STATEMENT OF MINERAL RESOURCES - TREGONY PROSPECT
SUPLEJACK GOLD PROJECT, NORTHERN TERRITORY

1. SUMMARY

Geos Mining was commissioned by Ord River Resources Limited to compile a technical report on the Mineral Resources at the Tregony gold prospect, which forms part of the Suplejack project in Northern Territory.

The Tregony deposit is hosted by metasediments of the Proterozoic Killi Killi Formation in the Tanami Region. Mineralisation consists of gold in quartz veins within a broad zone of shearing, termed the Suplejack Shear, which forms a N-S trending lineament that is evident from aeromagnetic and satellite images.

Previous mineral resource estimations were completed on the Tregony prospect in 2000 (AngloGold) and in 2001 (Messenger). Details of the estimations are not available and Geos Mining cannot state whether they were JORC compliant. The 2000 estimation utilised a Multiple Indicator Kriging method on 3m composite grades for all drillholes up to April 2000 (Spurway, 2000). The estimation produced a total resource of 331,000 tonnes averaging 1.9 g/t Au (20,000 ounces gold) at a 1.0 g/t Au cut-off. The 2001 estimation utilised a polygonal method, at a 0.3 g/t Au cut-off, down to 100m below surface (Large, 2001). The estimation produced a total resource of 1.1 million tonnes averaging 1.57 g/t Au (55,000 ounces gold).

Modelling of the deposit relied heavily on assay data as geological logging of historical drillholes was not consistent throughout. The model utilised block sizes of 10m x 5m x 2m, oriented along the dominant N-S trend of both strata and structures. The block model was trimmed by the surface DTM.

Drillhole assays were composited downhole over 2m intervals. Sections of drillholes that had not been assayed, as they were interpreted to be unmineralised, were assigned grades of 0.005 g/t Au to restrict the influence of mineralised zones in nearby blocks.

Ordinary kriging was used to estimate the block grades. Variography determined a search ellipse with radii of 120m along strike, 70m down-dip and 30m across dip. High grade composites were restricted to one quarter of the search radii to restrict the influence of these zones in nearby blocks.
Geos Mining project 2389-02  
Ord River Resources – Suplejack Gold project  
Statement of Mineral Resources 22 November 2012

Mineral Resource estimations, as at 22 November 2012, are 2.44 Mt @ 1.29 g/t (101,300 ounces gold) using a 0.5 g/t Au cut-off (Table 1). Within this resource are blocks totalling 646,000 tonnes @ 3.02 g/t Au (62,700 ounces gold) using a 1.0 g/t Au cut-off. The resources are classified as Inferred Resources in accordance with the JORC Code 2004.

<table>
<thead>
<tr>
<th>Cut-off g/t Au</th>
<th>Inferred Tonnes</th>
<th>Au g/t</th>
<th>TOTAL Tonnes</th>
<th>Au g/t</th>
<th>Au Oz</th>
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<tr>
<td>0.5</td>
<td>2,441,000</td>
<td>1.29</td>
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<td>1.29</td>
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<td>646,000</td>
<td>3.02</td>
<td>646,000</td>
<td>3.02</td>
<td>62,700</td>
</tr>
</tbody>
</table>

Table 1 : Suplejack Resource Estimations as at 22 November, 2012

2. COMPETENT PERSON STATEMENT

The data relating to the Mineral Resources Estimation for the Suplejack deposit was supplied by Ord River Resources Limited. This information included copies of previous exploration reports and data files related to previous exploration. Geos Mining was responsible for management of a drilling program on the Tregony prospect during June-September 2012.

Modelling of the deposit was undertaken by Geos Mining personnel, Geologist Calum Bisset and Senior Geologist (Resources & Data) Oliver Willetts, under the direction of Project Manager Murray Hutton. Mr Hutton is a member of the Australian Institute of Geoscientists and has sufficient experience relevant to the style of deposit and the task being undertaken to qualify as a Competent Person as defined by the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code), prepared by the Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia.

Murray Hutton consents to the use of the information in this report in the form and context in which it appears.

3. INTRODUCTION AND TERMS OF REFERENCE

Geos Mining was commissioned by Ord River Resources Limited (Ord) to prepare a technical report on Mineral Resources at the Suplejack gold prospect, Tanami region, Northern Territory. Suplejack is an advanced exploration project that had been previously explored by several companies, including Dominion Gold Operations, Acacia Resources and AngloGold Australasia.

The report conforms to requirements set out in the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code, 2004), prepared by the Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia.
4. **SCOPE OF WORK**

Previous resource estimates for the Tregony deposit were completed in 2000 and 2001. The project undertaken by Geos Mining aimed at updating the mineral resources to JORC standards, utilising all of the available data from past exploration programs as well as data from the 2012 drilling program.

5. **SOURCES OF INFORMATION**

Ord provided the following information on the Suplejack project:

- Reports of exploration programs completed by previous holders of tenements covering the Suplejack area.
- Data files of drilling and surface geochemical sampling throughout the area covered by SEL26483.
- Data for the airborne magnetics / radiometrics survey flown by Ord during 2010.

We believe that there are no additional data, since the Ord drilling program during 2012, that have a bearing on the Mineral Resource estimation.

6. **GEOS MINING’S QUALIFICATIONS**

Geos Mining is a specialist geology consultancy based in Sydney, Australia, that has been providing consulting and contract services to the minerals industry since 1998. Geos Mining’s professional staff have extensive experience in gold, base metals, uranium, coal and industrial minerals.

The following Geos Mining personnel were involved in the Tregony Mineral Resource Estimation project:

- Murray Hutton, Project Manager, BA (Hons, Geology), MAIG
- Oliver Willetts, Senior Geologist (Resources & Data), BSc (Geology), MSc (Geophysical Hazards)
- Calum Bisset, Geologist, BSc (Hons, Geology)

Murray Hutton has sufficient relevant experience in relation to the mineralisation styles being reported on to qualify as a Competent Person as defined in the 2004 edition of the Australasian Code for Reporting of Identified Mineral Resources and Ore Reserves (the JORC Code).

7. **PROPERTY DESCRIPTION**

The Suplejack project consists of one exploration tenement, SEL26483 (102 graticular blocks, 330 km²), located in the Tanami region of Northern Territory, approximately 625 km northwest of Alice Springs (Figure 1). The tenement is wholly within the Suplejack Downs Pastoral Lease.
SEL26483 was initially granted to Suplejack Pty Ltd (a wholly-owned subsidiary of Ord) on 13 August 2008 as a Substitute Exploration Licence (SEL) for four existing exploration licences. The SEL was reduced from an initial 204 blocks to 102 blocks on the first anniversary date. Application for renewal of SEL26483 was lodged on 18 May 2012.

Access to the tenement is via Stuart Highway (sealed) and the Tanami Road (mostly unsealed) from Alice Springs to Tanami Central Gold Mine, then via the Lajamanu Road to Suplejack Downs Pastoral Lease, a total distance of around 750 km. Intermittently maintained pastoral tracks provide access to the various prospect sites within the tenement.

Ord set up a camp at Tregony prospect using ATCO demountable buildings mounted on sleds.

Figure 1: Location of the Suplejack Project
8. PROJECT HISTORY

The current area encompassed by SEL26483 was explored by Kidd and Messenger, Dominion Gold Operations Pty Ltd, Acacia Resources Ltd and AngloGold Australasia Ltd. Exploration activities included geological mapping, airborne geophysical surveys, geochemical sampling and RAB, RC percussion and diamond drilling.

Several prospects have been defined within the tenement but the most advanced is the Tregony prospect. The Tregony gold deposit is situated in the eastern part of SEL26483 and within a 6km long zone of gold, arsenic and base metal anomalies defined by assay results from RAB drilling (Figure 2).

Drilling at Tregony has been completed by:

- Acacia Resources: 72 RC holes totalling 8,825m, 5 DD holes totalling 805.9m in 1996-98;
- Ord River Resources: 30 RC holes totalling 1,922m in 2005; 8 RC / DD holes totalling 2,011.3m in 2012.
9. ENVIRONMENT & ABORIGINAL HERITAGE

Suplejack is located within the monsoonal region of Northern Territory, thus the site may be prone to significant flood events during the wet season from November to March. Mean annual rainfall for Rabbit Flat (100km south of Suplejack) is 426mm, with a mean number of rainfall days being 35. Approximately 75% (or 330mm rainfall) occurs during the period November to March. Mean maximum temperatures for Rabbit Flat range from 25.9°C in July to 39.2°C in December. Mean minimum temperatures range from 6.6°C in July to 23.6°C in January.

The vegetation over most of the area is desert scrubland and sparse low woodland. Some good grassland occurs around the Suplejack Downs homestead, but elsewhere spinifex predominates.

Suplejack Downs is characterised by breakaways, residual hills, and undulating terrain that slopes eastwards onto flat to gently undulating low level plains. In this area several ephemeral creeks such as Wilson, Nanny Goat and Birthday Creeks drain the eastern side of the plateau. To the southeast of SEL26483, Lake Buck and a complex of salt pans occupy an area of local inland drainage on the low level plains.

All of the tenement area had been given clearance for various activities by the Central Lands Council (CLC) in the past. These clearances were reviewed and found to be current. Sacred sites were identified from previous surveys (all occur outside of the current tenement) and field personnel were made aware of the need to be on the lookout for any other potential heritage sites. The CLC was provided with information on the proposed activities within the tenement prior to commencement of the field program.

10. INFRASTRUCTURE

The Tanami Region contains several major gold deposits, including Tanami Gold’s Groundrush mine (40km to the south), ABM Resource’s Hyperion gold exploration project (25km to the south) and Newmont’s Callie Mine (135km to the south) (Figure 1). Airfields are situated at Tanami Gold’s Central processing plant (78km south of SEL26483) and at Suplejack Downs station.

At Tregony, power is supplied by an 11 kVA generator at Ord’s Tregony camp. Potable water for the camp was obtained from the 5 Mile Bore (11km west of Tregony camp) through an arrangement with the owners of Suplejack Downs station. Water for drilling programs was obtained from a water bore drilled by Ord (3.6km northwest of Tregony camp), which was left open at the end of the drilling program for use by the station owners (Figure 3).
11. SAMPLING TECHNIQUES

11.1 Drilling techniques

Drilling techniques used at Suplejack are summarised in Table 2. Locations of drillhole collars are shown in Figure 4.

<table>
<thead>
<tr>
<th>Company</th>
<th>Drill type</th>
<th>Size</th>
<th>Years</th>
<th>No of holes</th>
<th>Total metres</th>
<th>Collar survey</th>
<th>Downhole surveys</th>
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<tr>
<td>Acacia Resources</td>
<td>RC</td>
<td>130mm</td>
<td>1996-98</td>
<td>72</td>
<td>8,825</td>
<td>ns</td>
<td>Yes</td>
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<tr>
<td>Acacia Resources</td>
<td>DD</td>
<td>HQ</td>
<td>1997-98</td>
<td>5</td>
<td>805.9</td>
<td>ns</td>
<td>Yes</td>
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<tr>
<td>Ord River Resources</td>
<td>RC</td>
<td>ns</td>
<td>2005</td>
<td>30</td>
<td>1,922</td>
<td>GPS</td>
<td>Yes</td>
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<tr>
<td>Ord River Resources</td>
<td>RC / DD</td>
<td>RC - 115mm / DD - HQ3 / NQ2</td>
<td>2012</td>
<td>10</td>
<td>2,403.3</td>
<td>GPS</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Table 2: Drilling techniques at Tregony

ns = not stated in reports
11.2 Drillhole recoveries

Acacia recorded sample recoveries for their RC drilling in the logging database, but do not have any records for recovery for diamond drilling. However, significant core losses were recorded on wooden blocks in the core trays and, on inspection of these, it can be seen that there were no major zones of core loss and only minor core loss intervals occurred in the weathered zone.

For the Ord drilling, core and chip sample recoveries were generally greater than 90%, with the only major loss observed in the highly weathered zone in drillhole TRD602, which was cored from surface. Recovery was recorded for every core run in the diamond holes and uploaded into a database where percentage recoveries were calculated.

11.3 Geological logging

Acacia’s drillhole logging was presented as Excel spreadsheets with the following data recorded:

- lithologies
- weathering
- veining
- alteration
- mineralisation
- geotechnical data

Ord’s 2005 RC drillhole logging came in the form of incomplete Excel spreadsheets with the following data recorded:

- sample weight
- colour
- description (% contents of different lithologies)

Descriptions were absent for drillholes TG05RC509 to TG05RC528.

Ord’s 2012 drillhole logging was recorded onsite using Excel spreadsheets and uploaded into an Access database with the following data recorded:

- lithologies
- weathering
- core recovery
- veining
- alteration
- mineralisation
- structural data (including alpha and beta angles).

11.4 Sampling methodology

Gold mineralisation at Tregony is associated with narrow (mostly <2m) quartz veins + chlorite and pyrite. Assay results suggest that the gold grades are “nuggety”, with high grades (>3 g/t Au) within the veins commonly surrounded by very low grades (<0.1 g/t Au) in the adjacent wall rocks. Close-spaced sampling is required to define the high grade zones.

For the Acacia drilling, all RC holes were sampled every metre, with samples kept on site in plastic bags. A 3-4kg sample was split every metre into a calico bag for analysis. For the diamond holes, the entire hole was assayed in each case. The core was cut in half using a diamond saw; one half was sent for assay and the other half was retained in the core trays. Samples of various potential gold hosts (such as different vein types and orientations) were also taken, to attempt to define gold “niches”. In this case, small (often around 40-50g) samples were selectively cut out from the core and assayed for gold only.

The sampling method used for Ord’s 2005 RC drilling program was not described in the Annual Report. However, assays were reported for 1m intervals and large plastic bags of RC chip samples at 1m intervals were located in the bag farm at Tregony camp.
The Ord River 2012 drilling program consisted of RC drilling for the upper parts of the most of the drillholes, where significant gold mineralisation was not expected, with diamond core tails. Drillholes TRD609 and TRD610 were entirely RC drilling as they were testing gold anomalies from previous RAB drilling. Drillhole TRD602 was totally diamond core drilling.

RC chips were sampled at one metre intervals from the cyclone and riffle split to produce a 1/8 sample that was collected in a calico bag and the rest collected in a large plastic bag. Composite 4m samples were collected for assaying by spearing a representative sample from the individual 1m interval bags and combining it into one larger bag. Intervals of core showing significant veining or mineralisation (plus ~4m either side of the intervals) were selected for sampling. The core was halved using a diamond core saw with one half sent for assay and the other left in the core tray for future reference/sampling. As far as possible, the same side of the core was sampled, using the dominant foliation/cleavage as the guide.

11.5 Sample preparation & assaying methods

Acacia’s RC and diamond drilling sample preparation included single stage mix and grind in a mixer-mill for samples up to 3kg, with barren quartz wash between samples. They were then assayed for gold only at Amdel Laboratories, Darwin, using methods FA1 (detection limit 0.01 ppm Au) and FA3 (detection limit 0.001 ppm Au). Re-assaying of selected pulps as check samples was carried out by ALS Laboratories in Alice Springs.

Ord’s 2005 RC drilling samples were analysed by ALS Laboratories Alice Springs using a 48 hour cyanide leach. Information on the sample preparation techniques are not available.

Ord’s 2012 RC drilling sample preparation was done by riffle splitting to 3kg and pulverise to 85% passing 75 microns or better. The pulps were then assayed using methods Au-AA26 (detection limit 0.01 ppm Au) and ME-ICP41 for 35 elements.

These procedures are summarised in Table 3.
11.6 Quality control procedures

There are no data records for the quality control procedures used for the Acacia Resources drilling programs. The following routine quality control procedures were regularly undertaken as part of AngloGold’s exploration activities (Large, 2001):

- **Interlab Repeats** – Pulps, from ~ 5% of mineralised intervals were sent to a check laboratory, to test for lab variability (ie biases).
- **Field Duplicates** - Submission of a field duplicate for analysis at the original lab, with the original sample batch, to test for repeatability within the batch.
- **Field Resplits** - Collection of a duplicate field split (i.e., a duplicate from the RC field sample) for analysis at the original laboratory to test AngloGold’s field sampling practices, and gold distribution.
- **Lab Residues** - Resplit of residues at the original laboratory and analysis of the -75 micron material to test lab homogenisation & splitting process.
- **Screen Fire Assays** - Submittal to original laboratory of residues for analysis of -75 micron and +75 micron fractions, to test for coarsegold.
- **Certified Reference Materials (CRMs)** – Various CRMs, covering a range of gold grades, and blanks were routinely inserted into every batch of diamond drilling and some RC samples dispatched to the laboratory at a ratio of 3 CRMs per 100 samples. Most of the standards returned values within 15% of the accepted values (Sewell, 1999).
- **Blanks** – Sand containing 0 ppm gold were submitted in some groups of samples to monitor whether the laboratory mills were being fully cleaned between samples.

There are no records of quality control used for the Ord 2005 RC drilling program.
Quality control procedures used by Ord in the 2012 drilling program included:

- Certified Reference Materials (CRMs) – Three CRMs purchased from Ore Research & Exploration, with expected gold values of 1.02 g/t Au, 3.04 g/t Au and 11.79 g/t Au, were inserted at approximately 1 in 55 samples, preferentially within zones of better mineralisation. Only one result fell outside of the range recommended value +/- 2 SD (sample 603200).

Overall, the gold assay results from the Ord 2012 program are regarded as meeting industry standards for analytical accuracy. However, further QAQC assaying, including umpire assaying by independent laboratories, should be applied to future programs.

11.7 Independent verification of assay results

Geos Mining has not undertaken independent verification of the analytical results from the Acacia or Ord 2005 drilling programs.

11.8 Location of data points

A search for the Acacia drillholes in the field failed to locate the actual collars, although some of the drill pads were identified. The Acacia reports do not mention the method used to survey the drillhole collars.

Geos Mining recorded GPS coordinates of locatable drillhole collars (all of them being from Ord’s 2005 RC drilling program) during a site visit in 2011 and during the 2012 drilling program (Table 4). Apart from elevations, comparisons between the GPS readings and collar surveys were within the accuracy range of the GPS unit.

Drillhole collars prior to the 2012 drilling program did not have true elevations (RLs). Instead, a value of 500m ASL was assigned to all collars. In order to get better accuracy between drillholes, Digital Elevation Data covering the entire area of SEL26483 were downloaded from the Geoscience Australia 1 second STRM v1.0 database and processed in Micromine to produce a Digital Terrain Model (DTM) across the Tregony prospect. The historic drillhole collars were then pressed to the DTM and the revised RLs were added to the drilling database.
Drillhole collars for the 2012 drilling program were measured using a hand-held GPS unit (Garmin GPSMap 62s). To eliminate variations in GPS readings, a metal fence post near the Tregony camp was used as a base station. GPS readings of the base station over several days were used to assign accepted co-ordinates for the base station (MGA94, Zone 52 - 613318mE, 7860664mN, 408mRL). At the end of the program, all of the 2012 drillhole collars were recorded within a time period of one hour and corrected against the base station readings taken before and after the collar pickups.

11.9 Data spacing, orientation and distribution

The Acacia drillholes were drilled along E-W oriented drill sections at nominal 30-40m spacings. Downhole surveys were taken at nominal 30m intervals using a single-shot camera.

Ord’s 2005 RC drilling program at Tregony was designed to evaluate some of the Acacia holes that had produced high-grade intersections (Temby, 2005) and to test for extensions of two high-grade intersections in the southeastern part of the deposit. Downhole surveys were measured using a Reflex Ez-Shot camera at nominal 30m downhole spacings.

Ord’s 2012 RC/DD drilling program was designed to test for depth and along-strike extensions of previously defined mineralisation. Downhole surveys were measured using a “Camteq” camera routinely every 50m down hole.

Azimuths were corrected for magnetic declination by adding 4° to the magnetic readings.

Core orientation was performed for all Ord 2012 diamond drillholes. Core was orientated using “OriShot” - a back end core orientation tool. Orientations were taken nominally at the end of every run. However, due to the variable nature of the ground, not all orientations were able to be used. Orientation intersections were transferred to the core recovered by tracing the bottom of the drillhole trace as far as practicable, both up and

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### Table 4: Comparison of GPS readings and drillhole collars

<table>
<thead>
<tr>
<th>Point</th>
<th>E_MGA</th>
<th>N_MGA</th>
<th>RL</th>
<th>HOLE</th>
<th>E_MGA</th>
<th>N_MGA</th>
<th>RL</th>
<th>m E</th>
<th>m N</th>
<th>m RL</th>
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<tbody>
<tr>
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<td>7860248</td>
<td>412</td>
<td>-1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Note: RLs for collar data are taken from the DTM-adjusted data.
down the core. Core orientations were used as a basis for determining both α and β angles\(^1\) of structures relative to the drillhole orientation.

11.10 Specific Gravity

Acacia Resources recorded 257 Specific Gravity (SG) measurements from diamond drill core samples at Tregony. The method used was to measure the dry weight of core, divided by volume (as determined by the weight in air minus the weight in water). For 105 of the samples, the volume was determined after waxing the core to prevent absorption of water by the core. For the resource estimation process, 32 of the measurements were rejected because of obvious typographic errors or highly broken core giving results well outside the cluster of values.

Plotting of SG values against depth downhole showed a rough linear trend of increasing SG from 0 to 100m (Figure 5). Below 100m, the SG values are fairly consistent. Average values were calculated over 50m depth ranges:

- 0 – 50m 2.13
- 50 – 100m 2.53
- 100m + 2.72

\(^1\) Alpha angles measure angle between the structure and the core axis. Beta angles measure the angle between a reference line along the core and the ellipse apical trace measured in a clockwise sense (0-360°).
Figure 5: Measurements of SG vs depth downhole for Acacia diamond drillholes

Linear regression analysis for SG measurements from 0m to 100m downhole gave a formula for SG:

- \( SG = 1.89 + 0.009 \times \text{downhole depth} \)
- \( SG = 1.89 + 0.0078 \times \text{depth below surface} \) (all Acacia diamond holes were angled at -60°) down to 90m.

12. ESTIMATION OF MINERAL RESOURCES

12.1 Data audits & reviews

Geos Mining has audited the data in the following ways:

- Checking drill logs of the Acacia diamond drillholes against the drill core stored at Tregony camp.
- Checking drill logs of the Ord River 2005 RC drillholes against RC chips in storage bags.
- Checking drillhole collar locations with GPS readings.
• Checking assays in the database against assay laboratory result sheets.

Checking of the Acacia diamond drill core stored at Tregony showed accurate logging of the lithologies. However, Acacia used the term “greywacke” for the lithic sandstone, whereas the current logging used sandstone as the lithology descriptor.

Selected intervals of the 2005 RC drilling chips were sampled from the plastic bags stored at Tregony camp and placed into chip trays. Unfortunately, the files containing the drill logs for these holes were corrupted and could not be used.

Only five drillhole collars from the 2005 RC drilling program could be located in the field. GPS readings showed that the co-ordinates in the database were reliable. No Acacia drillhole collars could be located in the field.

Original files for laboratory results for the 2005 RC drilling were checked against the database and found to be reliable. No original laboratory results were found for the Acacia drillholes.

12.2 Geological interpretation

Gold mineralisation at Tregony is hosted by the Proterozoic Killi Killi Formation (Figure 4), which consists of interbedded lithic sandstone, siltstone and shale, with minor conglomerate units. This sequence hosts a major N-S shear zone, termed the Suplejack Shear Zone (SSZ). The SSZ is a low strain shear zone, where bedding is preserved, uniformly parallel to a fine but moderately strong cleavage (Laing, 1998).

Several vein types, mostly quartz ± chlorite ± pyrite, occur throughout the sequence at Tregony. These veins form a classic tension vein array (TVA) within the SSZ (Laing, 1998). The Tregony TVA is nested between narrow late shears.

Interpretation of drill sections indicates that the gold mineralisation zones dips at moderate angles (30°-50°) towards the west (Figure 6).

12.3 Previous resource estimations

Previous resource estimations at Suplejack are summarised in Table 5.

<table>
<thead>
<tr>
<th>Company</th>
<th>Year</th>
<th>Method</th>
<th>Tonnes</th>
<th>Au g/t</th>
<th>Au oz</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>AngloGold Australasia</td>
<td>2000</td>
<td>Multiple Indicator Kriging</td>
<td>330,000</td>
<td>1.9</td>
<td>20,000</td>
<td>1 g/t Au cut-off</td>
</tr>
<tr>
<td>Messenger</td>
<td>2001</td>
<td>Sectional</td>
<td>1,100,000</td>
<td>1.57</td>
<td>55,000</td>
<td>0.3 g/t Au cut-off</td>
</tr>
</tbody>
</table>

Table 5: Previous resource estimations at Suplejack

12.4 Modelling techniques

• All data was compiled into an SQL database that was linked to a Micromine project.
A wireframe for the surface DTM was created from data from Geoscience Australia.

A wireframe was created for the Base of Weathering (BoW) from drill logs.

Drillhole assays were composited to a regular downhole length of 2m. Selection of the appropriate composite length was based on a statistical review of the raw sample lengths, with consideration of the resource block dimensions. A weighted average method was applied to the downhole samples and was completed for gold only as there were limited assays for other elements that could be used for modelling.

A blank block model with block dimensions of 10m N x 5m E x 2m RL was created for the entire deposit. The block dimensions are considered suitable for the style of deposit and likely mining methods (open cut).

Variography was completed on the distribution of gold grades in the composite samples.

A search ellipse was created based on the variography results, with parameters of primary (along strike) axis oriented 120m towards 355° azimuth and 15° plunge; secondary (down-dip) axis oriented 70m towards 260° azimuth and 22° plunge; minor (across dip) axis oriented 30m towards 116° azimuth and 62° plunge.

For composite intervals of >5 g/t Au, the search ellipse was reduced to ¼ of the low grade search, to restrict the influence of individual very high grades.

The grade estimation for each of the blocks was assigned using ordinary kriging for gold. Each block required at least 2 data points within the search ellipse to be populated.

The estimated block model values were validated against the downhole composites, to ensure that adequate integrity was preserved, by visual comparison of block grades against downhole composite grades in drilling sections.

The specific gravity assigned to each block was based on Acacia’s SG measurements, using a formula derived from the linear regression analysis of the data.

Base of oxidation levels are commonly around 100m below surface but there is no compelling evidence of significant supergene enrichment of gold grades.

Tonnages are estimated on a dry basis. There have been no measurements of moisture content. RC drill logs for Ord’s 2012 drilling suggest that the water table is around 90-100m below surface.

A range of cut-offs have been used to tabulate resource figures and provide a grade-tonnage curve (Figure 8).

Mining will be most likely by open cut methods as the bulk of the mineralisation is too low grade to be an underground mining proposition. Some remote low-grade blocks at depth have been eliminated from the resource figures as they are deemed to be beyond the economic limits for mining.

No assumptions of potential processing methods have been used to restrict selection of blocks.

The resource was categorised as Inferred Resources only because of uncertainties over the accuracy of some of the drilling data, particularly the locations of the Acacia drillhole collars. Confidence in the resource model, and upgrading of the resource categories, may be increased if further diamond drilling is undertaken in those zones that are primarily based on RC drilling.

The resource is open down-dip and along strike. Furthermore, some areas with limited drilling may contain mineralisation that has not been included in the model due to insufficient data points, particularly in the middle part of the deposit (Figure 7).

Figure 6 and Figure 7 show the distribution of blocks averaging greater than 0.5 g/t Au in cross-section and longitudinal section respectively. Ord’s 2012 drillholes are labelled.
Figure 6: Cross-section at 7,860.200mN showing distribution of blocks >0.5 g/t Au

Figure 7: Longitudinal section looking west showing distribution of blocks >0.5 g/t Au
13. MINERAL RESOURCE ESTIMATION

Mineral Resource estimations for the Tregony prospect are presented at various cut-off grades in Table 6 (rounded to nearest 1,000 tonnes & 100 ounces) and Figure 8. All resources are classified as Inferred Resources in accordance with the JORC Code 2004.

Although mining and processing studies have not been undertaken, the Mineral Resources at the 0.5 g/t Au cut-off are selected as the deposit is likely to be mined by low-cost open cut methods. Toll treatment of the ore at Tanami Gold’s Central plant may be an option.

<table>
<thead>
<tr>
<th>Cut-off (Au g/t)</th>
<th>Inferred Total (Tonnes)</th>
<th>Au g/t</th>
<th>Au Oz</th>
<th>Total Inferred (Tonnes)</th>
<th>Au g/t</th>
<th>Au Oz</th>
</tr>
</thead>
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<td>292,000</td>
<td>5.25</td>
<td>49,300</td>
<td>292,000</td>
<td>5.25</td>
<td>49,300</td>
</tr>
<tr>
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<td>402,000</td>
<td>4.18</td>
<td>54,000</td>
<td>402,000</td>
<td>4.18</td>
<td>54,000</td>
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<tr>
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<td>646,000</td>
<td>3.02</td>
<td>62,700</td>
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<tr>
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<td>76,700</td>
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<td><strong>101,300</strong></td>
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<td>152,200</td>
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<td>0.67</td>
<td>152,200</td>
</tr>
</tbody>
</table>

Table 6: Resource Estimations for Tregony prospect

Figure 8: Grade and Tonnage curve with cut-off grade labels
14. BIBLIOGRAPHY


