

18 November 2020

ASX ANNOUNCEMENT

Excellent Bulk Metallurgical Results Provides Confidence For Underground PFS

Highlights from underground mine bulk metallurgical gold sampling results based on nine 50kg sample sizes include:

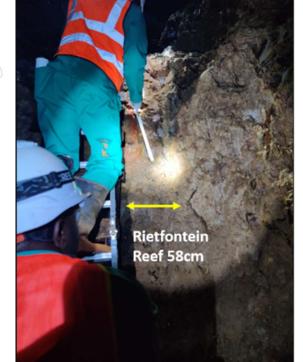
- Rietfontein Gold Mine
 - 94 % CIL Gold Recovery average from gold face samples
 - 41% Gravity gold from sample RFTMET1
 - 5.48 g/t gold from Rietfontein Gold Mine sample RFTMET2
 - 11.23 g/t gold return from Rietfontein Waste rock dump
- Beta Gold Mine
 - 91% CIL Gold Recovery
 - 12% Gravity gold from sample
 - **7.76 g/t gold from Beta Gold Mine**
- Vaalhoek Gold Mine
 - 91 % CIL Gold Recovery
 - 26 % Gravity gold from sample
 - 5.89 g/t gold from Vaalhoek Gold Mine

Theta Gold Mines Limited ("Theta Gold" or "Company") (ASX: TGM | OTCQB: TGMGF) is pleased to provide an update on its underground gold bulk sampling program. The Company is assessing ways to accelerate its planned +160,000 oz Au per annum production target which is primarily focused on bringing priority underground mines into production sooner.

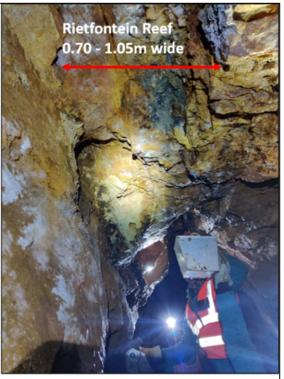
450kg of bulk samples were collected from various shallow underground gold faces including at the Rietfontein, Beta and Vaalhoek Gold Mines with all showing excellent gold recovery with Carbon In Leach (CIL).

Theta Gold's technical team is confident that these preliminary metallurgical results can be repeated on a number of other mines. The 91% CIL recovery for the Beta Reef bulk sample was fresh ore which is very typical of that mine which hosts ~1.1 million ounces gold resources. The 91% recovery was well above expectations and demonstrates once again that modern technology can revitalize Theta Gold's broader mining province.

Work completed so far will be included in the Pre-feasibility Study (PFS) to increase the Mine Reserves which includes an underground bulk sampling program, underground workings survey and historical data review. The bulk sampling was carried out to assist metallurgical studies. The bulk sampling program was restricted to easily accessible gold mining faces and dumps to gauge historical Run-of-Mine (ROM) ore.



Rietfontein Met 1



Rietfontein Met 2

Figure 1: Rietfontein sample points

Theta Gold Chairman Bill Guy commented:

"Theta Gold Mines has identified and progressed a strategic opportunity to re-assess the viability of re-opening a number of historical underground workings that have easy access and near surface mineable gold faces (Table 1). The Pre-feasibility Study on various underground mines is focussed on a path to quick gold production and ramp-up.

The preliminary metallurgical test-work involved diagnostic leach tests and the results from a number of our targets have shown high recoveries for gold using conventional CIL. These preliminary results are great news for our shareholders. The ability to process both open pit and shallow underground material through the same TGME gold plant has the potential to reduce capital and operating costs, as well as enabling us to scale up gold production as each new underground mine is brought online. The results are yet another key value driver for Theta Gold shareholders."

| Element | Unit | RTF Dump Composite ² | RTFWRMet 1 Composite ³ | RFTMet 1 Composite⁴ | RFTMet 2 Composite⁴ | BETMet 1 Composite⁴ | VaalHMet Composite⁴ |
|------------------------------------|-----------|------------------------------------|--------------------------------------|------------------------|------------------------|------------------------|------------------------|
| Au Head Grade | g/t | 1.12 | 11.60 | 4.60 | 5.68 | 7.76 | 5.80 |
| Au (duplicate) | g/t | 1.12 | 10.90 | 4.92 | 5.44 | 7.48 | 5.92 |
| Au (triplicate) | g/t | 1.20 | 11.20 | 4.84 | 5.32 | 7.32 | 5.96 |
| Au av Head Grade | g/t | 1.15 | 11.23 | 4.79 | 5.48 | 7.52 | 5.89 |
| | | | | | | | |
| Gravity recoverable | 11 | RTF Dump | RTFWRMet 1 | RFTMet 1 | RFTMet 2 | BETMet 1 | VaalHMet |
| gold | gold Unit | | Composite | Composite | Composite | Composite | Composite |
| Gravity (80% - 75um scout test) | % | 7.82 | 7.96 | 41.05 | 27.84 | 12.04 | 26.03 |
| | | | | | | | |
| CIL Recovery Results | % | 62.74 | 78.69 | 95.53 | 92.09 | 90.91 | 91.63 |

Table 1: Highlights of Gold Bulk Sampling Metallurgical Test Work¹

Notes 1 Details of bulk gold sampling program are given in Annexure A

2 RTF Dump is a sample derived from composites from the Rietfontein Mine tailings facility

- 3 RTFWRMet1 is a composite sample of fresh rock material on the historic Rietfontein Mine ROM pad (Over 9g/t recovered from CIL TEST)
- 4 Samples RFTMET 1&2, BetMET1, and VaalHMet1 were all collected from underground workings gold faces.
- 5 Frankfort Mine was also sampled and yielded low CIL metallurgical recoveries. Further test work is required (See Annexure A).

This announcement was approved for release by Bill Guy, Chairman.

For more information please visit <u>www.thetagoldmines.com</u> or contact:

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https://www.linkedin.com/company/thetagoldmines/

Competent Persons Statement

Metallurgical results

The information in this report relating to exploration results is based on, and fairly reflects, the information and supporting documentation compiled by Mr Phil Bentley (MSc (Geol), MSc (MinEx), Pr.Sci.Nat. No. 400208/05, FGSSA), a consultant to the Company and a member of the South African Council for Natural Scientific Professions.

Mr Bentley has sufficient experience that is relevant to the style of mineralisation under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Bentley consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Mineral resources

The information in this report relating to Mineral Resources is based on, and fairly reflects, the information and supporting documentation compiled by Mr Uwe Engelmann (BSc (Zoo. & Bot.), BSc Hons (Geol.), Pr.Sci.Nat. No. 400058/08, MGSSA), a director of Minxcon (Pty) Ltd and a member of the South African Council for Natural Scientific Professions.

The original report titled "Theta Gold increases Mineral Resource to over 6Moz" was dated 16 May 2019 and was released to the Australian Securities Exchange (ASX) on that date. The Company confirms that –

- it is not aware of any new information or data that materially affects the information included in the ASX announcement; and
- all material assumptions and technical parameters underpinning the estimates in the ASX announcement continue to apply and have not materially changed.

ABOUT THETA GOLD MINES LIMITED

Theta Gold Mines Limited (ASX: TGM | OTCQB: TGMGF) is a gold development company that holds a range of prospective gold assets in a world-renowned South African gold mining region. These assets include several surface and near-surface high-grade gold projects which provide cost advantages relative to other gold producers in the region.

Theta Gold's core project is located next to the historical gold mining town of Pilgrim's Rest, in Mpumalanga Province, some 370km northeast of Johannesburg by road or 95km north of Nelspruit (Capital City of Mpumalanga Province). Following small scale production from 2011 – 2015, the Company is currently focussing on the construction of a new gold processing plant within its approved footprint at the TGME plant, and for the processing of the Theta Open Pit oxide gold ore. Nearby surface and underground mines and prospects are being evaluated

The Company aims to build a solid production platform to over 160 kozpa based primarily around shallow, open-cut or adit-entry hard rock mining sources. Theta Gold has access to over 43 historical mines and prospect areas that can be accessed and explored, with over 6.7Moz of historical production recorded.

Theta Gold holds 100% issued capital of its South African subsidiary, Stonewall Mining (Pty) Ltd ("Stonewall"). Stonewall holds a 74% shareholding in both Transvaal Gold Mining Estates Limited ("TGME") and Sabie Mines (Pty) Ltd ("Sabie Mines"). The balance of shareholding is held by Black Economic Empowerment ("BEE") entities. The South African Mining Charter requires a minimum of 26% meaningful economic participation by the historically disadvantaged South Africans ("HDSAs"). The BEE shareholding in TGME and Sabie Mines is comprised of a combination of local community trusts, an employee trust and a strategic entrepreneurial partner.



DISCLAIMER

This announcement has been prepared by and issued by Theta Gold Mines Limited to assist in informing interested parties about the Company and should not be considered as an offer or invitation to subscribe for or purchase any securities in the Company or as an inducement to make an offer or invitation with respect to those securities. No agreement to subscribe for securities in the Company will be entered into on the basis of this announcement.

This announcement may contain forward looking statements. Whilst Theta Gold has no reason to believe that any such statements and projections are either false, misleading or incorrect, it does not warrant or guarantee such statements. Nothing contained in this announcement constitutes investment, legal, tax or other advice. This overview of Theta Gold does not purport to be all inclusive or to contain all information which its recipients may require in order to make an informed assessment of the Company's prospects. Before making an investment decision, you should consult your professional adviser, and perform your own analysis prior to making any investment decision. To the maximum extent permitted by law, the Company makes no representation and gives no assurance, guarantee or warranty, express or implied, as to, and take no responsibility and assume no liability for, the authenticity, validity, accuracy, suitability or completeness of, or any errors in or omissions, from any information, statement or opinion contained in this announcement. This announcement contains information, ideas and analysis which are proprietary to Theta Gold.

ANNEXURE A: JORC Code, 2012 Edition – Table 1 report template

Section 1 Sampling Techniques and Data

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

| JORC Code explanation | Commentary |
|--|--|
| • 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. | Sampling undertaken for the underground metallurgical characterization programme involved insitu underground face, sidewall and roof channel samples from vein exposures. The Rietfontein Tailings dump samples were taken at surface from channel samples from 12 mechanically excavated pits. |
| Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. | Samples from in situ mineralized vein samples were either over the width of the vein or else over a mining width inclusive of HW and FW dilution (eg FKTBEVMET2). Roughly 20kg samples were composited prior to assay. |
| Aspects of the determination of mineralisation that are Material to the Public Report. | The sampling was of a regional nature. The sampling is not material to any estimations other than an indication as to the presence of gold in the material sampled and from which metallurgical analyses and tests could be undertaken |
| • 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. | The channel rock chip samples were between 15 and 25kg in mass for composite purposes. Samples analysed for gold were approximately 2 kg from composited material from each site. |
| | 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 |

| JORC Code explanation | Commentary |
|--|--|
| 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). | No drilling was undertaken. Sampling was by conducted manually. |
| 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. | No drilling was undertaken. |
| 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. | The underground channel samples were taken for testwork on gold deportment and metallurgical characteristics and were not geologically or geotechnically logged to any detail to support a mineral resource estimate or mining studies. |
| • Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. | No logging was undertaken. Photographs of each site taken. |
| • The total length and percentage of the relevant intersections logged. | No logging was undertaken |
| If core, whether cut or sawn and whether quarter, half or all core taken | No drilling was undertaken. |
| If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry | Approximately 4 x 20kg Channel rock chip samples were taken and composited from sites for metallurgical tests. |
| For all sample types, the nature, quality and appropriateness of the sample preparation technique. | Rock samples were collected manually or in a sample tray and bagged |
| Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. | and tagged No QC procedures were noted. |
| | 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). 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. 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. If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffied, tube sampled, rotary split, etc and whether sample dwet or dry For all sample types, the nature, quality and appropriateness of the sample dwet or dry Quality control procedures adopted for all sub-sampling stages to |

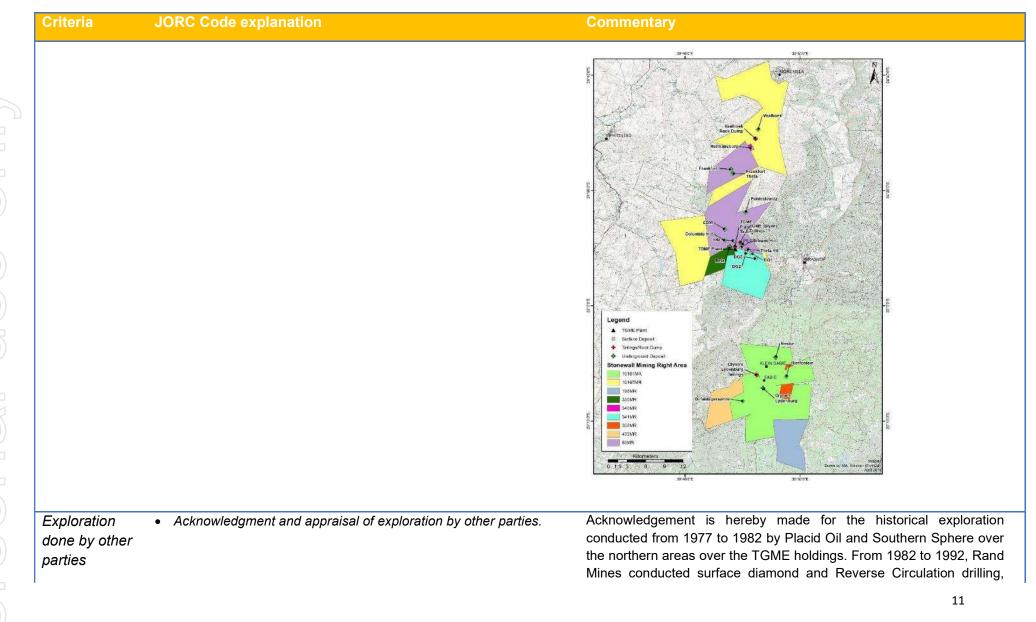
| Criteria | JORO | C Code explanation | Commentary |
|---------------------------------|---------------------|---|---|
| | situ duj • Wł | easures taken to ensure that the sampling is representative of the in u material collected, including for instance results for field plicate/second-half sampling. hether sample sizes are appropriate to the grain size of the material ing sampled. | There were no specific representivity measures applied to the rock sampling Sample sizes (15 - 25kg) are appropriate for sampling the rock chips |
| Quality of assay data and | lab | e nature, quality and appropriateness of the assaying and poratory procedures used and whether the technique is considered rtial or total. | Fire assay analyses were undertaken, Appropriate total methodology. FA is a total assay, 50g aliquot, 4 acid attack. |
| laboratory tests | the ma | r geophysical tools, spectrometers, handheld XRF instruments, etc, e parameters used in determining the analysis including instrument ake and model, reading times, calibrations factors applied and their rivation, etc. | None of these applications were used, and have not been reported. |
| | du | ature of quality control procedures adopted (eg standards, blanks, plicates, external laboratory checks) and whether acceptable levels accuracy (ie lack of bias) and precision have been established. | There were no QC procedures adopted for the assaying of the rock chips |
| Verification | | e verification of significant intersections by either independent or | This has not been undertaken |
| of sampling and assaving | | ernative company personnel. e use of twinned holes. | No drilling was undertaken. |
| assaying | | ocumentation of primary data, data entry procedures, data rification, data storage (physical and electronic) protocols. | This press release October 2020 documents the underground rock chip sampling programme accurately, and provides excel spreadsheets containing sampling data and metallurgical testwork results. |
| | • Dis | scuss any adjustment to assay data. | There is no adjustment to assay data. |

| Criteria | JORC Code explanation | Commentary |
|--|--|--|
| 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. | A handheld Garmin GPS (WGS84) was used to survey dumps and sample points, and the survey was of good quality. |
| | Specification of the grid system used.Quality and adequacy of topographic control. | UTM Zone 36J Good quality and adequate |
| Data spacing and | Data spacing for reporting of Exploration Results. | The rock chip sampling was taken in situ from exposures safe to access. |
| distribution | 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. | The data spacing and distribution is not sufficient for geological and grade continuity interpretations to support a mineral resource estimate. |
| | • Whether sample compositing has been applied. | Rock chip sampling from each locality was composited for metallurgical test-work to ascertain the existence of free gold amenable to gravity recovery as well as amenability to cyanidation. Samples submitted for assay were of insitu representative material |
| Orientation of data in | Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering | The orientation of the rock chip sampling was not taken and achieves no bias, and there are no structures to impact evaluation |
| relation to geological structure | 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. | No drilling was undertaken and there are no relationships generated by the rock chip sampling programme, no structures that can introduce sample bias. |
| Sample security | • The measures taken to ensure sample security. | Samples are stored in a locked core shed. |
| Audits or reviews | • The results of any audits or reviews of sampling techniques and data. | No audits or reviews of sampling techniques have been undertaken. |

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

| Criteria | JORC Code explanation | Commentary |
|--|--|--|
| <i>Mineral tenement and land tenure status</i> | nement and nd tenure 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 | The mining rights are held under Transvaal Gold Mining Estates Limited ("TGME"). The mining rights 83MR, 341MR, 358MR, 340MR and 433MR have been granted, registered and executed and are currently active, held over certain Mineral Resource areas. Their accompanying environmental management programmes and social and labour programmes are also executed. |
| | | The mining rights 10161MR,10167MR and MR330 have been granted and are pending execution. The mining right 198MR is pending renewal. |
| | | A Section 102 amendment process for inclusion of Theta Project into 83MR is currently underway, with the environmental and socio- economic studies, as well as water use licence application process, following prescribed regulatory timelines. |
| | • 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. | TGME is required to comply with DMR regulations and instructions timeously in order to receive executed rights, as well as for the currently active rights to remain in force. It is noted that a few years have lapsed since the last formal DMR communication on 330MR and 198MR, and notes that the security of these rights may be at risk. |
| | | The 83MR Section 102 application is following timelines as stipulated by applicable regulations. The Mineral Resource is located within the above mining right areas as per the figure below. |

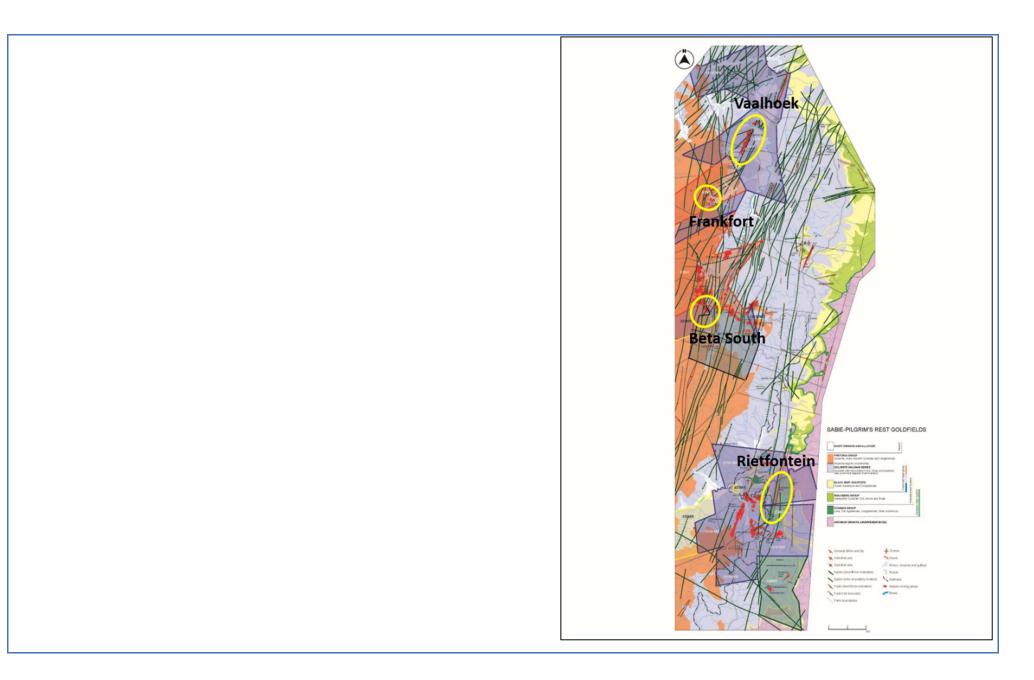


| Criteria | JORC Code explanation | Commentary |
|----------|---|---|
| | | extensive re-opening of old workings and surface exploration programmes around the town of Pilgrims Rest, and systematic alluvi prospecting along the Blyde River. |
| | | TGME and Simmer & Jack conducted drilling, geochemical so sampling, trenching and geological mapping. |
| Geology | • Deposit type, geological setting and style of mineralisation. | Epigenetic gold mineralisation in the Sabie-Pilgrims Rest Goldfie occurs as concordant and discordant (sub-vertical) veins (or reefs) in variety of host rocks within the Transvaal Drakensberg Goldfield, ar these veins have been linked to emplacement of the Bushveld Comple |
| | | Mineralisation in the region occurs principally in concordant reefs in fla bedding parallel shears located mainly on shale partings within the Malmani Dolomites. These bodies are stratiform, and are general stratabound, and occur near the base of these units. |
| | | The discordant reefs (or cross-reefs) are characterised by a variety gold mineralisation styles. At Rietfontein, a sub-vertical quar carbonate vein occurs which reaches up from the Basement Granit and passes to surface through the Transvaal. They are fou throughout the Sabie-Pilgrims Rest Goldfield, and are common |
| | | referred to as cross reefs, blows, veins, and leaders and exhibit varyi assemblage of gold-quartz-sulphide mineralisation generally striki northeast to north-northeast. They vary greatly in terms of composition depth and diameter. In addition to the above, more recent eluv |
| | | deposits occur on the sides of some of the hills and are through represent cannibalised mineralised clastic material resulting from t erosion of underlying reefs. Gold mineralisation is accompanied various sulphides of Fe, Cu, As and Bi. |

| | Criteria | JORC Code explanation | Commentary |
|---|--------------------------------|--|---|
| | 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. | No drilling was undertaken. |
| | | If the exclusion of this information is justified on the basis that the 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. | This information is not excluded. |
| | 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. | There were no weighted average techniques applied to the rock chip sampling. No grade cutting was used. |
| | | | There was no aggregation reported |
| | | • 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. | |
| | | | There were no metal equivalent values. |
| | | The assumptions used for any reporting of metal equivalent values should be clearly stated. | |
| | Relationship | • These relationships are particularly important in the reporting of | The channel rock chip sampling was taken across total vein widths. |
| | between | Exploration Results.If the geometry of the mineralisation with respect to the drill hole | There was no drilling, so there is no related geometry of mineralization. |
| | mineralisation widths and | 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, | There was no drilling, so there is no downhole length or true width data. |
| 1 | | | 13 |

| Criteria | JORC Code explanation | Commentary |
|----------------------|---|---|
| intercept lengths | true width not known'). | |
| 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. | The channel rock chip sampling is part of a regional underground assessment programme. In the writer's opinion there are no significant discoveries being reported. |
| | i i i i i i i i i i i i i i i i i i i | Locality plans of the rock chip sampling are given below. |
| | | Map showing underground channel rock chip sample localities in the Sabie – Pilgrims Rest Goldfield |

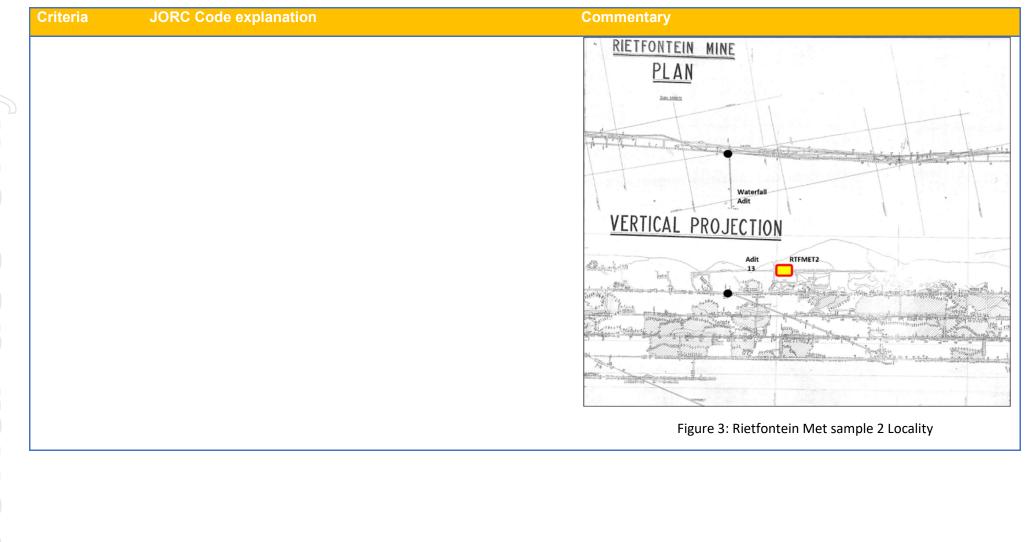




| riteria | JORC Code explanation | Commenta | iry | | | | | |
|--|--|---|--|----------------------|------|------------------|-------|--------------------------------|
| alanced | Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades | The table below lists the composite channel rock chip assay results | | | | | | |
| porting | and/or widths should be practiced to avoid misleading reporting of | Mine | Sample Locality | Sample Tag | No. | Total Mass Kg | | Vaelgwyn Lab Composite Au g |
| | | Rietfontein Mine | 3 Level Oxide Otz Vein | RFTMET1 | 4 | 93.18 | 1.14 | 4.79 |
| | Exploration Results. | Rietfontein Mine | 2 Level Mixed oxidised/sulphide Vein | RFTMET1 | 4 | 72.31 | 0.58 | 5.48 |
| | | Rietfontein Mine | Old ROM pad ore feed material | RTFWRMET1 | 3 | 81.50 | 13.05 | 11.23 |
| | | Beta Mine | Beta South Beta Reef | BETMET1A | 2 | 46.69 | 9.11 | 7.52 |
| | | Beta Mine | Beta South Beta Reef | BETMET1A BETMET1B | 2 | 45.00 | 5.35 | 1.52 |
| | | Vaalhoek North Section | | VAALHMET | 4 | 75.24 | 3.79 | 5.89 |
| | | Frankfort Mine | Bevetts Reef Main Workings | FKTMET1 | 4 | 98.63 | 2.88 | 8.07 |
| | | Frankfort Mine | Bevetts Reef Main workings | FKTMET2 | 4 | 111.85 | 0.14 | 6.60 |
| | | Frankfort Mine | Bevetts Reef / Beverly Hills Lense | FKTMET3 | 4 | 57.16 | 6.94 | 4.33 |
| | | Frankfort Mine | Bevetts Reef / Beverly Hills Lense | FKTMET4 | 7 | 104.33 | 1.04 | 0.24 |
| | | Rietfontein Mine | Tailings Dump | RTFDUMP1 | 1 | 104.55 | 0.76 | 0.24 |
| | | Metrontenninne | Tallings Dullip | RTFDUMP2 | 1 | | 1.15 | |
| | | | | RTFDUMP3 | 1 | | 1.03 | |
| | | | | RTFDUMP4 | 1 | | 1.03 | |
| | | | | RTFDUMP5 | 1 | | 0.40 | |
| | | | | RTFDUMP6 | 1 | | 1.10 | |
| | | | | RTFDUMP7 | 1 | | 0.44 | |
| | | | | RTFDUMP8 | 1 | | 0.44 | |
| | | | | RTFDUMP9 | 1 | | 0.02 | |
| | | | | RTFDUMP10 | 1 | | 1.52 | |
| | | | | RTFDUMP11 | 1 | | 1.32 | |
| | | | | Total | 11 | 299.12 | 1.45 | 1.15 |
| | | L | 1 | 1.000 | 1 ** | 255.12 | I | 1.15 |
| Other ubstantive xploration ata | 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 | Rietfontein I Two (2) und | I sample sites and res Vine erground samples (R1 | | | | | |
| | potential deleterious or contaminating substances. | 4). | | | | | | |
| | | , | | | | | | |
| | | | | | | | | |

| Criteria | JORC Code explanation | Commentary |
|----------|-----------------------|---|
| | | 3 Adit 21 3 Adit 21 4 3 Adit 21 4 5 5 10 10 10 10 10 10 10 10 10 10 |
| | | Figure 1: Rietfontein Mine longitudinal section and plan view |
| | | |

| | Commentary |
|--|--|
| | Plan View RTFMET1 |
| | Figure 2: Rietfontein Met1 sample locality |



Criteria

JORC Code explanation

Commentary



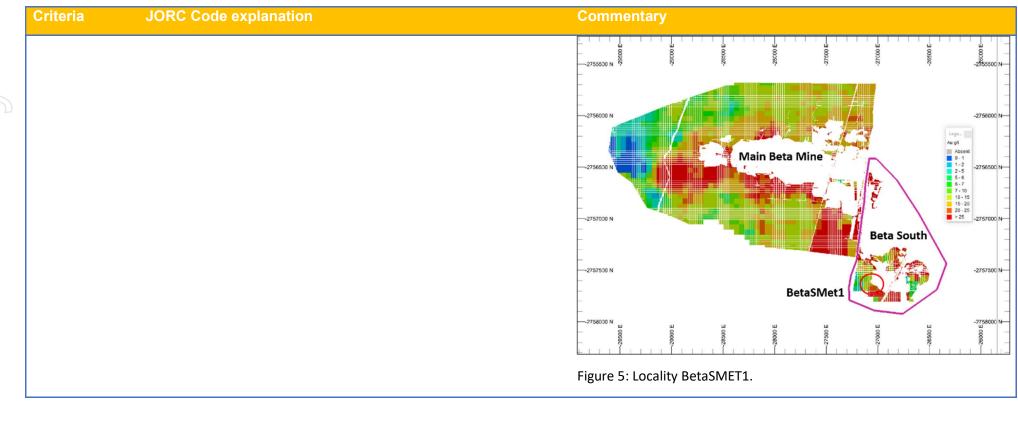
Figure 4: Rietfontein Met Samples 1 and 2

Metallurgical testwork results are shown below.

| JORC Co | de explanation | Commentary | | | | |
|---------|----------------|-----------------------------------|------|--------------------------------------|------------------------|-----------------------|
| | | Element | Unit | RTFWRMet 1 Composite ³ | RFTMet 1 Composite⁴ | RFTMet 2 Composite |
| | | Au Head Grade | g/t | 11.60 | 4.60 | 5.68 |
| | | Au (duplicate) | g/t | 10.90 | 4.92 | 5.44 |
| | | Au (triplicate) | g/t | 11.20 | 4.84 | 5.32 |
| | | Au av Head Grade | g/t | 11.23 | 4.79 | 5.48 |
| | | | | • | | |
| | | Gravity recoverable | | RTFWRMet 1 | RFTMet 1 | RFTMet 2 |
| | | gold | Unit | Composite | Composite | Composite |
| | | Gravity (80% -75um scout test) | % | 7.96 | 41.05 | 27.84 |
| | | CIL Recovery Results | % | 78.69 | 95.53 | 92.09 |

3.2 Beta South

The Beta south area of interest is shown in Figure 5. BetaSMET1 comprised insitu reef and illegal miner's material (Figure 6).



| Criteria | JORC Code explanation | Commentary |
|----------|-----------------------|---|
| | | Beta South Met Samples 1 & 2 Beta South Met Samples 1 & 2 Beta Reef Scome Scome |
| | | Figure 6: BetaSMET1&2 sampling insitu reef and illegal miner's ore sacks. |
| | | The metallurgical Testwork result for Beta SMET1 is shown below; |

| RC Code explanation | Commentary | | |
|---------------------|-----------------------------------|---|------------------------------------|
| | Element | Unit | BETMet 1 Composite ⁴ |
| | Au Head Grade | g/t | 7.76 |
| | Au (duplicate) | g/t | 7.48 |
| | Au (triplicate) | g/t | 7.32 |
| | Au av Head Grade | g/t | 7.52 |
| | Gravity recoverable gold | Unit | BETMet 1 Composite |
| | Gravity (80% -75um scout test) | % | 12.04 |
| | CIL Recovery | ~ | |
| | Results | % | 90.91 |

| Criteria | JORC Code explanation | Commentary |
|----------|-----------------------|---|
| | | 230 cmg/t cut-off Au g/t 1 & 2 FKTMET 1 & 2 FKTMET3 Higher grade areas of interest – possible filler FKTMET4 - possible filler 10 - 1 - 20 - 2 20 - 2 |
| | | Figure 7: Frankfort Bevetts metallurgical sample localities Photographs of the met samples are shown in Figures 7-9. |

JORC Code explanation

Commentary



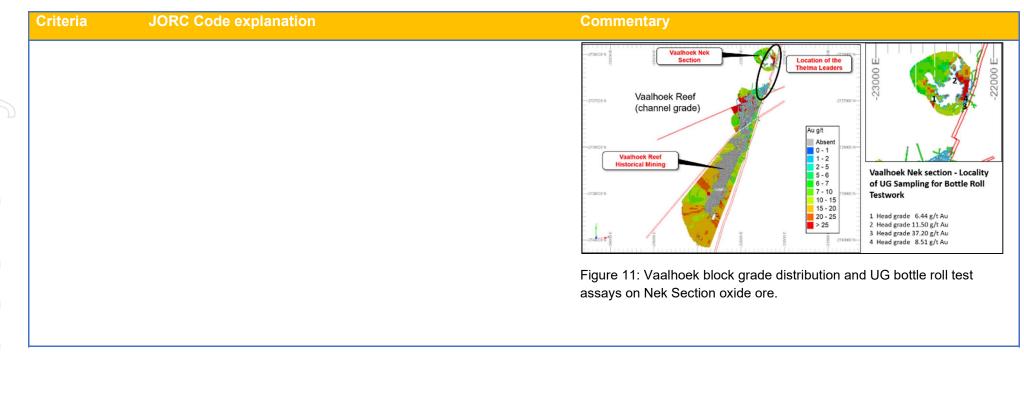
Figure 8: Frankfort Bevetts Met 1 & 2 samples. Sulphidic reef with the thrust duplication on the HW of the thrust plane leading to localised reef thickening.

FKTMET2 was taken across the drive from No 1 and included contaminating HW and FW carbonaceous shale. Previous overbreak and dilution as per this sample by Simmers and Jack resulted in very poor grades and low metallurgical recoveries.

FKTMET3 and 4 were taken from Bevetts thrust exposures on the northern Beverly Hills section of the mine.

| riteria | JORC Code explanation | Commentary | |
|---------|-----------------------|---|---------------------------------|
| | | Frankfort Bev | etts Reef (Beverly Hills) |
| | | FKTMET3 Bevetts Lense 1.0 m | EKIMET3 Bevetts Len 1.0 m |
| | | Frankfort Bevetts Reef MET3 | Frankfort Bevetts Reef MET3 |
| | | Figure 9: Frankfort Bevetts MET3. pyrite-graphite minerlisation locali | |
| | | FKTMET4 Bevetts Thrust 30cm | FKTMET4 Bevetts Thr 30cm |
| | | | |
| | | | |

| JC | ORC Code explanation | Commentary | | | | | |
|----|----------------------|--|------------------------------------|---------------------------------------|-------------------------|-----------------------|------------------|
| | | Figure 10: Frankfor section | t Bevetts | MET4. Bev | etts thrus | t in the Bev | erly Hills |
| | | Metallurgical testwork results for FKTMet1-4 are show | | | | | ow: |
| | | Element | Unit | FKTMet 1 Composite | FKTMet 2 Composite | FKTMet 3 Composite | FKTMe Compos |
| | | Au Head Grade | g/t | 8.30 | 6.90 | 4.50 | 0.20 |
| | | Au (duplicate) | g/t | 8.00 | 6.50 | 4.10 | 0.24 |
| | | Au (triplicate) | g/t | 7.90 | 6.40 | 4.40 | 0.28 |
| | | Au av Head Grade | g/t | 8.07 | 6.60 | 4.33 | 0.24 |
| | | Gravity recoverable gold | Unit | FKTMet 1 Composite | FKTMet 2 Composite | FKTMet 3 Composite | FKTMet Compos |
| | | Gravity (80% -75um scout test) | % | 9.83 | 22.07 | 14.67 | 16.71 |
| | | CIL Recovery Results | % | 7.33 | 27.98 | 8.43 | 9.11 |
| | | 3.4 Vaalhoek M Previous bottle roll and amenability to 11 & 12) but a fall adjacent area close | sampling cyanidati of ground | at Vaalho on. The sa forced the | me Adit 3 e sampling | was access | ed (Figur |
| | | | | | | | |



| Vaalhoek Nek / Hill Section Vaalhoek Nek / Hill Section Vaalhoek Nek / Hill Section Figure 12: Locality VHKMET1 The Vaalhoek reef is well oxidised in this area (Figure 13). | Criteria | JORC Code explanation | Commentary |
|--|----------|-----------------------|--|
| | | | HKMETI MA |
| The Vaalhoek reef is well oxidised in this area (Figure 13). | | | Figure 12: Locality VHKMET1 |
| | | | The Vaalhoek reef is well oxidised in this area (Figure 13). |

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JORC Code explanation

Criteria

Commentary



Figure 13: Sampling VHKMET1

The metallurgical testwork result for VHKMET1 is shown below:

| Criteria | JORC Code explanation | Commentary | | |
|----------|-----------------------|-----------------------------------|------|------------------------|
| | | Element | Unit | VaalHMet Composite⁴ |
| | | Au Head Grade | g/t | 5.80 |
| | | Au (duplicate) | g/t | 5.92 |
| | | Au (triplicate) | g/t | 5.96 |
| | | Au av Head Grade | g/t | 5.89 |
| | | Gravity recoverable gold | Unit | VaalHMet Composite |
| | | Gravity (80% -75um scout test) | % | 26.03 |
| | | CIL Recovery Results | % | 91.63 |
| | | | | |
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| Criteria | JORC Code explanation | Commentary |
|----------|--|---|
| | | Mineral Resources for the #1 and #2 shaft pillars were also extracted as part of the "early gold" assessment (Figure 14). |
| | 273008н Vaalhoek North oxides 273000 N 295Kt @ 2.35g/t over 90cm Vaalhoek North oxides 273700 N 20Koz Au 273700 N -273700 N 273700 N 273700 N -273700 N 273900 N 273900 N -273000 N 273900 N 273900 N -273900 N 273900 N | |
| | | Figure 14: Vaalhoek "early gold" opportunities |
| | | |
| | | 33 |

| Criteria | JORC Code explanation | Commentary |
|----------|---|---|
| | | 3.5 Rietfontein Tailings Dump |
| | | The Rietfontein Mine tailings dump (Figures 15 and 16) has never been evaluated for retreatment. The tailings were generated from the processing of some 227Kt of ore that yielded around 65kOz Au. |
| | Rietfontein Tailings Dump 4 Adit Proteine 4 Adit Proteine 4 Adit Proteine 4 Adit Proteine 4 Adit Proteine 4 Adit Proteine 4 Adit | |
| | | Figure 15: Rietfontein tailings dump locality |
| | | |
| | | 34 |
| | | |

Criteria JORC Code explanation Commentary Figure 16: Rietfontein tailings sampling pits and exposure of a splay vein at Adit 4 The tailings dump is roughly constructed at 3 levels, and these were pitted using an excavator to give preliminary indications of gold grade (Figure 17).

Criteria

JORC Code explanation

Commentary



Figure 17: Rietfontein tailings sample localities. (Green=Top dump; Brown=Middle dump; Yellow=Bottom dump). RTFWRD1 is a sulphidic ore sample from the old ROM pad (av assay 13 g/t Au).

JORC Code explanation

Commentary

Rietfontein Dump metallurgical Samples

| | Rietfontein Tailings Dump Metallurgical Samples | | | | | | | |
|--------|---|-----------|---------|--|--|--|--|--|
| Level | Sample | SGS Assay | Mass Kg | Description | | | | |
| Тор | RFTDump 1 | 0.76 | 22 | Limonitic sand Top Dump south end slot | | | | |
| Тор | RFT Dump 2 | 1.15 | 28 | Limonitic sand Top Dump | | | | |
| Тор | RFT Dump 3 | 1.03 | 36 | Limonitic sand Top Dump | | | | |
| Тор | RFT Dump 4 | 1.12 | 27 | Limonitic sand Top Dump | | | | |
| Тор | RFT Dump 5 | 0.40 | 26 | Limonitic sand Top Dump | | | | |
| | | | | | | | | |
| Middle | RFT Dump 6 | 1.10 | 34 | Grey sand Middle Dump | | | | |
| Middle | RFT Dump 7 | 0.44 | 24 | Grey sand Middle Dump | | | | |
| Middle | RFT Dump 8 | 0.62 | 23 | Grey sand middle Dump | | | | |
| | | | | | | | | |
| Bottom | RFT Dump 9 | 0.93 | 25 | Grey sand basal part of bottom dam | | | | |
| Bottom | RFT Dump 10 | 1.52 | 26 | Grey sand basal part of bottom dam | | | | |
| Bottom | RFT Dump 11 | 1.49 | 29 | Grey sand basal part of bottom dam | | | | |

The estimated volume/resource of tailings is shown below. The 211kt reconciles quite well with the historic production from 227kt processed (see Table below). Any future evaluation should involve 20m collar spaced augering and tightening up on the grade distribution vertically and laterally.

| Historical Production from Rietfontein | | | | | |
|--|---------|------------|----------------------|----------------|-------------|
| Tons Milled | 227,000 | | | | |
| | | g/t / kg/t | Today's value (US\$) | Rev/ton (US\$) | Rev/ton (R) |
| Gold (Oz) | 65,000 | 8.1 | 117,000,000 | 515 | 8,762 |
| Silver (Oz) | 36,000 | 4.5 | 864,000 | 4 | 65 |
| Copper (tons) | 550 | 2.4 | 3,135,000 | 14 | 235 |
| | | Total | 120,999,000 | 533 | 9,062 |

The Rietfontein Tailings dump composite metallurgical testwork results are shown below:

| JORC Code explanation | Commentary | | |
|-----------------------|------------------------------------|------|------------------------------------|
| | Element | Unit | RTF Dump Composite ² |
| | Au Head Grade | g/t | 1.12 |
| | Au (duplicate) | g/t | 1.12 |
| | Au (triplicate) | g/t | 1.20 |
| | Au av Head Grade | g/t | 1.15 |
| | Gravity recoverable gold | Unit | RTF Dum Composit |
| | Gravity (80% - 75um scout test) | % | 7.82 |
| | CIL Recovery Results | % | 62.74 |
| | | % | 62.74 |
| | | | |
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| Criteria | JORC Code explanation | Commentary Rietfontein Tailings estimated and unclassified mineral resource | | | | | | | | | |
|----------------|---|---|--------|-----|---------|---|---------|------|-----|-----------|----------|
| | | | | | | | | | | | |
| | | Rietfontein Tailings Dump Metallurgical Samples | | | | | | | | | |
| | | Level | | | | ³ Est SG Est Tonnes Est Au g/t Est Au Kg Est Au Oz | | | | Est Au Oz | Sample |
| | | Тор | 7,435 | 6 | 44,610 | 1.2 | 53,532 | 0.89 | 48 | 1,535 | RFTDump |
| | | Тор | | | | | | | | | RFT Dump |
| | | Тор | | | | | | | | | RFT Dump |
| | | Тор | | | | | | | | | RFT Dump |
| | | Тор | | | | | | | | | RFT Dump |
| | | Middle | 16,714 | 7 | 116,998 | 1.2 | 140,398 | 0.72 | 101 | 3,250 | RFT Dump |
| | | Middle | | | | | | | | | RFT Dump |
| | | Middle | | | | | | | | | RFT Dump |
| | | Bottom | | 2 | | | | | | | RFT Dump |
| | | Bottom | 9,355 | 1.5 | 14,033 | 1.2 | 16,839 | 1.31 | 22 | 711 | RFT Dump |
| | | Bottom | | 1 | | | | | | | RFT Dump |
| | | Total | 33,504 | | 175,641 | | 210,769 | 0.81 | 171 | 5,496 | |
| Further work • | • The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). | The underground channel sampling programme will continue as underground access permits, building up a suite of sampling suitable fo ongoing metallurgical validation. | | | | | | | | | |
| | Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. | Not available due to commercial sensitivity | | | | | | | | | |

| Mineral Resource Classification | UG Mine | Reef | Reef Tonnes Kt | Reef Grade g/t | Reef Width cm | Stope Tonnes | Stope Width | Stope Grade | Au Content | | |
|------------------------------------|-------------------|------------------|----------------------|----------------------|---------------------|-----------------|----------------|----------------|------------|-------|--|
| Classification | | | | | | Kt | cm | g/t | Kg | Koz | |
| | Beta | Beta | 716 | 21.66 | 23 | 2,357 | 90 | 6.58 | 15,509 | 499 | |
| | Rietfontein | Rietfontein | 327 | 14.57 | 52 | 986 | 92 | 4.83 | 4,764 | 153 | |
| M & I | CDM | Rho | 258 | 13.19 | 23 | 895 | 90 | 3.80 | 3,403 | 109 | |
| IVI OC I | Frankfort | Bevett's | 312 | 7.70 | 61 | 464 | 97 | 5.18 | 2,402 | 77 | |
| | Vaalhoek | Vaalhoek | 64 | 13.90 | 36 | 140 | 90 | 6.35 | 890 | 29 | |
| | Olifantsgeraamte | Olifantsgeraamte | 26 | 16.97 | 25 | 91 | 90 | 4.85 | 441 | 14 | |
| Total Measured & | Indicated | | 1,703 | 16.09 | 38 | 4,933 | 91 | 6.20 | 27,409 | 881 | |
| | | | | | | | | | | | |
| Mineral Resource | UG Mine | Reef | Reef Tonnes | Reef Grade | Reef Width | Stope Tonnes | Stope Width | Stope Grade | Au Content | | |
| Classification | | | Kt | g/t | cm | Kt | cm | g/t | kg | koz | |
| | Glynn's Lydenburg | Glynn's | 3,218 | 15.87 | 25 | 9,833 | 90 | 5.19 | 51,070 | 1,642 | |
| | Beta | Beta | 1,107 | 16.51 | 25 | 3,367 | 90 | 5.43 | 18,277 | 588 | |
| | Rietfontein | Rietfontein | 1,190 | 14.06 | 57 | 1,962 | 94 | 8.52 | 16,731 | 538 | |
| | Vaalhoek | Vaalhoek | 873 | 16.28 | 22 | 2,980 | 90 | 4.77 | 14,212 | 457 | |
| Inferred | CDM | Rho | 544 | 10.06 | 24 | 1,811 | 90 | 3.02 | 5,473 | 176 | |
| | Frankfort | Bevett's | 343 | 7.41 | 48 | 596 | 93 | 4.27 | 2,542 | 82 | |
| | Olifantsgeraamte | Olifantsgeraamte | 59 | 18.33 | 23 | 248 | 90 | 4.68 | 1,081 | 35 | |
| | Ponieskrantz* | Portuguese | 64 | 13.26 | 22 | 213 | 90 | 3.99 | 849 | 27 | |
| | Frankfort Theta* | Theta | 99 | 7.22 | 34 | 220 | 90 | 3.24 | 715 | 23 | |
| | Nestor* | Sandstone | 101 | 5.54 | 41 | 193 | 90 | 2.92 | 560 | 18 | |
| | Vaalhoek | Thelma Leaders | 23 | 12.18 | 96 | 30 | 123 | 9.47 | 280 | 9 | |
| Total Inferred | | • | 7,621 | 14.67 | 31 | 21,453 | 91 | 5.22 | 111,789 | 3,594 | |

ANNEXURE B: MINERAL RESOURCES - UNDERGROUND