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The Company Announcements Office

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Update of Gold and Silver Resource Tunkillia, Gawler Craton, SA

Minotaur Exploration (**ASX:MEP**) is pleased to announce a new resource estimation for the 223 Deposit at Tunkillia on the central Gawler Craton of South Australia. Gold and silver mineralisation at the 223 Deposit occurs in steeply-dipping quartz-sulphide shear-hosted veins in fresh bedrock whilst gold also occurs as a tabular, flat-lying oxide zone within highly weathered bedrock. The mineralised envelope extends for approximately 3.5 kilometres by 200 metres and extends to a depth of at least 300 metres from surface.

The Tunkillia Project is a Joint Venture between Minotaur Exploration and Helix Resources Ltd (**ASX:HLX**). The update of the resource has been solely undertaken by Minotaur Exploration and is yet to be reviewed in complete detail by Helix Resources Ltd.

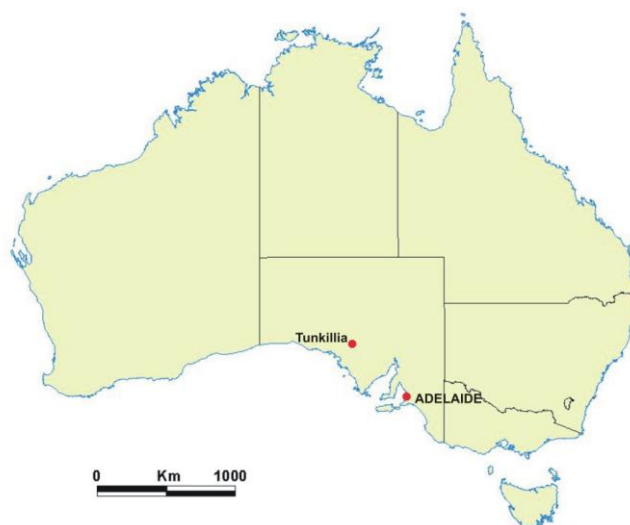


Figure 1: Location of the Tunkillia Prospect

A previous resource assessment undertaken in 2007 (ASX Announcement 25th May 2007) is superseded by this revision, which includes further RC and Diamond drilling undertaken in late 2008 followed by a complete re-interpretation of the deposit and a better understanding of the mineralization and structural controls.

The current (2009) estimation for the Tunkillia 223 Deposit is a gold inventory of 803,000 ounces comprising:

- **An oxide gold resource of 6.3 million tonnes at 1.1 g/t Au for 224,000 ounces (0.5 g/t cutoff), and**
- **A primary gold resource of 9.3 million tonnes at 1.9 g/t Au for 579,000 ounces (1.0 g/t cutoff), and includes:**
- **A primary silver resource of 9.3 million tonnes at 5.5 g/t Ag for 1,658,000 ounces (within the gold resource blocks)**

The current estimation confirms a robust resource at the 223 Deposit of 803,000 ounces of gold with the Measured and Indicated primary gold resource categories increased by 27% (see table below).

Despite significant changes to the mineralisation model and estimation parameters, there is little significant difference when comparing the total in-situ resource of the current revision with the previous model. This is considered a reflection of the robustness of the resource estimate.

The 2007 resource statement estimated an oxide gold resource of 230,000 ounces (0.5 g/t cutoff) and a primary gold resource of 570,000 ounces (1.0 g/t cutoff), to a depth of 200 metres below ground level. The previous model used inverse-distance estimation with a weighting power of 1 and no top-cutting. The current resource extends below 200 metres in places where drilling is sufficient to confidently extend the primary loads. The general interpretation of the 223 Deposit has remained consistent with the previous model, although there have been considerable changes on an individual lens scale. The information collected from the recent drilling program together with a review of all historical data has added confidence to the geological interpretation especially regarding the continuity of the steeply-dipping primary mineralised lenses.



The total **oxide gold** resource at a 0.5 g/t Au cutoff is (2007 figures in brackets):

JORC Category	Million tonnes	Grade g/t Au	Ounces
Measured	1.5 (1.2)	1.6 (1.8)	75,000 (66,000)
Indicated	2.0 (2.0)	1.2 (1.3)	75,000 (86,000)
Inferred	2.8 (2.5)	0.8 (1.0)	74,000 (77,000)
TOTAL	6.3 (5.7)	1.1 (1.3)	224,000 (230,000)

The total **primary gold** resource at a 1.0 g/t Au cutoff is:

JORC Category	Million tonnes	Grade g/t Au	Ounces
Measured	0.8 (-)	2.2 (-)	59,000 (-)
Indicated	4.5 (4.2)	2.0 (2.0)	284,000 (270,000)
Inferred	3.9 (4.4)	1.9 (2.1)	236,000 (300,000)
TOTAL	9.3 (8.6)	1.9 (2.1)	579,000 (570,000)

The total **primary silver** resource (within the 1.0 g/t Au gold blocks) is:

JORC Category	Million tonnes	Grade g/t Au	Ounces
Measured	0.8 (-)	7.4 (-)	200,000 (-)
Indicated	4.5 (4.2)	5.5 (5.7)	803,000 (770,000)
Inferred	3.9 (4.4)	5.2 (5.7)	655,000 (810,000)
TOTAL	9.3 (8.6)	5.5 (5.7)	1,658,000 (1,600,000)

Assessment and Reporting Criteria

The following table provides a summary of important criteria related to the interpretation, estimation and reporting of the new gold resource at the Tunkillia 223 Deposit. All reported coordinates refer to a local grid.

Criteria	Status
Data and Sampling Techniques	
2008 drilling	29 RC and 4 RC/diamond holes were drilled, totalling 2262 metres of RC and 332 metres of NQ core
All pre-2008 drilling from 1996	118 Slimline RC holes totalling 7339 metres (oxide zone only) 322 RC holes totalling 55,488 metres 23 RC/diamond holes totalling 5828 metres
Drilling techniques	- Slimline RC drilling used a face-sampling hammer bit with a diameter of approximately 90mm - All other RC holes were drilled using a "standard size" hammer (ranging from 120mm–136mm) - All diamond holes were pre-drilled to fresh rock using a RC pre-collar
Sampling techniques	- For all RC, Slimline RC and RC pre-collars, samples were taken from each metre and representative chip samples placed in chip trays - For 183 early RC Holes (1996–1997), the 1 metre samples were collected through a cyclone and collected in poly bags. Samples were initially taken as 4 metre spear composites and then re-assayed at 1 metre intervals if the initial sample returned a "positive" result. Any 4 metre spear composites that remained in the database were not used in the estimation due to reliability concerns - RC holes drilled post-1997 were sampled through an on-rig splitter system

	The majority of core samples were taken as 1 metre lengths and half-cored
Recoveries	- No recoveries have been recorded from RC drilling - Recoveries of 100% have been recorded from diamond drilling
Logging	- RC chips and diamond core have been logged by experienced geologist as a hard copy and then data-entered into an Access database - All diamond core has been photographed - A majority of the core is stored on site
Location of Collars	422 out of a total of 496 collars have been located using DGPS - Earlier collars were located by measuring off a local grid system and have been deemed "reasonably accurate"
Down-hole surveys	347 holes were surveyed using a down-hole survey instrument - All of the remaining holes were not surveyed, all but 4 were reasonably shallow and vertical RC holes
Quality of assay data and laboratory tests	- Pre-2003 samples were sent Analabs for analysis. - Post 2003 samples were sent to Genalysis Laboratory for assay - Gold values were determined by aqua regia digest (B/ETA or B/SAAS) and any values returning >1 ppm were repeated using fire assay (FA25/AAS). If a fire assay was taken then this became the "official" assay. All other elements were determined using multi-acid digest (AT/OES)
Verification of sampling and assaying	- Early holes, pre-1998, have no recorded QAQC samples - Blanks, standards and duplicates have been submitted throughout the drilling campaigns since 1998 with no major concerns highlighted - No twins have been drilled into the deposit.
Drill hole spacing	- Drilling used in the resource estimate extended from 109980N to 113810N and 109475E to 110345E. - Sections are orientated E-W, perpendicular to the main mineralised lenses - Sections are on a 25 metre spacing from 111250N to 111850N - Sections are on a 50 metre spacing from 110600N to 112500N (excluding the 25 metre sections 111250N to 111850N) - Sections from 110300N to 110600N are on a 100 metre and 200 metre spacing - Sections from 112500N to 113800N are on spacings that range from 100 metres to 300 metres and include only inferred or an unclassified resource - On section drill spacing generally ranges from 25 metres to 50 metres - The majority of holes defining the flat lying oxide resource are drilled vertical - The majority of holes used to define the steeply west dipping primary mineralisation are drilled towards the east at -60 degrees - Earlier holes were drilled oblique to the strike of mineralisation with the majority of drilling on section and perpendicular to strike - The resource has been drilled to a maximum depth of 360 metres below surface and is not closed off down dip
Estimating and Reporting of Mineral Resources	
Database integrity	- All relevant data were entered into an Access database where various validation checks were performed - Examination of the database has not revealed any issues of concern that could significantly affect the resource estimation - Data were entered into the modelling software (Vulcan) from the database via csv files
Geological interpretation	- The Tunkillia 223 Deposit is characterised by several different mineralisation styles dependent on the host rock and intensity of alteration - Primary gold mineralisation is hosted in narrow, steeply west-dipping quartz veins associated with sulphides within approximately parallel zones concordant with the main shear direction. These zones have been described as Footwall Lodes (FW), Phyllitic Shear Zone Lodes (PUS), Hangingwall Lodes (HW) and Fuzzy Granitoid Lodes (FUG) - A zone of flat-lying supergene mineralisation (OX) has been developed between the base of partial oxidation (BOPO) and base of complete oxidation (BOCO)
Estimation and modelling techniques	- Polygons and hence triangulations are based on interpretations completed on sections - Structural data from core logging was used to verify ore orientations - Triangulations constructed include: primary lodes, mineralised oxide zone, mafic dykes, dacite dykes, BOPO and BOCO - A reasonable amount of internal dilution was included in the oxide triangulation to keep consistency within the constructed mineralisation shapes - The mafic dyke has a higher priority in the primary zone where it is interpreted to be un-mineralised

	• The mineralised oxide zone has a higher priority than the mafic dyke as there is evidence of pervasive mineralisation of the mafic dyke above the BOPO • Geostatistics were performed for gold on a flagged (by individual mineralised lens ID) composite database to determine the number of geological domains required and it was decided to “group” individual lenses that are contained within each of the basic mineralisation domains (FW, HW, FUG, PUS lodes and the OX zones) resulting in 5 estimation domains • 2 metre assay composites were used • Parent block sizes were 15 metres in the X (east) direction, 25 metres in the Y (north) direction and 15 metres in the Z (RL) direction with sub-blocks of 2.5 metres in X, 5 metres in Y and 1 metre in Z. Sub-blocks were assigned corresponding parent cell grades • An inverse distance estimation with a weighting power of 1 was used for the oxide zone. An inverse distance estimation with a weighting power of 2 was used for the primary lodes • Top cutting determined from log-probability plots were used for all estimations • Up to 4 estimation passes with an increasing search radius were run for all domains. Any blocks not estimated by the final run were flagged as unclassified and were very few • The first and second estimation runs used an octant based search where at least 5 octants had to be estimated • Variography has been attempted previously with little success especially in the primary zone where the mineralisation is constrained by relatively thin modelled hard boundaries • Search ellipses were orientated to follow the trend of the individual domains • Estimation applied composite length weighting
Moisture	• Tonnes have been calculated on a dry basis
Cut-off parameters	• Oxide gold resources have been reported above 0.5 g/t Au block grade cut-off • Primary gold resources have been reported above 1.0 g/t Au block grade cut-off • Primary silver resources have been reported above 1.0 g/t Au block grade cut-off
Bulk density	• A total of 2774 samples of core were used for density measurements • SG calculations were determined using the “Archimedes Principle”
Classification	• Mineral resources have been classified on the basis of geological confidence in the continuity of the mineralisation with drill-hole spacing being the highest contributor to confidence. In general, the measured primary resource contains no more than 25 metre drill spacing while for the oxide zone section spacing could be increased to 50 metres in some instances for a measured classification due to the more continuous mineralisation style
Reviews	• A review of the data integrity and modelling parameters has been conducted by Maptek in Adelaide.

**For further information contact Derek Carter (Managing Director)
or Tony Belperio (Exploration Director)**

The information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Dr A. P. Belperio, who is a full-time employee of the Company and a Fellow of the Australasian Institute of Mining and Metallurgy. Dr A. P. Belperio has a minimum of 5 years experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the “Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves”. Dr A. P. Belperio consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

