OZ Minerals Limited

Western Copper
Mineral Resources and
Ore Reserves Statement

As at 3 May 2010

Prominent Hill Western Copper Resource Statement: May 2010

Summary

The Western Copper Mineral Resource, part of the Prominent Hill deposit, sits approximately 900m west of the Prominent Hill open pit.

The Western Copper Mineral Resource as at June 2009 was estimated to be 14.5Mt of copper mineralisation grading 1.69% Cu, 0.28g/t Au and 3.7g/t Ag using a copper cut-off of 0.5%.

As a result of further drilling in the period from July 2009 to April 2010 the Western Copper Mineral Resource is now estimated to be 10.3Mt of copper mineralisation grading 1.84% Cu, 0.3g/t Au and 3.3g/t Ag including 6.3Mt classified as Indicated.

Western Copper Mineral Resource May 2010

Category	Tonnes (Mt)	Cu (%)	Au (g/t)	Ag (g/t)
Indicated	6.3	2.23	0.5	3.3
Inferred	4.0	1.23	0.1	3.2
Total	10.3	1.84	0.3	3.3

Cu Resources reported above 0.5% Cu cut-off

The June 2009 Western Copper Resource was wholly classified as Inferred while 61% of the current resource is now classified as Indicated. The total resource has decreased by 4.2Mt due to a more constrained model of mineralisation based on a significant increase in understanding of the Western Copper deposit since the previous Resource Estimate. Knowledge has been attained by an extensive drilling program followed by geochemical and structural analysis of the drill core.

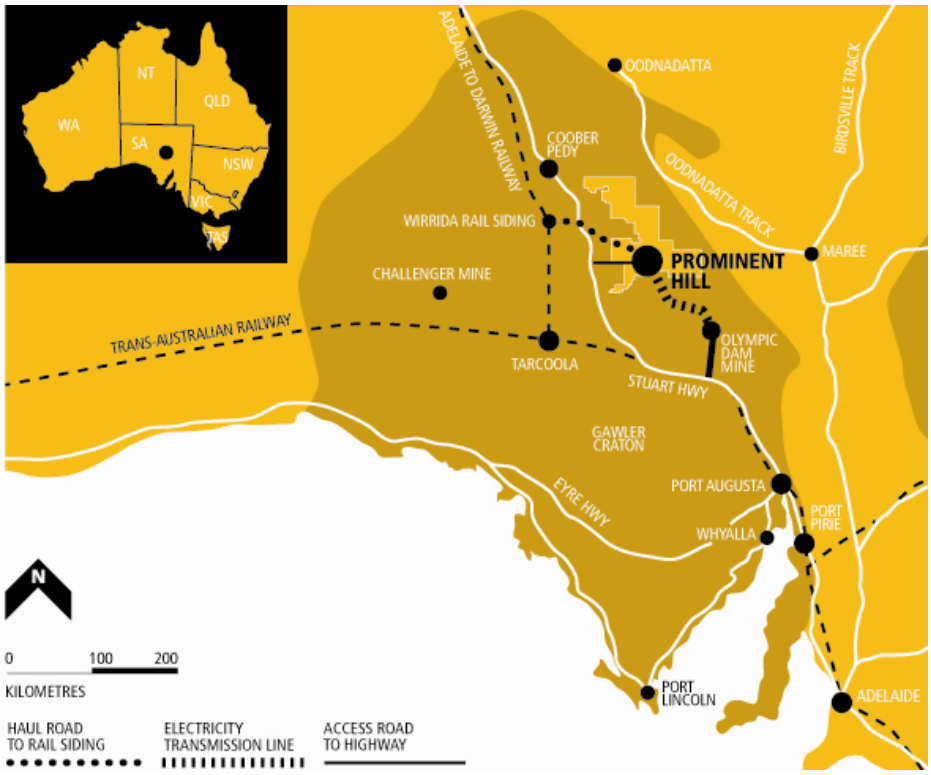


Figure 1 Prominent Hill Project Area, South Australia.

Setting

The Prominent Hill iron-oxide copper gold (IOCG) deposit is located in the Mount Woods Inlier, in the north-eastern portion of the Archaean to Mesoproterozoic Gawler Craton, South Australia (Figure 1). The Gawler Craton of approximately 600,000 km^2 hosts the Olympic Dam, Prominent Hill, Moonta and a number of other smaller and sub-economic copper-gold deposits (e.g. Acropolis, Wirrda Well). Outcrop is sparse and most of the current understanding of the geology of the Gawler Craton is derived from exploration drilling and geophysical datasets. Most of these deposits are genetically related to the Gawler Range Volcanic (GRV) – Hiltaba magmatic event which affected the central and eastern portions of the Gawler Craton around 1600-1580Ma.

Copper-gold-silver mineralisation at Prominent Hill is hosted within hematitic breccias of sandstone, shale, and dolomite which have undergone extensive near-surface sericite alteration and silica hydrothermal overprinting (hydrolytic alteration). The Western Copper mineralisation lies approximately 1.5 km west from the centre of the current Prominent Hill pit (Figure 2).

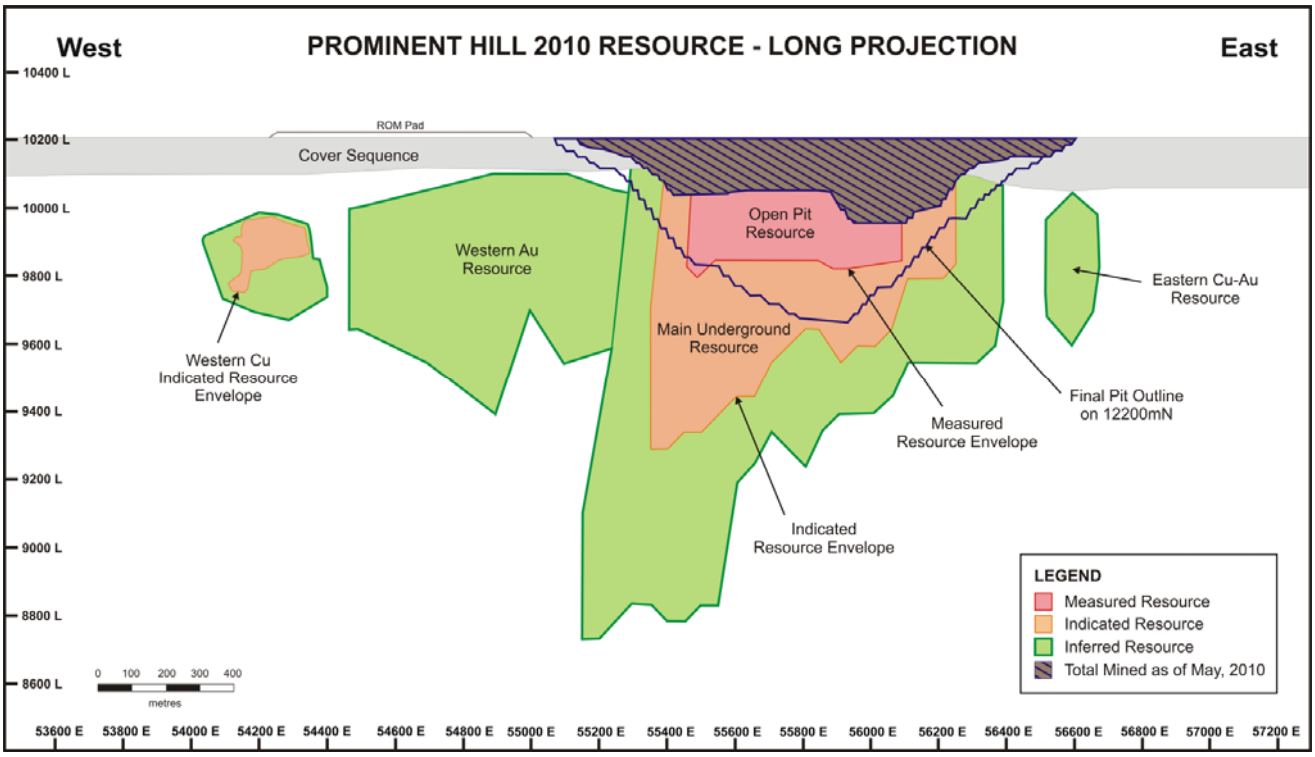


Figure 2. **Long projection of Prominent Hill showing the outline of the 2009 main Prominent Hill Mineral Resource and the 2010 Western Copper Mineral Resource.**

Assessment and Reporting Criteria

The following table provides a summary of important criteria related to the assessment and reporting of the Western Copper Mineral Resource.

Criteria	Status
Western Copper - Sampling Techniques and Data	
Drilling techniques	• Diamond (NQ2) standard tube drilling and reverse circulation (RC) was used for geological interpretation. Western Copper mineralisation is entirely drilled by diamond (NQ2) drilling.
Drill sample recovery	• Core recovery was good with an average of over 98% recovered.
Logging	• Core was logged into the GBIS™ logging system. • Core was photographed prior to geological logging. • All core is stored at the Prominent Hill core shed.
Sub-sampling techniques and sample preparation	• Core is orientated along the bottom of hole and then half-core samples are taken using a diamond core saw • Nominal sample length is 1m. • Sample interval density was measured on the entire sampled interval using "Archimedes Principle". • Samples were dried, crushed and pulverised to a nominal 90% passing -75 microns.
Quality of assay data and laboratory tests	• Cu grades were determined by modified aqua-regia/perchloric acid digest ICPOES determination (AMDEL Adelaide ore-grade Cu method). • Au grades were determined by 40g Fire Assay AAS (at AMDEL Adelaide). • Assay data quality was determined through submission of field and laboratory standards, blanks and repeats which were inserted at a nominal rate of 1 each per 25 drill samples.
Verification of sampling and assaying	• No umpire laboratory checks were conducted for the Western Copper Resource. However, umpire laboratory checks were completed during the Bankable Feasibility Study (BFS) and no issues were identified in the current assaying method that would prevent the unreserved classification of the Cu and Au Mineral Resources. • Three pairs of twinned holes were drilled at Prominent Hill and their results are detailed in the BFS. No twinned holes have been drilled in the Western Copper Resource.
Location of Data points	• All survey data is stored in a GBIS™ database. • All diamond drillhole collars were surveyed using RTK GPS. • All drillholes have magnetic downhole surveys taken at 30m intervals using either a single or multi-shot down-hole camera. An azimuth adjustment of +6.3^{o} degrees was applied for the conversion to local mine grid for all magnetic surveys. • In addition to the magnetic downhole surveys, all drillholes post Oct 2007 were surveyed using a North Seeking Gyro (NSG) or a Humphries Gyro.
Data spacing and distribution	• Drilling has been completed on nominal north-south 50m sections and in-filled to 25m sections in the main mineralised zone. • 11 holes have been drilled from west to east on 25m spacing. • A total of 55 holes directly intersected the modelled Mineral Resource volume. 130 holes in total were drilled in the Western Copper area, of which 107 were submitted for laboratory analysis.

	• The majority of drilling was angled at approximately 60 degrees to the south, whilst the series of 11 west to east holes were angled at approximately 58 degrees to the east. • Drilling is concentrated between 53700mE to 54500mE, 11500mN to 12200mN, and 10210mRL and 9600mRL.
Orientation of data in relation to geological structure	• The majority of drilling has been completed on nominal north-south sections which intersect the main strike of the orebody. • The north-south trending domain of the mineralisation is intersected by the east-west drilling. • The intersection angle is between 60 and 90 degrees through the haematite breccia bodies.
Estimating and Reporting of Western Copper Mineral Resources	
Database integrity	• The Prominent Hill database is a SQL system. • Data is logged directly into the database utilising wireless transfer protocols on 'Toughbook' Portable computers. • Validation checks are written into the SQL database and these are activated via database and user triggers to ensure the data is correct with respect to fundamental quality issues.
Geological interpretation	• The mineralisation at Prominent Hill forms part of a large regional alteration system. Interpretation and geochronological analysis of drill samples from Prominent Hill and surrounding prospects suggests a genesis related to the Gawler Range Volcanic / Hiltaba volcano-plutonic event (ca. 1585Ma). • The Cover Sequence is approximately 110m thick and comprises a flat-lying sequence of shales, clays and minor sandy layers. Mineralisation at Prominent Hill, including Western Copper, is hosted in the underlying basement rocks. • Copper-gold mineralisation is hosted by haematite-matrix breccias, which have undergone extensive sericite alteration and silica hydrothermal overprinting (hydrolytic alteration). • The local basement geology at Western Copper is complex, and comprises the following six lithofacies described from oldest to youngest: 1. Volcano-sedimentary package, consisting of sandstones, greywackes and volcanics. This unit is highly altered, deformed, and often fractured. 2. Breccia zone consisting of well developed to poorly developed monomictic and polymictic hematite breccia (HMBX), both mineralised and non-mineralised. This unit contains the major copper-gold mineralisation. Zones of competent sandstone/siltstone as well as volcanics are present as pods within the breccia. 3. Dolomite, forms a wedge adjacent to the graphitic rock. The dolomite commonly occurs interbedded with sandstone and both are variably silicified. 4. "Graphitic rock", is fine-grained, graphite altered carbonaceous rock. This unit hosts high grade Chalcocite Bornite (CCBN) mineralisation and forms the western most limit of mineralisation. This unit occurs in a major north-south, steeply dipping structure. 5. Lower volcanic units comprising a distinct zonation of felsic to mafic volcanics. Variable alteration from sericite/chlorite with or without earthy hematite alteration to 'Red Rock' hematite dusting alteration. Lower grade copper mineralisation is present in the upper units of these rocks. 6. Lower conglomerate unit, which is the youngest stratigraphic unit, and is the deepest downhole lithofacies intersected.

Western Copper Dimensions	• The breccia hosted mineralisation zones within Western Copper generally strikes east-west however becomes north-south striking in the west due to a major structural displacement. This structure hosts a graphitic mineralised body, striking north-south, and is steeply dipping. • The main mineralised body is variously dipping due to its complex shape. The strike extent of known mineralisation is approximately 300 m east-west and north-south and extends from approximately 235–500 m below surface. Mineralisation remains open along strike to the east.
Estimation and Modelling Techniques	• The cut-off date for inclusion of drillhole data in the resource modelling was 22 April 2010. • Polygons were created based on geological interpretation and copper grade on various width sections depending on drill spacing. • Major geological domains were interpreted using structural analysis and lithological logging with the assistance of geochemical data. • A low grade copper shell was created based on a cut –off of 0.3% Cu. • A higher grade copper shell was constructed, based on a 1.0% Cu cut-off, to domain a continuous high grade core of the mineralised breccia. • Copper mineralisation domains within the lower volcanic were constructed using a 0.3% Cu cut off. • The block model was constructed with parent blocks of 12mE by 12mN by 6mRL., with subcelling permitted down to 3mN by 3mE by 2mRL • Variography was applied to the composite database to determine search ellipse size and orientations. • Ordinary kriging (OK) was used to estimate Cu, Au, Ag, U, Fe, Ba, S, Si and F grades separately. • Variography from the 761 mineralised domains in Area 1 and Area 2 (west and east of 54200mE respectively) was applied to the 760-762 domains in the respective Areas. • Up to three estimation passes with increasing search neighbourhood size were run for all domains. • Octant based searches were used to limit the effect of sample clustering. • Sub cells were assigned parent cell grades. • 1m assay composites were used. • Estimation applied composite length weighting. • Log probability plots were used to determine top cut values • Inverse distance squared was used as the estimation method for all Inferred domains.
Quantitative Kriging Neighbourhood Analysis (QKNA)	• A quantitative kriging neighbourhood analysis was undertaken to assess the most appropriate combination of variables and parameters for the main Western Copper domains. • Domains that constitute the Indicated Resource used search ellipses that are: (Pass 1 – 75m by 55m by 30m, Pass 2- 110m by 80m by 40m, Pass 3 – 150m by 110m by 55m). A minimum of 4 and maximum of 48 composites were used per estimate.
Moisture	• Tonnes have been calculated on a dry basis.
Cut-off parameters	• Copper Mineral Resources have been reported above a 0.5% Cu block grade cut-off.

	• Gold and Silver Mineral Resources have been reported within the Copper Resource using the copper grade cut-off.
Mining factors or assumptions	• Underground mining studies are being undertaken on the Western Copper Resource.
Metallurgical factors or assumptions	• Copper mineralisation of Western Copper is predominately a chalcocite-bornite assemblage. • Metallurgical characteristics of the Western Copper Resource are considered to be comparable with areas studied within the main Prominent Hill orebody as part of the BFS.
Bulk density	• All sampled core has been measured for density. • The method used the entire air-dried core sample weighed in air and water, which was used to estimate the density (Archimedes Principle). • Regression analysis of iron assays vs. density was applied to estimate the density of blocks based on the ordinary kriged iron value. Where blocks were not estimated for iron, the average drillhole density for the domain was assigned.
Audits or Reviews	• An audit and review of the current sampling techniques has been undertaken for Prominent Hill during the BFS. • An external and independent review of the current Western Copper Resource estimate has been undertaken by AMC Consultants Pty Ltd.

Competent Person Statement

This Mineral Resource Statement has been compiled in the accordance with the guidelines defined in the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code, 2004 Edition).

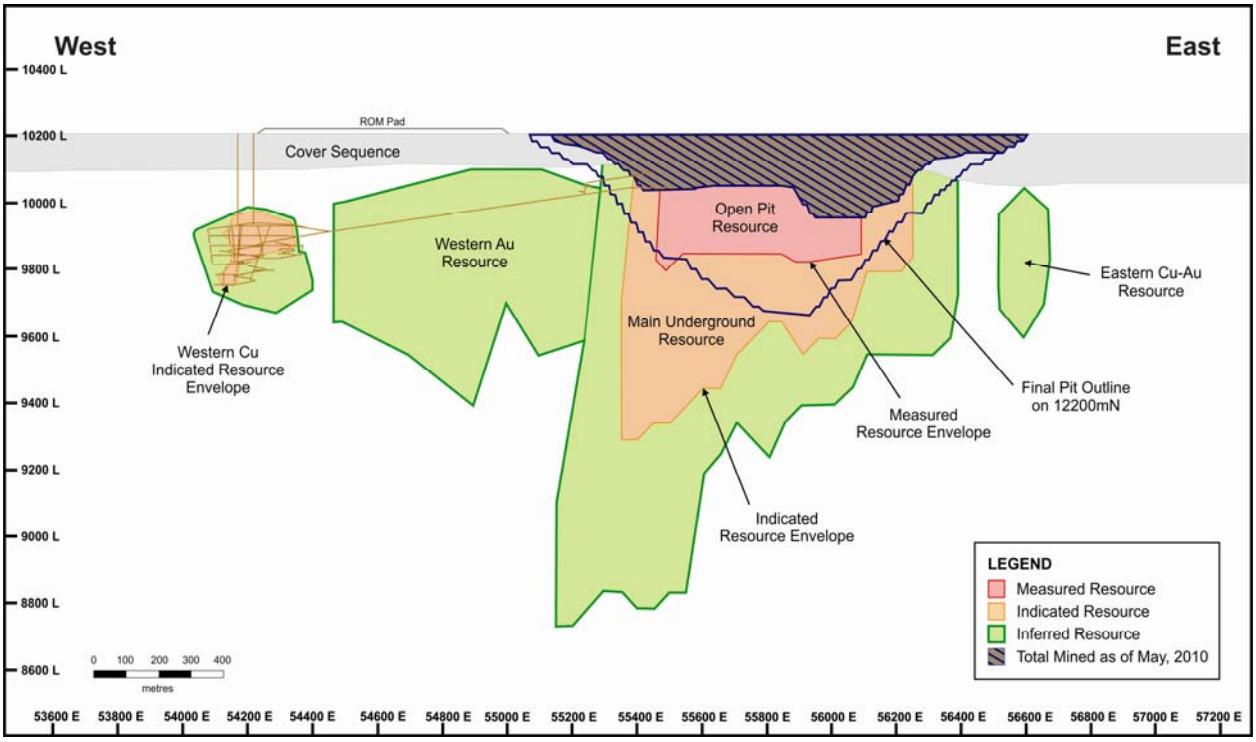
The information in this report that relates to Mineral Resources is based on information compiled by Mark Burdett under the guidance of Sharron Sylvester. Mark Burdett is a full time employee of OZ Minerals Limited and Sharron Sylvester is a full time employee of AMC Consultants Pty Ltd. The Competent Person for the Mineral Resource Estimate is Sharron Sylvester.

Sharron Sylvester is a Member of the Australian Institute of Geoscientists and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration. Sharron Sylvester consents to the inclusion in the report of the matters based on her information in the form and context in which it appears.

PROMINENT HILL WESTERN COPPER ORE RESERVES STATEMENT: MAY 2010

Introduction

The Western Copper Ore Reserves are derived from the copper-gold Mineral Resources for the Western Copper deposit, situated approximately 900m from the existing Prominent Hill open pit located 150km south-east of Coober Pedy, South Australia. This Ore Reserves Statement is the initial estimate for the Western Copper deposit.



The Western Copper Reserves and Resources are based on the geological block model[1] finalised in May 2010. The geological model is limited to the Resources specific to the Western Copper deposit and extends 500m along strike, and covers the 400-500m width of the mineralised horizons to a depth of 670m.

Results

The Ore Reserves summarised in Table 1 are reported within the current stope and development designs completed for the Western Copper Feasibility Study.

Table 1. Western Copper Ore Reserve, May 2010

Classification	Tonnes (Mt)	Cu (%)	Cu (kt)	Au (g/t)	Au (koz)	Ag (g/t)	Ag (koz)
Probable	4.5	2.53	115	0.49	71	3.78	553
Total	**4.5**	**2.53**	**115**	**0.49**	**71**	**3.78**	**553**

[1] Vulcan™ file - PH_Cu_2010b.bmf

Compliance with the JORC code assessment criteria

This Ore Reserve statement has been compiled in accordance with the guidelines defined in the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code, 2004 Edition).

The information in this report that relates to Ore Reserves is based on information compiled by Ben Wilson, a Member of the Australasian Institute of Mining and Metallurgy and an employee of OZ Minerals Ltd. He has sufficient experience relevant to the style of mineralisation and type of deposit under consideration to qualify as Competent Person as defined in the 2004 Edition of the JORC Code. Ben Wilson consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Ben Wilson
Senior Mining Engineer
OZ Minerals Limited

Key points relating to the Prominent Hill June 2009 Ore Reserves Estimate

1. Metal Prices.

The Ore Reserve estimate uses US$2.25/lb (US$4960/t) for copper, US$810/oz for gold and US$12.50/oz for silver using an exchange rate of A$1.00 = US$0.80.

2. Classification.

The Ore Reserve Estimate is based on the Mineral Resource contained within the designed stopes and development classified as "Indicated" after consideration of all mining, metallurgical, social, environmental and financial aspects of the project. All Probable Ore Reserves were derived from the Indicated Mineral Resources.

3. Resource Estimate.

The Western Copper Mineral Resource Estimate was compiled by Mark Burdett under the guidance of Sharron Sylvester. Mark Burdett is a full time employee of OZ Minerals Limited and Sharron Sylvester is a full time employee of AMC Consultants Pty Ltd. The Competent Person for the Mineral Resource Estimate is Sharron Sylvester.

Sharron Sylvester is a Member of the Australian Institute of Geoscientists and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration. Sharron Sylvester consents to the inclusion in the report of the matters based on her information in the form and context in which it appears.

The Resource Estimate classification was based on data density, data quality, confidence in the geological interpretation and confidence in the estimation method. Indicated Resources have a nominal drill-hole spacing of 25m by 25m in the most complex zones and up to 50m by 50m. Inferred Resources have an average spacing of 50m by 50m depending on geological complexity.

The Resource model is based on the geological database (SQL system) as at 22 April, 2010 and the geological interpretation and grade estimation were undertaken using Vulcan™ software. Sample data was composited to 1m intervals to reflect the original sample length and flagged by the domains defined in the geological interpretation. Internal dilution is rare within all mineralisation shapes. Ordinary Kriging was used to estimate all blocks that make up the Indicated Resource and Inverse Distance squared (ID2) was used as the estimation technique when flagged data was too sparse in the peripheral mineralised zones. Due to the change in strike direction several domains where divided into north-south and east-west sub-domains to reflect the observed spatial variability. QKNA analysis was undertaken to assess the most appropriate combination of estimation variables.

Bulk density values were assigned to each block within each domain using a polynomial regression based on iron assay data and bulk density measurements undertaken on all sampled core.

The strike extent of the main mineralised zones is approximately 300m east-west and north-south and extends to approximately 500m below surface. Mineralisation remains open along strike to the east.

4. Cut-off Grade.

The cut-off grade used for the Ore Reserve Estimate is the marginal mining grade taking into account mining recovery and dilution, metallurgical recovery, proportional site costs, concentrate transport costs, concentrate treatment and refinery charges, and royalties. Expressed as Nett Smelter Return (NSR) or mine gate value, the cut-off grade used for the Ore Reserve Estimate is $55.00/t.

5. Mining Factors and Assumptions.

The Ore Reserve Estimate is based on conventional underground sub-level open stoping (SLOS) operations using a cemented tailing fill to increase recovery and haulage with conventional underground trucks. Mining recovery has been estimated to be 96% and dilution parameters used in the estimate are summarised in Table 2.

	Tonnes (%)	Cu (%)	Au (g/t)	Ag (g/t)
Dilution	**9**	**0.39**	**0.12**	**0.97**

6. Metallurgical Factors and Assumptions.

The Ore Reserve Estimate is based on treating the Western Copper ore through the existing process plant in production at Prominent Hill. The test work and mineralogy confirmed that the WC Resource has similar characteristics to those exhibited by the open pit ores. Metallurgical recoveries are based on the WCFS test work assuming that the WC ore will be treated concurrently with open pit ore. The copper recovery for the WC ore is 88%, and the gold recovery is 70%.

7. Marketing Terms.

The Ore Reserve Estimate uses OZ Minerals forecasts for overland, port and sea transport, smelter deductions, and treatment and refining charges and royalties. Penalties for contaminant elements are also accounted for. The smelter charges used in the estimate are US$75/t of concentrate. The refining charges used in the estimate are US$0.075/lb of copper and US$4.50/ounce of gold.