Exploration Target Calculated for Fosters (an area south of Reward Gold Mine PFS)

ASX ANNOUCEMENT 29th August 2023

HIGHLIGHTS:

- **An Exploration Target has been calculated for Fosters Gold Project (Fosters), an area ~400m south of the Reward Gold Mine (Reward) (refer to Figure 1)**
- **Vertex commissioned HGS Australia (HGS) who calculated the following Exploration Target rage (refer to App. 1)**
    - **524kt @ 12.5g/t Au (lower range) 211kozs**
    - **524kt @ 19.0g/t Au (upper range) 321kozs**
- **The Fosters Exploration Target is within ground covered by the Company's Mining Licences (ML's) and existing Development Consent**
- **Fosters is accessed by an existing adit and development drive**
- **Fosters adit is a few hundred meters from the Hill End Gravity Gold plant.**
- **Additionally, Fosters is open at depth and along strike to the North and the South (refer to Figures 1 & 2)**
- **Reward is currently the focus of a PFS (see ASX announcement dated 2023-07-06)**
- **The existing Mineral Resource Estimate (MRE) for the Reward gold deposit at Hill End currently stands at 419,000 tonnes at 16.72g/t Au for 225,200oz Au:**

Classification	Cut-off	Tonnes	Au (g/t)	Ounces
Indicated	4	141,000	15.54	70,500
Inferred	4	278,000	17.28	154,700
Total	**4**	**419,000**	**16.72**	**225,200**

- **Vertex is designing a diamond drill program aimed at converting the Exploration Target to a JORC resource.**
- **Vertex is currently commissioning the Gravity Gold plant and onboarding personnel to run the plant on a continuous basis.**

(1) Cautionary Statement

The Exploration Target is conceptual in nature as there has been insufficient exploration to define a Mineral Resource. It is uncertain if further exploration will result in the determination of a Mineral Resource under the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, the JORC Code" (JORC 2012). The Exploration Target is not being reported as part of any Mineral Resource or Ore Reserve.

Vertex Minerals Limited (ASX:VTX) ("Vertex" or the "Company") is pleased to advise that it has completed an Exploration Target estimate for the Fosters Gold Project (**Fosters**), an area immediately south of the Reward Gold Mine (**Reward**). Both gold deposits are covered by its 100%-owned Hill End Gold Project near Orange in the NSW Lachlan Fold belt. The MRE was carried by independent consultants HGS Australia in accordance with the 2012 JORC Code.

The existing Mineral Resource for the Reward Gold Mine totals 419,000 tonnes, with a 278kt Inferred Resource and a 141kt Indicated Resource, at a weighted average grade of 16.72 g/t Au for 225,200oz (154,700oz Inferred and 70,500oz Indicated). The global Mineral Resource estimate for the Hill End & Hargraves Gold Project is 485,000 ounces at 3.6 g/t (*refer Table 1*).

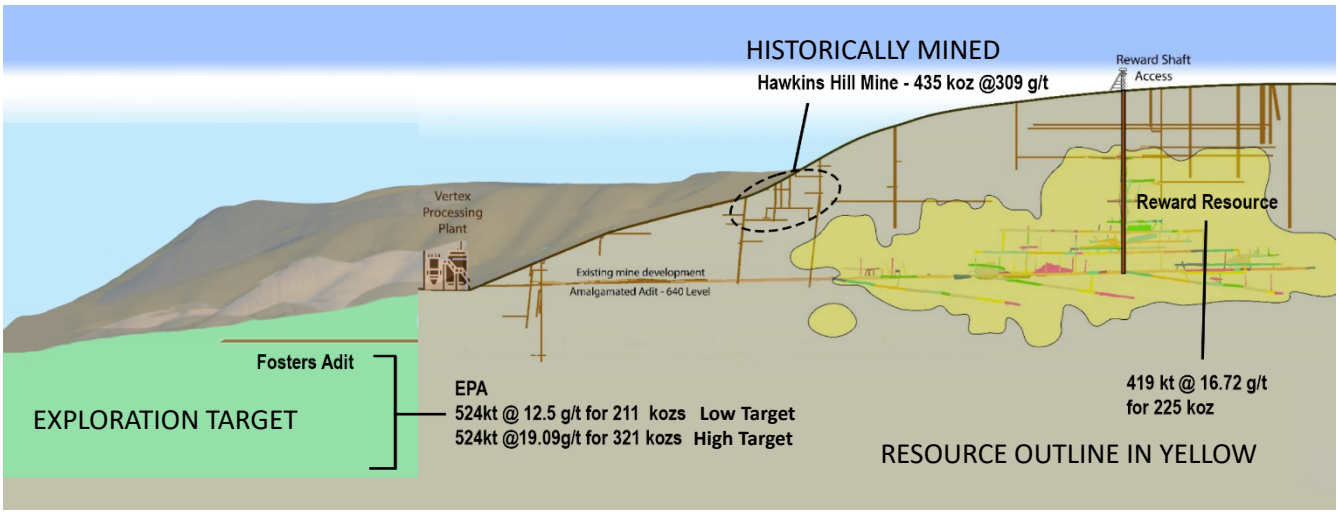


Figure 1, showing Fosters Exploration Target (green panel) south of the Reward underground gold mine workings, below Hawkins Hill (Historical Mine and shown in dotted line). Yellow showing the Reward Resource.

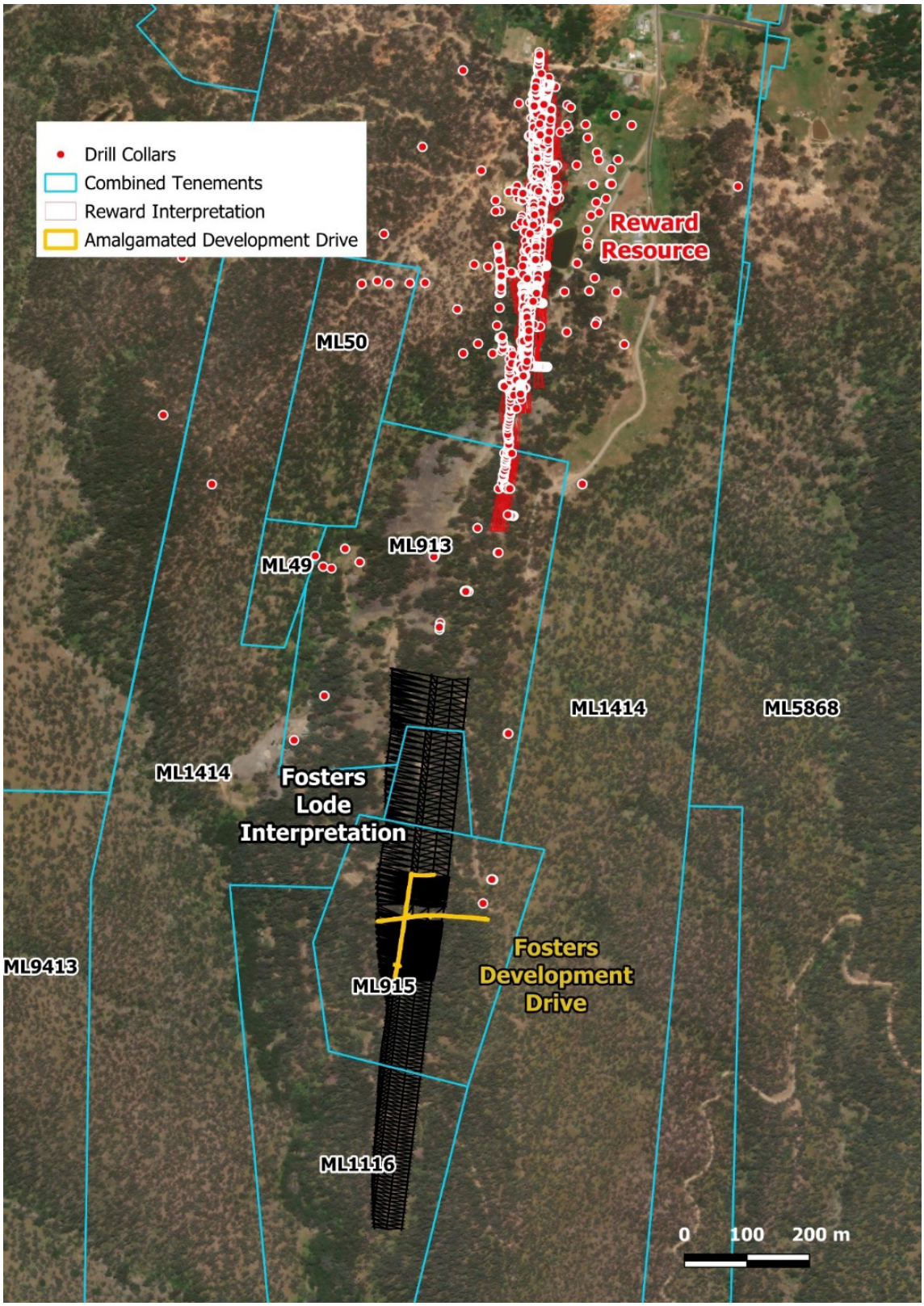


Figure 2, showing Fosters (old underground workings shown in yellow) south of the Reward Gold Mine/Resource

Technical Director, Tully Richards commented: *"Fosters is a significant and exciting addition to Vertex's gold project and underpins a healthy resource development future. Personally, it's been 'rewarding' to work on Fosters, with HGS, while others in the Company remain focused on the Reward underground PFS and completing the wet commissioning of the Company's gravity gold plant and commencing production."*

Hill End Project Mineral Resource Estimate				
Deposit	**Classification**	**Tonnes (kt)**	**Grade Au (g/t)**	**Contained Au (koz)**
Reward Gold Mine				
	Indicated	141	15.5	71
	Inferred	278	17.3	155
Sub Total		419	**16.7**	225
Hargraves Project				
	Indicated	1,109	2.7	97
	Inferred	1,210	2.1	80
Sub Total		**2,319**	**2.4**	**178**
Red Hill Project				
	Indicated	413	1.4	19
	Inferred	1,063	1.8	61
Sub Total		**1,476**	**1.7**	**80**
Project Total				
	Indicated	1,663	3.5	187
	Inferred	2,551	3.6	296
Grand Total		**4,214**	3.6	**483**

Table 1: Global Mineral Resource estimate for the Hill End & Hargraves Gold Project

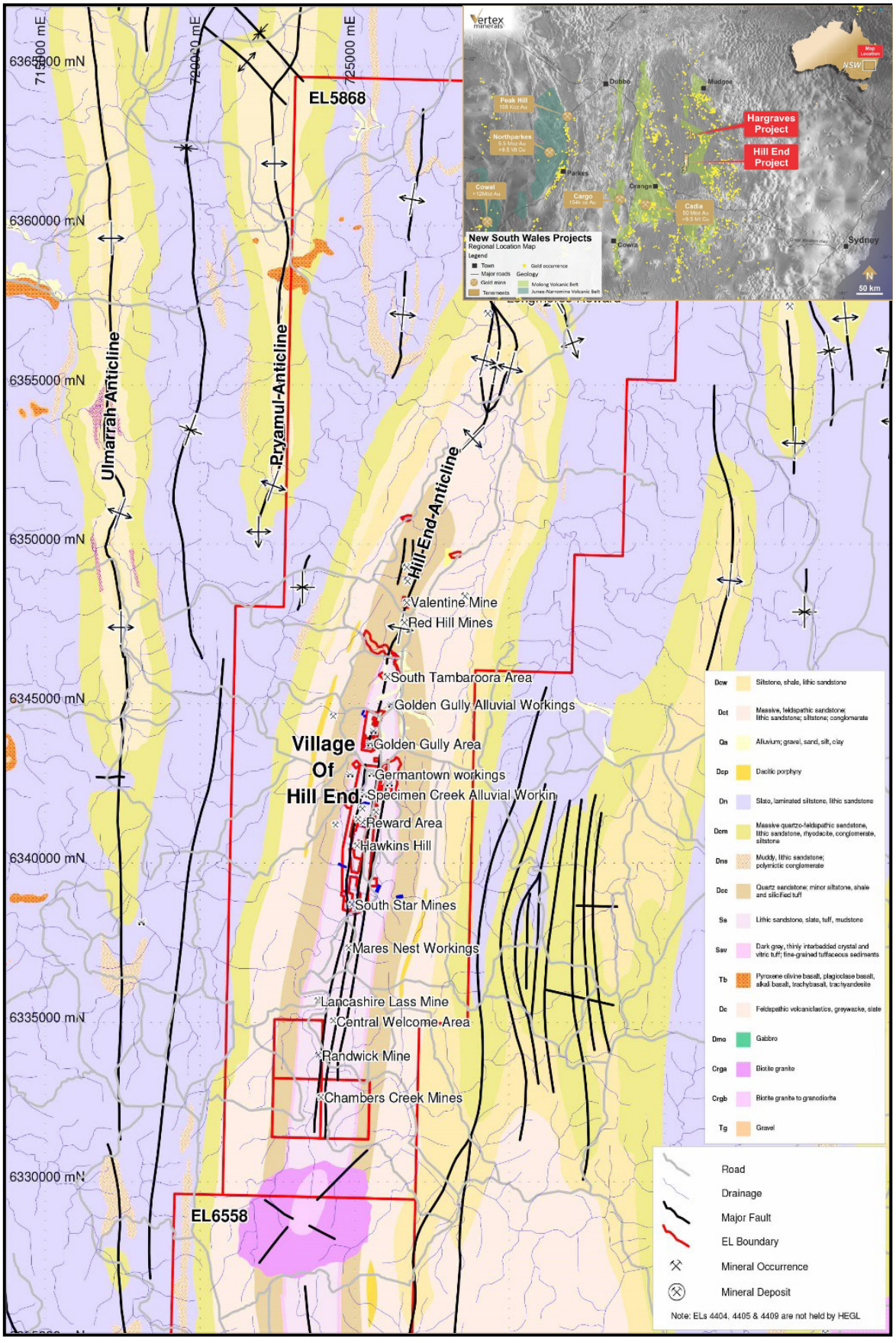
Figure 3. On-site workers in Amalgamated Adit/640L mine access point for the Reward gold mine to the Gold plant, with clean floors, good quality ground works and service pipes, all in very good condition

GEOLOGY

The Hill End Project is located within the Palaeozoic Lachlan Fold Belt and is hosted within the mid- Silurian to mid-Devonian Hill End Trough, a north-south trending elongated pull-apart basin containing sedimentary and volcanic rocks.

The Hill End Anticline plunges to the north at approximately 10° in the Hill End area. The strata have a maximum dip on the limbs of the fold of about 60°. Local reversals of dip occur where small drag folds are developed on the limbs of the main structure. A well-developed axial plane cleavage strikes 170° and dips 80° on the eastern limb of the anticline. A weak sub-vertical foliation, which trends at approximately 115° and pre-dating the axial plane cleavage is observed locally. A crenulation cleavage post-dating the axial plane cleavage is also developed. A number of sub-vertical small-scale faults, which show reverse or oblique slip movement were encountered during mining on the eastern limb. These faults strike at approximately right angles to the fold axis and have lateral displacements up to 0.8m. They were referred to as “cross-courses” by the early miners.

Figure 4. Local Geology



ESTIMATION PROCESS

Data provided for this Exploration Target estimation process included:

- LIDAR surface topography plans to 0.5m accuracy.
- Assay log sheets from underground face sampling and drill holes.
- Scanned plans, in local grid, including:
    - Hand drawn drives with face samples.
    - Drafted surveys of the drives with face sample assays and lode widths.
    - Surface drafted plans of topographical features
- Scanned long sections of stoping with face sampling.
- Historical and overview reports from current and 1980's.

The process commenced with importing the plans into QGIS and registering the images using localised features identifiable from the LIDAR imagery and creating a local grid for importation of other plans in local grid (Figure 5).

Once the samples northing and easting were digitised, the shape file was exported to a CSV and the relative levels (RL) were hand measured off the long sections. The final CSV file was reimported into QGIS and imported into the Reward Mine Access database via Surpac.

The highest stope level face samples were used to identify the backs of the leading stopes and extended 0.2m above for the final profile. This was used to create the development stopes for wireframing in three dimensions. There are 2 stoping areas associated with the historic Amalgamated lode labelled South Lode (Figure 5) and North Lode (Figure 6).

From Figure 5 it can be seen the drafted Amalgamated Lode sits on the far northern section of the topographical map yet the various lodes, identified as Lady Belmore, Brand & Fletcher, and Amalgamated, extend to the far south where adits were historically created for mining in the side of the hill (Figure 6). The Exploration Target Estimate assumed drive extension is extended from the known sampling location to the adit location in the south at 67339900N.

Two diamond drill holes approximately 250m north of the Amalgamated Lode (HHD35 & 36) identified narrow high grade gold mineralisation and is considered to be the same lode. The same for the Reward gold lodes, approximately 600m north of the Amalgamated Lode sampling, could be considered a related system. The northern end of the Exploration Target Estimate was extended 70m north of the diamond holes (HDD35 & 36).

Observations made of the Amalgamated Lode in the drives has identified the dip to be approximately 70° east. Using this observation and the mineralised intersections in HHD35 & 36 there are possibly 3 mineralised lodes as shown in Figure 9.

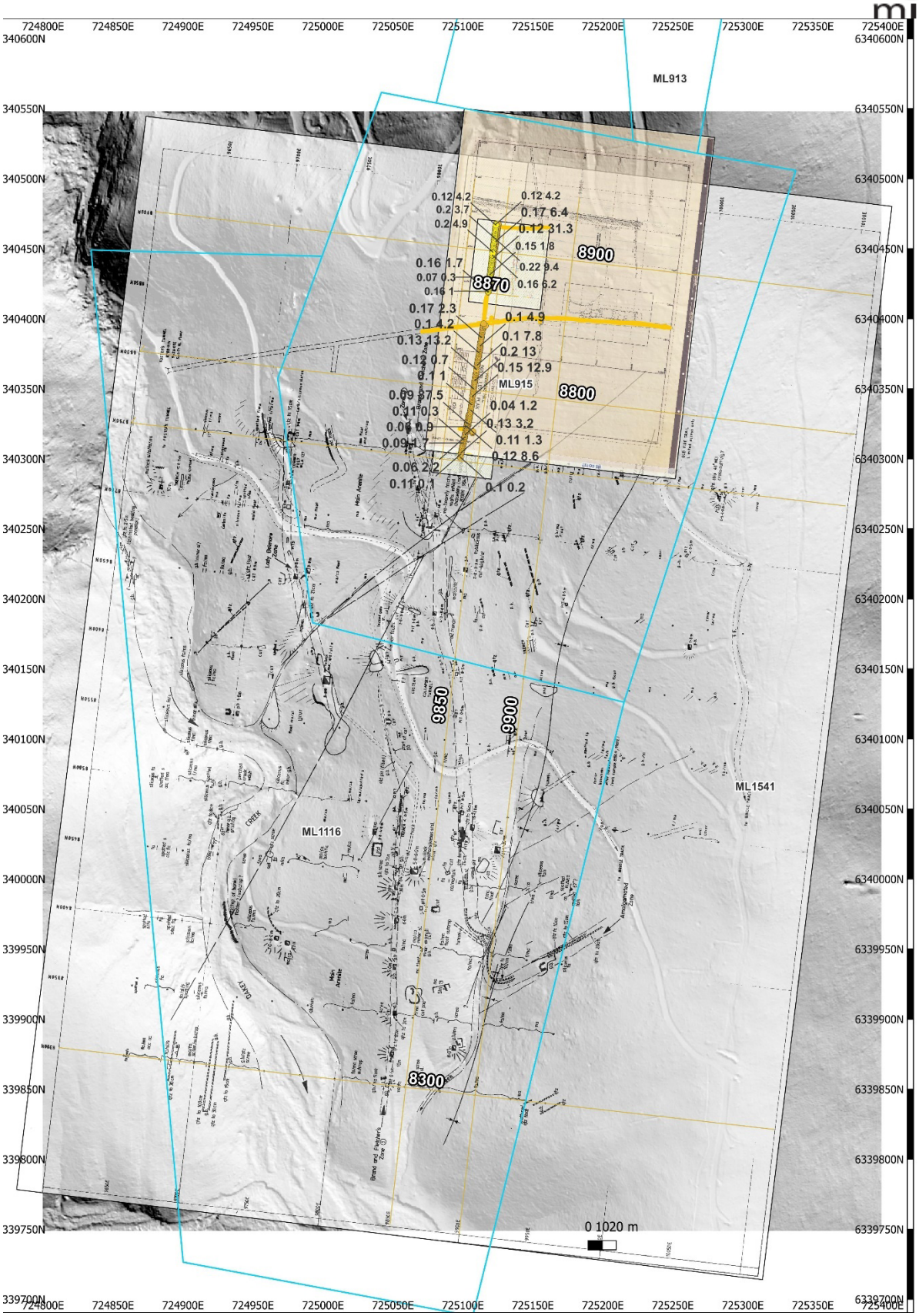


Figure 5: Plan view of Lidar (lower background, drafted surface topography (1988), drafted underground drive map and hand drawn face sampling.

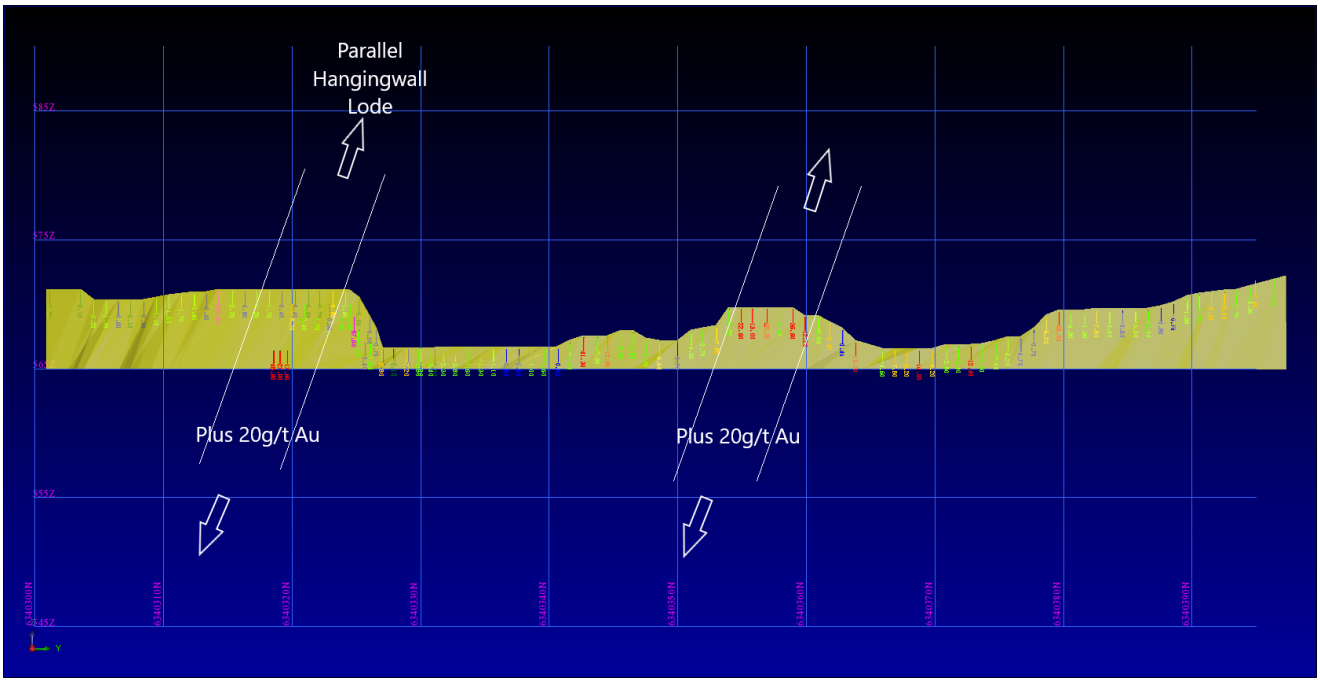


Figure 6: South Lode long section of the stoped area and face samples.

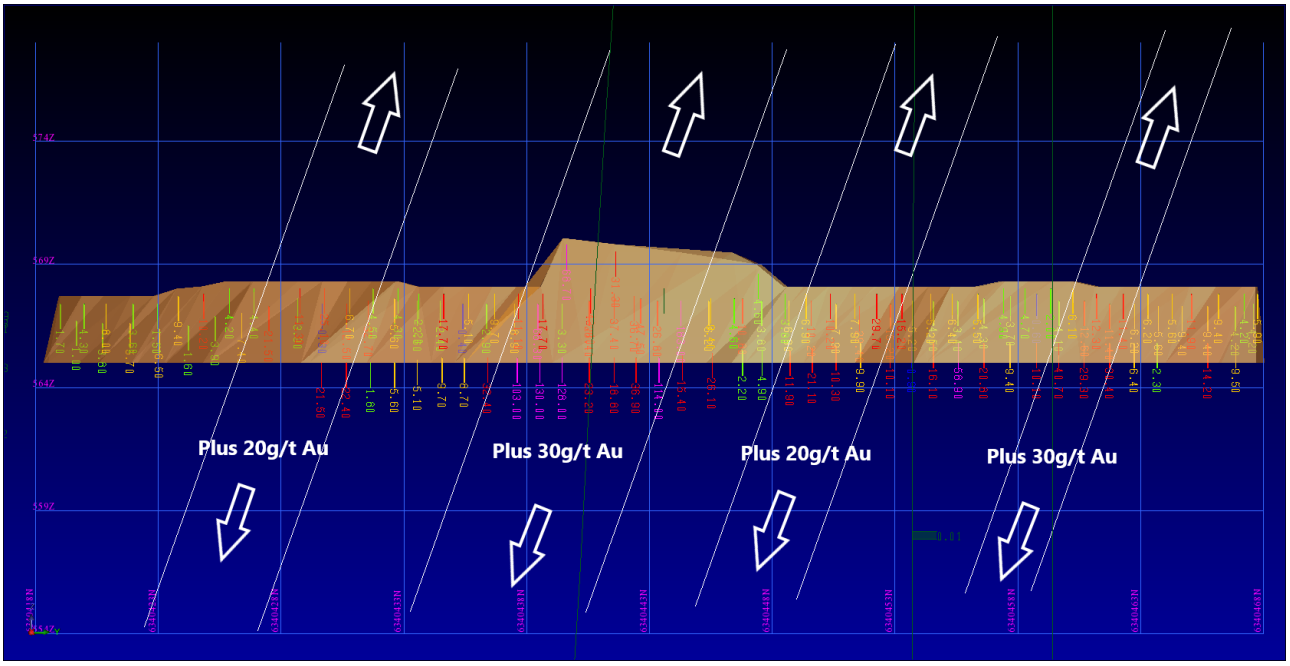


Figure 7: North Lode long section of the stoped area and face samples.

Assessing the limited face sampling data there is evidence of zones of high-grade trends. These trends appear to be plunging approximately 65° to the south, as shown in Figures 6 & 7. These high-grade trends appear to be greater than 20g/t Au with grades over 100g/t Au. For the purpose of the Production Target estimate, an assumption of 30% of the defined lode will be in the plus 30g/t Au trend. The grades outside of this vary considerably but will be applied a grade range of 5g/t Au to 10g/t Au on average.

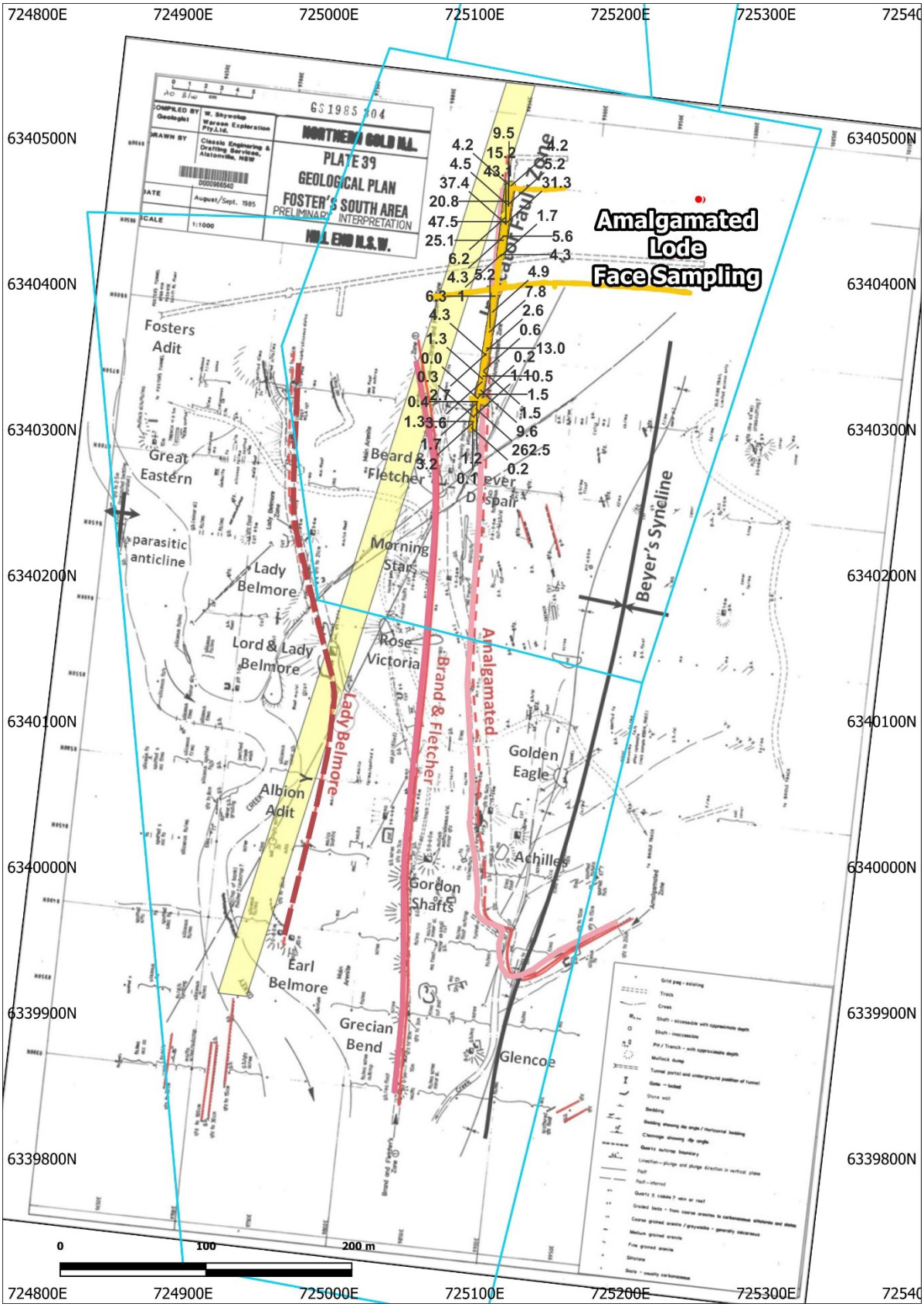


Figure 8: Historical topographical map with existing face sampling and drive outline.

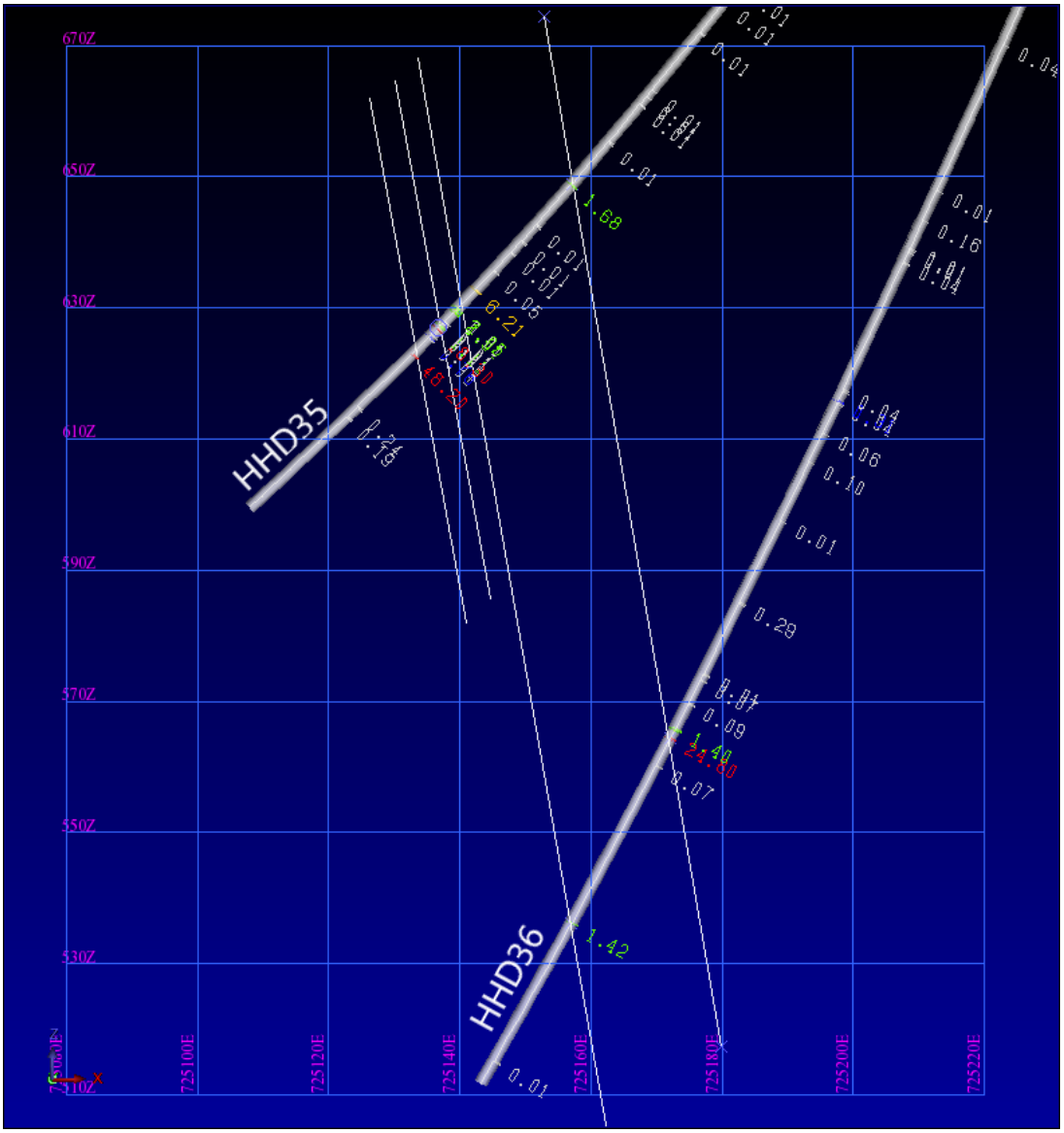


Figure 9: Cross Section showing HHD35 & 36 with interpreted lodes assuming a 70° easterly dip.

The provided data in long section contained 2 different assaying techniques and did not define the sampling parameters across the face or only the lode, which varied between 7cm and 22cm. Reported lode widths in other lodes is up to 60cm (Moye 2011). The 2 assaying methods were fire assay and screen fire assay. If both samples were collected the same way, then the screen fire assay would be considered the more accurate as it removed the coarse-grained gold portion and analysed separately from the minus side. As gold is malleable and does not grind consistently with the gangue material there is a probability the fire assay grades will be low or very high (nuggetty). Screen fire removes the coarse gold to analyse separately then analyse the minus material several times for averaging. Unfortunately, the provided data is insufficient in discussing how and what the analyses represent, so assumptions are made. On comparing the 2 assaying types it is noted the Screen Fire Assay is considerable higher than the Fire Assay (Figure 10). The average for Fire assay was 24g/t Au and average for screen fire assay was 253.9g/t Au.

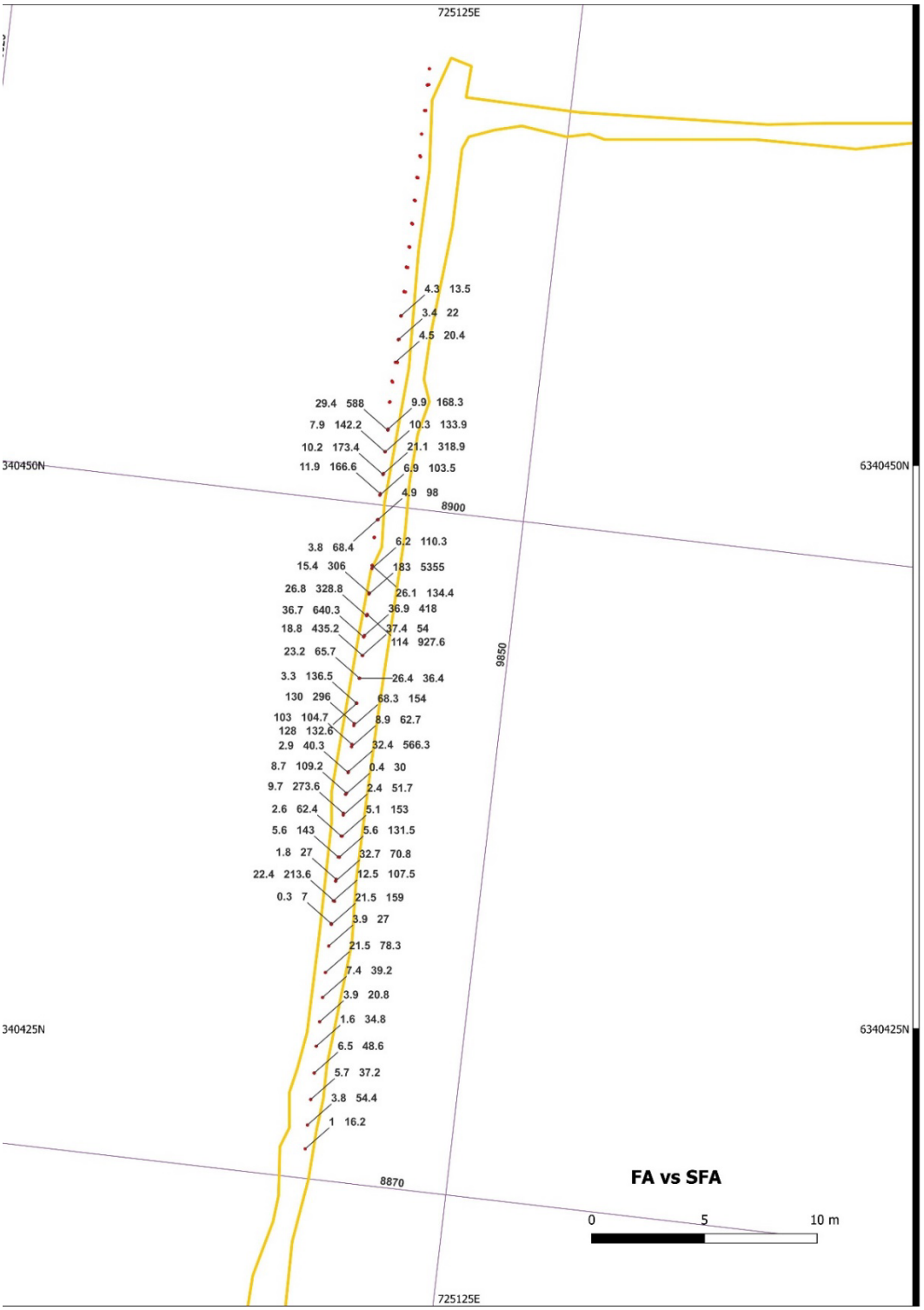


Figure 10: Fire Assay vs Screen Fire Assay in the Northern Lode.

Historical gold production in the Fosters area has quoted production grades as follows:

- South Brand & Fletcher Lode: 0.68 ounces/tonne (21.1g/t Au)
- Central Fosters Area: 25 tonnes averaging 320g/t Au.

The problem in defining the Production Target is there are multiple parallel lodes identifiable in the surface topography plan. Much of the historical mining was not surveyed or sampled and there were tributary mined areas not reported so there is limited information on how extensive these parallel lodes are. In the southern lode area of the Amalgamated face samples and in the samples of the northern lode main drive we see a parallel system. The southern lode parallel system is approximately 4.2m from the main drive with grades ranging from 17.5g/t Au and 46.9g/t Au (Figure 11 left). The northern lode parallel system was close enough to be included in the main drive that was widened from the normal 1m drive width to 1.6m drive width (Figure 11 right).

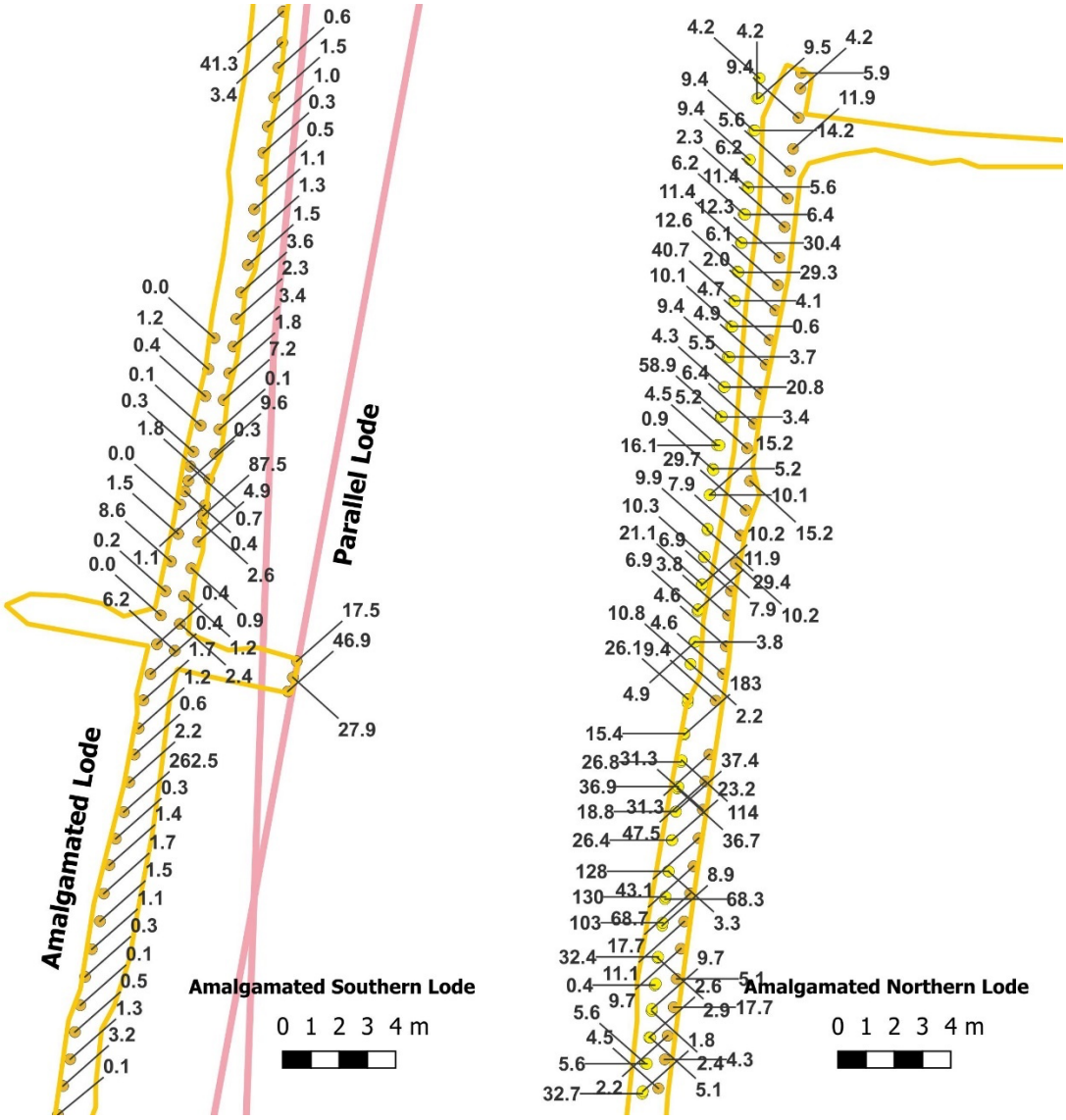


Figure 11: Parallel lodes identified in the Southern Lode System (left) and Northern Lode System (right).

For the purposes here the process will apply to one lode only, Amalgamated Lode, and a percentage of high- and low-grade mineralisation of above 30g/t Au and below 30g/t Au (ranging 5-10g/t Au).

EXPLORATION TARGET

A wireframed outline of the Amalgamated Lode was created. The criteria used is discussed above and cut to the surface topography (Figure 12).

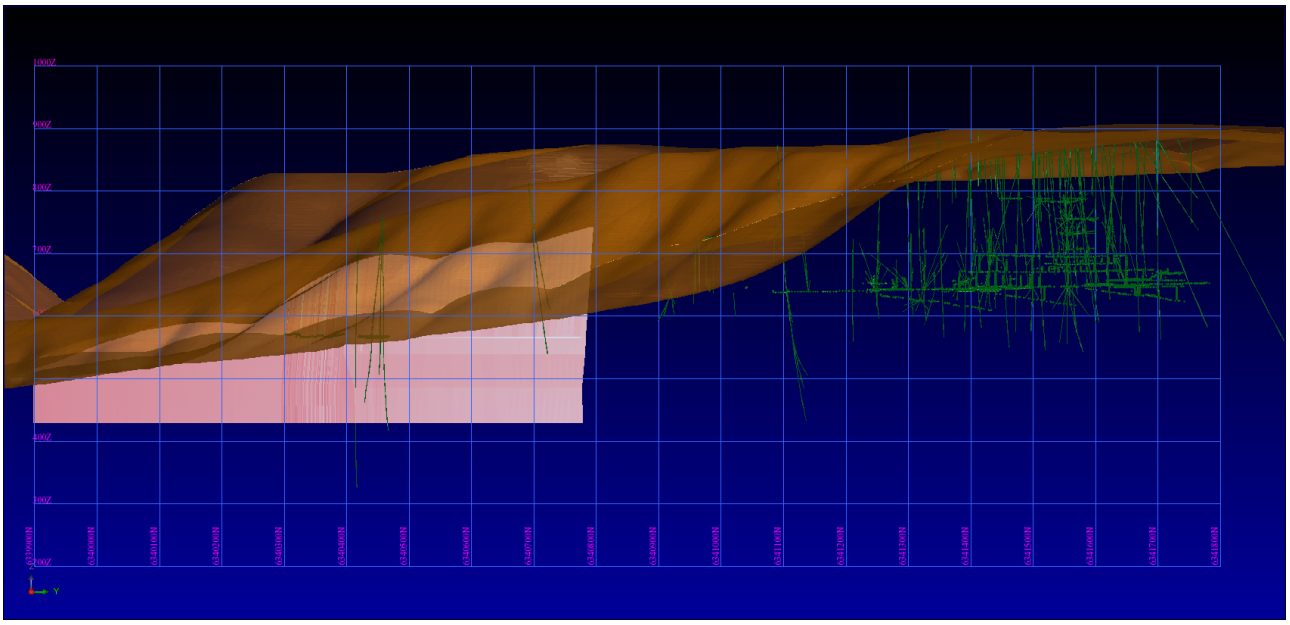


Figure 12: Long Section of the Amalgamated Lode with the surface topography and underground workings from the Reward Mine (Left).

The following criteria and assumptions were used in the Exploration Target Estimate:

- Volume of the Amalgamated Lode wireframe is 193,953m³.
- Bulk density is derived from the Reward resource estimate of 2.7t/m³.
- Amalgamated lode wireframe = 524,000 tonnes.
- Grade estimate for 30% of the lode is between 30g/t Au and 40g/t Au, and the remaining 70% has a grade estimate between 5g/t and 10g/t Au.
- Lode is to a maximum of one metre and allowance for a single lode only.
- Grade average is for full face width.
- Exploration Target of
    - 524kt @ 12.5g/t Au (lower range)
    - 524kt @ 19g/t Au (upper range)
- The estimate could be high graded if selective mining was used to extract the upper grade areas only.

Table 1: Exploration Target Estimate upper and lower ranges.

Grade Range	Tonnes	Grade (g/t)	Ounces
High Grade	157,200	30	152,000
	157,200	40	202,000
Low Grade	366,800	5	59,000
	366,800	10	118,000
Lower Range	524,000	12.5	211,000
Upper Range	524,000	19.0	320,000

METALLURGY

The mineralogy of the Hill End gold mineralisation is relatively simple with most gold being of high fineness and hosted within quartz veins with low sulphide content.

The gravity separation plant on site achieved a 95% recovery rate during previous periods of operation. During 2009 a total of 12,591 tonnes of ore at a grade of 15.9g/t was processed producing 5,871 ounces of gold.

Figure 13: Refurbishment work underway at the processing plant

This announcement has been approved by the Board of Vertex Minerals Limited.

Further Information:

Roger Jackson
Executive Chairman

roger@vertexminerals.com.au

Tully Richards
Technical Director

tully@vertexminerals.com.au

About Vertex Minerals Limited

Vertex Minerals Limited (ASX: VTX) is an Australian based gold exploration company developing its advanced Hargraves and Hill End gold projects located in the highly prospective Eastern Lachlan Fold Belt of Central West NSW. Other Company assets include the Pride of Elvire gold project and Taylors Rock gold/nickel/lithium project both located in the Eastern Goldfields of WA. The focus of Vertex Minerals is to advance the commercial production of gold from its NSW projects embracing an ethical and environmentally sustainable approach:

- **Gravity Separation**: The deportment of gold at the Hill End Project allows high recovery to a concentrate produced using gravity separation techniques.
- **Direct Smelting**: The use of direct smelting of a gold concentrate that eliminates the need to use cyanide as a solvent.
- **Contrast in Density**: These separation techniques take advantage of the contrast in density of gold (ρ=19.3) relative to quartz (ρ=2.65).
- **Renewable Energy Potential**: The unique landscape and infrastructure makes Hill End ideal for the establishment of renewable sources of power. The Crudine Ridge Windfarm is only 30km from the project site and Vertex plans to examine a pumped hydro-electricity scheme as an integral part of any proposed development. The topography and existing mine workings including shafts and adits make the establishment of a pumped hydro scheme achievable at modest expense.
- **Benign Tailings**: The tailings will essentially be quartz with little to no sulphide minerals.

Hargraves Gold Project (NSW)

- Hargraves Gold project is located approximately 2 5 km south of the town of Mudgee.
- The goldfield is 4 x 10 km with numerous mineralised structures with little modern exploration.
- An updated mineral resource in accordance with JORC 2012 Code was completed by SRK Consulting (Australasia) Pty Ltd (SRK) – total of **2.3Mt at 2.38g/t Au for 177koz Au.**

Hill End Gold Project (NSW)

- Consists of 10 mining leases and three Exploration Licences located in the core of the Hill End Trough on the eastern Lachlan Fold Belt.
- 14km of continuous gold lode with gold recovery rate to gravity at +90%**.**
- Work undertaken in 2015 by Hill End Gold Limited (HEG) culminated in a JORC 2012 resource estimate of
    - **80,000 oz Au @ 1.7 g/t to 150m** depth.

Pride of Elvire Gold Project (WA)

- Tenements surround the Mt. Elvire homestead approximately 210km north of Southern Cross in Western Australia
- The project has seen historical drilling with encouraging gold results achieved.

Taylors Rock Project (WA)

- Located 80km WSW of Norseman in the Southern Goldfields region of Western Australia.
- The project has both Gold and Nickel potential, interesting historical intercepts have recorded encouraging mineralisation.

EXPLORATION TARGET ESTIMATE STATEMENT

The Exploration Target is classified in accordance with the Australasian Code for Reporting of Identified Mineral Resources and Ore Reserves (JORC, 2012). The Exploration Target Estimate was completed by Andrew Hawker of HGS Australia. Mr Hawker has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken 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 Hawker consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Competent Persons Statement

The information in this report that relates to Exploration Results and Exploration Targets is based on information compiled by Mr. Roger Jackson, a Director and Shareholder of the Company, who is a 25+ year Fellow of the Australasian Institute of Mining and Metallurgy (FAusIMM), Fellow of the Australian Institute of Geoscientists (FAIG) and a Member of Australian Institute of Company Directors. Mr. Jackson has sufficient experience which is relevant to the style of mineralisation and type of deposits 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. Jackson consents to the inclusion of the data contained in relevant resource reports used for this announcement as well as the matters, form and context in which the relevant data appears.

JORC Compliance Statements

Where statements in this announcement make reference to exploration results which previously been reported, the Company confirms that it is not aware of any new information or data that materially affects the information included in the original announcements, and in the case of estimates of Mineral Resources, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Persons' findings are presented have not materially modified from the original market announcements.

Forward Looking Statements and Important Notice

This report contains forecasts, projections and forward-looking information. Although the Company believes that its expectations, estimates and forecast outcomes are based on reasonable assumptions it can give no assurance that these will be achieved. Expectations and estimates and projections and information provided by the Company are not a guarantee of future performance and involve unknown risks and uncertainties, many of which are out of Vertex Minerals' control.

Actual results and developments will almost certainly differ materially from those expressed or implied. Vertex Minerals has not audited or investigated the accuracy or completeness of the information, statements and opinions contained in this announcement. To the maximum extent permitted by applicable laws, Vertex Minerals makes no representation and can give no assurance, guarantee or warranty, express or implied, as to, and takes no responsibility and assumes no liability for the authenticity, validity, accuracy, suitability or completeness of, or any errors in or omission from, any information, statement or opinion contained in this report and without prejudice, to the generality of the foregoing, the achievement or accuracy of any forecasts, projections or other forward looking information contained or referred to in this report.

Investors should make and rely upon their own enquiries before deciding to acquire or deal in the Company's securities.

JORC Code, 2012 Edition – Table 1 report template

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *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.*	• Diamond drilling – Variable sample length depending on vein thickness. Quartz veining was half-cored by diamond saw except where veining was isolated and narrow. Core cut down long axis with same relative portion of sampled for each interval. Routinely a few centimetres of wall rock around the vein(s) were included in the sample to ensure that the vein footwall and hanging wall were left intact. Sampling of wall rock carried out adjacent to high grade intervals to test for peripheral mineralization with minimal values returned. • Reverse Circulation Drilling – Samples collected over 1m intervals via a cyclone and split to 3kg samples for submission to the laboratory. The only RC holes that intercepted the mineralised domains interpreted in this estimate have diamond core tails through the mineralised intervals. • Face Sampling - Face samples were approximately 8kgs of representative vein material taken by a geologist from the face. Only quartz vein material was sampled, with two or more samples collected if two or more veins are present. The distance between faces is approximately 1.75m and generally every second face was sampled giving approximately 3.5m sample spacing or rarely a 5.4m sample spacing
Drilling techniques	• *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).*	• Diamond Drilling – Surface diamond drill holes were either NQ3 or HQ3 in size whereas underground drill holes were LTK48. Core was oriented using the Ballmark method. • Reverse Circulation Drilling – RC holes were generally 130mm diameter face sampling bits with diamond core tails through mineralized zones.

Criteria	JORC Code explanation	Commentary
Drill sample recovery	• *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.*	• Diamond Drilling - Core recovery (total core recovery) averaged >99% and the average RQD was 75%. • Reverse Circulation Drilling – Bag containing the 1m sample intervals were weighed prior to sub-sampling. No RC intervals intercepted mineralisation therefore recovery not an issue. • There is no apparent relationship between sample recovery and grade.
Logging	• *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.*	• Core was laid out in an angle iron with a base of hole line marked for core orientation. All artificial core breaks were marked by red chinagraph crosses. The core also had metre marks, tray and hole numbers marked in chinagraph pencil prior to digital photography. Geotechnical logging was completed with recovery, rock quality designation (RQD), fracture frequency and orientation quality digitally recorded in Excel spreadsheets. Core was logged for geological and geotechnical parameters, with data collected digitally and transferred directly to the database. Holes were logged in detail for alteration, lithology, structure, vein style and mineralisation by geologists with data being plotted and interpreted on section during drilling. High quality digital photographs are available for all recent core. • Reverse Circulation Drilling – RC holes logged for lithology, colour, structure, alteration, mineralisation, weathering & oxidation, and vein quartz characteristics. As field staff sampled each hole the following information was recorded: Hole Name, Sample Name, Interval, Sample date, sampler name(s), Sample Mass, and sample moisture. This data was subsequently digitally recorded in Excel spreadsheets.
Sub-sampling techniques and sample preparation	• *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*	• Diamond Drilling - Core was cut down the structural long axis and the same relative portion of half core was always sampled. Sample intervals, true vein thickness, angle of vein to core axis and vein composition were recorded. For screen fire assays each core sample was submitted to the laboratory, weighed, dried, and then pulverised in its entirety in an LM2 to a P85 of -75 microns. For Leachwell digestion methods sample protocol involved drill core samples of approximately 1kg weighed, dried, crushed and pulverised in an LM2 (removable-bowl

Criteria	JORC Code explanation	Commentary
	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.*	pulveriser) to 85% passing -75 micron. • Reverse Circulation Drilling - RC drilling: dust samples were collected in a side-mounted cyclone and dumped into large plastic bags annotated with the Hole Number and the interval depth. The bags were stacked in order at each site. A wet sample was frequently encountered at the water table. In all cases the water was able to be controlled and only a few samples were damp in the entire program. This is probably due to free draining old workings below the area of RC drilling. After weighing on a floor scale, each sample was carefully passed through a cradle riffle splitter by 2 field assistants sufficient to produce a ~3kg sample for dispatch to the laboratory. • Sample sizes are appropriate for the grain size of the material being sampled. • No systematic collection of field duplicate or second half sampling was recorded.
Quality of assay data and laboratory tests	• *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.*	• Prior to January 2007 all HEGL core samples were analysed by the screen fire assay technique at the ALS Chemex Laboratory in Orange, NSW. Each core sample was submitted to the laboratory, weighed, dried, and then pulverised in its entirety in an LM2 to a P85 of -75 microns. The entire sample was weighed and wet screened using -75 micron disposable nylon screen. The +75 micron fraction was dried in aluminium trays, weighed and fire assayed to extinction. The -75 micron fraction was collected using flocculant, the liquor then decanted and the fines sample dried in an oven. This was homogenised in the LM2, weighed and fire assayed in duplicate using a 50 g charge. The assays for the -75 micron fraction were averaged and a weighted average is calculated with the +75 micron fraction. • In January 2007, drill core samples entered the production stream at SGS Labs-Townsville and were assayed for gold by accelerated cyanide leach using “Leachwell” reagent with fire assay finish. Sample protocol involved drill core samples of approximately 1kg weighed, dried, crushed and pulverised in an LM2 (removable-bowl pulveriser) to 85% passing -75 micron followed by a quartz flush. Both quartz flush and the sample were inserted in a Leachwell bottle filled with water and a predetermined number of Leachwell tablets. The containers were rolled for 24 hours whereupon the liquor was

Criteria	JORC Code explanation	Commentary
		homogenous and a subsample is extracted for fire assay. For assays greater than 10g/t, bottle tails were washed filtered and fire assayed. For assays greater than 50g/t, bottle tails were washed filtered and screen fire assayed. This additional protocol ensured coarse gold that may not have been dissolved in the accelerated cyanide leach process was captured. • For HEGL, Reverse Circulation drilling produced 1 metre samples which initially were all submitted for fire assay with any intervals returning elevated gold being re-assayed by screen fire assay. Post-December 2005, RC samples containing quartz were assayed by screen fire assay. After January 2007 RC samples were assayed by Leachwell methods. • Assay techniques are considered total and appropriate for the mineralisation style. • There is no documentation of the systematic collection of field duplicates or use of Certified Reference Material during the various drilling and sampling programs to monitor the precision and accuracy of the assay results. Instead, previous companies relied on the quality control procedures of the laboratory undertaking the sample assays to verify accuracy and precision. Each sample assayed by screen fire assay method had a duplicate 50g firing from the -75 micron fraction. The ALS Chemex QC protocol required that each batch of 50 samples analysed included a reagent blank, 3 replicate determinations and 2 standard materials [Certified Reference Material]. Samples exhibiting anomalous values (high or low) were routinely analysed using either the original pulp or a second split. All routine replicate analyses were reported to the client. During the analytical sample preparation stage, crushing and grinding equipment was flushed with barren quartz material between each sample. The quartz flush sample was stored, which could later be analysed to test for contamination or “loss of grade”. • Review of results of the lab’s internal QAQC results, indicate an acceptable level of accuracy and precision has been established for the drilling results. • Previous reporting on internal laboratory accuracy and precision has

Criteria	JORC Code explanation	Commentary
		not raised any significant issues. • The lack of QC at the sample collection stage is not considered to be a significant problem with the data from the deposit, as reconciliation of mined grades to model grades during trial production were within acceptable tolerances for an area of Paxtons vein mined and processed in 2008. Comparison of the estimated Mineral Resource and mill production to the end of June 2009 revealed a gold content reconciliation of 104%. .
Verification of sampling and assaying	• *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.*	• The drilling database was validated for overlapping sample intervals, compatibility of hole depths between database tables as well as collar elevations compared to surface surveys and visual checks of drill hole traces in Surpac. No issues were found. • There are a number of drill holes that have intercepted mineralisation within relatively close proximity to each other and these drill holes have been investigated. Holes located less than 10m apart were assessed and found to have satisfactory levels of similarity and acceptable to be used in Resource estimation.
Location of data points	• *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.*	• The majority of surface drill holes were surveyed using differential GPS and underground holes surveyed by underground total station methods. • Underground sample locations were located using a tape from the nearest underground survey station which were generally less than 20m apart. • Holes paths were surveyed using a downhole gyro or an Eastman single shot down-hole camera at 30 metres (or at the end of reverse circulation pre-collars) and then every 50 metres to the end of holes. • The level of accuracy for drill hole locations is considered appropriate for Resource estimation purposes. • This Resource estimate was undertaken using Zone 55 of the MGA94 grid coordinate system. • A reasonably detailed surface topographic survey was supplied. This Resource estimate is not impacted by surface topography as the uppermost extents of the mineralised domains occur between 60m and 100m below the surface.

Criteria	JORC Code explanation	Commentary
Data spacing and distribution	• *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.*	• Drill hole intercept spacing averages around 10m to 40m along strike and around 10m to 20m in the dip direction. Underground drill fans have resulted in intercepts as close as 2m apart in the dip direction. Down hole sampling intervals vary from 10cm to 5.25m with an average of 0.5m. • The data spacing and distribution is sufficient to establish grade continuity appropriate for the Mineral Resource estimation procedures and classifications applied. • No sample compositing was carried out prior to analysis.
Orientation of data in relation to geological structure	• *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.*	• Holes were drilled in an orientation to ensure sampling was undertaken, as close as possible, orthogonal to the strike and dip of the mineralised vein packages. This orientation achieves the least biased sample interval.
Sample security	• *The measures taken to ensure sample security.*	• All samples were collected and sub-sampled on site by company staff. Samples were submitted to the external laboratory using standard paperwork and delivered by company staff.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• Review of QAQC data by Snowden (2006) showed moderate to high variability in laboratory duplicate data, mainly in the lower grades (<0.1g/t), but would not have a major impact on the global grade of the resource. • HEG personnel undertook audits of the ALS laboratory in Orange and the SGS laboratories in West Wyalong and Townsville with no issues discovered that may have a negative impact on sample preparation or analysis.

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	• *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.*	• The project is located within granted Exploration Licence EL5868 Mining leases ML1541, ML1116, ML315, ML316, ML317, ML49, ML50, ML913, ML914, ML915 and GL5846 with the earliest expiry date of 19 January 2033. The leases are held by Vertex Minerals Pty Ltd. • First Tiffany Resources Corporation is registered as having a 15% free carried interest in EL5868. • The site is covered by EPL 12008, scheduled activity is mining for minerals.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Modern exploration of the Hill End goldfield has been carried out by various companies since the early 1980's using surface and underground mapping and sampling, geophysical investigations, diamond and reverse circulation drilling. Previous exploration appears to have been performed to industry standards.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• Mineralisation at the Reward deposit occurs within a series of bedding parallel quartz veins occurring along the limbs of the Hill End Anticline which is located in the mid-Silurian to mid-Devonian Hill End Trough containing sedimentary and volcanic rocks. The deposit is best described as a brittle, thrust-dominated, competency-controlled orogenic gold low sulphide system developed post ductile deformation.

Drill hole Information	• *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:*
	  ○ *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*
		• There are approximately 3,800 separate drill holes and face sample locations used in the estimate and tabulation of the information would be cumbersome. A summary of all relevant drill hole and face sample information in this report is considered not to be material to the understanding of the report.

Criteria	JORC Code explanation	Commentary
	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.	
Data aggregation methods	• *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.*	• Exploration results are not the subject of this report. • Mineralised intercepts were composited to a nominal 1m in length for the purpose of statistical analysis and grade estimation. • No metal-equivalent values have been used in reporting (gold only).
Relationship between mineralisation widths and intercept lengths	• *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').*	• Exploration results are not the subject of this report. • Holes were drilled to intersect the direction of main grade continuity at approximate right angles.
Diagrams	• *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.*	• Maps and sections of the drill hole locations, mineralised intercepts and domain interpretations are included in this report.
Balanced reporting	• *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.*	• Exploration results are not the subject of this report. • All intersections have been included in the estimation of Mineral Resources.
Other substantive exploration data	• *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.*	• Exploration results are not the subject of this report. • Bulk density measurements and metallurgical test results are discussed in the report. • There are no potentially deleterious elements in the Reward deposit.
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).*	• Further exploration work will include drilling to extend the Mineral Resource along strike as well as up and down dip.

Criteria	JORC Code explanation	Commentary
	• *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• A long section is included in the report showing the potential areas for extension of the Resource (Exploration Target).

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	• *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.*
		• Core was logged for geological and geotechnical parameters, with data collected digitally and transferred directly to the database. Holes were logged in detail for alteration, lithology, structure, vein style and mineralisation by geologists with data being plotted and interpreted on section during drilling.
		• The following database validation activities have been carried out:
		  • Ensure compatibility of total hole depth data in the collar and assay drill hole database files.
		  • Check for overlapping sample intervals.
		  • Checking of drill hole locations against the surface topography.
		  • Visual validation in Surpac software.
		• No issues were found with the database.

Site visits	• *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.*	• No site visit was completed by the Competent Person due to time and budgetary constraints.
Geological interpretation	• *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.*	• Confidence in the geological interpretation is high as the deposit has been the subject of over 150 years of investigations and mining. • Data from sampling of diamond drill holes and underground exposures has been used in the estimation of grade. Any unsampled intervals were considered to have practically zero grade. • There are currently no alternative geological interpretations as the current interpretation has been considered the only feasible explanation of mineralisation for some time.

Criteria	JORC Code explanation	Commentary
		• Geological mapping of bedding, vein and fault orientations have been used to guide and constrain Mineral Resource estimation. • The principal gold mineralisation is associated with a series of bedding parallel quartz veins and associated saddle reefs occurring along both limbs and across the axis of the Hill End Anticline. veins are generally confined to slate units interbedded within coarser metasandstone units. Individual veins are narrow (0.05 to 0.3m wide) strike 190° and dip ~60°E. On some sections, up to 8 mineralised veins have been recorded. Minor near-horizontal, laminated (crack-seal), "leader" veins intersect layer-parallel veins. This intersection forms near-horizontal north plunging high-grade ore shoots. Also present are minor steeply dipping, crosscutting "spur" veins and crosscutting faults which kinematic analysis suggests resulted from minor dextral strike-slip movement. Steeply plunging high-grade ore shoots also formed at the intersection of these crosscutting structures and layer-parallel veins.
Dimensions	• *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.*	• Mineralisation occurs as a series of 8 stacked quartz vein sets that strike approximately north-south and steeply dip to the east. The current defined Mineral Resource extends for 650m along strike, has a horizontal combined width of around 70m and a vertical height of about 250m. The top of the Mineral Resource occurs between 70m and 90m below the surface.
Estimation and modelling techniques	• *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).*	• Surpac software was used for data validation, analysis, geological and mineralized domain modelling, sample compositing, grade interpolation and reporting. • Grade domains for constraining Resource estimation were interpreted and modelled based on geological logging and assay results contained within the supplied database. Eight separate vein sets were modelled. • The resource model is based on statistical and geostatistical investigations generated using 1m composited sample intervals. Assessment of the data suggests requirement for high grade cutting for the input datasets to be used for resource estimation and a value of 240 g/t Au was used. A high-grade distance restriction was used in the estimation so that any composite with a grade of more than 30g/t

Criteria	JORC Code explanation	Commentary
	• *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.*	was restricted to an influence of 12m for the first estimation pass and 24m for the second and third passes.. • A rotated, sub-celled block model was constructed using parent block dimensions of 1m East by 10m North by 10mRL with sub-blocking for the purpose of providing appropriate definition of the grade domain boundaries. • Resource estimation was carried out for gold on the basis of analytical results available up to October 2022. Ordinary Kriging (OK) was selected as an appropriate estimation method based on the quantity and spacing of available data and style of deposit under review. A three-pass strategy was employed to generate the grade estimates. The number of composites for a successful estimate was restricted to a minimum of 12 and a maximum of 24 for the first and second pass, reducing to 6 and 12 for the third pass. The search axes were aligned with the average orientation of the mineralised domains while search distances were derived from variographic analyses of the data sets. • Production records are not available for comparison to this estimate. Comparison of the estimated Mineral Resource and mill production to the end of June 2009 revealed a gold content reconciliation of 104%. (HEG Annual Report 2009) • No assumptions of byproduct recovery have been made. • There are no deleterious elements associated with the Reward deposit. Sulphide content is low with an average of 3% logged when present. • Block sizes in the block model were chosen based on average drill spacing. • Parent block size are comparable to underground mining selective units. • No assumptions about correlation between variables has been made. • The search radii were aligned to reflect the directions of maximum grade continuity. Vein package domains were used to constrain composite selection and interpolation. • Validation of the estimate was completed and included both interactive and statistical review. The validation methods included: -

Criteria	JORC Code explanation	Commentary
		• Visual comparison of the input data against the block model grade in plan and cross section. • Comparison of global statistics. • Swath plots, comparing the composite grade and the estimated grade grouped by intervals in plan and section The model was found to be robust.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• The tonnages are estimated on a dry basis.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• The Mineral Resource has been reported using a lower cut-off grade of 2 g/t Au. This grade reflects the underground mining method and relatively low cost processing method and is consistent with previous estimates.
Mining factors or assumptions	• *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.*	• The deposit has been mined in the past using small scale mining methods which have a high degree of selectivity. Lower cost bulk mining methods are currently being investigated for future mining campaigns.
Metallurgical factors or assumptions	• *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.*	• The mineralogy of the Hill End gold mineralisation is relatively simple with most gold being of high fineness and hosted within quartz veins with low sulphide content. • Preliminary metallurgical testing by Metcon Laboratories Brookvale NSW, indicated that the gold is coarse and free milling. Testing has determined that 98% of the contained gold is liberated and recoverable at a P80 grind size of 670 microns. • The gravity separation plant on site achieved a 95% recovery rate. During 2009 a total of 12,591 tonnes of ore at a grade of 15.9g/t was processed producing 5,871 ounces of gold.
Environmental factors or assumptions	• *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*	• The free-milling coarse gold and low sulphide content of the ore is unlikely to present any significant mine waste issues.

Criteria	JORC Code explanation	Commentary
	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.	
Bulk density	• *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.*	• Specific gravity determinations were made from 101 samples of unmineralized and mineralized quartz veins and wall rock submitted to the laboratory. The relative abundance of each rock type was factored into the analysis of the results, resulting in a bulk density of 2.7 t/m3 for all vein sets with the exception of Phillipson's with a bulk density of 2.8 t/m3. .

Classification	• *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.*
		• The Resource has been classified as Indicated and Inferred with the key parameters considered during the resource classification being:
		  • Geological knowledge and interpretation.
		  • Deposit style.
		  • Confidence in the sampling and assay data.
		  • The spacing of the exploration drill holes.
		  • Variogram model ranges in relation to the local data spacing and the estimation variance.
		  • Prospects for eventual economic extraction.
		• The exploration data used for the Reward estimate is robust and appropriate for resource estimation purposes, with the current data spacing sufficient to generate robust mineralisation interpretations. The geology of the project area has been studied in detail over numerous years, providing confidence in the interpretation of mineralisation style. Historical mining records give further confidence in the existence of economic mineralisation.
		• Prospects for eventual economic extraction are high as the deposit is partly developed, the gold is easily beneficiated using simple methods and there is an existing processing plant on site.

Criteria	JORC Code explanation	Commentary

		• Based on the consideration of items listed above, and review of the resource block model estimate quality, classification criteria were determined as summarised in the following: -
		  • **Indicated** – Blocks that were estimated in the first pass. The search ellipse distance of the first estimation pass approximates the overall range of the variogram model. The majority of these blocks occur immediately adjacent to development.
		  • **Inferred** – Blocks that were estimated in the second or third pass.
		• There is insufficient confidence in historical drilling results, primarily due to a lack of information regarding quality control results and procedures used during drilling programs, that would allow the classification of a Measured Resource.
		• The classification reflects the Competent Person's view of the deposit.

Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• There have been no audits or reviews of the estimate apart from internal review by Groundwork Plus.
Discussion of relative accuracy/ confidence	• *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.*	• There has been no attempt to apply geostatistical methods to quantify the relative accuracy of the Mineral Resource to within a set of confidence limits. • The Competent Person believes the Mineral Resource estimate provides a good estimate of global tonnes and grade. • No change of support adjustment has been made to the block estimates. • The accuracy and confidence of this Mineral Resource estimate is considered suitable for public reporting by the Competent Person. • Previous Mineral Resource estimates have reconciled well with mill production. Comparison of the estimated Mineral Resource and mill production to the end of June 2009 revealed a gold content reconciliation of 104%.