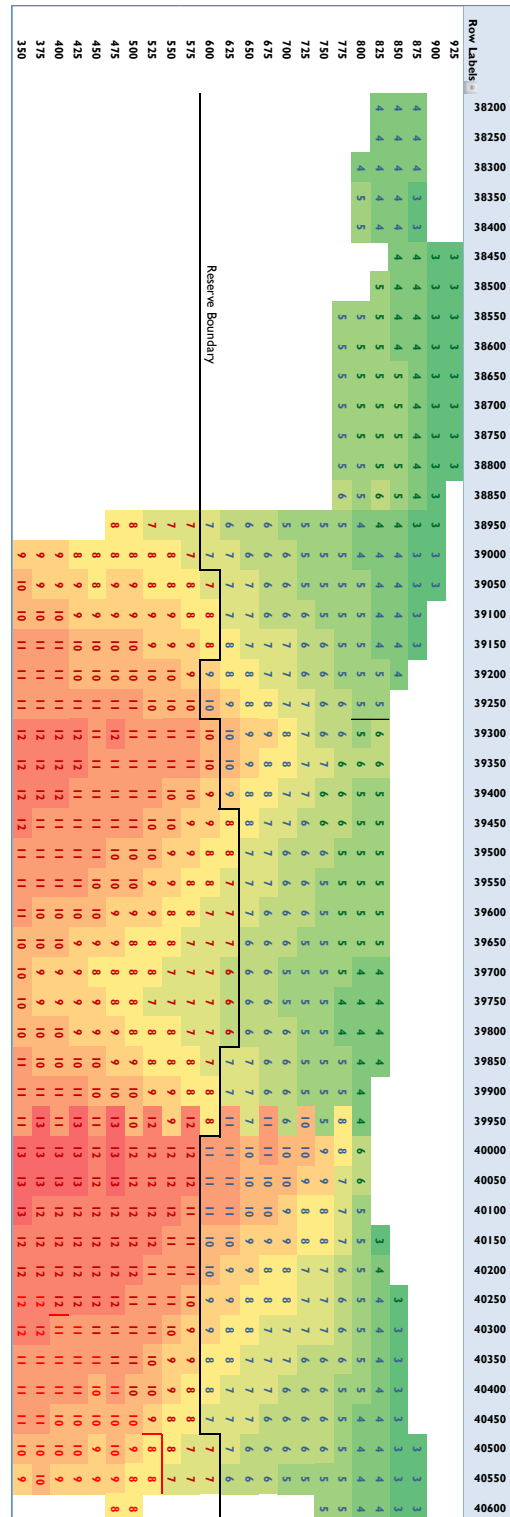


Figure 2 – Zeta Underground Reserve Schedule Year Mined

The infrastructure requirements for the Zeta underground Ore Reserve are detailed in the Zeta Underground DFS and are aimed at utilising the existing milling facilities.

Criteria	Explanation
<p><i>Metallurgical factors or assumptions</i></p>	<p>The Boseto processing plant is targeting 3.2Mtpa throughput, although it has not yet achieved that level. The process path is:</p> <ul style="list-style-type: none"> the comminution circuit comprises three stage crushing and ball milling. ROM material is trucked from the open pit into either ROM stockpiles and then rehandled by front-end-loader into a bin, or tipped directly into the bin. Ore gravitates via an apron feeder into a jaw crusher. Crushing incorporates a three stage crushing plant with a crushing capacity of 500dtph to product size (P80) of 15mm; Flotation includes a flash flotation cell and separate sulphide and oxide flotation circuits with copper sulphide rougher flotation, regrinding of the unit cell concentrate in a regrind circuit to a product size (P80) size of 38µm. This is followed by two stages of sulphide cleaning and then oxide copper flotation of the sulphide rougher tails followed by three stages of cleaning of the oxide rougher concentrates; Concentrate handling includes dewatering of both the oxide and sulphide copper concentrates via a concentrate thickening circuit and filtration of the concentrate via a single vertical plate filter; and Disposal includes tailings thickening in a 20m diameter thickener with disposal of the underflow to the Tailings Storage Facility (TSF). <p>The process metallurgical recovery for copper is dependent on the S:Cu ratio and calculated for each block using the following formula:</p> <ul style="list-style-type: none"> $2.961 * (\text{S:Cu Ratio } \%) + 14.439$, with a maximum recovery of 93%. <p>The process metallurgical recovery for silver is fixed by material type:</p> <ul style="list-style-type: none"> oxide = 50% transitional = 70% sulphide = 75% <p>The origin of the copper recovery formula is described in a report by Metalicon, provided by DML (20100114-CH-PRO-Metalicon_Disc001.028 Discovery Boseto Sulphur Copper R....pdf). Historical performance of the plant has resulted in fluctuating copper recovery due mainly to fluctuating blends of material type (oxide, transitional and sulphide). More recent results during blends with higher percentage of sulphide material support the estimation of copper recovery based on the S:Cu dependent formula. The remaining Zeta Ore Reserve comprises > 95% sulphide material leading to greater confidence in the expected copper recovery estimate.</p>
<p><i>Environmental</i></p>	<p>DML has appropriate and approved waste dump designs in place and in operation, of sufficient size to store the expected quantities of mine waste rock associated with the Zeta Ore Reserve.</p> <p>Likewise, Boseto has sufficient capacity in its purpose designed and approved tailings storage facility to meet the requirements generated from mining and processing the Zeta Ore Reserve.</p>

Criteria	Explanation
<i>Infrastructure</i>	The Boseto operation has the required infrastructure in place to process the Zeta Underground Ore Reserve. Additional infrastructure will be required to establish the underground operations as set out in the Zeta Underground DFS.
<i>Costs</i>	The reserve cost model for Zeta Underground includes \$US17.3M estimated for capital infrastructure required to establish the underground operations and \$US151.4M for capitalized mine development.
<i>Revenue factors</i>	<p>The copper and silver prices used in the derivation of the Zeta Ore reserves falls below the US SEC rolling 3 year average and close to the US SEC rolling 5 year average, which is sufficient justification for the relatively short life of the Zeta pit.</p> <p>The transportation, treatment, refining and penalty charges are all taken from the Transamine contract mentioned below.</p> <p>All costs and prices are in US\$, negating the need for the use of exchange rates.</p>
<i>Market assessment</i>	DML has an arrangement for sale of the Boseto concentrate to metal trader Transamine that has an initial term expiring in early 2015, automatically renewed for successive 12 month periods thereafter.
<i>Economic</i>	<p>DML supplied an annual discount rate of 10% to be used in financial analysis, which Mining Plus Ltd considered appropriate for an operating mine in Botswana.</p> <p>No inflation was used due to the relatively short mine life of the Zeta pit.</p>
<i>Social</i>	<p>DML have established relevant agreements with local stakeholders.</p> <p>The mine plan for the operation of the zeta underground includes the use of skilled expat workers and locally sourced skilled workers. The plan contains transitional arrangements commencing with mining conducted by a specialised underground mining contractor switching to DML workers.</p>
<i>Other</i>	<p>DML has received the relevant Mining License from the government of the Republic of Botswana (Mining License No. 2010/99L), which is valid until 19 December 2025. This license covers the area incorporating Zeta pit and associated waste dumps and haul roads, the plant and tailing facility, and offices.</p> <p>DML has contracts in place for the provision of some materials and supplies for the operation. Mining Plus Ltd does not expect any unmanageable risks to arise during establishment and operation of the Zeta Underground mine.</p>

Criteria	Explanation
<i>Classification</i>	<p>The Ore Reserve is classified as Proved and Probable in accordance with the JORC Code, corresponding to the resource classifications of Measured and Indicated. No Measured Mineral Resources were downgraded to Probable Ore Reserves.</p> <p>No Inferred Mineral Resources were included in the Ore Reserve estimate.</p>
<i>Audits or reviews</i>	Mining Plus Ltd has completed an internal review of the Ore Reserve estimate.
<i>Discussion of relative accuracy / confidence</i>	Mining Plus has used mine design practices and estimates based on the Zeta underground DFS with additional information provided in relation to updated operating costs. The accuracy of many of these estimates is therefore in line with the DFS, i.e. $\pm 10\%$

COMPETENT PERSON STATEMENT

The mining specific information in this report that relates to Ore Reserves is based on information compiled by Mr Andrew Gasmier, who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Gasmier is employed full time by Mining Plus Pty Ltd. Mr Gasmier 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 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Gasmier consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Memorandum

Company:	Discovery Metals Ltd		
Sender/author:	Matthew Readford		
Date:	21 June 2013	Project reference:	P1815
Subject:	Selene Mineral Resource Estimate update to the JORC Code (2012)		

Dear Discovery Metals Ltd

Xstract Mining Consultants Pty Ltd ("Xstract") reported a 'maiden' Mineral Resource Estimate for the Selene copper and silver prospect according to guidelines of the Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves, 2004 Edition (The JORC Code, 2004) for Discovery Metals Ltd ("DML") on 28th November 2012. This Mineral Resource Statement and a supporting Mineral Resource Report updates the reporting of this Mineral Resource to JORC 2012 edition guidelines. This resource statement has an effective date of 21 June 2013.

The Selene copper and silver prospect ("Selene Prospect") is located in Ngamiland within the Ghanzi-Chobe Fold Belt (informally known as the Kalahari Copper Belt) of northwest Botswana, some 80 km southwest of the town of Maun. The Selene prospect forms part of DML's 100% owned Boseto Copper Project and is located in the northeast extremity of the Boseto Zone.

As with other known deposits of the Boseto Copper Project, mineralisation within the Selene prospect is a sediment hosted, stratiform redox copper and silver deposit. Mineralisation is characterised by predominantly chalcopyrite with lesser chalcocite, bornite, malachite, pyrite, sphalerite and galena.

DML undertook exploration drilling of the Selene Prospect between March and May 2011. Drilling comprises 52 holes, totalling 5,345 m. Three drillholes were abandoned resulting in drilling and supporting assay data for 37 reverse cycle ("RC"), four fully cored diamond drillholes and eight partial RC holes that have diamond drill core 'tails' in the mineralised zone. All were used in the estimation of the maiden Mineral Resource. Drillholes are supported by detailed collar records as well as downhole survey QA/QC records.

Drilling at the Selene Prospect occurs on 19 drill sections, spaced approximately 400 m apart along the strike of mineralisation. There are generally two drillholes per section, spaced approximately 40 m across strike. Six RC drillholes were drilled vertically. The remaining 46 drillholes were drilled at an approximate angle of 60° from horizontal at generally 300° to the northwest in order to intersect the plane of mineralisation at a high angle.

Xstract has reviewed all data provided by DML and confirms that the information is of sufficient quality to support a Mineral Resource for public reporting purposes.

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The mineralised zone of the Selene Prospect has been interpreted in all sections along the drill section strike length of approximately 7 km, and has also been intersected at depths between 25 m and 200 m. Mineralisation is generally dipping at 70° to the northwest, and is constrained within a zone of approximately 3 m thickness. The majority of samples are 1 m in length with core sampling derived from half core intervals and a minimum sampling width of 0.5 m.

Xstract produced a three-dimensional ("3D") geological interpretation of the mineralisation based primarily on the lithology and copper mineralisation in the drillhole intersections. Statistical analysis of the copper grades within this mineralised zone identified two grade populations. Further geological domaining to separate the grade population is considered impractical due to the narrow thickness and steep dip of the deposit. A high level study by Xstract further of the relationship between lithology and copper grades identified a correlation between limestone lithology and higher copper grades. This correlation supported the impracticality of further domaining due to the interbedded nature of the mineralised lithological units.

In addition to the 3D mineralisation interpretation, Xstract produced two-dimensional ("2D") surfaces of the base of the oxidation zones (Oxidised Zone, Transition Zone, and Fresh) as well as a lithological 'capping' surface demarcating overlying Tertiary to Quaternary, post mineralisation unconsolidated sands, calcrete, etc. of the Kalahari Group. These surfaces were derived from coded lithological logs within the drillhole database.

Ordinary kriging was used to estimate copper, silver and sulphur into a block model with parent cells of dimension 40 mE by 80 mN by 10 m, with sub-celling utilised to accurately represent the geometry and volume of the mineralisation model. Estimation parameters were optimised based on the drillhole data spacing and the models of grade continuity produced by a variography study of copper, silver and sulphur. No assay top cuts have been applied due to a low co-efficient of variation for all data sets. Short-range continuity along strike for copper, silver and sulphur is poorly defined due to the wide spaced drilling conducted over the area.

In the absence of specific gravity sampling data for Selene, a dry bulk density factor for estimating material tonnages has been derived utilising specific gravity measurements from the nearby Zeta deposit. The Zeta deposit is in the same prospective copper horizon as Selene and considered by DML to be of similar geology and mineralisation style, and thus representative for the Selene Prospect. Dry bulk density factors of 2.61 t/m³ were used for calculating tonnages for capping and oxidised material, 2.61 t/m³ for partially oxidised ('Transition Zone') material and fresh 2.69 t/m³ or fresh rock. Due the lack of sampling in the oxidised zone, a mineral resource is not reported from this area.

A Total Inferred Mineral Resource of 16.0 Million tonnes at 1.0% Cu, 16 g/t Ag, and 0.3% S using a block cut-off grade of 0.6% Cu has been reported for the Selene Prospect in accordance with the guidelines of the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. The grade and tonnage values listed in Table 1 are an accumulation of blocks above a given cut-off within a portion of the Selene Prospect Mineral Resource Estimate block model defined by criteria based on proximity to drillholes and confidence in estimation continuity.

Table 1: Selene Prospect Inferred Mineral Resource above a Cu% Grade Cut-off

Cu cut-off	Tonnes	Cu	Ag	S
(%)	(Mt)	(%)	(g/t)	(%)
0.3	17.0	0.9	16	0.3
0.4	16.9	1.0	16	0.3
0.5	16.7	1.0	16	0.3
0.6	16.0	1.0	16	0.3
0.7	14.4	1.0	17	0.3
0.8	11.7	1.1	18	0.3
0.9	9.0	1.1	19	0.4
1.0	6.9	1.2	20	0.4
1.1	4.8	1.2	22	0.4
1.2	2.2	1.3	24	0.4
1.3	0.7	1.5	28	0.5
1.4	0.2	1.7	34	0.5
1.5	0.2	1.8	37	0.6
1.8	0.1	1.8	38	0.6

If you have any questions regarding the information above, please do not hesitate to contact me.

Yours sincerely

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JORC Code, 2012 Edition – Table 1

Section 1: Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information. 	<ul style="list-style-type: none"> The DML sampling procedure documentation contains procedures for diamond core and RC chip samples. Diamond core sampling is generally constrained by a minimum sample length of 0.5 m and logged lithological or mineralogical boundaries. The general practice of sampling 3 m before visible copper mineralisation should be reviewed on a project by project basis. Xstract considered sampling to be adequate. Xstract observed during a site visit in October 2012 that the practice of sampling diamond core along the drill orientation line should be changed as cases were observed where half core samples were cut at less than optimal angles to mineralised structures-
Drilling techniques	<ul style="list-style-type: none"> Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc). 	<ul style="list-style-type: none"> Drilling comprises Reverse Circulation (RC), fully cored diamond drill holes with RC pre-collars and diamond core 'tails' in the mineralised zone. Diamond drill holes are either HQ or NQ in size with RC holes 5.5 inches in diameter. Core is orientated so as to intersect mineralisation at a high angle to the dip plane.

Criteria	JORC Code explanation	Commentary
Drill sample recovery	<ul style="list-style-type: none"> Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	<ul style="list-style-type: none"> Overall recovery was considered by Xstract as reasonable once it was calculated correctly. Holes are re-drilled in transition and fresh rock if core recovery is lower than 30% for a drill string. DML advised Xstract that anomalous low and high (significantly over 100%) recovery values were often associated with low core retrieval in drill runs in poor ground conditions, followed by the 'pick up' of core in a subsequent drill run, resulting in individual core run recovery calculations of greater than 100%. This method of calculating 'core recovery' is actually recording 'core retrieval' and potentially biasing confidence in diamond drill core results. In the past, this has led to the omission of data from resource estimation. Xstract recommends DML review the core recovery data collection procedure to ensure that the recovery percentage recorded is representative of the entire interval. Anomalous core recovery values should be resolved between the driller and rig geologist as close as possible to the time of drilling the interval. Total weights of RC samples should be recorded as a measure of sample recovery from this drilling method.

Criteria	JORC Code explanation	Commentary
Logging	<ul style="list-style-type: none"> Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	<ul style="list-style-type: none"> Overall logging is to a good standard and level of detail The logging procedure documentation provided by DML included general logging principles plus specific diamond core logging and RC chip logging principles. Logging is written onto paper forms and entered into spreadsheets. DML was in the process to migrating to a data management system (aQuire) during the time of the site visit. Limited geotechnical data is logged within cored drillholes in the form of RQD measurements. It was noted during the site review that there appears to be confusion in logging terminology regarding what is meant by 'oxidation'. The current process is to log the degree of weathering down the hole, but also define the degree of 'oxidation' based on copper mineralogy. A general logging mark-up practice was recommended to assist in improving the quality and consistency of work.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled. 	<ul style="list-style-type: none"> Core is cut in half and sampled over 1 m intervals and split at lithological boundaries. Minimum sampling size is 0.1 m, Xstract recommend this be increased to 0.3 m to improve representivity. Xstract considers sampling and sub-sampling to be of good quality and appropriate for this level of study. RC sampling is conducted at 1 m intervals within mineralisation and are sampled dry. RC sampling was not observed during the site visit but the procedures states that it is cyclone split to a size of 2.5 kg. Samples are then spear or tube sampled. DML's drilling procedure strongly suggests that when dry sampling is not possible RC drilling is abandoned in favour of diamond drilling. The potential for sample cross-contamination in wet RC sampling is very high and given that mineralisation is generally a few metres wide it is likely to lead to significant estimation risk.

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established. 	<ul style="list-style-type: none"> Xstrat has reviewed QAQC procedures for DML projects and suggests that procedures are adequate for this level of study. The DML procedure for QAQC field standards, blanks and duplicates is to submit one sample of each type in every 25 samples. Laboratory QC data (internal sample preparation duplicates, grind size passing check, sample preparation blanks, quartz flush analyses, standard analyses, sample weight checks, batch re-assay occurrences) is not obtained or analysed. Xstrat recommends this data is requested, analysed and retained for future Mineral Resource updates. Standards with a more relevant range of silver grades are recommended. Due to the narrow and planar nature of mineralisation field and laboratory duplicate strategy could be amended to increase the number of QC samples in mineralisation in order to provide a reasonable basis for evaluating sampling and laboratory procedures. DML should request Genalysis to introduce the use of quartz flushes between grinding DML samples as soon as possible. Blanks are submitted as pulps. Coarse material blanks samples should be introduced as part of the QAQC system to test for contamination in sample preparation.
Verification of sampling and assaying	<ul style="list-style-type: none"> The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	<ul style="list-style-type: none"> Senior geologists have been validating anomalous database records against logging and assay submission as part of a database migration Data storage and validation protocols were not in place due to the change to a new system Xstrat recommends a database audit be undertaken once the database migration is complete Some minor verification of logging and assay results was undertaken during the site visit but it was numerous enough to be representative No twinned holes have been used within the Selene Project.

Criteria	JORC Code explanation	Commentary
Location of data points	<ul style="list-style-type: none"> Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control. 	<ul style="list-style-type: none"> Drillhole collar positions were surveyed using OmniLogger Differential GPS (DGPS) from OmniSTAR's Global Positioning System products. The DGPS has a stated accuracy of ± 50 cm. A Reflex Ez-TracTM instrument was used to record downhole survey measurements. Spatial coordinates for the Boseto prospects were supplied in World Geodetic System 1984, Zone 34 Southern Hemisphere (WGS84_34S). A translation to the DML Local Mine Grid (DML LG) provided by DML allowed for the deposits to be modelled with the mineralisation strike aligned to a grid north – south orientation A variation in the order of tens of metres between survey relative levels (RL) and that of surface topography is noted. DML has adjusted hole collar positions to surface topography for Mineral Resource modelling due to the very flat terrain. DML mine surveyors have a method for resolving these differences accurately and it is recommended the exploration division adopt these procedures for past and future surveys
Data spacing and distribution	<ul style="list-style-type: none"> Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied. 	<ul style="list-style-type: none"> Data spacing at 400 m along strike is currently within limits of geological continuity but at or beyond the limit of copper, silver and sulphur grade continuity. Xstract recommends a component of infill drilling should target definition of grade continuity at a range of sample spacing that will define shorter range grade relationships and assist in detecting mineralisation controls (e.g. plunges). This will improve confidence in Mineral Resource estimation and make it possible to optimise drill spacing for project development objectives.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material. 	<ul style="list-style-type: none"> In general, the drilling orientation is at a high angle to the geological structures controlling mineralisation result in limited sampling bias.

Criteria	JORC Code explanation	Commentary
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> Sample security is managed with dispatch dates noted for each samples by the core technician, this is checked and confirmed at the laboratory on receipt of samples and discrepancies are corrected via telephone link up with laboratory and project geologist.
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> Sampling techniques and data site audit occurred in October 2012. No information regarding previous audits was available.

Section 2: Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	<ul style="list-style-type: none"> The Selene prospecting licence (PL098/2005) falls within a group of seven prospecting licences located in Ngamiland district, all of which expired September 2012. The license for the area that covers the Selene Prospect has currently been extended by the Botswana Department of Minerals, Energy and Water Resources whilst the renewal application is being considered. No third party has access to the area until the application finalised.
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> Since the late 1960s, there have been at least five phases of exploration in the Kalahari Copper Belt prior to the current exploration by Discovery Metals Ltd. Previous owners include: Anglovaal South West Africa and JV partners, DeBeers, Tsumeb Corporation, US Steel Corporation, US Steel Corporation and JV partners Newmont South Africa Ltd and INCO of Canada, Anglo American Prospecting Services (AAPS), Glencore International PLC, Kalahari Gold and Copper (KGC) and JV partner Delta Gold DML exploration data is the only data used in resource estimation.
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> The Selene Prospect is located in Ngamiland, within the Ghanzi-Chobe Fold Belt (informally known as the Kalahari Copper Belt) of northwest Botswana. The mineralisation style of the Selene Prospect is that of a sediment hosted, stratiform redox copper and silver deposit. Mineralisation is characterised by predominantly chalcopyrite with lesser chalcocite, bornite, malachite, pyrite, sphalerite and galena

Criteria	JORC Code explanation	Commentary
Drill hole Information	<ul style="list-style-type: none"> A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	<ul style="list-style-type: none"> A list of drillholes used with relevant information is within Appendix A of the report.
Data aggregation methods	<ul style="list-style-type: none"> In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	<ul style="list-style-type: none"> This section is not relevant as data is composited for Mineral Resource estimation (Section 3).
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known'). 	<ul style="list-style-type: none"> In general, the drilling orientation is at a high angle to the geological structures controlling mineralisation result in limited sampling bias.
Diagrams	<ul style="list-style-type: none"> Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views. 	<ul style="list-style-type: none"> Images of mineralisation shown in Figure 7-1, 7-2 and 7-3.

Criteria	JORC Code explanation	Commentary
Balanced reporting	<ul style="list-style-type: none"> Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results. 	<ul style="list-style-type: none"> Individual Exploration Results are not being reported so this section is not relevant to Mineral Resource reporting.
Other substantive exploration data	<ul style="list-style-type: none"> Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances. 	<ul style="list-style-type: none"> All available exploration data is included and documented in Mineral Resource reporting.
Further work	<ul style="list-style-type: none"> The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	<ul style="list-style-type: none"> Details of planned further work were unknown at the time of the Mineral Resource reporting.

Section 3: Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	<ul style="list-style-type: none"> Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. Data validation procedures used. 	<ul style="list-style-type: none"> DML were migrating their drilling database from Microsoft (MS) Access to an acQuire software system during October 2012. Once the database migration is completed Xstract recommends a database validation be undertaken. Senior geologists have been validating anomalous database records against logging and assay submission as part of a database migration Data storage and validation protocols were not in place due to the change to a new system
Site visits	<ul style="list-style-type: none"> Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case. 	<ul style="list-style-type: none"> A Competent Person site visit was undertaken by Matthew Readford during October 2012. This included visits to the Zeta mining operation, all Boesto exploration areas and assay laboratories (ALS Chemex laboratory, Johannesburg and Genalysis Intertek, Johannesburg and Perth).

Criteria	JORC Code explanation	Commentary
Geological interpretation	<ul style="list-style-type: none"> Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. Nature of the data used and of any assumptions made. The effect, if any, of alternative interpretations on Mineral Resource estimation. The use of geology in guiding and controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology. 	<ul style="list-style-type: none"> Mineralisation is generally consistent along strike for many kilometres and down-dip below deepest drilling. The mineralisation was interpreted on drill sections by Xstrat for Mineral Resource estimation based on geology logs and copper grades in order to delineate consistent higher-grade areas of the deposit at widths likely to be mined (This equated to approximately four metres or 4 x 1 metre samples downhole based on drillholes dipping at 60 degrees.). In most cases, two to three drill intersections were available to define mineralisation boundaries on any given section. The mineralisation was modelled to a maximum depth of 300 m below the surface topography. The mineralisation must maintain an overall downhole composite that reported a copper grade of greater than 0.3% Cu. Mineralisation outlines were terminated at half the drillhole spacing beyond the last known section of copper mineralisation. Where copper mineralisation appeared to extend past the last downhole intersection on a section, the copper mineralisation was extended for a distance equal to the general down-dip drill spacing. Assay data from within mineralisation wireframes was composited to the mode sample length of 1 m for analysis and estimation. The compositing routine respects the boundaries of the mineralisation domains but also optimises lengths so the majority are as close as possible to 1 m. At this stage of project development the wide-spaced drilling demonstrates reasonable geological continuity of mineralisation along strike and down-dip but variography suggests that grade continuity for copper, silver and sulphur generally needs to be defined by infill drilling. A base of oxidation surface was also interpreted from drill sections and extended laterally beyond the limits of the Mineral Resource model The mineralisation wireframes were constructed from interpretations on 19 east-west drill sections spaced between 200 m and 400 m apart
Dimensions	<ul style="list-style-type: none"> The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource. 	<ul style="list-style-type: none"> The mineralisation wireframes cover a strike distance of approximately 7 km and extend to 250 m below surface.

Criteria	JORC Code explanation	Commentary
Estimation and modelling techniques	<ul style="list-style-type: none"> The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used. The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. The assumptions made regarding recovery of by-products. Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation). In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. Any assumptions behind modelling of selective mining units. Any assumptions about correlation between variables. Description of how the geological interpretation was used to control the resource estimates. Discussion of basis for using or not using grade cutting or capping. The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available. 	<ul style="list-style-type: none"> No top cuts where applied to the three elements of the data composites. Ordinary Kriging interpolation was used to estimate the grades into model blocks of 40 mE by 80 mN by 40mRL in size for copper, silver and sulphur in the mineralised domain. Drill section spacing are 400 m apart and 40 m down-dip. Whilst there is a correlation between copper, silver and sulphur each element was estimated independently from the same or similar numbers of data Sub-celling was employed to accurately represent model volumes down to 1 mE by 8 mN by 0.05 mRL. Each sub-cell within the mineralisation outline was assigned the grade values of the parent cell. Software used in resource estimation was CAE Mining, Datamine software. Estimation parameters were optimised based on the drillhole data spacing and the models of grade continuity produced by the variography study. An anisotropic, elliptical search neighbourhood was orientated according to the modelled directions of grade continuity for copper, which generally correlate with the mineralisation strike and dip. Data density is not sufficient to model grade variation across the mineralisation width; geological modelling is currently simulating a mining cut-off envelope. Infill drilling is required to allow for more confident modelling of mineralisation volume and to make it possible to determine grade variation across strike and to a scale indicative of selective mining units along strike and down-dip. Search ranges for all elements were adjusted in order to ensure a reasonable number of samples were included in each block estimate and so data in the dip and across-dip direction was not 'screened out' by the high dimensional ratios between strike and dip directions and the narrow across-dip width of mineralisation. A minimum of 4 and maximum of 24 samples were used in the estimation of each block grade. A comparison between the mean grades from the drillhole composite data and the block estimates (on a parent cell basis) was performed to ensure they were similar and the estimate unbiased in a global sense. Local validation of the estimates was performed by visually inspecting the block model in plan sections, long sections and cross sections. The quality of the local estimates was checked by averaging block grades and composite data for copper, silver and sulphur both along strike and down dip.

Criteria	JORC Code explanation	Commentary
Moisture	<ul style="list-style-type: none"> Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content. 	<ul style="list-style-type: none"> Tonnages are estimated on a dry basis.
Cut-off parameters	<ul style="list-style-type: none"> The basis of the adopted cut-off grade(s) or quality parameters applied. 	<ul style="list-style-type: none"> A nominal 0.6% Cu lower cut-off is used for reporting the mineral resource on the basis of what is used for the nearby Zeta open pit mining operation.
Mining factors or assumptions	<ul style="list-style-type: none"> Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made. 	<ul style="list-style-type: none"> Mining studies for the Selene Prospect have not been carried out to determine optimal open pit and underground grade cut-offs. The Mineral Resources are considered to be amenable to extraction by open pit mining at this stage and modelling does not extend to sufficient depth to report a section of the Mineral Resource above a higher grade cut-off expected to be relevant to underground mining.
Metallurgical factors or assumptions	<ul style="list-style-type: none"> The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made. 	<ul style="list-style-type: none"> Metallurgical assessment is recommended to confirm the assumptions made in the reporting of Mineral Resources that oxidised copper material is not economical to process. Different trends in Selene copper:sulphur ratios indicate that metallurgical assumptions from mining the Zeta pit should be tested for Selene.

Criteria	JORC Code explanation	Commentary
Environmental factors or assumptions	<ul style="list-style-type: none"> Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made. 	<ul style="list-style-type: none"> No environmental impact study has been completed at this initial stage of Mineral Resource estimation. Current assumptions of similarity to the nearby Zeta NE open pit operations and treatment at the established Boseto Copper concentrator mean there is no apparent material environmental impact on exploitation of this Mineral Resource at this stage.
Bulk density	<ul style="list-style-type: none"> Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit. Discuss assumptions for bulk density estimates used in the evaluation process of the different materials. 	<ul style="list-style-type: none"> Specific gravity measurements from the nearby Zeta deposit were used as a corollary for calculating dry bulk density factors due to similar geology and mineralogy. The absence of specific density sampling for the Selene Prospect is a significant consideration in classification of mineral resource for public reporting.

Criteria	JORC Code explanation	Commentary
Classification	<ul style="list-style-type: none"> The basis for the classification of the Mineral Resources into varying confidence categories. Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). Whether the result appropriately reflects the Competent Person's view of the deposit. 	<ul style="list-style-type: none"> The Mineral Resource has been classified as Inferred due to the current, early stages of project development where data density is typically beyond grade continuity along strike and key areas of spatial location and QAQC require further investigation and issue resolution.
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of Mineral Resource estimates. 	<ul style="list-style-type: none"> Xstract has completed an internal peer review of this estimate and report.
Discussion of relative accuracy/ confidence	<ul style="list-style-type: none"> Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate. The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available. 	<ul style="list-style-type: none"> As this is a 'maiden' Mineral Resource the prospect is in early stages of project development where data density is typically beyond grade continuity. Estimates do not model local grade variability across the mineralisation and only broadly along strike and down dip. Overall estimation accuracy is relatively low compared to projects sampled sufficiently to warrant a detailed mining study. No studies have been undertaken to quantify the accuracy and confidence of the estimate. Metallurgical and mining studies have also not been undertaken to evaluate the which proportion of this Mineral Resource may be economic

Memorandum

Company:	Discovery Metals Ltd		
Sender/author:	Matthew Readford		
Date:	21 June 2013	Project reference:	P1815
Subject:	Zeta North East Mineral Resource Estimate update to the JORC Code (2012)		

Dear Discovery Metals Ltd

Xstract Mining Consultants Pty Ltd ("Xstract") reported a 'maiden' Mineral Resource Estimate for the Zeta Northeast copper and silver prospect according to guidelines of the Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves, 2004 Edition (The JORC Code, 2004) for Discovery Metals Ltd ("DML") on 23rd November 2012. This Mineral Resource Statement and a supporting Mineral Resource Report updates the reporting of this Mineral Resource to JORC 2012 edition guidelines. This resource statement has an effective date of 21 June 2013.

The Zeta Northeast copper and silver prospect ("Zeta NE Prospect") is located in Ngamiland within the Ghanzi-Chobe Fold Belt (informally known as the Kalahari Copper Belt) of northwest Botswana, some 80 km southwest of the town of Maun. The Zeta NE prospect forms part of DML's 100% owned Boseto Copper Project and is located in the northeast of the Boseto Zone.

As with other known deposits of the Boseto Copper Project, mineralisation within the Zeta NE prospect is a sediment hosted, stratiform redox copper and silver deposit. Mineralisation is characterised by predominantly chalcopyrite with lesser chalcocite, bornite, malachite, pyrite, sphalerite and galena.

DML undertook exploration drilling of the Zeta NE Prospect between August 2011 and February 2012, with some historic holes drilled by previous owners in 2007. Drilling comprises 91 holes, totalling 5,801 m. Two drillholes were abandoned resulting in drilling and supporting assay data for 51 Reverse Cycle (RC), 35 fully cored diamond drillholes with the remaining holes being RC that have diamond drill core 'tails' in the mineralised zone. The 51 RC drillholes were drilled vertically and were not used in the interpretation or estimation. The 35 diamond drillholes were used in the estimation of the Mineral Resource across both mineralisation zones. Drillholes are supported by detailed collar records as well as downhole survey and QA/QC data.

Drilling at the Zeta NE Prospect occurs on 14 drill sections, spaced approximately 400 m apart with some stretching to 800 m along the strike of mineralisation. There are generally three diamond drillholes per section, spaced approximately 40 m across strike. The diamond drillholes were drilled at an approximate angle of 60° from horizontal at generally 270° east-west in order to intersect the plane of mineralisation at a high angle.

Xstract has reviewed all data relating to the diamond drillholes used in the estimation provided by DML and confirms that the information is of sufficient quality to support a Mineral Resource for public reporting purposes.

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Xstract has interpreted two mineralisation zones, the main footwall zone and a smaller higher copper grade hanging wall zone. The criteria used for the interpretation is a 0.30% Cu cut off across a mineable thickness of 4 m down hole. The interpretations extended past the last drillhole section by half the length to the next drillhole section. The model depths were based on the vertical drillhole spacing and extended by this spacing distance beyond the deepest drillhole.

The main footwall aspect has been interpreted in 12 of the 14 sections of the Zeta NE Prospect along the drill section strike length of approximately 5 km, and intersected at depths between 10 m and 230 m.

The smaller hanging wall zone has been interpreted in three of the 14 sections of the Zeta NE Prospect along the drill section strike length of approximately 1 km, and intersected at depths between 10 m and 70 m.

Both mineralisation zones are generally dipping at 80° to the northwest, and are constrained within a zone of approximately 3 m horizontal thickness. The majority of samples are 1 m in length with core sampling derived from half core intervals and a minimum sampling width of 0.5 m.

DML provided two-dimensional ("2D") surfaces of the base of the oxidation zones (Oxidised Zone, Transition Zone, and Fresh) as well as a lithological 'capping' surface demarcating overlying Tertiary to Quaternary, post mineralisation unconsolidated sands, calcrete etc. of the Kalahari Group.

Ordinary kriging was used to estimate copper, silver and sulphur into a block model with parent cells of dimension 40 mE by 80 mN by 40mRL, with sub-celling utilised to accurately represent the geometry and volume of the mineralisation model. Estimation parameters were optimised based on the drillhole data spacing and the models of grade continuity produced by a variography study of copper, silver and sulphur.

Assay top cuts have been applied to Silver and Sulphur even with a low co-efficient of variation, Xstract applied top cuts to these elements to reduce the undue influence from outliers in the data on estimation results. Top cuts applied are Silver above 200 g/t and Sulphur above 3%. Short-range continuity along strike for copper, silver and sulphur is poorly defined due to the wide spaced drilling conducted over the area.

Specific gravity sample data for Zeta NE has been used for estimating material tonnages. Dry bulk density factors of 2.66 t/m³ for partially oxidised ('Transition Zone') material and fresh 2.64 t/m³ or fresh rock. Due the lack of sampling in the oxidised zone, a Mineral Resource is not reported from this area.

A total Inferred Mineral Resource across all mineralisation zones of 12.9 Mt at 1.3% Cu, 22 g/t Ag and 0.5% S using a block cut-off grade of 0.6% Cu has been reported for the Zeta NE Prospect in accordance with the guidelines of the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. This tonnage is split across the two mineralisation zones with an Inferred Mineral Resource within the main footwall mineralisation of 11.1 Mt at 1.2% Cu, 22 g/t Ag, and 0.5% S and within the high grade hanging wall mineralisation of 1.8 Mt at 1.5% Cu, 20 g/t Ag, and 0.6 % S.

The grade and tonnage values listed in Table 1 are an accumulation of blocks above a given cut-off within a portion of the Zeta NE Prospect Mineral Resource Estimate block model defined by criteria based on proximity to drillholes and confidence in estimation continuity.

Table 1: Zeta NE Prospect Inferred Mineral Resource above a Cu% Grade Cut-off

Cu cut-off	Tonnes	Cu	Ag	S
(%)	(Mt)	(%)	(g/t)	(%)
0.01	14.5	1.2	21	0.5
0.6	12.9	1.3	22	0.5
0.7	12.7	1.3	22	0.5
0.8	12.2	1.3	22	0.5
0.9	10.5	1.4	24	0.5
1.0	8.5	1.5	26	0.5
1.1	6.9	1.6	29	0.6
1.2	5	1.7	31	0.6
1.3	4.2	1.8	33	0.6
1.4	3.9	1.8	34	0.6
1.5	3.7	1.9	35	0.6
1.6	2.9	2.0	36	0.6
1.7	2.2	2.0	40	0.6
1.8	2	2.1	42	0.6
1.9	1.8	2.1	44	0.6
2.0	1.2	2.2	45	0.7
2.1	0.9	2.3	47	0.7
2.2	0.7	2.3	47	0.7
2.3	0.2	2.4	52	0.7

If you have any questions regarding the information above, please do not hesitate to contact me.

Yours sincerely

Matthew Readford
 Manager – Geology (Brisbane)
 BSc (Hons) (Structural Geology), MAusIMM
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1 JORC Code, 2012 Edition – Table 1

Section 1: Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information. 	<ul style="list-style-type: none"> The DML sampling procedure documentation contains procedures for diamond core and RC chip samples. Diamond core sampling is generally constrained by a minimum sample length of 0.5 m and logged lithological or mineralogical boundaries. The general practice of sampling 3 m before visible copper mineralisation should be reviewed on a project by project basis. Xstract considered sampling to be adequate. Xstract observed during a site visit in October 2012 that the practice of sampling diamond core along the drill orientation line should be changed as cases were observed where half core samples were cut at less than optimal angles to mineralised structures-
Drilling techniques	<ul style="list-style-type: none"> Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc). 	<ul style="list-style-type: none"> Drilling comprises Reverse Circulation (RC), fully cored diamond drill holes with RC pre-collars and diamond core 'tails' in the mineralised zone. Diamond drill holes are either HQ or NQ in size with RC holes 5.5 inches in diameter. Core is orientated so as to intersect mineralisation at a high angle to the dip plane.

Criteria	JORC Code explanation	Commentary
Drill sample recovery	<ul style="list-style-type: none"> Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	<ul style="list-style-type: none"> Overall recovery was considered by Xstract as reasonable once it was calculated correctly. Holes are re-drilled in transition and fresh rock if core recovery is lower than 30% for a drill string. DML advised Xstract that anomalous low and high (significantly over 100%) recovery values were often associated with low core retrieval in drill runs in poor ground conditions, followed by the 'pick up' of core in a subsequent drill run, resulting in individual core run recovery calculations of greater than 100%. This method of calculating 'core recovery' is actually recording 'core retrieval' and potentially biasing confidence in diamond drill core results. In the past, this has led to the omission of data from resource estimation. Xstract recommends DML review the core recovery data collection procedure to ensure that the recovery percentage recorded is representative of the entire interval. Anomalous core recovery values should be resolved between the driller and rig geologist as close as possible to the time of drilling the interval. Total weights of RC samples should be recorded as a measure of sample recovery from this drilling method.

Criteria	JORC Code explanation	Commentary
Logging	<ul style="list-style-type: none"> Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	<ul style="list-style-type: none"> Overall logging is to a good standard and level of detail The logging procedure documentation provided by DML included general logging principles plus specific diamond core logging and RC chip logging principles. Logging is written onto paper forms and entered into spreadsheets. DML was in the process to migrating to a data management system (aQuire) during the time of the site visit. Limited geotechnical data is logged within cored drillholes in the form of RQD measurements. It was noted during the site review that there appears to be confusion in logging terminology regarding what is meant by 'oxidation'. The current process is to log the degree of weathering down the hole, but also define the degree of 'oxidation' based on copper mineralogy. A general logging mark-up practice was recommended to assist in improving the quality and consistency of work.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled. 	<ul style="list-style-type: none"> Core is cut in half and sampled over 1m intervals and split at lithological boundaries. Minimum sampling size is 0.1 m, Xstract recommend this be increased to 0.3 m to improve representatively. Xstract considers sampling and sub-sampling to be of good quality and appropriate for this level of study. RC sampling is conducted at 1 m intervals within mineralisation and are sampled dry. RC sampling was not observed during the site visit but the procedures states that it is cyclone split to a size of 2.5 kg. Samples are then spear or tube sampled. DML's drilling procedure strongly suggests that when dry sampling is not possible RC drilling is abandoned in favour of diamond drilling. The potential for sample cross-contamination in wet RC sampling is very high and given that mineralisation is generally a few metres wide it is likely to lead to significant estimation risk.

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established. 	<ul style="list-style-type: none"> Xstract has reviewed QAQC procedures for DML projects and suggests that procedures are adequate for this level of study. The DML procedure for QAQC field standards, blanks and duplicates is to submit one sample of each type in every 25 samples. Laboratory QC data (internal sample preparation duplicates, grind size passing check, sample preparation blanks, quartz flush analyses, standard analyses, sample weight checks, batch re-assay occurrences) is not obtained or analysed. Xstract recommends this data is requested, analysed and retained for future Mineral Resource updates. Standards with a more relevant range of silver grades are recommended. Due to the narrow and planar nature of mineralisation field and laboratory duplicate strategy could be amended to increase the number of QC samples in mineralisation in order to provide a reasonable basis for evaluating sampling and laboratory procedures. DML should request Genalysis to introduce the use of quartz flushes between grinding DML samples as soon as possible. Blanks are submitted as pulps. Coarse material blanks samples should be introduced as part of the QAQC system to test for contamination in sample preparation.
Verification of sampling and assaying	<ul style="list-style-type: none"> The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	<ul style="list-style-type: none"> Senior geologists have been validating anomalous database records against logging and assay submission as part of a database migration Data storage and validation protocols were not in place due to the change to a new system Xstract recommends a database audit be undertaken once the database migration is complete Some minor verification of logging and assay results was undertaken during the site visit but it was numerous enough to be representative No twinned holes have been used within the Zeta NE Project.

Criteria	JORC Code explanation	Commentary
Location of data points	<ul style="list-style-type: none"> Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control. 	<ul style="list-style-type: none"> Drillhole collar positions were surveyed using OmniLogger Differential GPS (DGPS) from OmniSTAR's Global Positioning System products. The DGPS has a stated accuracy of ± 50 cm. A Reflex Ez-TracTM instrument was used to record downhole survey measurements. Spatial coordinates for the Boseto prospects were supplied in World Geodetic System 1984, Zone 34 Southern Hemisphere (WGS84_34S). A translation to the DML Local Mine Grid (DML LG) provided by DML allowed for the deposits to be modelled with the mineralisation strike aligned to a grid north – south orientation A variation in the order of tens of metres between survey relative levels (RL) and that of surface topography is noted. DML has adjusted hole collar positions to surface topography for Mineral Resource modelling due to the very flat terrain. DML mine surveyors have a method for resolving these differences accurately and it is recommended the exploration division adopt these procedures for past and future surveys
Data spacing and distribution	<ul style="list-style-type: none"> Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied. 	<ul style="list-style-type: none"> Data spacing at 400 m to 800 m along strike is currently within limits of geological continuity but at or beyond the limit of copper, silver and sulphur grade continuity. Xstract recommends a component of infill drilling should target definition of grade continuity at a range of sample spacing that will define shorter range grade relationships and assist in detecting mineralisation controls (e.g. plunges). This will improve confidence in Mineral Resource estimation and make it possible to optimise drill spacing for project development objectives.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material. 	<ul style="list-style-type: none"> In general, the drilling orientation is at a high angle to the geological structures controlling mineralisation result in limited sampling bias.

Criteria	JORC Code explanation	Commentary
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> Sample security is managed with dispatch dates noted for each samples by the core technician, this is checked and confirmed at the laboratory on receipt of samples and discrepancies are corrected via telephone link up with laboratory and project geologist.
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> Sampling techniques and data site audit occurred in October 2012. No information regarding previous audits was available.

Section 2: Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	<ul style="list-style-type: none"> The Zeta NE prospecting licence (PL099/2005) falls within a group of seven prospecting licences located in Ngamiland district, all of which expired September 2012. The license for the area that covers the Zeta NE Prospect has currently been extended by the Botswana Department of Minerals, Energy and Water Resources whilst the renewal application is being considered. No third party has access to the area until the application finalised.
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> Since the late 1960s, there have been at least five phases of exploration in the Kalahari Copper Belt prior to the current exploration by Discovery Metals Ltd. Previous owners include: Anglovaal South West Africa and JV partners, DeBeers, Tsumeb Corporation, US Steel Corporation, US Steel Corporation and JV partners Newmont South Africa Ltd and INCO of Canada, Anglo American Prospecting Services (AAPS), Glencore International PLC, Kalahari Gold and Copper (KGC) and JV partner Delta Gold DML exploration data is the only data used in resource estimation.
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> The Zeta NE Prospect is located in Ngamiland, within the Ghanzi-Chobe Fold Belt (informally known as the Kalahari Copper Belt) of northwest Botswana. The mineralisation style of the Zeta NE Prospect is that of a sediment hosted, stratiform redox copper and silver deposit. Mineralisation is characterised by predominantly chalcopryrite with lesser chalcocite, bornite, malachite, pyrite, sphalerite and galena

Criteria	JORC Code explanation	Commentary
Drill hole Information	<ul style="list-style-type: none"> A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	<ul style="list-style-type: none"> A list of drillholes used with relevant information is within Appendix B of the report.
Data aggregation methods	<ul style="list-style-type: none"> In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	<ul style="list-style-type: none"> This section is not relevant as data is composited for Mineral Resource estimation (Section 3).
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known'). 	<ul style="list-style-type: none"> In general, the drilling orientation is at a high angle to the geological structures controlling mineralisation result in limited sampling bias.
Diagrams	<ul style="list-style-type: none"> Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views. 	<ul style="list-style-type: none"> Images of mineralisation shown in Figure 7-1 and 7-2.

Criteria	JORC Code explanation	Commentary
Balanced reporting	<ul style="list-style-type: none"> Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results. 	<ul style="list-style-type: none"> Individual Exploration Results are not being reported so this section is not relevant to Mineral Resource reporting.
Other substantive exploration data	<ul style="list-style-type: none"> Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances. 	<ul style="list-style-type: none"> All available exploration data is included and documented in Mineral Resource reporting.
Further work	<ul style="list-style-type: none"> The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	<ul style="list-style-type: none"> Details of planned further work were unknown at the time of the Mineral Resource reporting.

Section 3: Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	<ul style="list-style-type: none"> Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. Data validation procedures used. 	<ul style="list-style-type: none"> DML were migrating their drilling database from Microsoft (MS) Access to an acQuire software system during October 2012. Once the database migration is completed Xstract recommends a database validation be undertaken. Senior geologists have been validating anomalous database records against logging and assay submission as part of a database migration Data storage and validation protocols were not in place due to the change to a new system
Site visits	<ul style="list-style-type: none"> Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case. 	<ul style="list-style-type: none"> A Competent Person site visit was undertaken by Matthew Readford during October 2012. This included visits to the Zeta mining operation, all Boesto exploration areas and assay laboratories (ALS Chemex laboratory, Johannesburg and Genalysis Intertek, Johannesburg and Perth).

Criteria	JORC Code explanation	Commentary
Geological interpretation	<ul style="list-style-type: none"> Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. Nature of the data used and of any assumptions made. The effect, if any, of alternative interpretations on Mineral Resource estimation. The use of geology in guiding and controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology. 	<ul style="list-style-type: none"> Mineralisation is generally consistent along strike for many kilometres and down-dip below deepest drilling. The mineralisation was interpreted on drill sections by Xstrat for Mineral Resource estimation based on geology logs and copper grades in order to delineate consistent higher-grade areas of the deposit at widths likely to be mined (This equated to approximately four metres or 4 x 1 metre samples downhole based on drillholes dipping at 60 degrees.). In most cases, two to three drill intersections were available to define mineralisation boundaries on any given section. The mineralisation was modelled to a maximum depth of 230 m below the surface topography. The mineralisation must maintain an overall downhole composite that reported a copper grade of greater than 0.3% Cu. Mineralisation outlines were terminated at half the drillhole spacing beyond the last known section of copper mineralisation. Where copper mineralisation appeared to extend past the last downhole intersection on a section, the copper mineralisation was extended for a distance equal to the general down-dip drill spacing. Assay data from within mineralisation wireframes was composited to the mode sample length of 1 m for analysis and estimation. The compositing routine respects the boundaries of the mineralisation domains but also optimises lengths so the majority are as close as possible to 1 m. At this stage of project development the wide-spaced drilling demonstrates reasonable geological continuity of mineralisation along strike and down-dip but variography suggests that grade continuity for copper, silver and sulphur generally needs to be defined by infill drilling. A base of oxidation surface was also interpreted from drill sections and extended laterally beyond the limits of the Mineral Resource model The mineralisation wireframes were constructed from interpretations on 14 east-west drill sections spaced between 400 m and 800 m apart

Criteria	JORC Code explanation	Commentary
Dimensions	<ul style="list-style-type: none"> The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource. 	<ul style="list-style-type: none"> The mineralisation wireframes cover a strike distance of approximately 5 km and extend to 230 m below surface Mineralisation is modelled in two mineralisation domains a main footwall domain and a smaller higher copper grade hanging wall domain. The main footwall domain has been interpreted in 12 of the 14 sections of the Zeta NE Prospect along the drill section strike length of approximately 5 km, and intersected at depths between 10 m and 230 m. The smaller hanging wall domain has been interpreted in 3 of the 14 sections of the Zeta NE Prospect along the drill section strike length of approximately 1 km, and intersected at depths between 10 m and 70 m. Both mineralisation domains are generally dipping at 80° to the northwest.

Criteria	JORC Code explanation	Commentary
Estimation and modelling techniques	<ul style="list-style-type: none"> The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used. The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. The assumptions made regarding recovery of by-products. Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation). In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. Any assumptions behind modelling of selective mining units. Any assumptions about correlation between variables. Description of how the geological interpretation was used to control the resource estimates. Discussion of basis for using or not using grade cutting or capping. The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available. 	<ul style="list-style-type: none"> Top cuts (3.0% Cu and 200 g/t S) applied to copper and silver data composites to limit the effect of high grade outliers located at depth creating an artificial high grade bias in areas where block grades were extrapolated beyond drilling. Ordinary Kriging interpolation was used to estimate the grades into model blocks of 40 mE by 80 mN by 40mRL in size for copper, silver and sulphur in the mineralised domain. Drill section spacing is 400 m to 800 m apart and 40 m down-dip. Whilst there is a correlation between copper, silver and sulphur each element was estimated independently from the same or similar numbers of data Sub-celling was employed to accurately represent model volumes down to 1 mE by 8 mN by 0.5 mRL. Each sub-cell within the mineralisation outline was assigned the grade values of the parent cell. Software used in resource estimation was CAE Mining, Datamine software. Estimation parameters were optimised based on the drillhole data spacing and the models of grade continuity produced by the variography study. An anisotropic, elliptical search neighbourhood was orientated according to the modelled directions of grade continuity for copper, which generally correlate with the mineralisation strike and dip. Data density is not sufficient to model grade variation across the mineralisation width; geological modelling is currently simulating a mining cut-off envelope. Infill drilling is required to allow for more confident modelling of mineralisation volume and to make it possible to determine grade variation across strike and to a scale indicative of selective mining units along strike and down-dip. Search ranges for all elements were adjusted in order to ensure a reasonable number of samples were included in each block estimate and so data in the dip and across-dip direction was not 'screened out' by the high dimensional ratios between strike and dip directions and the narrow across-dip width of mineralisation. A minimum of 4 and maximum of 24 samples were used in the estimation of each block grade. A comparison between the mean grades from the drillhole composite data and the block estimates (on a parent cell basis) was performed to ensure they were similar and the estimate unbiased in a global sense. Local validation of the estimates was performed by visually inspecting the block model in plan sections, long sections and cross sections. The quality of the local estimates was checked by averaging block grades and composite data for copper, silver and sulphur both along strike and down dip.

Criteria	JORC Code explanation	Commentary
Moisture	<ul style="list-style-type: none"> Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content. 	<ul style="list-style-type: none"> Tonnages are estimated on a dry basis.
Cut-off parameters	<ul style="list-style-type: none"> The basis of the adopted cut-off grade(s) or quality parameters applied. 	<ul style="list-style-type: none"> A nominal 0.6% Cu lower cut-off is used for reporting the mineral resource on the basis of what is used for the nearby Zeta open pit mining operation.
Mining factors or assumptions	<ul style="list-style-type: none"> Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made. 	<ul style="list-style-type: none"> Mining studies for the Zeta NE Prospect have not been carried out to determine optimal open pit and underground grade cut-offs. The Mineral Resources are considered to be amenable to extraction by open pit mining at this stage and modelling does not extend to sufficient depth to report a section of the Mineral Resource above a higher grade cut-off expected to be relevant to underground mining.
Metallurgical factors or assumptions	<ul style="list-style-type: none"> The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made. 	<ul style="list-style-type: none"> Metallurgical assessment is recommended to confirm the assumptions made in the reporting of Mineral Resources that oxidised copper material is not economical to process. Different trends in Zeta NE copper:sulphur ratios indicate that metallurgical assumptions from mining the Zeta pit should be tested for Zeta NE.

Criteria	JORC Code explanation	Commentary
Environmental factors or assumptions	<ul style="list-style-type: none"> Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made. 	<ul style="list-style-type: none"> No environmental impact study has been completed at this initial stage of Mineral Resource estimation. Current assumptions of similarity to the nearby Zeta open pit operations and treatment at the established Boseto Copper concentrator mean there is no apparent material environmental impact on exploitation of this Mineral Resource at this stage.
Bulk density	<ul style="list-style-type: none"> Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit. Discuss assumptions for bulk density estimates used in the evaluation process of the different materials. 	<ul style="list-style-type: none"> Specific gravity measurements were taken from drill core were grouped into oxidation domains defined in the geological model and mean values were used as a dry bulk density factor on this basis. A bulk density factor of 2.64 t/m³ was used for oxidised material due to lack of sufficient sampling. Estimation of bulk density factors from specific gravity sampling can be improved through more representative sampling of weathered zones and incorporating geological domain interpretations for lithology and weathering.

Criteria	JORC Code explanation	Commentary
Classification	<ul style="list-style-type: none"> The basis for the classification of the Mineral Resources into varying confidence categories. Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). Whether the result appropriately reflects the Competent Person's view of the deposit. 	<ul style="list-style-type: none"> The Mineral Resource has been classified as Inferred due to the current, early stages of project development where data density is typically beyond grade continuity along strike and key areas of spatial location and QAQC require further investigation and issue resolution.
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of Mineral Resource estimates. 	<ul style="list-style-type: none"> Xstract has completed an internal peer review of this estimate and report.
Discussion of relative accuracy/ confidence	<ul style="list-style-type: none"> Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate. The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available. 	<ul style="list-style-type: none"> As this is a 'maiden' Mineral Resource the prospect is in early stages of project development where data density is typically beyond grade continuity. Estimates do not model local grade variability across the mineralisation and only broadly along strike and down dip. Overall estimation accuracy is relatively low compared to projects sampled sufficiently to warrant a detailed mining study. No studies have been undertaken to quantify the accuracy and confidence of the estimate. Metallurgical and mining studies have also not been undertaken to evaluate the which proportion of this Mineral Resource may be economic

Memorandum

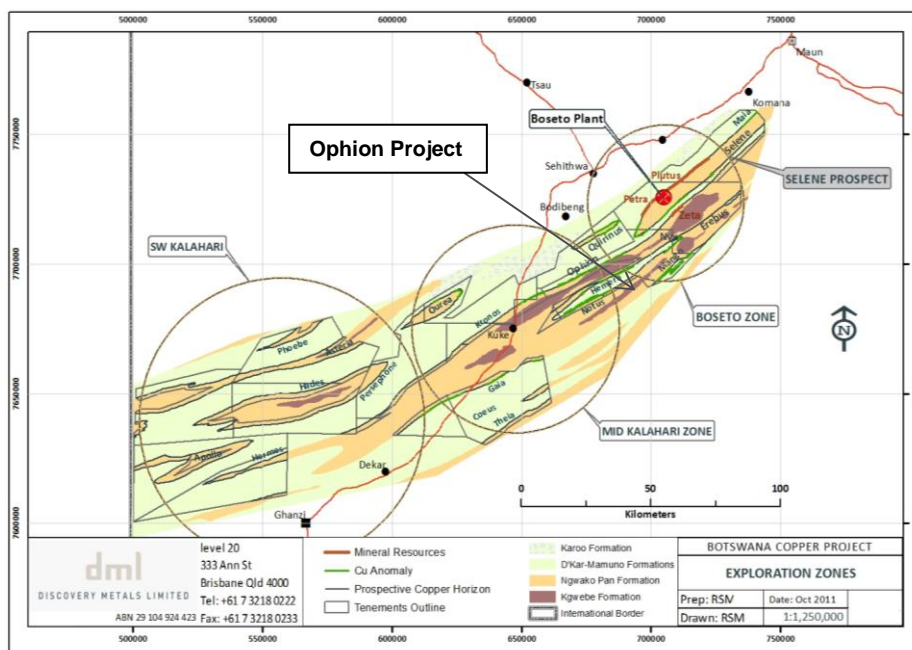
Company: Discovery Metals Ltd
Sender/author: Matthew Readford
Date: 21 June 2013
Project reference: P1815
Subject: Ophion Mineral Resource Estimate update to the JORC Code (2012)

Dear Discovery Metals Ltd

Xstract Mining Consultants Pty Ltd ("Xstract") reported a 'maiden' Mineral Resource Estimate for the Ophion copper and silver prospect according to guidelines of the Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves, 2004 Edition (The JORC Code, 2004) for Discovery Metals Ltd ("DML") on 28th November 2012. This Mineral Resource Statement and a supporting Mineral Resource Report updates the reporting of this Mineral Resource to JORC 2012 edition guidelines. This resource statement has an effective date of 21 June 2013.

The Ophion copper and silver project ("Ophion") is located in Ngamiland within the Ghanzi-Chobe Fold Belt (informally known as the Kalahari Copper Belt) of northwest Botswana, some 80 km southwest of the town of Maun. Ophion forms part of DML's 100% owned Boseto Copper Project and is located in the southwest extremity of the Boseto Zone (Figure 1).

Figure 1: Location of Ophion Project in the Boseto Copper Belt Project



Source: Discovery Metals Limited

Xstract – Excellence from the outset

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As with other known deposits of the Boseto Copper Project, mineralisation within Ophion is a sediment hosted, stratiform redox copper and silver deposit. Mineralisation is characterised by predominantly chalcopyrite with lesser chalcocite, bornite, malachite, pyrite, sphalerite and galena.

DML undertook exploration drilling of Ophion in several stages between September 2009 and March 2012. Drilling comprises 63 drillholes, totalling 6,070 m. Of these, 36 drillholes (26 reverse circulation ("RC") and six diamond core) were located in the area modelled for Mineral Resource estimation. Drill holes are supported by detailed collar records as well as downhole surveys and QA/QC data.

The Ophion Project has been drilled on 31 drill sections spaced approximately 400 m to 1,600 m apart along the strike of mineralisation. There are between one to three drill holes per section, spaced approximately 25 m to 60 m across strike. They are mostly drilled at an approximate angle of 60° from horizontal at an azimuth of 140° (east-south-east) in order to intersect the plane of mineralisation at a high angle. The majority of samples are 1 m in length with core sampling derived from half core intervals. Xstract has reviewed all data provided by DML and confirms that the information used for modelling is of sufficient quality to support a Mineral Resource for public reporting purposes.

The mineralised zone of Ophion has been interpreted in 14 sections spaced approximately 400 m apart along a 5.5 km strike length in north-eastern end of the project area. Mineralisation is generally dipping at 80° to the northwest, has been intersected at depths between 30 m to 200 m and is constrained within seven zones of approximately 2 m to 6 m thickness, with up to three at a time sub-parallel to each other.

DML provided 2D surfaces of the base of the oxidation zones (oxidised zone, transition zone, and **fresh rock**) as well as a lithological 'capping' surface demarcating overlying Tertiary to Quaternary, post mineralisation unconsolidated sands and calcrete of the Kalahari Group.

DML also provided a three-dimensional ("3D") geological interpretation of the mineralisation based primarily on the lithology and copper grades in the drillhole data. Domains were modified by Xstract to create spatially consistent areas of the deposit at widths likely to be mined. In certain circumstances, one metre sample lengths with copper grades less than 0.3% Cu were included to maintain an overall downhole four metre composite that reported a copper grade of greater than 0.3% Cu.

Ordinary kriging was used to estimate copper, silver and sulphur into block models of the mineralisation wireframes. The block model parent cells have dimensions of 40 mE by 80 mN by 40 mRL, with sub-celling employed to accurately represent the geometry and volume of the mineralisation models. The estimation parameters were optimised based on the drillhole data spacing and the models of grade continuity produced by variography study of copper, silver and sulphur. The short-range continuity along strike for copper, silver and sulphur is poorly defined due to the wide spaced drilling over the area.

Specific gravity sampling data for Ophion was used to determine dry bulk density factors for estimating material tonnages. Dry bulk density factors of 2.64 t/m³ was used for calculating tonnages for capping and oxidised material, 2.72 t/m³ for partially **oxidised ('transition zone')** material and 2.75 t/m³ for fresh rock. A mineral resource is not estimated in the oxidised zone due to lack of sampling.

A total Inferred Mineral Resource of 14.0 Mt at 1.0% Cu, 12 g/t Ag, and 0.3% S using a block cut-off grade of 0.6% Cu has been reported for the Ophion Prospect in accordance with the guidelines of the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. The grade and tonnage values listed in Table 1 are an accumulation of blocks above a given cut-off within a portion of the Ophion Project Mineral Resource Estimate block model defined by criteria based on proximity to drill holes and confidence in estimation continuity.

Table 1: Ophion Project Inferred Mineral Resource above a Cu% Grade Cut-off

Cu cut-off	Tonnes	Cu	Ag	S
(%)	(Mt)	(%)	(g/t)	(%)
0.01	17.8	0.9	11	0.2
0.60	14.0	1.0	12	0.3
0.80	11.6	1.0	13	0.3
1.00	3.6	1.2	18	0.3
1.20	2.1	1.3	22	0.3

If you have any questions regarding the information above, please do not hesitate to contact me.

Yours sincerely

Matthew Readford
 Manager – Geology (Brisbane)
 BSc (Hons) (Structural Geology), MAusIMM
 Xstract Mining Consultants Pty Ltd

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1 JORC Code, 2012 Edition – Table 1

Section 1: Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information. 	<ul style="list-style-type: none"> The DML sampling procedure documentation contains procedures for diamond core and RC chip samples. Diamond core sampling is generally constrained by a minimum sample length of 0.5 m and logged lithological or mineralogical boundaries. The general practice of sampling 3 m before visible copper mineralisation should be reviewed on a project by project basis. Xstract considered sampling to be adequate. Xstract observed during a site visit in October 2012 that the practice of sampling diamond core along the drill orientation line should be changed as cases were observed where half core samples were cut at less than optimal angles to mineralised structures-
Drilling techniques	<ul style="list-style-type: none"> Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc). 	<ul style="list-style-type: none"> Drilling comprises Reverse Circulation (RC), fully cored diamond drill holes with RC pre-collars and diamond core 'tails' in the mineralised zone. Diamond drill holes are either HQ or NQ in size with RC holes 5.5 inches in diameter. Core is orientated so as to intersect mineralisation at a high angle to the dip plane.

Criteria	JORC Code explanation	Commentary
Drill sample recovery	<ul style="list-style-type: none"> Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	<ul style="list-style-type: none"> Overall recovery was considered by Xstrat as reasonable once it was calculated correctly. Holes are re-drilled in transition and fresh rock if core recovery is lower than 30% for a drill string. DML advised Xstrat that anomalous low and high (significantly over 100%) recovery values were often associated with low core retrieval in drill runs in poor ground conditions, followed by the 'pick up' of core in a subsequent drill run, resulting in individual core run recovery calculations of greater than 100%. This method of calculating 'core recovery' is actually recording 'core retrieval' and potentially biasing confidence in diamond drill core results. In the past, this has led to the omission of data from resource estimation. Xstrat recommends DML review the core recovery data collection procedure to ensure that the recovery percentage recorded is representative of the entire interval. Anomalous core recovery values should be resolved between the driller and rig geologist as close as possible to the time of drilling the interval. Total weights of RC samples should be recorded as a measure of sample recovery from this drilling method.

Criteria	JORC Code explanation	Commentary
Logging	<ul style="list-style-type: none"> Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	<ul style="list-style-type: none"> Overall logging is to a good standard and level of detail The logging procedure documentation provided by DML included general logging principles plus specific diamond core logging and RC chip logging principles. Logging is written onto paper forms and entered into spreadsheets. DML was in the process to migrating to a data management system (aQuire) during the time of the site visit. Limited geotechnical data is logged within cored drillholes in the form of RQD measurements. It was noted during the site review that there appears to be confusion in logging terminology regarding what is meant by 'oxidation'. The current process is to log the degree of weathering down the hole, but also define the degree of 'oxidation' based on copper mineralogy. A general logging mark-up practice was recommended to assist in improving the quality and consistency of work.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled. 	<ul style="list-style-type: none"> Core is cut in half and sampled over 1m intervals and split at lithological boundaries. Minimum sampling size is 0.1 m, Xstract recommend this be increased to 0.3 m to improve representatively. Xstract considers sampling and sub-sampling to be of good quality and appropriate for this level of study. RC sampling is conducted at 1 m intervals within mineralisation and are sampled dry. RC sampling was not observed during the site visit but the procedures states that it is cyclone split to a size of 2.5 kg. Samples are then spear or tube sampled. DML's drilling procedure strongly suggests that when dry sampling is not possible RC drilling is abandoned in favour of diamond drilling. The potential for sample cross-contamination in wet RC sampling is very high and given that mineralisation is generally a few metres wide it is likely to lead to significant estimation risk.

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established. 	<ul style="list-style-type: none"> Xstract has reviewed QAQC procedures for DML projects and suggests that procedures are adequate for this level of study. The DML procedure for QAQC field standards, blanks and duplicates is to submit one sample of each type in every 25 samples. Laboratory QC data (internal sample preparation duplicates, grind size passing check, sample preparation blanks, quartz flush analyses, standard analyses, sample weight checks, batch re-assay occurrences) is not obtained or analysed. Xstract recommends this data is requested, analysed and retained for future Mineral Resource updates. Standards with a more relevant range of silver grades are recommended. Due to the narrow and planar nature of mineralisation field and laboratory duplicate strategy could be amended to increase the number of QC samples in mineralisation in order to provide a reasonable basis for evaluating sampling and laboratory procedures. DML should request Genalysis to introduce the use of quartz flushes between grinding DML samples as soon as possible. Blanks are submitted as pulps. Coarse material blanks samples should be introduced as part of the QAQC system to test for contamination in sample preparation.
Verification of sampling and assaying	<ul style="list-style-type: none"> The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	<ul style="list-style-type: none"> Senior geologists have been validating anomalous database records against logging and assay submission as part of a database migration Data storage and validation protocols were not in place due to the change to a new system Xstract recommends a database audit be undertaken once the database migration is complete Some minor verification of logging and assay results was undertaken during the site visit but it was numerous enough to be representative No twinned holes have been used within the Ophion Project.

Criteria	JORC Code explanation	Commentary
Location of data points	<ul style="list-style-type: none"> Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control. 	<ul style="list-style-type: none"> Drillhole collar positions were surveyed using OmniLogger Differential GPS (DGPS) from OmniSTAR's Global Positioning System products. The DGPS has a stated accuracy of ± 50 cm. A Reflex Ez-TracTM instrument was used to record downhole survey measurements. Spatial coordinates for the Boseto prospects were supplied in World Geodetic System 1984, Zone 34 Southern Hemisphere (WGS84_34S). A translation to the DML Local Mine Grid (DML LG) provided by DML allowed for the deposits to be modelled with the mineralisation strike aligned to a grid north – south orientation A variation in the order of tens of metres between survey relative levels (RL) and that of surface topography is noted. DML has adjusted hole collar positions to surface topography for Mineral Resource modelling due to the very flat terrain. DML mine surveyors have a method for resolving these differences accurately and it is recommended the exploration division adopt these procedures for past and future surveys
Data spacing and distribution	<ul style="list-style-type: none"> Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied. 	<ul style="list-style-type: none"> Data spacing at 400 m along strike is currently within limits of geological continuity but at or beyond the limit of copper, silver and sulphur grade continuity. Xstract recommends a component of infill drilling should target definition of grade continuity at a range of sample spacing that will define shorter range grade relationships and assist in detecting mineralisation controls (e.g. plunges). This will improve confidence in Mineral Resource estimation and make it possible to optimise drill spacing for project development objectives.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material. 	<ul style="list-style-type: none"> In general, the drilling orientation is at a high angle to the geological structures controlling mineralisation result in limited sampling bias.

Criteria	JORC Code explanation	Commentary
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> Sample security is managed with dispatch dates noted for each samples by the core technician, this is checked and confirmed at the laboratory on receipt of samples and discrepancies are corrected via telephone link up with laboratory and project geologist.
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> Sampling techniques and data site audit occurred in October 2012. No information regarding previous audits was available.

Section 2: Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	<ul style="list-style-type: none"> The Ophion prospecting licence (PL100/2005) falls within a group of seven prospecting licences located in Ngamiland district, all of which expired September 2012. The license for the area that covers the Ophion Prospect has currently been extended by the Botswana Department of Minerals, Energy and Water Resources whilst the renewal application is being considered. No third party has access to the area until the application finalised.
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> Since the late 1960s, there have been at least five phases of exploration in the Kalahari Copper Belt prior to the current exploration by Discovery Metals Ltd. Previous owners include: Anglovaal South West Africa and JV partners, DeBeers, Tsumeb Corporation, US Steel Corporation, US Steel Corporation and JV partners Newmont South Africa Ltd and INCO of Canada, Anglo American Prospecting Services (AAPS), Glencore International PLC, Kalahari Gold and Copper (KGC) and JV partner Delta Gold DML exploration data is the only data used in resource estimation.
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> The Ophion Prospect is located in Ngamiland, within the Ghanzi-Chobe Fold Belt (informally known as the Kalahari Copper Belt) of northwest Botswana. The mineralisation style of the Ophion Prospect is that of a sediment hosted, stratiform redox copper and silver deposit. Mineralisation is characterised by predominantly chalcopryrite with lesser chalcocite, bornite, malachite, pyrite, sphalerite and galena

Criteria	JORC Code explanation	Commentary
Drill hole Information	<ul style="list-style-type: none"> A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	<ul style="list-style-type: none"> A list of drillholes used with relevant information is within Appendix B of the report.
Data aggregation methods	<ul style="list-style-type: none"> In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	<ul style="list-style-type: none"> This section is not relevant as data is composited for Mineral Resource estimation (Section 3).
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known'). 	<ul style="list-style-type: none"> In general, the drilling orientation is at a high angle to the geological structures controlling mineralisation result in limited sampling bias.

Criteria	JORC Code explanation	Commentary
Diagrams	<ul style="list-style-type: none"> Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views. 	<ul style="list-style-type: none"> Images of mineralisation shown in Figure 7-1 and 7-2.
Balanced reporting	<ul style="list-style-type: none"> Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results. 	<ul style="list-style-type: none"> Individual Exploration Results are not being reported so this section is not relevant to Mineral Resource reporting.
Other substantive exploration data	<ul style="list-style-type: none"> Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances. 	<ul style="list-style-type: none"> All available exploration data is included and documented in Mineral Resource reporting.
Further work	<ul style="list-style-type: none"> The nature and scale of planned further work (eq tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	<ul style="list-style-type: none"> Details of planned further work were unknown at the time of the Mineral Resource reporting.

Section 3: Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	<ul style="list-style-type: none"> Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. Data validation procedures used. 	<ul style="list-style-type: none"> DML were migrating their drilling database from Microsoft (MS) Access to an acQuire software system during October 2012. Once the database migration is completed Xstract recommends a database validation be undertaken. Senior geologists have been validating anomalous database records against logging and assay submission as part of a database migration Data storage and validation protocols were not in place due to the change to a new system
Site visits	<ul style="list-style-type: none"> Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case. 	<ul style="list-style-type: none"> A Competent Person site visit was undertaken by Matthew Readford during October 2012. This included visits to the Zeta mining operation, all Boesto exploration areas and assay laboratories (ALS Chemex laboratory, Johannesburg and Genalysis Intertek, Johannesburg and Perth).

Criteria	JORC Code explanation	Commentary
Geological interpretation	<ul style="list-style-type: none"> Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. Nature of the data used and of any assumptions made. The effect, if any, of alternative interpretations on Mineral Resource estimation. The use of geology in guiding and controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology. 	<ul style="list-style-type: none"> Mineralisation is generally consistent along strike for many kilometres and down-dip below deepest drilling. The mineralisation was interpreted on drill sections by Xstract for Mineral Resource estimation based on geology logs and copper grades in order to delineate consistent higher-grade areas of the deposit at widths likely to be mined (This equated to approximately four metres or 4 x 1 metre samples downhole based on drillholes dipping at 60 degrees.). In most cases, two to three drill intersections were available to define mineralisation boundaries on any given section. The mineralisation was modelled to a maximum depth of 230 m below the surface topography. The mineralisation must maintain an overall downhole composite that reported a copper grade of greater than 0.3% Cu. Mineralisation outlines were terminated at half the drillhole spacing beyond the last known section of copper mineralisation. Where copper mineralisation appeared to extend past the last downhole intersection on a section, the copper mineralisation was extended for a distance equal to the general down-dip drill spacing. Assay data from within mineralisation wireframes was composited to the mode sample length of 1 m for analysis and estimation. The compositing routine respects the boundaries of the mineralisation domains but also optimises lengths so the majority are as close as possible to 1 m. At this stage of project development the wide-spaced drilling demonstrates reasonable geological continuity of mineralisation along strike and down-dip but variography suggests that grade continuity for copper, silver and sulphur generally needs to be defined by infill drilling. A base of oxidation surface was also interpreted from drill sections and extended laterally beyond the limits of the Mineral Resource model The mineralisation wireframes were constructed from interpretations on 14 east-west drill sections spaced between 400 m apart

Criteria	JORC Code explanation	Commentary
Dimensions	<ul style="list-style-type: none"> The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource. 	<ul style="list-style-type: none"> The mineralisation wireframes cover a strike distance of approximately 5.5 km and extend to 230 m below surface The copper mineralisation is discernible from drill intersections as four main zones. Each zone is approximately 2 m to 6 m thick and generally dipping 80° to the west. Drilling intersected mineralisation at depths between 23 m and 190 m below surface and always below the base of complete oxidation.

Criteria	JORC Code explanation	Commentary
Estimation and modelling techniques	<ul style="list-style-type: none"> The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used. The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. The assumptions made regarding recovery of by-products. Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation). In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. Any assumptions behind modelling of selective mining units. Any assumptions about correlation between variables. Description of how the geological interpretation was used to control the resource estimates. Discussion of basis for using or not using grade cutting or capping. The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available. 	<ul style="list-style-type: none"> A top cut of 5.0% Cu was applied to the copper data composites to limit the effect of high grade outliers located at depth creating an artificial high grade bias in areas where block grades were extrapolated beyond drilling. Ordinary Kriging interpolation was used to estimate the grades into model blocks of 40 mE by 80 mN by 40mRL in size for copper, silver and sulphur in the mineralised domain. Drill section spacing is 400 m apart and between 25 m and 60 m down-dip. Whilst there is a correlation between copper, silver and sulphur each element was estimated independently from the same or similar numbers of data Sub-celling was employed to accurately represent model volumes down to 1 mE by 8 mN by 0.04 mRL. Each sub-cell within the mineralisation outline was assigned the grade values of the parent cell. Software used in resource estimation was CAE Mining, Datamine software. Estimation parameters were optimised based on the drillhole data spacing and the models of grade continuity produced by the variography study. An anisotropic, elliptical search neighbourhood was orientated according to the modelled directions of grade continuity for copper, which generally correlate with the mineralisation strike and dip. Data density is not sufficient to model grade variation across the mineralisation width; geological modelling is currently simulating a mining cut-off envelope. Infill drilling is required to allow for more confident modelling of mineralisation volume and to make it possible to determine grade variation across strike and to a scale indicative of selective mining units along strike and down-dip. Search ranges for all elements were adjusted in order to ensure a reasonable number of samples were included in each block estimate and so data in the dip and across-dip direction was not 'screened out' by the high dimensional ratios between strike and dip directions and the narrow across-dip width of mineralisation. A minimum of 4 and maximum of 24 samples were used in the estimation of each block. A comparison between the mean grades from the drillhole composite data and the block estimates (on a parent cell basis) was performed to ensure they were similar and the estimate unbiased in a global sense. Local validation of the estimates was performed by visually inspecting the block model in plan, long sections and cross sections. The quality of the local estimates was checked by averaging block grades and composite data for copper, silver and sulphur both along strike and down dip.

Criteria	JORC Code explanation	Commentary
Moisture	<ul style="list-style-type: none"> Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content. 	<ul style="list-style-type: none"> Tonnages are estimated on a dry basis.
Cut-off parameters	<ul style="list-style-type: none"> The basis of the adopted cut-off grade(s) or quality parameters applied. 	<ul style="list-style-type: none"> A nominal 0.6% Cu lower cut-off is used for reporting the mineral resource on the basis of what is used for the nearby Zeta open pit mining operation.
Mining factors or assumptions	<ul style="list-style-type: none"> Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made. 	<ul style="list-style-type: none"> Mining studies for the Ophion Prospect have not been carried out to determine optimal open pit and underground grade cut-offs. The Mineral Resources are considered to be amenable to extraction by open pit mining at this stage and modelling does not extend to sufficient depth to report a section of the Mineral Resource above a higher grade cut-off expected to be relevant to underground mining.
Metallurgical factors or assumptions	<ul style="list-style-type: none"> The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made. 	<ul style="list-style-type: none"> Metallurgical assessment is recommended to confirm the assumptions made in the reporting of Mineral Resources that oxidised copper material is not economical to process. Different trends in Ophion copper:sulphur ratios indicate that metallurgical assumptions from mining the Zeta pit should be tested for Ophion.

Criteria	JORC Code explanation	Commentary
Environmental factors or assumptions	<ul style="list-style-type: none"> Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made. 	<ul style="list-style-type: none"> No environmental impact study has been completed at this initial stage of Mineral Resource estimation. Current assumptions of similarity to the nearby Zeta NE open pit operations and treatment at the established Boseto Copper concentrator mean there is no apparent material environmental impact on exploitation of this Mineral Resource at this stage.
Bulk density	<ul style="list-style-type: none"> Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit. Discuss assumptions for bulk density estimates used in the evaluation process of the different materials. 	<ul style="list-style-type: none"> Specific gravity measurements were taken from drill core were grouped into oxidation domains defined in the geological model and mean values were used as a dry bulk density factor on this basis. A bulk density factor of 2.64 t/m³ was used for oxidised material due to lack of sufficient sampling. This value was derived from open pit mining of the Zeta deposit. Estimation of bulk density factors from specific gravity sampling can be improved through more representative sampling of weathered zones and incorporating geological domain interpretations for lithology and weathering.

Criteria	JORC Code explanation	Commentary
Classification	<ul style="list-style-type: none"> The basis for the classification of the Mineral Resources into varying confidence categories. Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). Whether the result appropriately reflects the Competent Person's view of the deposit. 	<ul style="list-style-type: none"> The Mineral Resource has been classified as Inferred due to the current, early stages of project development where data density is typically beyond grade continuity along strike and key areas of spatial location and QAQC require further investigation and issue resolution.
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of Mineral Resource estimates. 	<ul style="list-style-type: none"> Xstract has completed an internal peer review of this estimate and report.
Discussion of relative accuracy/ confidence	<ul style="list-style-type: none"> Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate. The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available. 	<ul style="list-style-type: none"> As this is a 'maiden' Mineral Resource the prospect is in early stages of project development where data density is typically beyond grade continuity. Estimates do not model local grade variability across the mineralisation and only broadly along strike and down dip. Overall estimation accuracy is relatively low compared to projects sampled sufficiently to warrant a detailed mining study. No studies have been undertaken to quantify the accuracy and confidence of the estimate. Metallurgical and mining studies have also not been undertaken to evaluate the which proportion of this Mineral Resource may be economic

Memorandum

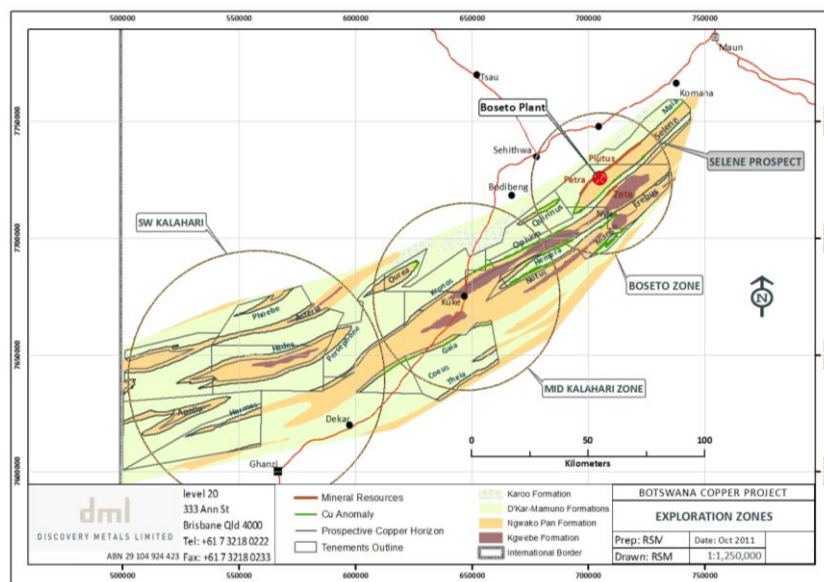
Company: Discovery Metals Ltd
Sender/author: Matthew Readford
Date: 21 June 2013
Project reference: P1815
Subject: North East Mango 1 Mineral Resource Estimate update to the JORC Code (2012)

Dear Discovery Metals Ltd

Xstract Mining Consultants Pty Ltd ("Xstract") reported a 'maiden' Mineral Resource Estimate for the NE Mango 1 copper and silver prospect according to guidelines of the Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves, 2004 Edition (The JORC Code, 2004) for Discovery Metals Ltd ("DML") on 16th November 2012. This Mineral Resource Statement and a supporting Mineral Resource Report updates the reporting of this Mineral Resource to JORC 2012 edition guidelines. This resource statement has an effective date of 21 June 2013.

The North East Mango 1 copper and silver prospect ("NE Mango 1 Prospect") is located in Ngamiland within the Ghanzi-Chobe Fold Belt (informally known as the Kalahari Copper Belt) of northwest Botswana, some 80 km southwest of the town of Maun. The Mango prospect forms part of DML's 100% owned Boseto Copper Project and is located in the northeast extremity of the Boseto Zone.

Figure 1: Location of NE Mango 1 Prospect in the Boseto Zone



Source: Discovery Metals Limited

Xstract – Excellence from the outset

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As with other known deposits of the Boseto Copper Project, mineralisation within the Mango prospect is a sediment hosted, stratiform redox copper and silver deposit. Mineralisation is characterised by predominantly chalcopyrite with lesser chalcocite, bornite, malachite, pyrite, sphalerite and galena.

DML undertook exploration drilling of the NE Mango 1 Prospect between January 2011 and March 2012. Drilling comprises 52 drillholes, totalling 4,967 m. Six drillholes were excluded from the resource estimation process due to the uncertainty of the data and location of the holes resulting is a dataset of 46 completed drillholes comprising 22 reverse circulation ("RC"), 1 fully diamond cored ("DD"), 23 partially diamond cored drillholes (RC/DD and NC/DD). All 22 RC drillholes and two diamond drillholes were drilled vertically. Only 17 drillholes were used in the grade estimation of the Mineral Resource. Drillholes are supported by detailed collar records as well as downhole survey QA/QC records.

Drilling at the NE Mango 1 Prospect occurs on nine drill sections spaced approximately 170 to 500 m apart along the strike of mineralisation and one drill section at 1,500 m to the south of the drilling area. There are generally two to three drillholes per section, spaced approximately 40 m across strike drilled at an approximate angle of 60° from horizontal at an azimuth of generally 230° (west-south-west) in order to intersect the plane of mineralisation at a high angle.

Xstrat has reviewed all data provided by DML and confirms that the information is of sufficient quality to support a Mineral Resource for public reporting purposes.

The mineralised zone of the NE Mango 1 Prospect has been interpreted in all sections along the drill section strike length of approximately 4.2 km, and has also been intersected at depths between 30 m to 160 m. Mineralisation is generally dipping at 55° to the northeast, and is constrained within a zone of approximately 10 m thickness. The majority of samples are 1 m in length with core sampling derived from half core intervals and a minimum sampling width of 0.05 m.

DML provided two-dimensional ("2D") surfaces of the base of the oxidation zones (oxidised zone, **transition zone, and fresh rock**) as well as a lithological 'capping' surface demarcating overlying Tertiary to Quaternary, post mineralisation unconsolidated sands, calcrete, etc. of the Kalahari Group.

DML also provided a three-dimensional ("3D") geological interpretation of the mineralisation based primarily on the lithology and copper grades in the drillhole data. Statistical analysis of the copper grades within this mineralised zone identified that a substantial amount of low grade had been included in the interpretation. Further domaining based on geology and copper grades made it possible to delineate consistent higher-grade areas of the deposit at widths likely to be mined. Two mineralised zones were delineated by a cut-off grade of 0.5% Cu and a minimum of four assays (approximately 4 m length) of drillhole intersection. These zones are approximately 2,100 m and 400 m in strike length and extend to depths of 110 m to 230 m. A distinct higher-grade zone was delineated using a cut-off grade of 1.0% Cu within the northern part of the mineralisation for 550 m of strike length. These three zones were analysed separately and the estimation results were combined in the final block model.

Ordinary kriging was used to estimate copper, silver and sulphur into the low grade mineralised lodes and inverse distance squared interpolation was used for the estimation of grades for the higher grade mineralisation. The block model parent cells have dimensions of 40 mE by 80 mN by 10 mRL, with sub-celling employed to accurately represent the geometry and volume of the mineralisation models. The higher-grade zone estimation data has a top cut of 5.0% Cu to limit the effect of overestimation from the negatively skewed data. The estimation parameters were optimised based on the drillhole data spacing and the models of grade continuity produced by variography study of copper, silver and sulphur. The short-range continuity along strike for copper, silver and sulphur was poorly defined due to the wide spaced drilling over the area.

Specific gravity sampling data for NE Mango 1 was used to determine dry bulk density factors for estimating material tonnages. Dry bulk density factors of 2.64 t/m³ were used for calculating tonnages for capping and oxidised material, 2.67 t/m³ for partially oxidised ('transition zone') material and 2.70 t/m³ for fresh rock. Due to the lack of sampling in the oxidised zone, a mineral resource was not estimated in this area.

A Total Inferred Mineral Resource of 4.8 Mt at 1.2% Cu, 13 g/t Ag, and 0.5% S using a block cut-off grade of 0.6% Cu has been reported for the NE Mango 1 Prospect in accordance with the guidelines of the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. The grade and tonnage values listed in Table 1 are an accumulation of blocks above a given cut-off within a portion of the NE Mango 1 Prospect Mineral Resource Estimate block model defined by criteria based on proximity to drillholes and confidence in estimation continuity also listed in Table 2 and Table 3 are the high grade and low grade zone's grade and tonnage values.

Table 1: NE Mango 1 Prospect Inferred Mineral Resource above a Cu% Grade Cut-off

Cu cut-off	Tonnes	Cu	Ag	S
(%)	(Mt)	(%)	(g/t)	(%)
0.01	4.8	1.2	13	0.5
0.4	4.8	1.2	13	0.5
0.6	4.8	1.2	13	0.5
0.8	3.5	1.4	16	0.5
1.0	1.7	2.0	23	0.7
1.2	1.6	2.1	25	0.7
1.4	1.6	2.1	25	0.7
1.6	1.5	2.1	25	0.7
1.8	1.5	2.1	25	0.7
2.0	0.9	2.3	26	0.8

Table 2: NE Mango 1 Prospect Low Grade Inferred Mineral Resource above a Cu% Grade Cut-off

Cu cut-off	Tonnes	Cu	Ag	S
(%)	(Mt)	(%)	(g/t)	(%)
0.01	3.2	0.8	7	0.4
0.4	3.2	0.8	7	0.4
0.6	3.2	0.8	7	0.4
0.8	1.9	0.9	9	0.4
1.0	0.2	1.0	10	0.5

Table 3: Mango 1 Prospect High Grade Inferred Mineral Resource above a Cu% Grade Cut-off

Cu cut-off	Tonnes	Cu	Ag	S
(%)	(Mt)	(%)	(g/t)	(%)
0.01	1.6	2.1	25	0.7
0.4	1.6	2.1	25	0.7
0.6	1.6	2.1	25	0.7
0.8	1.6	2.1	25	0.7
1.0	1.6	2.1	25	0.7
1.2	1.6	2.1	25	0.7
1.4	1.6	2.1	25	0.7
1.6	1.5	2.1	25	0.7
1.8	1.5	2.1	25	0.7
2.0	0.9	2.3	26	0.8
2.2	0.6	2.3	27	0.8
2.4	0.1	2.6	32	1.0

If you have any questions regarding the information above, please do not hesitate to contact me.

Yours sincerely

Matthew Readford
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JORC Code, 2012 Edition – Table 1

Section 1: Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information. 	<ul style="list-style-type: none"> The DML sampling procedure documentation contains procedures for diamond core and RC chip samples. Diamond core sampling is generally constrained by a minimum sample length of 0.5 m and logged lithological or mineralogical boundaries. The general practice of sampling 3 m before visible copper mineralisation should be reviewed on a project by project basis. Xstract considered sampling to be adequate. Xstract observed during a site visit in October 2012 that the practice of sampling diamond core along the drill orientation line should be changed as cases were observed where half core samples were cut at less than optimal angles to mineralised structures-
Drilling techniques	<ul style="list-style-type: none"> Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc). 	<ul style="list-style-type: none"> Drilling comprises Reverse Circulation (RC), fully cored diamond drill holes with RC pre-collars and diamond core 'tails' in the mineralised zone. Diamond drill holes are either HQ or NQ in size with RC holes 5.5 inches in diameter. Core is orientated so as to intersect mineralisation at a high angle to the dip plane.

Criteria	JORC Code explanation	Commentary
Drill sample recovery	<ul style="list-style-type: none"> Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	<ul style="list-style-type: none"> Overall recovery was considered by Xstract as reasonable once it was calculated correctly. Holes are re-drilled in transition and fresh rock if core recovery is lower than 30% for a drill string. DML advised Xstract that anomalous low and high (significantly over 100%) recovery values were often associated with low core retrieval in drill runs in poor ground conditions, followed by the 'pick up' of core in a subsequent drill run, resulting in individual core run recovery calculations of greater than 100%. This method of calculating 'core recovery' is actually recording 'core retrieval' and potentially biasing confidence in diamond drill core results. In the past, this has led to the omission of data from resource estimation. Xstract recommends DML review the core recovery data collection procedure to ensure that the recovery percentage recorded is representative of the entire interval. Anomalous core recovery values should be resolved between the driller and rig geologist as close as possible to the time of drilling the interval. Total weights of RC samples should be recorded as a measure of sample recovery from this drilling method.

Criteria	JORC Code explanation	Commentary
Logging	<ul style="list-style-type: none"> Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	<ul style="list-style-type: none"> Overall logging is to a good standard and level of detail The logging procedure documentation provided by DML included general logging principles plus specific diamond core logging and RC chip logging principles. Logging is written onto paper forms and entered into spreadsheets. DML was in the process to migrating to a data management system (aQuire) during the time of the site visit. Limited geotechnical data is logged within cored drillholes in the form of RQD measurements. It was noted during the site review that there appears to be confusion in logging terminology regarding what is meant by 'oxidation'. The current process is to log the degree of weathering down the hole, but also define the degree of 'oxidation' based on copper mineralogy. A general logging mark-up practice was recommended to assist in improving the quality and consistency of work.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled. 	<ul style="list-style-type: none"> Core is cut in half and sampled over 1m intervals and split at lithological boundaries. Minimum sampling size is 0.1 m, Xstract recommend this be increased to 0.3 m to improve representatively. Xstract considers sampling and sub-sampling to be of good quality and appropriate for this level of study. RC sampling is conducted at 1 m intervals within mineralisation and are sampled dry. RC sampling was not observed during the site visit but the procedures states that it is cyclone split to a size of 2.5 kg. Samples are then spear or tube sampled. DML's drilling procedure strongly suggests that when dry sampling is not possible RC drilling is abandoned in favour of diamond drilling. The potential for sample cross-contamination in wet RC sampling is very high and given that mineralisation is generally a few metres wide it is likely to lead to significant estimation risk.

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established. 	<ul style="list-style-type: none"> Xstrat has reviewed QAQC procedures for DML projects and suggests that procedures are adequate for this level of study. The DML procedure for QAQC field standards, blanks and duplicates is to submit one sample of each type in every 25 samples. Laboratory QC data (internal sample preparation duplicates, grind size passing check, sample preparation blanks, quartz flush analyses, standard analyses, sample weight checks, batch re-assay occurrences) is not obtained or analysed. Xstrat recommends this data is requested, analysed and retained for future Mineral Resource updates. Standards with a more relevant range of silver grades are recommended. Due to the narrow and planar nature of mineralisation field and laboratory duplicate strategy could be amended to increase the number of QC samples in mineralisation in order to provide a reasonable basis for evaluating sampling and laboratory procedures. DML should request Genalysis to introduce the use of quartz flushes between grinding DML samples as soon as possible. Blanks are submitted as pulps. Coarse material blanks samples should be introduced as part of the QAQC system to test for contamination in sample preparation.
Verification of sampling and assaying	<ul style="list-style-type: none"> The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	<ul style="list-style-type: none"> Senior geologists have been validating anomalous database records against logging and assay submission as part of a database migration Data storage and validation protocols were not in place due to the change to a new system Xstrat recommends a database audit be undertaken once the database migration is complete Some minor verification of logging and assay results was undertaken during the site visit but it was numerous enough to be representative No twinned holes have been used within the NE Mango 1 Project.

Criteria	JORC Code explanation	Commentary
Location of data points	<ul style="list-style-type: none"> Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control. 	<ul style="list-style-type: none"> Drillhole collar positions were surveyed using OmniLogger Differential GPS (DGPS) from OmniSTAR's Global Positioning System products. The DGPS has a stated accuracy of ± 50 cm. A Reflex Ez-TracTM instrument was used to record downhole survey measurements. Spatial coordinates for the Boseto prospects were supplied in World Geodetic System 1984, Zone 34 Southern Hemisphere (WGS84_34S). A translation to the DML Local Mine Grid (DML LG) provided by DML allowed for the deposits to be modelled with the mineralisation strike aligned to a grid north – south orientation A variation in the order of tens of metres between survey relative levels (RL) and that of surface topography is noted. DML has adjusted hole collar positions to surface topography for Mineral Resource modelling due to the very flat terrain. DML mine surveyors have a method for resolving these differences accurately and it is recommended the exploration division adopt these procedures for past and future surveys
Data spacing and distribution	<ul style="list-style-type: none"> Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied. 	<ul style="list-style-type: none"> Data spacing at 400 m to 800 m along strike is currently within limits of geological continuity but at or beyond the limit of copper, silver and sulphur grade continuity. Xstract recommends a component of infill drilling should target definition of grade continuity at a range of sample spacing that will define shorter range grade relationships and assist in detecting mineralisation controls (e.g. plunges). This will improve confidence in Mineral Resource estimation and make it possible to optimise drill spacing for project development objectives.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material. 	<ul style="list-style-type: none"> In general, the drilling orientation is at a high angle to the geological structures controlling mineralisation result in limited sampling bias.

Criteria	JORC Code explanation	Commentary
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> Sample security is managed with dispatch dates noted for each samples by the core technician, this is checked and confirmed at the laboratory on receipt of samples and discrepancies are corrected via telephone link up with laboratory and project geologist.
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> Sampling techniques and data site audit occurred in October 2012. No information regarding previous audits was available.

Section 2: Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	<ul style="list-style-type: none"> The NE Mango 1 prospecting licence (PL099/2005) falls within a group of seven prospecting licences located in Ngamiland district, all of which expired September 2012. The license for the area that covers the NE Mango 1 Prospect has currently been extended by the Botswana Department of Minerals, Energy and Water Resources whilst the renewal application is being considered. No third party has access to the area until the application finalised.
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> Since the late 1960s, there have been at least five phases of exploration in the Kalahari Copper Belt prior to the current exploration by Discovery Metals Ltd. Previous owners include: Anglovaal South West Africa and JV partners, DeBeers, Tsumeb Corporation, US Steel Corporation, US Steel Corporation and JV partners Newmont South Africa Ltd and INCO of Canada, Anglo American Prospecting Services (AAPS), Glencore International PLC, Kalahari Gold and Copper (KGC) and JV partner Delta Gold DML exploration data is the only data used in resource estimation.
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> The NE Mango 1 Prospect is located in Ngamiland, within the Ghanzi-Chobe Fold Belt (informally known as the Kalahari Copper Belt) of northwest Botswana. The mineralisation style of the NE Mango 1 Prospect is that of a sediment hosted, stratiform redox copper and silver deposit. Mineralisation is characterised by predominantly chalcopryite with lesser chalcocite, bornite, malachite, pyrite, sphalerite and galena

Criteria	JORC Code explanation	Commentary
Drill hole Information	<ul style="list-style-type: none"> A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	<ul style="list-style-type: none"> A list of drillholes used with relevant information is within Appendix A of the report.
Data aggregation methods	<ul style="list-style-type: none"> In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	<ul style="list-style-type: none"> This section is not relevant as data is composited for Mineral Resource estimation (Section 3).
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known'). 	<ul style="list-style-type: none"> In general, the drilling orientation is at a high angle to the geological structures controlling mineralisation result in limited sampling bias.
Diagrams	<ul style="list-style-type: none"> Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views. 	<ul style="list-style-type: none"> Images of mineralisation shown in Figure 7-1, 7-2 and 7-3.

Criteria	JORC Code explanation	Commentary
Balanced reporting	<ul style="list-style-type: none"> Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results. 	<ul style="list-style-type: none"> Individual Exploration Results are not being reported so this section is not relevant to Mineral Resource reporting.
Other substantive exploration data	<ul style="list-style-type: none"> Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances. 	<ul style="list-style-type: none"> All available exploration data is included and documented in Mineral Resource reporting.
Further work	<ul style="list-style-type: none"> The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	<ul style="list-style-type: none"> Details of planned further work were unknown at the time of the Mineral Resource reporting.

Section 3: Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	<ul style="list-style-type: none"> Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. Data validation procedures used. 	<ul style="list-style-type: none"> DML were migrating their drilling database from Microsoft (MS) Access to an acQuire software system during October 2012. Once the database migration is completed Xstract recommends a database validation be undertaken. Senior geologists have been validating anomalous database records against logging and assay submission as part of a database migration Data storage and validation protocols were not in place due to the change to a new system
Site visits	<ul style="list-style-type: none"> Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case. 	<ul style="list-style-type: none"> A Competent Person site visit was undertaken by Matthew Readford during October 2012. This included visits to the Zeta mining operation, all Boesto exploration areas and assay laboratories (ALS Chemex laboratory, Johannesburg and Genalysis Intertek, Johannesburg and Perth).

Criteria	JORC Code explanation	Commentary
Geological interpretation	<ul style="list-style-type: none"> Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. Nature of the data used and of any assumptions made. The effect, if any, of alternative interpretations on Mineral Resource estimation. The use of geology in guiding and controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology. 	<ul style="list-style-type: none"> Mineralisation is generally consistent along strike for many kilometres and down-dip below deepest drilling. The mineralisation was interpreted on drill sections by Xstrat for Mineral Resource estimation based on geology logs and copper grades in order to delineate consistent higher-grade areas of the deposit at widths likely to be mined (This equated to approximately four metres or 4 x 1 metre samples downhole based on drillholes dipping at 60 degrees.). In most cases, two to three drill intersections were available to define mineralisation boundaries on any given section. The mineralisation was modelled to a maximum depth of 230 m below the surface topography. The mineralisation must maintain an overall downhole composite that reported a copper grade of greater than 0.5% Cu. Mineralisation outlines were terminated at half the drillhole spacing beyond the last known section of copper mineralisation. Where copper mineralisation appeared to extend past the last downhole intersection on a section, the copper mineralisation was extended for a distance equal to the general down-dip drill spacing. Assay data from within mineralisation wireframes was composited to the mode sample length of 1 m for analysis and estimation. The compositing routine respects the boundaries of the mineralisation domains but also optimises lengths so the majority are as close as possible to 1 m. At this stage of project development the wide-spaced drilling demonstrates reasonable geological continuity of mineralisation along strike and down-dip but variography suggests that grade continuity for copper, silver and sulphur generally needs to be defined by infill drilling. A base of oxidation surface was also interpreted from drill sections and extended laterally beyond the limits of the Mineral Resource model The mineralisation wireframes were constructed from interpretations on 9 east-west drill sections spaced between 200 m and 500 m apart
Dimensions	<ul style="list-style-type: none"> The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource. 	<ul style="list-style-type: none"> Xstrat interpreted three mineralised domains, two low grade and one high grade. The main low grade domain has a total strike length of 2.1 km and the secondary footwall low grade domain has a 400 m strike length. The high grade domain is within the northern section of the main low grade domain and extends along a strike for 550 m. Domains extend to depths of 110 m to 230 m

Criteria	JORC Code explanation	Commentary
Estimation and modelling techniques	<ul style="list-style-type: none"> The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used. The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. The assumptions made regarding recovery of by-products. Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation). In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. Any assumptions behind modelling of selective mining units. Any assumptions about correlation between variables. Description of how the geological interpretation was used to control the resource estimates. Discussion of basis for using or not using grade cutting or capping. The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available. 	<ul style="list-style-type: none"> A top cut of 5.0% Cu was applied to the copper data composites to limit the effect of high grade outliers located at depth creating an artificial high grade bias in areas where block grades were extrapolated beyond drilling. Ordinary Kriging interpolation was used to estimate the grades into model blocks of 40 mE by 80 mN by 10mRL in size for copper, silver and sulphur in the mineralised domain. Drill section spacing is 200 m to 500 m apart and 40 m down-dip. Whilst there is a correlation between copper, silver and sulphur each element was estimated independently from the same or similar numbers of data Sub-celling was employed to accurately represent model volumes down to 5 mE by 10 mN by 0.5 mRL. Each sub-cell within the mineralisation outline was assigned the grade values of the parent cell. Software used in resource estimation was CAE Mining, Datamine software. Estimation parameters were optimised based on the drillhole data spacing and the models of grade continuity produced by the variography study. An anisotropic, elliptical search neighbourhood was orientated according to the modelled directions of grade continuity for copper, which generally correlate with the mineralisation strike and dip. Data density is not sufficient to model grade variation across the mineralisation width; geological modelling is currently simulating a mining cut-off envelope. Infill drilling is required to allow for more confident modelling of mineralisation volume and to make it possible to determine grade variation across strike and to a scale indicative of selective mining units along strike and down-dip. Search ranges for all elements were adjusted in order to ensure a reasonable number of samples were included in each block estimate and so data in the dip and across-dip direction was not 'screened out' by the high dimensional ratios between strike and dip directions and the narrow across-dip width of mineralisation. A minimum of 3 and maximum of 10 samples were used in the estimation of each block grade. A comparison between the mean grades from the drillhole composite data and the block estimates (on a parent cell basis) was performed to ensure they were similar and the estimate unbiased in a global sense. Local validation of the estimates was performed by visually inspecting the block model in plan sections, long sections and cross sections. The quality of the local estimates was checked by averaging block grades and composite data for copper, silver and sulphur both along strike and down dip.

Criteria	JORC Code explanation	Commentary
Moisture	<ul style="list-style-type: none"> Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content. 	<ul style="list-style-type: none"> Tonnages are estimated on a dry basis.
Cut-off parameters	<ul style="list-style-type: none"> The basis of the adopted cut-off grade(s) or quality parameters applied. 	<ul style="list-style-type: none"> A nominal 0.6% Cu lower cut-off is used for reporting the mineral resource on the basis of what is used for the nearby Zeta open pit mining operation.
Mining factors or assumptions	<ul style="list-style-type: none"> Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made. 	<ul style="list-style-type: none"> Mining studies for the NE Mango 1 Prospect have not been carried out to determine optimal open pit and underground grade cut-offs. The Mineral Resources are considered to be amenable to extraction by open pit mining at this stage and modelling does not extend to sufficient depth to report a section of the Mineral Resource above a higher grade cut-off expected to be relevant to underground mining.
Metallurgical factors or assumptions	<ul style="list-style-type: none"> The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made. 	<ul style="list-style-type: none"> Metallurgical assessment is recommended to confirm the assumptions made in the reporting of Mineral Resources that oxidised copper material is not economical to process. Different trends in NE Mango 1 copper:sulphur ratios indicate that metallurgical assumptions from mining the Zeta pit should be tested for NE Mango 1.

Criteria	JORC Code explanation	Commentary
Environmental factors or assumptions	<ul style="list-style-type: none"> Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made. 	<ul style="list-style-type: none"> No environmental impact study has been completed at this initial stage of Mineral Resource estimation. Current assumptions of similarity to the nearby Zeta NE open pit operations and treatment at the established Boseto Copper concentrator mean there is no apparent material environmental impact on exploitation of this Mineral Resource at this stage.
Bulk density	<ul style="list-style-type: none"> Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit. Discuss assumptions for bulk density estimates used in the evaluation process of the different materials. 	<ul style="list-style-type: none"> Specific gravity measurements were taken from drill core were grouped into oxidation domains defined in the geological model and mean values were used as a dry bulk density factor on this basis. A bulk density factor of 2.64 t/m³ was used for oxidised material due to lack of sufficient sampling. This value was derived from open pit mining of the Zeta deposit.. Estimation of bulk density factors from specific gravity sampling can be improved through more representative sampling of weathered zones and incorporating geological domain interpretations for lithology and weathering.

Criteria	JORC Code explanation	Commentary
Classification	<ul style="list-style-type: none"> The basis for the classification of the Mineral Resources into varying confidence categories. Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). Whether the result appropriately reflects the Competent Person's view of the deposit. 	<ul style="list-style-type: none"> The Mineral Resource has been classified as Inferred due to the current, early stages of project development where data density is typically beyond grade continuity along strike and key areas of spatial location and QAQC require further investigation and issue resolution.
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of Mineral Resource estimates. 	<ul style="list-style-type: none"> Xstract has completed an internal peer review of this estimate and report.
Discussion of relative accuracy/ confidence	<ul style="list-style-type: none"> Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate. The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available. 	<ul style="list-style-type: none"> As this is a 'maiden' Mineral Resource the prospect is in early stages of project development where data density is typically beyond grade continuity. Estimates do not model local grade variability across the mineralisation and only broadly along strike and down dip. Overall estimation accuracy is relatively low compared to projects sampled sufficiently to warrant a detailed mining study. No studies have been undertaken to quantify the accuracy and confidence of the estimate. Metallurgical and mining studies have also not been undertaken to evaluate the which proportion of this Mineral Resource may be economic

Memorandum

Company: Discovery Metals Ltd
Sender/author: Matthew Readford
Date: 21 June 2013
Project reference: P1794
Subject: North East Mango 2 Mineral Resource Estimate update to the JORC Code (2012)

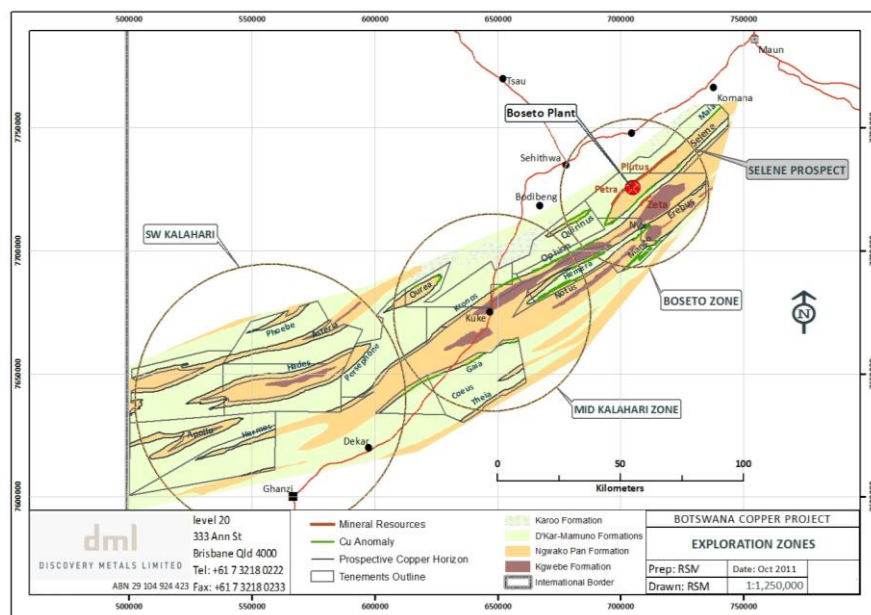
Dear Discovery Metals Ltd

Xstract Mining Consultants Pty Ltd ("Xstract") reported a 'maiden' Mineral Resource Estimate for the NE Mango 2 copper and silver prospect according to guidelines of the Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves, 2004 Edition (The JORC Code, 2004) for Discovery Metals Ltd ("DML") on 20th November 2012. This Mineral Resource Statement and a supporting Mineral Resource Report updates the reporting of this Mineral Resource to JORC 2012 edition guidelines. This resource statement has an effective date of 21 June 2013.

The NE Mango 2 copper and silver project ("NE Mango 2") is located in Ngamiland within the Ghanzi-Chobe Fold Belt (informally known as the Kalahari Copper Belt) of northwest Botswana, some 80 km southwest of the town of Maun. NE Mango 2 forms part of DML's 100% owned Boseto Copper Project and is located within the southeast of the Boseto Zone (Figure 1).

The Botswana Government has extended DML's prospect license covering NE Mango 1 beyond the September 2011 expiry until such time that it completes processing DML's renewal application.

Figure 1: Location of NE Mango 2 Prospect in the Boseto Zone



Source: Discovery Metals Limited

Xstract – Excellence from the outset

XstractGroup.com

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As with other known deposits of the Boseto Copper Project, the mineralisation style of the NE Mango 2 deposit is that of a sediment hosted, stratiform redox copper and silver deposit. Mineralisation is characterised by predominantly chalcopyrite with lesser chalcocite, bornite, malachite, pyrite, sphalerite and galena.

DML undertook exploration drilling of the NE Mango 2 Prospect during 2012. Drilling comprises 45 drillholes, totalling 6,580 m. All of these drillholes are reverse circulation ("RC") with diamond drilling ("DD") through the mineralisation. All were located in the area modelled for Mineral Resource estimation. Drillholes are supported by detailed collar records as well as downhole surveys and QA/QC data.

The NE Mango 2 Prospect has been drilled on 15 drill sections spaced approximately 200 m to 1,000 m apart along the strike of mineralisation. There are between one to three drillholes per section, spaced approximately 25 m to 80 m across strike. They are mostly drilled at an angle of 50° to 60° from horizontal at an azimuth of 140° (east-south-east) in order to intersect the plane of mineralisation at a high angle. The majority of samples are 1 m in length with core sampling derived from half core intervals. Xstract has reviewed all data provided by DML and confirms that the information used for modelling is of sufficient quality to support a Mineral Resource for public reporting purposes.

The mineralised zone of the NE Mango 2 Prospect has been interpreted from 15 drillhole sections mostly spaced 400 m apart, with one section in the north interpreted over 1,000 m, for a total strike length of 6.6 km. Mineralisation is generally dipping at 80° to the northwest, intersected at depths between 30 m to 250 m and is constrained within a zone approximately 2 m to 5 m thick. Mineralisation appears to be open at depth and along strike. An igneous dyke has been intersected by one drillhole in the northern half of the prospect. This feature has been interpreted to be 50 m thick and not mineralised.

There is a thickening of the mineralisation up to 16 m for a strike length of 1 km in the central portion of the Prospect. At this early stage of project development, delineation of a separate high grade mineralisation zone is not practical.

DML provided interpretations of surfaces of the base of complete and partial copper oxidation, **and the 'capping' surface** of overlying Tertiary to Quaternary, post mineralisation, unconsolidated sands and calcrete of the Kalahari Group. DML also provided a three-dimensional ("3D") geological interpretation of the mineralisation based primarily on the lithology and copper grades in the drillhole data. The mineralised domain was modified by Xstract to create spatially consistent areas of the deposit at widths likely to be mined.

Ordinary kriging was used to estimate copper, silver and sulphur into a block model of the mineralisation wireframe. The block model parent cells have dimensions of 40 mE by 80 mN by 40 mRL, with sub-celling employed to represent the geometry and volume of the mineralisation models. The estimation parameters were optimised based on the drillhole data spacing and the models of grade continuity produced by variography study of copper, silver and sulphur. The short-range continuity along strike for copper, silver and sulphur is poorly defined due to the wide-spaced drilling over the area.

Specific gravity sampling data for the NE Mango 2 Prospect was used to determine dry bulk density factors for estimating material tonnages. Dry bulk density factors of 2.58 t/m³ were used for calculating tonnages for capping and oxidised copper material, 2.68 t/m³ for partially oxidised **copper ('transition zone') material** and 2.70 t/m³ for fresh rock. A mineral resource is not estimated in the oxidised copper zone due to both a lack of sampling and, based on the Zeta deposit, that it is possibly uneconomic to process.

A total Inferred Mineral Resource of 28.5 Mt at 1.3% Cu, 14 g/t Ag, and 0.8% S using a lower block cut-off grade of 0.6% Cu has been reported for the NE Mango 2 Prospect in accordance with the guidelines of the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. The grade and tonnage values listed in Table 1 are an accumulation of blocks above a given cut-off within a portion of the NE Mango 2 Project Mineral Resource Estimate block model defined by criteria based on proximity to drillholes and confidence in estimation continuity.

Table 1: NE Mango 2 Project Inferred Mineral Resource above a lower Cu (%) Grade Cut-off

Cu cut-off (%)	Tonnes (Mt)	Cu (%)	Ag (g/t)	S (%)
0.01	29.1	1.3	14	0.8
0.6	28.5	1.3	14	0.8
0.8	26.5	1.4	14	0.9
1.0	20.8	1.5	16	1.0
1.2	15.2	1.7	18	1.1

If you have any questions regarding the information above, please do not hesitate to contact me.

Yours sincerely

Matthew Readford
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 BSc (Hons) (Structural Geology), MAusIMM
 Xstract Mining Consultants Pty Ltd

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1 JORC Code, 2012 Edition – Table 1

Section 1: Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information. 	<ul style="list-style-type: none"> The DML sampling procedure documentation contains procedures for diamond core and RC chip samples. Diamond core sampling is generally constrained by a minimum sample length of 0.5 m and logged lithological or mineralogical boundaries. The general practice of sampling 3 m before visible copper mineralisation should be reviewed on a project by project basis. Xstract considered sampling to be adequate. Xstract observed during a site visit in October 2012 that the practice of sampling diamond core along the drill orientation line should be changed as cases were observed where half core samples were cut at less than optimal angles to mineralised structures-
Drilling techniques	<ul style="list-style-type: none"> Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc). 	<ul style="list-style-type: none"> Drilling comprises Reverse Circulation (RC), fully cored diamond drill holes with RC pre-collars and diamond core 'tails' in the mineralised zone. Diamond drill holes are either HQ or NQ in size with RC holes 5.5 inches in diameter. Core is orientated so as to intersect mineralisation at a high angle to the dip plane.

Criteria	JORC Code explanation	Commentary
Drill sample recovery	<ul style="list-style-type: none"> Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	<ul style="list-style-type: none"> Overall recovery was considered by Xstract as reasonable once it was calculated correctly. Holes are re-drilled in transition and fresh rock if core recovery is lower than 30% for a drill string. DML advised Xstract that anomalous low and high (significantly over 100%) recovery values were often associated with low core retrieval in drill runs in poor ground conditions, followed by the 'pick up' of core in a subsequent drill run, resulting in individual core run recovery calculations of greater than 100%. This method of calculating 'core recovery' is actually recording 'core retrieval' and potentially biasing confidence in diamond drill core results. In the past, this has led to the omission of data from resource estimation. Xstract recommends DML review the core recovery data collection procedure to ensure that the recovery percentage recorded is representative of the entire interval. Anomalous core recovery values should be resolved between the driller and rig geologist as close as possible to the time of drilling the interval. Total weights of RC samples should be recorded as a measure of sample recovery from this drilling method.

Criteria	JORC Code explanation	Commentary
Logging	<ul style="list-style-type: none"> Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	<ul style="list-style-type: none"> Overall logging is to a good standard and level of detail The logging procedure documentation provided by DML included general logging principles plus specific diamond core logging and RC chip logging principles. Logging is written onto paper forms and entered into spreadsheets. DML was in the process to migrating to a data management system (aQuire) during the time of the site visit. Limited geotechnical data is logged within cored drillholes in the form of RQD measurements. It was noted during the site review that there appears to be confusion in logging terminology regarding what is meant by 'oxidation'. The current process is to log the degree of weathering down the hole, but also define the degree of 'oxidation' based on copper mineralogy. A general logging mark-up practice was recommended to assist in improving the quality and consistency of work.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled. 	<ul style="list-style-type: none"> Core is cut in half and sampled over 1m intervals and split at lithological boundaries. Minimum sampling size is 0.1 m, Xstract recommend this be increased to 0.3 m to improve representivity. Xstract considers sampling and sub-sampling to be of good quality and appropriate for this level of study. RC sampling is conducted at 1 m intervals within mineralisation and are sampled dry. RC sampling was not observed during the site visit but the procedures states that it is cyclone split to a size of 2.5 kg. Samples are then spear or tube sampled. DML's drilling procedure strongly suggests that when dry sampling is not possible RC drilling is abandoned in favour of diamond drilling. The potential for sample cross-contamination in wet RC sampling is very high and given that mineralisation is generally a few metres wide it is likely to lead to significant estimation risk.

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established. 	<ul style="list-style-type: none"> Xstract has reviewed QAQC procedures for DML projects and suggests that procedures are adequate for this level of study. The DML procedure for QAQC field standards, blanks and duplicates is to submit one sample of each type in every 25 samples. Laboratory QC data (internal sample preparation duplicates, grind size passing check, sample preparation blanks, quartz flush analyses, standard analyses, sample weight checks, batch re-assay occurrences) is not obtained or analysed. Xstract recommends this data is requested, analysed and retained for future Mineral Resource updates. Standards with a more relevant range of silver grades are recommended. Due to the narrow and planar nature of mineralisation field and laboratory duplicate strategy could be amended to increase the number of QC samples in mineralisation in order to provide a reasonable basis for evaluating sampling and laboratory procedures. DML should request Genalysis to introduce the use of quartz flushes between grinding DML samples as soon as possible. Blanks are submitted as pulps. Coarse material blanks samples should be introduced as part of the QAQC system to test for contamination in sample preparation.
Verification of sampling and assaying	<ul style="list-style-type: none"> The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	<ul style="list-style-type: none"> Senior geologists have been validating anomalous database records against logging and assay submission as part of a database migration Data storage and validation protocols were not in place due to the change to a new system Xstract recommends a database audit be undertaken once the database migration is complete Some minor verification of logging and assay results was undertaken during the site visit but it was numerous enough to be representative No twinned holes have been used within the NE Mango 2 Project.

Criteria	JORC Code explanation	Commentary
Location of data points	<ul style="list-style-type: none"> Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control. 	<ul style="list-style-type: none"> Drillhole collar positions were surveyed using OmniLogger Differential GPS (DGPS) from OmniSTAR's Global Positioning System products. The DGPS has a stated accuracy of ± 50 cm. A Reflex Ez-TracTM instrument was used to record downhole survey measurements. Spatial coordinates for the Boseto prospects were supplied in World Geodetic System 1984, Zone 34 Southern Hemisphere (WGS84_34S). A translation to the DML Local Mine Grid (DML LG) provided by DML allowed for the deposits to be modelled with the mineralisation strike aligned to a grid north – south orientation A variation in the order of tens of metres between survey relative levels (RL) and that of surface topography is noted. DML has adjusted hole collar positions to surface topography for Mineral Resource modelling due to the very flat terrain. DML mine surveyors have a method for resolving these differences accurately and it is recommended the exploration division adopt these procedures for past and future surveys
Data spacing and distribution	<ul style="list-style-type: none"> Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied. 	<ul style="list-style-type: none"> Data spacing at 200 m to 400 m along strike is currently within limits of geological continuity but at or beyond the limit of copper, silver and sulphur grade continuity. Xstract recommends a component of infill drilling should target definition of grade continuity at a range of sample spacing that will define shorter range grade relationships and assist in detecting mineralisation controls (e.g. plunges). This will improve confidence in Mineral Resource estimation and make it possible to optimise drill spacing for project development objectives.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material. 	<ul style="list-style-type: none"> In general, the drilling orientation is at a high angle to the geological structures controlling mineralisation result in limited sampling bias.

Criteria	JORC Code explanation	Commentary
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> Sample security is managed with dispatch dates noted for each samples by the core technician, this is checked and confirmed at the laboratory on receipt of samples and discrepancies are corrected via telephone link up with laboratory and project geologist.
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> Sampling techniques and data site audit occurred in October 2012. No information regarding previous audits was available.

Section 2: Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	<ul style="list-style-type: none"> The NE Mango 2 prospecting licence (PL099/2005) falls within a group of seven prospecting licences located in Ngamiland district, all of which expired September 2012. The license for the area that covers the NE Mango 2 Prospect has currently been extended by the Botswana Department of Minerals, Energy and Water Resources whilst the renewal application is being considered. No third party has access to the area until the application finalised.
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> Since the late 1960s, there have been at least five phases of exploration in the Kalahari Copper Belt prior to the current exploration by Discovery Metals Ltd. Previous owners include: Anglovaal South West Africa and JV partners, DeBeers, Tsumeb Corporation, US Steel Corporation, US Steel Corporation and JV partners Newmont South Africa Ltd and INCO of Canada, Anglo American Prospecting Services (AAPS), Glencore International PLC, Kalahari Gold and Copper (KGC) and JV partner Delta Gold DML exploration data is the only data used in resource estimation.
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> The NE Mango 2 Prospect is located in Ngamiland, within the Ghanzi-Chobe Fold Belt (informally known as the Kalahari Copper Belt) of northwest Botswana. The mineralisation style of the NE Mango 2 Prospect is that of a sediment hosted, stratiform redox copper and silver deposit. Mineralisation is characterised by predominantly chalcopryite with lesser chalcocite, bornite, malachite, pyrite, sphalerite and galena

Criteria	JORC Code explanation	Commentary
Drill hole Information	<ul style="list-style-type: none"> A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	<ul style="list-style-type: none"> A list of drillholes used with relevant information is within Appendix A of the report.
Data aggregation methods	<ul style="list-style-type: none"> In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	<ul style="list-style-type: none"> This section is not relevant as data is composited for Mineral Resource estimation (Section 3).
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known'). 	<ul style="list-style-type: none"> In general, the drilling orientation is at a high angle to the geological structures controlling mineralisation result in limited sampling bias.

Criteria	JORC Code explanation	Commentary
Diagrams	<ul style="list-style-type: none"> Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views. 	<ul style="list-style-type: none"> Images of mineralisation shown in Figure 7-1 and 7-2.
Balanced reporting	<ul style="list-style-type: none"> Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results. 	<ul style="list-style-type: none"> Individual Exploration Results are not being reported so this section is not relevant to Mineral Resource reporting.
Other substantive exploration data	<ul style="list-style-type: none"> Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances. 	<ul style="list-style-type: none"> All available exploration data is included and documented in Mineral Resource reporting.
Further work	<ul style="list-style-type: none"> The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	<ul style="list-style-type: none"> Details of planned further work were unknown at the time of the Mineral Resource reporting.

Section 3: Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	<ul style="list-style-type: none"> Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. Data validation procedures used. 	<ul style="list-style-type: none"> DML were migrating their drilling database from Microsoft (MS) Access to an acQuire software system during October 2012. Once the database migration is completed Xstract recommends a database validation be undertaken. Senior geologists have been validating anomalous database records against logging and assay submission as part of a database migration Data storage and validation protocols were not in place due to the change to a new system
Site visits	<ul style="list-style-type: none"> Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case. 	<ul style="list-style-type: none"> A Competent Person site visit was undertaken by Matthew Readford during October 2012. This included visits to the Zeta mining operation, all Boesto exploration areas and assay laboratories (ALS Chemex laboratory, Johannesburg and Genalysis Intertek, Johannesburg and Perth).

Criteria	JORC Code explanation	Commentary
Geological interpretation	<ul style="list-style-type: none"> Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. Nature of the data used and of any assumptions made. The effect, if any, of alternative interpretations on Mineral Resource estimation. The use of geology in guiding and controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology. 	<ul style="list-style-type: none"> Mineralisation is generally consistent along strike for many kilometres and down-dip below deepest drilling. The mineralisation was interpreted on drill sections by Xstrat for Mineral Resource estimation based on geology logs and copper grades in order to delineate consistent higher-grade areas of the deposit at widths likely to be mined (This equated to approximately four metres or 4 x 1 metre samples downhole based on drillholes dipping at 60 degrees.). In most cases, two to three drill intersections were available to define mineralisation boundaries on any given section. The mineralisation was modelled to a maximum depth of 230 m below the surface topography. The mineralisation must maintain an overall downhole composite that reported a copper grade of greater than 0.3% Cu. Mineralisation outlines were terminated at half the drillhole spacing beyond the last known section of copper mineralisation. Where copper mineralisation appeared to extend past the last downhole intersection on a section, the copper mineralisation was extended for a distance equal to the general down-dip drill spacing. Assay data from within mineralisation wireframes was composited to the mode sample length of 1 m for analysis and estimation. The compositing routine respects the boundaries of the mineralisation domains but also optimises lengths so the majority are as close as possible to 1 m. At this stage of project development the wide-spaced drilling demonstrates reasonable geological continuity of mineralisation along strike and down-dip but variography suggests that grade continuity for copper, silver and sulphur generally needs to be defined by infill drilling. A base of oxidation surface was also interpreted from drill sections and extended laterally beyond the limits of the Mineral Resource model The mineralisation wireframes were constructed from interpretations on 15 east-west drill sections spaced between 200 m and 400 m apart
Dimensions	<ul style="list-style-type: none"> The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource. 	<ul style="list-style-type: none"> The mineralisation wireframes cover a strike distance of approximately 6.6 km and extend to 250 m below surface.

Criteria	JORC Code explanation	Commentary
Estimation and modelling techniques	<ul style="list-style-type: none"> The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used. The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. The assumptions made regarding recovery of by-products. Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation). In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. Any assumptions behind modelling of selective mining units. Any assumptions about correlation between variables. Description of how the geological interpretation was used to control the resource estimates. Discussion of basis for using or not using grade cutting or capping. The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available. 	<ul style="list-style-type: none"> Top cuts (5.5% Cu, 80 g/t Ag and 2.5% S) were applied to the three elements of the data composites to limit the effect of high grade outliers located at depth creating an artificial high grade bias in areas where block grades were extrapolated beyond drilling. Ordinary Kriging interpolation was used to estimate the grades into model blocks of 40 mE by 80 mN by 40mRL in size for copper, silver and sulphur in the mineralised domain. Drill section spacing is 200 m to 400 m apart and between 25m and 80 m down-dip. Whilst there is a correlation between copper, silver and sulphur each element was estimated independently from the same or similar numbers of data Sub-celling was employed to accurately represent model volumes down to 1 mE by 2 mN by 1 mRL. Each sub-cell within the mineralisation outline was assigned the grade values of the parent cell. Software used in resource estimation was CAE Mining, Datamine software. Estimation parameters were optimised based on the drillhole data spacing and the models of grade continuity produced by the variography study. An anisotropic, elliptical search neighbourhood was orientated according to the modelled directions of grade continuity for copper, which generally correlate with the mineralisation strike and dip. Data density is not sufficient to model grade variation across the mineralisation width; geological modelling is currently simulating a mining cut-off envelope. Infill drilling is required to allow for more confident modelling of mineralisation volume and to make it possible to determine grade variation across strike and to a scale indicative of selective mining units along strike and down-dip. Search ranges for all elements were adjusted in order to ensure a reasonable number of samples were included in each block estimate and so data in the dip and across-dip direction was not 'screened out' by the high dimensional ratios between strike and dip directions and the narrow across-dip width of mineralisation. A minimum of 4 and maximum of 24 samples were used in the estimation of block grades. A comparison between the mean grades from the drillhole composite data and the block estimates (on a parent cell basis) was performed to ensure they were similar and the estimate unbiased in a global sense. Local validation of the estimates was performed by visually inspecting the block model in plan sections, long sections and cross sections. The quality of the local estimates was checked by averaging block grades and composite data for copper, silver and sulphur both along strike and down dip.

Criteria	JORC Code explanation	Commentary
Moisture	<ul style="list-style-type: none"> Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content. 	<ul style="list-style-type: none"> Tonnages are estimated on a dry basis.
Cut-off parameters	<ul style="list-style-type: none"> The basis of the adopted cut-off grade(s) or quality parameters applied. 	<ul style="list-style-type: none"> A nominal 0.6% Cu lower cut-off is used for reporting the mineral resource on the basis of what is used for the nearby Zeta open pit mining operation.
Mining factors or assumptions	<ul style="list-style-type: none"> Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made. 	<ul style="list-style-type: none"> Mining studies for the NE Mango 2 Prospect have not been carried out to determine optimal open pit and underground grade cut-offs. The Mineral Resources are considered to be amenable to extraction by open pit mining at this stage and modelling does not extend to sufficient depth to report a section of the Mineral Resource above a higher grade cut-off expected to be relevant to underground mining.
Metallurgical factors or assumptions	<ul style="list-style-type: none"> The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made. 	<ul style="list-style-type: none"> Metallurgical assessment is recommended to confirm the assumptions made in the reporting of Mineral Resources that oxidised copper material is not economical to process. Different trends in NE Mango 2 copper:sulphur ratios indicate that metallurgical assumptions from mining the Zeta pit should be tested for NE Mango 2.

Criteria	JORC Code explanation	Commentary
Environmental factors or assumptions	<ul style="list-style-type: none"> Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made. 	<ul style="list-style-type: none"> No environmental impact study has been completed at this initial stage of Mineral Resource estimation. Current assumptions of similarity to the nearby Zeta NE open pit operations and treatment at the established Boseto Copper concentrator mean there is no apparent material environmental impact on exploitation of this Mineral Resource at this stage.
Bulk density	<ul style="list-style-type: none"> Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit. Discuss assumptions for bulk density estimates used in the evaluation process of the different materials. 	<ul style="list-style-type: none"> Specific gravity measurements were taken from drill core were grouped into oxidation domains defined in the geological model and mean values were used as a dry bulk density factor on this basis. A bulk density factor of 2.58 t/m³ was used for oxidised material due to lack of sufficient sampling. This value was derived from open pit mining of the Zeta deposit.. Estimation of bulk density factors from specific gravity sampling can be improved through more representative sampling of weathered zones and incorporating geological domain interpretations for lithology and weathering.

Criteria	JORC Code explanation	Commentary
Classification	<ul style="list-style-type: none"> The basis for the classification of the Mineral Resources into varying confidence categories. Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). Whether the result appropriately reflects the Competent Person's view of the deposit. 	<ul style="list-style-type: none"> The Mineral Resource has been classified as Inferred due to the current, early stages of project development where data density is typically beyond grade continuity along strike and key areas of spatial location and QAQC require further investigation and issue resolution.
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of Mineral Resource estimates. 	<ul style="list-style-type: none"> Xstract has completed an internal peer review of this estimate and report.
Discussion of relative accuracy/ confidence	<ul style="list-style-type: none"> Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate. The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available. 	<ul style="list-style-type: none"> As this is a 'maiden' Mineral Resource the prospect is in early stages of project development where data density is typically beyond grade continuity. Estimates do not model local grade variability across the mineralisation and only broadly along strike and down dip. Overall estimation accuracy is relatively low compared to projects sampled sufficiently to warrant a detailed mining study. No studies have been undertaken to quantify the accuracy and confidence of the estimate. Metallurgical and mining studies have also not been undertaken to evaluate the which proportion of this Mineral Resource may be economic

Competent Persons statement

The NE Mango 1, NE Mango 2, Zeta NE, Ophion and Selene Mineral Resource estimates and associated Mineral Resource statements have been compiled and prepared by Mr Matthew Readford. Mr Readford is a qualified geologist and a member of the Australasian Institute of Mining and Metallurgy (Membership number 110552) and has sufficient experience to qualify as a Competent Person under the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, 2012 Edition (The JORC Code, 2012 Edition).

Mr Readford is a fulltime employee of Xstract Mining Consultants Pty Ltd (Xstract). Neither Mr Readford nor Xstract have any material interest or entitlement, direct or indirect, in the securities of Discovery Metals Ltd, nor any companies associated with Joint Venture participants. Xstract commenced providing geological services to Discovery Metals Ltd in September 2011. Fees for the preparation of the Mineral Resource reports for the NE Mango 1, NE Mango 2, Zeta NE, Ophion and Selene were on a time and materials basis.

Mr Readford consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.