

SUMMARY OF GLENCOE GOLD DEPOSIT, N.T.

(Prospectus Presentation)

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Extracted from Australasia Gold Ltd Prospectus dated November 2005, by T.J. Ireland,
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5.4.1

PINE CREEK PROJECT / *Overview continued*

The influence of carbonaceous or ferruginous sediments in controlling sites of gold deposition has been described in parts of the Brocks Creek, Mt Bonnie and Cosmo Howley deposits.

In spite of intensive past exploration focused on well exposed parts of the district, there are still opportunities for virgin discoveries of outcropping mineralisation as indicated by the Company's Rocks Ridge gold prospect which was discovered by visual prospecting. In addition there are large poorly drained areas where prospective host rocks are concealed by a veneer of alluvial and colluvial material which has been a barrier to effective regional exploration. These covered areas have the potential to host large undiscovered mineralised systems.

Australasia's primary target is a Callie style gold deposit where moderate grade gold mineralisation (>5g/t) is associated with quartz veins in fine grained metasediments draped over domal structures in granitic basement. Secondary targets include lower grade "Slate Belt" style deposits similar to Brocks Creek.

5.4.2

Glencoe (MCN 20-MCN 25, MCN 3578, MCN 4248)

Interpretation from aerial photographs of an anticlinal fold between Brocks Creek and Woolwonga led to initial pegging of mineral claims in 1983. Further exploration between 1984 and 1991 defined a gold mineralised vein system over a strike length of 1800 metres.

This report on the prospect has relied upon detailed annual and interim exploration reports. Exploration carried out during this period has included:

- A total of 600 rotary air blast (RAB) drill holes to approximately 6 metres depth were drilled to determine the distribution of arsenic in bedrock as a pathfinder for near-surface gold mineralisation.
- A total of 59 diamond holes for 3,707 metres and 310 reverse circulation percussion (RC) drill holes for 11,240 metres were drilled (*Figure 8*).
- A total of 37 Costeans were completed over mineralised zones for a total of 2,633 metres.
- Metallurgical testing of surficial material as potential heap leach feed.
- Limited metallurgical testing of RC samples of in-situ mineralisation as potential Carbon In Pulp (CIP) feed.
- A geological resource estimate 1.5 MT @1.9 g/t Au, in four discrete zones was reported to Magnum shareholders in 1989. (*Figure 8*)
- Approximately 49,000 tonnes of ore from the four principal mineralised zones was mined under a bulk sampling programme. A recovered grade of 2.02 g/t gold was reported.
- Approximately 20,000 Tonnes of material from the west zone was tribute mined by Territory Goldfields under a joint venture agreement with Magnum. This material was not processed.

Despite encouraging gold recoveries by bulk sampling the deposit was considered by Magnum to be too small to be developed as a stand-alone operation.

5.4.2.1

Geology

Mineralisation occurs in a complex anastomosing quartz vein system associated with shearing in a sequence of interbedded sandstones, siltstones, and mudstones of the Palaeoproterozoic Mount Bonnie Formation (Figures 7-13).

Stratigraphic subdivision of the host sequence is hampered by the lack of clear marker units. The lithological characteristics were interpreted to be consistent with a stratigraphic position in the Mt Bonnie Formation rather than the overlying Burrell Creek Formation because of the relatively higher proportion of carbonaceous and pyritic sediments.

Minor biotite-chlorite rich mafic dykes (lamprophyres) intrude the sediments and may themselves be altered and mineralised.

Drilling and mining activities have confirmed that the host sequence has been folded about an anticline with an axial plane dipping steeply to the south west and a fold axis plunging shallowly towards the south east.

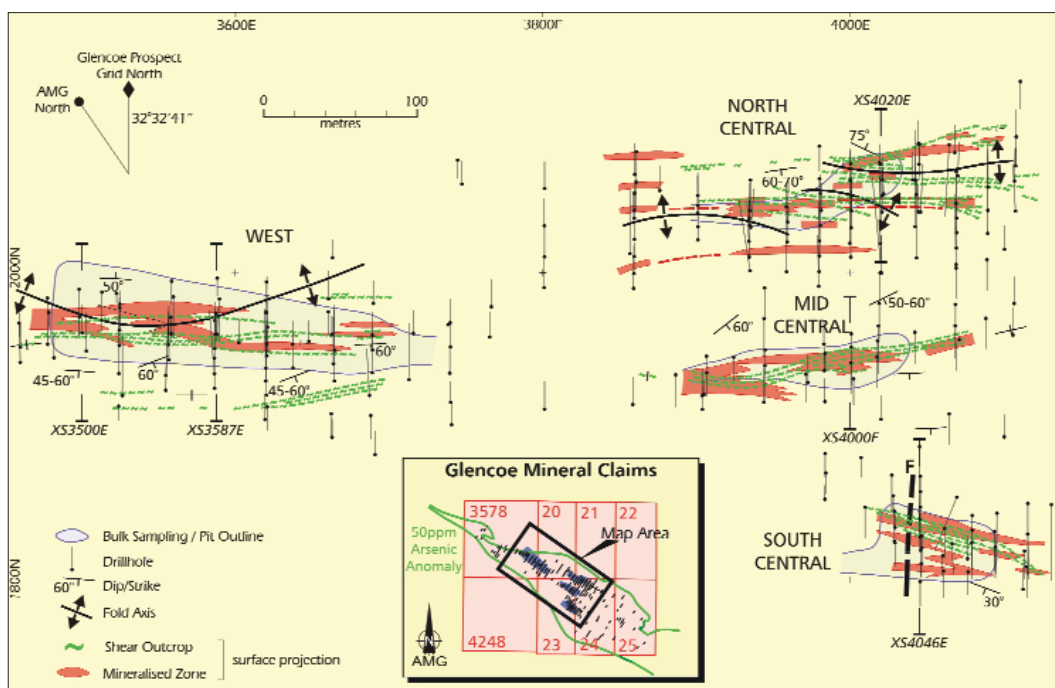


Fig 8: Glencoe Deposit – Simplified surface projection of structure and mineralisation.

PINE CREEK PROJECT / Glencoe (MCN 20-MCN 25, MCN 3578, MCN 4248)

Geology continued

5.4.2.1

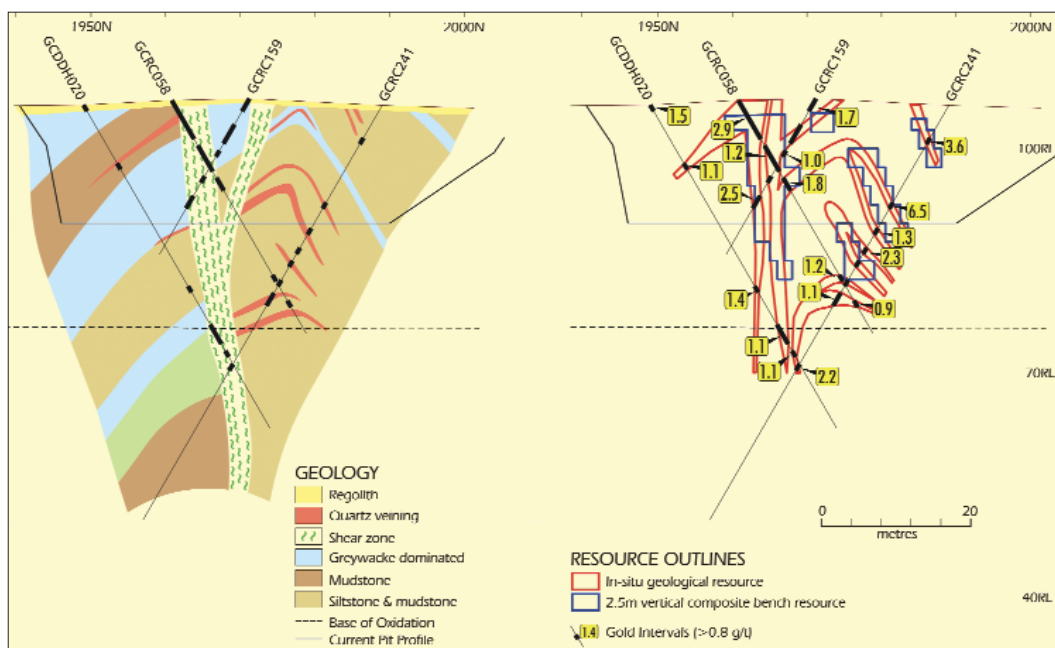


Fig 9: Glencoe Deposit – Cross sections of geology, mineralisation and resource outlines, West Central Zone Traverse 3500E.

5.4.2.2

Mineralisation

Gold mineralisation occurs in quartz veins which range from millimetres to several metres thick. Gold mineralisation is closely associated with development of sulphides principally arsenopyrite, pyrite and trace chalcopyrite. Veins have typically been oxidised to a depth of 30 metres.

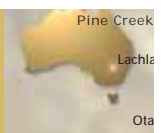
As noted above, gold mineralisation occupies positions close to the anticlinal crest. The major control is by discordant subvertical fracture systems subparallel to axial planar cleavage. Rock type apparently exerts a secondary control with elevated gold grades along favoured strata particularly carbonaceous mudstone and lamprophyre dykes.

A late stage phase of chlorite alteration and brecciation has been recognised. This alteration appears to have remobilised mineralisation and is associated with increased gold grades.

Anomalous levels of arsenic (values from 10ppm to 3000ppm) coincide with gold mineralisation. Bedrock arsenic geochemistry based on RAB drilling was used to outline an irregular corridor which contains the currently known gold resources (*Figure 8*). The 50ppm arsenic contour remains open to the south east.

In the sulphide zone, gold occurs in pyrite and arsenopyrite and as silica enclosed free gold. In the oxide zone gold occurs as free particles in a goethite +/- scorodite matrix.

Better mineralisation was identified in four discrete zones termed the Western, North Central, Mid Central and South Central zones (*Figure 8*). These are separated by narrower and less continuous zones of mineralisation.



5.4.2.3

Poorly consolidated surficial material consisting of regolith and sub outcropping weathered mineralisation contains appreciable but variable gold grades. Much of the surficial material was removed for treatment in the trial mining phase discussed below.

Resource Estimate

In 1989 after completion of exploration drilling, a resource estimate was carried out which took into account in-situ mineralisation in the West, North Central, Mid Central and South Central Zones and low grade auriferous gravels from the four zones.

The resource was estimated using a simple cross sectional method and was approached conservatively because of the complex geometry associated with anastomosing and discontinuous vein mineralisation. Robustness of the resource estimate is dependent on a number of factors of which data quality and the quality of the geological interpretation are particularly important and are discussed below.

Drilling

The drillhole database used in the resource estimate did not include outlying holes.

A total of 288 RC drillholes for a total of 10,570 metres were used in the resource estimate. RCdrilling employed the "crossover" sampling system and as a consequence, sample quality would be lower compared with the modern face sampling system. Many RC drillholes reported poor sample return below the water table because of high water inflows. The problem was rectified in late 1988 and the rig was replaced by a larger drilling rig with a higher volume compressor (*Milligan 2003 pers. comm.*).

Diamond drilling was carried out with HQ triple tube equipment and appropriate drilling fluids to maximise core recovery. All of the 59 holes completed were included in the resource estimate. Diamond core recoveries of 100% were achieved in fresh material although there was appreciable core loss in strongly fractured mineralised zones and in heavily oxidised material.

Two lines of close spaced drilling, each with 11 vertical RC holes at 2.5m centres to depth of 20 metres on sections 3524mE (West Zone) and 3978mE (North Central Zone) were completed as an aid to interpretation and to provide bulk samples for metallurgical testing.

Accurate 3D coordinates of drill hole collar positions were provided by survey controlled photogrammetric contoured base maps at 1:1000 scale which were compiled from specially acquired low level photography. These sheets employ Australian Map Grid and local grid co-ordinate systems (Local grid is offset 34 degrees towards the east from grid north).

Down-hole surveys were carried out on all diamond holes. It is apparent that drill holes did not deviate significantly from set up. Down-hole surveys were not carried out on RC holes but in view of the shallow depth (37.5 metres average) of RC drill holes and the lack of deviation of diamond holes, it is reasonable to assume that deviation of RC drill holes was negligible.

RC drill cuttings were bagged, logged and sampled over 1m intervals while diamond core was sampled to geologically defined boundaries.

PINE CREEK PROJECT / Glencoe (MCN 20-MCN 25, MCN 3578, MCN 4248)

5.4.2.3

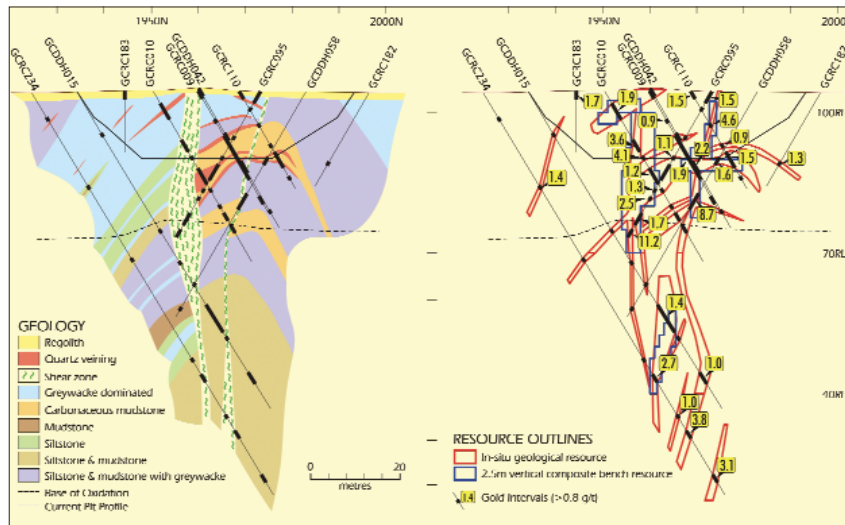
Resource Estimate continued

Fig 10:
Glencoe Deposit –
Cross sections
of geology,
mineralisation and
resource outlines,
West Central Zone
Traverse 3587E.

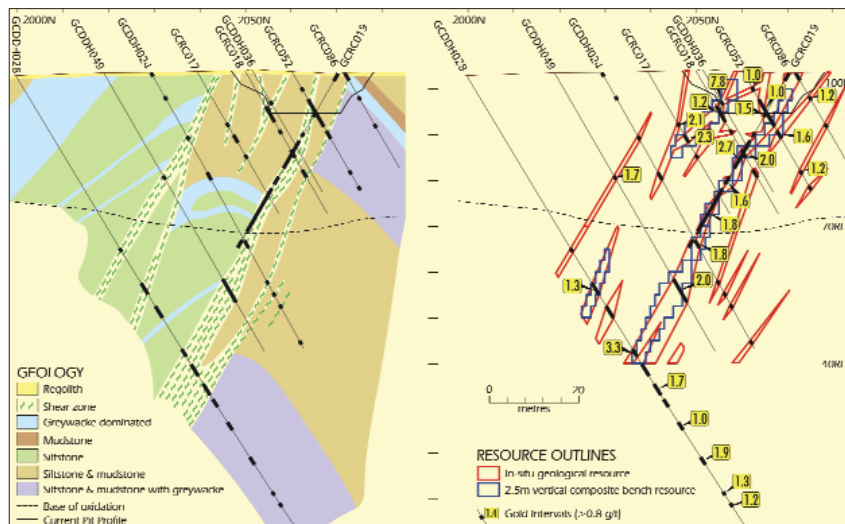


Fig 11:
Glencoe Deposit –
Cross sections
of geology,
mineralisation and
resource outlines,
North Central Zone
Traverse 4020E.

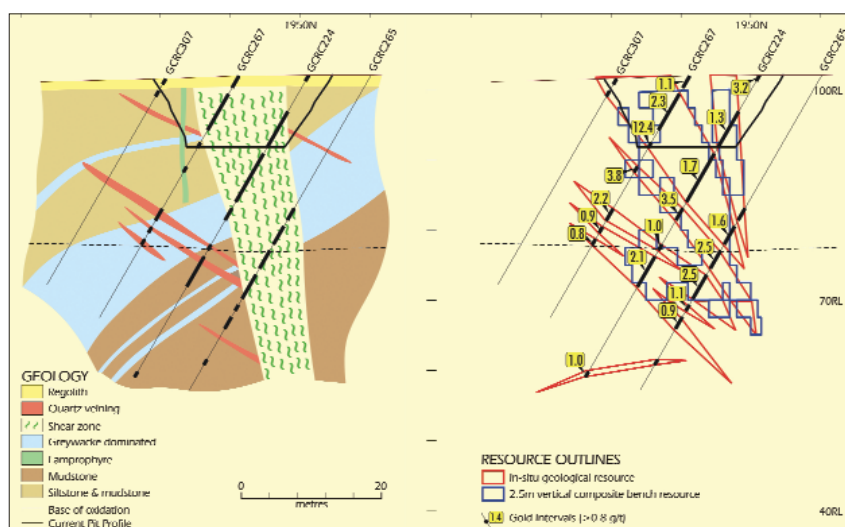


Fig 12:
Glencoe Deposit –
Cross sections
of geology,
mineralisation and
resource outlines,
Mid Central Zone
Traverse 4000E.

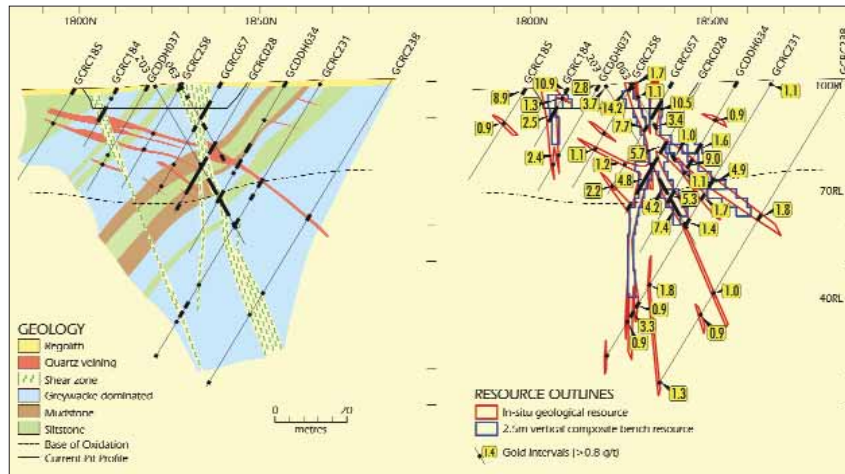


Fig 13:
Glencoe Deposit –
Cross sections
of geology,
mineralisation and
resource outlines,
South Central Zone
Traverse 4046e.

Geological Interpretation

As noted the Glencoe mineralised system exhibits strong structural control whereby quartz veins which are host to mineralisation are located as stockworks in the principal shear system and subsidiary shears and in dilational bedding conformable positions including saddle veins. The lithological control by carbonaceous mudstone and lamprophyre dykes has also been recognised in the resource model.

In detail the distribution of mineralisation is highly complex but broad continuity of the principal mineralised shears within each of the four zones has been reasonably well established (*Figure 7*).

Continuity of the bedding parallel mineralisation is less well established at the current drill spacing and further drilling would be required to tighten this up. The generally easterly plunge of the Glencoe antiform is reflected in the resource outlines. For example, in the western zone, thicker mineralisation occurs at a higher RL at the western end and at successively deeper RL's towards the east.

Coarse gold particles have only rarely been recognised (*l. Milligan pers. comm.*) and most of the gold appears to occur as fine inclusions in sulphides, quartz and in the oxidised zone as fine free gold in a goethitic matrix.

A boundary between oxidised and primary mineralisation was determined to be approximately 30m below surface (RL70). No evidence of supergene enrichment of gold at or about this interface was noted.

Boundaries to mineralisation in the geographical resource reflect the complexity of the mineralisation and have been constructed to take the above geological controls into account.

5.4.2.3

PINE CREEK PROJECT / Glencoe (MCN 20-MCN 25, MCN 3578, MCN 4248)

*Resource Estimate continued***Assays**

A total of 16,000 assays were incorporated into the resource estimate. All assays were by fire assay by Australian Assay Laboratories Pine Creek. Assay protocols at the time included normal use of laboratory repeats and standards (*I. Milligan 2003 pers. comm.*).

A programme of check fire assaying of 303 samples from RC holes GCRC173-GCRC270 was examined. Some significant outliers are evident but in general there is a good correlation between original and duplicate assays.

As noted above, sampling and assay of diamond core was carried out to geological boundaries. This produced resource intercepts between 10 centimetres and 6.9 metres in length. Assays were recomposited to 1 metre downhole length for inclusion into the resource estimate.

Metallurgy

A composite 800 kg costean sample of unconsolidated surface material overlying the West Zone was submitted for a column leach test as potential heap leach feed. Gold recovery of 81.5% was achieved after 49 days based on an estimated head grade of 1.1 g/t. (Much of this surface material was subsequently removed and treated under the bulk sampling programme)

RC cuttings of oxidised in-situ mineralisation from the four main mineralised zones were submitted for metallurgical testing to measure potential gold recovery by the CIP method. Samples were crushed and ground to 80% passing 75 microns and bottle roll tested for 48 hours. Recoveries of 93-97% were achieved as shown in *Table 3*.

Table 3: Glencoe, bottle roll test results on oxide mineralisation.

Sample	Head grade g/t Au	% Extraction
West	4.01	92.6
North Central	3.07	93.6
South Central	2.87	96.8
Mid Central	2.70	95.5

Gold recoveries from small samples of primary mineralisation by the same process were reported to be 66% for the North Central Zone and 89% for the South Central zones. Further testwork on primary mineralisation will be required.

Resource Estimation Procedure

The four main mineralised zones form the bulk of the resource estimate as reported by Magnum (*Magnum Gold NL Annual Report 1989*). Two estimates namely a "Geological Resource" and a "Potentially Ore Grade Resource" were published, each based on cut off and compositing criteria as described below.

- **Geological Resource** – This estimate is based on a cutoff of 0.5 g/t Au, a minimum intercept width of 1 metre and a density of 2.5 g/cc. High grades were cut to 20 g/t Au. This produced a result of 1.5 million tonnes @ 1.9 g/t Au to a vertical depth of 100 metres and includes 668,000 tonnes at 2.04 g/t Au to a vertical depth of 30 metres. Resource categories are presented in *Table 3*.

- **Potentially Ore-Grade Resource** – This estimate was based on a simulated 2.5 metre bench interval, a cutoff grade of 1 g/t Au, and high grades cut to 20 g/t Au. This was published as 550,000 tonnes at 2.3 g/t Au to a vertical depth of 60 metres including a Measured Resource of 300,000 tonnes at 2.57 g/t to 30 metres depth. This was the estimate used as the basis for bulk sampling.

Mineralised outlines were determined on each drilled section based on cut-off criteria and constrained by the geological interpretation. A comparison using selected sections, between the "Geological" and "Potential Ore Grade" resource outlines and the geological interpretation is presented in *Figures 9-13*. Pit outlines from subsequent bulk sampling and tribute mining are also indicated on section.

The computational process behind the resource estimates was validated by an independent specialist as part of this review (*Bampton 2003*).

Removal of parts of this resource by bulk sampling and mining activities is discussed below.

Table 3: Glencoe, In-situ Geological Resource Published by Magnum Gold NL 1989 (based on minimum intercept of 1 metre, cut-off grade of 0.5 g/t, SG of 2.5 and with high values cut to 20 g/t).

RL Interval	Measured	Indicated	Inferred	Total
West				
RL + 70m	148,000 @ 2.13	-	-	148,000 @ 2.13
RL 40-70m	66,000 @ 1.82	19,000 @ 1.50	13,000 @ 1.70	98,000 @ 1.74
RL 0-40m	-	11,000 @ 2.00	65,000 @ 1.70	76,000 @ 1.74
North Central				
RL + 70m	216,000 @ 1.86	-	-	216,000 @ 1.86
RL 40-70m	100,000 @ 1.77	54,000 @ 1.55	9,000 @ 1.70	163,000 @ 1.70
RL 0-40m	-	47,000 @ 1.95	132,000 @ 1.70	179,000 @ 1.77
Mid Central				
RL + 70m	83,000 @ 2.12	-	4,000 @ 2.00	87,000 @ 2.10
RL 40-70m	-	26,000 @ 1.43	43,000 @ 1.50	69,000 @ 1.47
RL 0-40m	-	-	78,000 @ 1.50	78,000 @ 1.50
South Central				
RL + 70m	39,000 @ 3.45	3,000 @ 1.92	-	42,000 @ 3.34
RL 40-70m	22,000 @ 3.08	1,000 @ 0.80	7,000 @ 1.90	30,000 @ 2.73
RL 0-40m	-	6,000 @ 3.11	29,000 @ 2.70	35,000 @ 2.77
Sub-Totals				
RL + 70m	486,000 @ 2.11	3,000 @ 1.92	4,000 @ 2.00	493,000 @ 2.11
RL 40-70m	188,000 @ 1.94	100,000 @ 1.50	72,000 @ 1.60	360,000 @ 1.75
RL 0-40m	-	64,000 @ 2.07	304,000 @ 1.70	368,000 @ 1.80
	674,000 @ 2.06	167,000 @ 1.73	380,000 @ 1.70	1,221,000 @ 1.91
Far West				
RL + 70m	-	15,000 @ 1.80	-	15,000 @ 1.80
RL + 0m	-	-	30,000 @ 1.50	30,000 @ 1.50
East				
RL + 70m	-	10,000 @ 2.00	-	10,000 @ 2.00
RL + 0m	-	-	20,000 @ 2.00	20,000 @ 2.00
Surface Mineralisation				
0-2m	98,000 @ 1.77	25,000 @ 1.77	25,000 @ 1.77	148,000 @ 1.77
Totals	772,000 @ 2.02	217,000 @ 1.75	455,000 @ 1.70	1,444,000 @ 1.88
			SAY 1,500,000 @ 1.9g/t	

NOTE: Surface RL ranges from 98 to 107 metres above sea level, with an average of about 103m over the area containing the defined resources. 70mRL corresponds to an approximate depth of 33 metres, 40mRL corresponds to about 63 metres depth, and 0mRL to some 130m.

PINE CREEK PROJECT / Glencoe (MCN 20-MCN 25, MCN 3578, MCN 4248) *continued*

5.4.2.4

Bulk Sampling/Toll Treatment 1989-1990

A decision was taken by Magnum to undertake a bulk sampling operation to improve confidence and to validate resource estimates and metallurgical recoveries.

In late 1989 a joint venture agreement was reached between Magnum Gold NL and the Tanami Joint Venture (Zapopan, Kumagai Gumi, Kintaro) under which bulk excavation was subsequently carried out by Henry Walker Ltd.

Mining of the four main zones was carried out to a depth of 10-12 metres utilising a drill and blast method with 3m blast holes on 3m centres. Pit outlines are shown in plan and section in *Figures 8-13*.

Grade control for mining was by continuous sampling of dozer rip lines located at 8m spacings across strike. Initially all blast holes were sampled but because of the effectiveness of rip line samples the process was changed to sampling only blast holes which coincided with rip lines.

A cut off grade of 1 g/t was applied and material between 0.5 g/t and 1g/t Au was placed in a low grade stockpile adjacent to the South Central Zone pit.

A total of 49,000 tonnes of ore were mined from four pits between October 1989 and February 1990. Bulk sampling was supervised by a competent "ore spotting" grade control geologist and trucked to the Mt Bonnie mill and CIP plant for gold recovery. A gold silver dore product from Glencoe was refined for a recovered total of 103,000 grams of gold. This equates to a recovered grade of 2.02 g/t Au and an overall gold recovery of 87% from an implied head grade of 2.34 g/t Au.

The 2.5m bench resource estimate, grade control estimates and head grade to the mill are compared in *Table 4* with respect to tonnes and grade. (Asterisks denote information destroyed by fire at Mt Bonnie plant)

It can be seen that tonnes of ore to the mill were significantly higher than the resource estimate for a similar gold head grade, which resulted in a 37% increase in contained gold to the plant. This emphasises the conservative nature of the 2.5m bench estimate and the importance in this style of deposit of visual grade control.

Table 4: Glencoe, Bulk sampling by Tanami JV, Comparison between mill feed, grade control (GC) and the bench resource estimate (BRE).

Pit and Lift RLs	Tonnes			Grade g/t Au			Contained Gold		
	Mill	GC	BRE	Mill	GC	BRE	Mill	GC	BRE
North Central RL103-RL91	*	10561	9000	*	2.14	2.3	*	22640	20700
Mid Central RL102-RL91	7890	9576	6100	2.57	2.38	2.3	20271	22752	14030
South Central RL99.5-RL89.5	*	11801	9200	*	2.53	3.5	*	29902	32200
West RL106-RL96	20673	16998	9700	*	1.98	2.1	*	33611	20370
Totals	48965	48936	34000	2.438	2.23	2.57	119398	109127	87300

**5.4.2.5*****Mining by Territory Goldfields JV 1995***

Negotiation of a royalty agreement with Territory Goldfields, owners of the Cosmo Howley plant culminated in a short-lived mining operation.

Mining consisted of enlarging the bulk sample pit on the West Zone and drilling and blasting to a vertical depth of 7.5 metres below the existing pit floor. An in-pit reserve of 20,326 tonnes at 2.05 g/t was quoted based on an SG of 2.4, a cut off grade of 1 g/t Au and assays cut to 10 g/t Au.

Records supplied to Magnum indicated that the following material had been mined:

- 9765 tonnes @ 1.88 g/t Au (ore stockpile)
- 13495 tonnes @ 0.72 g/t (low grade stockpile)

Magnum has few details about the mining process. Lower than predicted grades are noteworthy perhaps because visual grade control was not carried out.

Mined material was not treated by the JV and remained at grass at cessation of mining in March 1995. Stockpiles have not been positively identified by Australasia and selective dump/stockpile sampling will be needed before an estimate of broken ore can be made.

5.4.2.6***Glencoe Discussion***

A compilation of blast hole and available pit plans suggests that the total volume mined from the four open pits is 234,000 bcm.

The geological resource at Glencoe has been depleted by bulk sampling of 49,000 tonnes.

The presence at grass of 23,000 tonnes of ore mined but not treated under the tribute mining agreement, needs to be confirmed by dump sampling.

There is a reasonable expectation for additional surface and oxide mineralisation above the 70m RL (33m depth) in the outlying (East and Far West zones) and surface and oxide material along strike. As noted above, mineralisation is located within a corridor of anomalous arsenic which remains open to the south east (*Figure 8*).

Given the complexity of the deposit there is a strong possibility that a significant increase in contained gold compared to the resource estimate, may be achieved by meticulous visual grade control.

Metallurgical testwork has confirmed suitability of oxide ore for treatment by the CIP process while further testing is required for primary mineralisation.

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