ASX ANNOUNCEMENT

24 November 2022



Labyrinth Gold Project, Canada

Exceptional metallurgical results further strengthen development outlook for Labyrinth gold project in Canada

Overall recovery result of 95.2% Au follows maiden Resource of 500,000oz at 5g/t1

Key Points

- Outstanding recovery achieved through Gravity/Flotation flowsheet, returning a low mass pull, high value 96g/t Au concentrate at 97.3% recovery
- Mineralogical studies confirm the production of a pyrite dominant concentrate containing negligible deleterious elements
- Regrinding the flotation concentrate prior to cyanidation returns an overall 95.2% Au recovery to doré at low cyanide and lime consumption rates
- The results demonstrate a clear, efficient processing pathway for the high-grade Labyrinth project
 - Further metallurgical and process design upside likely through float and grind size optimisation
- Labyrinth Resources ("**Labyrinth**" or "**the Company**") (ASX:LRL) is pleased to announce outstanding metallurgical results from its comprehensive testwork which demonstrate a clear, efficient processing pathway for its 500,000 z Labyrinth gold project in Quebec, Canada.
- The results will help underpin optimisation studies across the Labyrinth Project, initial plant design costings and assessment of any third-party ore sales, toll treatment or concentrate sales.
- Labyrinth Chief Executive Matt Nixon said: "These are excellent metallurgical results demonstrating that we can deliver 95.2 per cent gold recoveries using a conventional gravity and flotation circuit.
- "This will be extremely beneficial for our optimisation studies, which are already underpinned by a Resource grade of 5g/t and access to the existing underground mine infrastructure".

Details of Testwork

The project commenced in August 2022 with the submission of diamond core crushed residue composites to Base Metallurgical Laboratories Ltd ("BaseLabs") in British Columbia, Canada. The metallurgical program was derived and managed by JT Metallurgical Services ("JTs") in Perth. The aims of the program were to define the key mineralogical characteristics of the likely mill feed to a future plant, undertake systematic tests reflective of likely flowsheets being gravity/cyanidation and gravity/flotation/cyanidation and conduct comprehensive assays and mineralogical analysis on the flotation concentrate and process streams for flowsheet optimisation and marketing purposes.

¹ Refer to ASX Announcement 27 September 2022. The Company is not aware of any new information or data that materially affects the information included in this release. All material assumptions and technical parameters continue to apply and have not materially changed.



BaseLabs were presented with a total of 35 diamond hole crushed residue composites totalling 17.55m @ 6.32g/t Au. These composites originated from a total of five diamond holes representing at least 80% of the known gold mineralisation of the Labyrinth project aiming to reflect the 7g/t Au resource feed grade. Five sub-composites were generated initially for assay prior to producing a single Master Composite which returned 5.60g/t Au and 1.7g/t Ag via BLEG assay ('Bulk Leach Extractable Grade').

Feed Grades and Mineralogy

Key analytes of the five sub-composites and one Master composite are presented in Table 1 indicating very low levels of common deleterious elements. Initial BLEG testwork on the Master Composite returned a cyanide recovery of 97.1% Au and 99.7% Ag suggesting the ore is free milling.

| Anglyto | Unit | | U22-03 | U22-05 | U22-06 | U22-09 | Master |
|-----------|------|--------------|-----------|-----------|-----------|--------------|-----------|
| Andiyle | Unin | 022-01 110 1 | Hd 1 | Hd 1 | Hd 1 | Hd 1 | Composite |
| Au | ppm | 3.02/3.57 | 2.84/2.84 | 2.19/2.25 | 9.09/7.65 | 5.22/5.16 | 3.29/4.81 |
| AU (BLEG) | ppm | - | - | - | - | - | 5.6 |
| Ag | | 0.4 | 0.6 | 0.2 | 1.1 | 41.3/7.6/106 | 0.7/1.1 |
| Ag (BLEG) | ppm | - | - | - | - | - | 1.6 |
| GO As | ppm | 66 | 12 | 56 | 33 | 65 | 49 |
| Bi | ppm | < 2 | < 2 | < 2 | < 2 | < 2 | < 2 |
| С | % | - | - | - | - | - | 1.46 |
| Cd | ppm | 3 | 1 | 2 | 1 | 4 | 2 |
| Cu | ppm | 55 | 61 | 223 | 194 | 167 | 190 |
| Fe | % | 9.22 | 2.71 | 4.85 | 2.27 | 10.29 | 4.84 |
| Hg | ppm | 1 | < 1 | < 1 | <] | 1 | < 1 |
| Pb | ppm | 4 | 5 | 4 | 5 | 5 | 5 |
| S s | % | 2.32 | 0.74 | 1.67 | 1.51 | 3.99 | 1.53 |
| Sulphides | % | 2.29 | 0.71 | 1.64 | 1.48 | 3.77 | 1.29 |
| Sb | ppm | 3 | 2 | 2 | 2 | 4 | 4 |
| Те | ppm | < 20 | < 20 | < 20 | < 20 | < 20 | < 20 |
| U | ppm | < 10 | < 10 | < 10 | < 10 | < 10 | < 10 |
| Zn | ppm | 74 | 29 | 53 | 11 | 61 | 38 |

Table 1: Composite Assays

Trace Mineral Search (TMS) on the Master Composite post Heavy Liquid Separation (HLS) identified 33,7% of the gold being liberated with 52.7% associated with pyrite and 10.2% as multiphase (two or more minerals). 98.6% of the liberated gold by occurrence was less than 38 microns in size. Encouragingly, only 0.5% of the gold was associated with non-sulphide gangue, 100% of the observed gold was present as native gold and targeted pyrite particles were generally well liberated. Images are presented in Figure 1.



Figure 1: TMS of Master Composite post HLS (P₈₀ 106 micron)

Gravity/Leaching

A 20kg homogenesis split of the Master Composite was ground to P₈₀ 300micron then passed through a 3" Knelson concentrator resulting in a 0.5% mass pull concentrate grading 170g/t Au and 15.6% recovery. The recalculated feed grade of 5.73g/t aligned well with the 5.60g/t BLEG grade. The Knelson concentrate was then leached at intensive conditions replicating either an ILR or Acacia returning a 92.2% gold recovery or 14.4% overall recovery to doré. This relatively low gravity recovery to dorė is likely due to the ultrafine gold grain nature of the ore observed in the TMS.

1kg representative splits of the gravity tails containing 85.6% of the gold were reground to P₈₀ 75, 106 and 125µm for cyanidation testwork (Table 2). Leach conditions are considered reflective of typical CIP/CIL plants in the area.

Complete gold dissolution was achieved within 24 hours with the highest overall recovery being 87.2% at P₈₀ 75µm. This recovery was lower than the initial BLEG results indicating additional liberation was required. Low cyanide and lime consumptions reflect the absence of common deleterious elements and indicates the dominant sulphide, pyrite is relatively inert. There was no evidence of preg-robbing or preg-borrowing from the dissolution curves.

| 2 | Grind Size | Gravity Recovery | Leach Feed Grade | Leach Extraction | Overall | Leach Residue | Consu | mption |
|---|------------|---------------------|---------------------|---------------------|---------|------------------|-------------|-------------------|
| | (micron) | % to dorė | Au, g/t | % | % | g/t | Lime (kg/t) | Cyanide (kg/t) |
| | 75 | 14.4 | 4.96 | 86.3 | 87.2 | 0.69 | 0.47 | 0.66 |
| | 106 | 14.4 | 4.82 | 83.7 | 85.0 | 0.79 | 0.49 | 0.52 |
| | 125 | 14.4 | 4.83 | 81.9 | 83.5 | 0.88 | 0.48 | 0.43 |

| Table | 2: Gr | avity/Cyd | anidation | Summary |
|-------|-------|-----------|-----------|---------|
|-------|-------|-----------|-----------|---------|



45

50



Grind sensitivity rougher flotation tests were conducted on 2kg gravity tail splits at conditions conducive for sulphide and free gold recovery with the aim to generate a low mass pull, high grade concentrate for downstream analysis. Commonly applied PAX (100g/t), CuSO4 (100g/t) and MIBC Frother (28g/t) were dosed at natural pH generating five concentrates and a tail to observe gold, silver and sulphur flotation kinetics over 7.5 min float time.

Figure 3 and Table 2 summarises the grind sensitivity rougher tests. Mass pull decreased with grind size with a corresponding improvement in concentrate grade due to improved liberation. Gold and sulphur recoveries are considered high for all three tests suggesting the chosen flotation regime is suitable for this mineralisation.



Figure 3: Rougher Float Gold: Grade-Recovery

| Table 3: Flotation | Grind | Sensitivity | Summary |
|--------------------|-------|-------------|---------|
|--------------------|-------|-------------|---------|

| Grind Size | Gravity Recover y to doré | Float Feed Grade | Mass Pull | Combin ed Rougher Con Grade | Float Recovery | | Overall Gold Recovery | Rougher Tails Grade |
|---------------|---------------------------------|------------------------|-----------|---|----------------|------|-----------------------------|------------------------|
| um | % | Au, g/t | % | Au, g/t | Αυ % | S % | Αυ % | Au, g/t |
| 75 | 14.4 | 5.09 | 10.7 | 46.2 | 97.4 | 99.7 | 97.8 | 0.15 |
| 106 | 14.4 | 5.47 | 11.7 | 45.6 | 97.6 | 99.6 | 97.9 | 0.15 |
| 125 | 14.4 | 5.22 | 12.6 | 40.1 | 96.6 | 99.3 | 97.1 | 0.20 |

A 1kg open circuit cleaner test was conducted to reduce mass pull and increase concentrate grade as illustrated in Figure 4. A rougher grind size of P₈₀ 106µm was chosen though it's likely the grind size could be coarsened in future studies to reduce capital footprint and operating cost.

The same rougher conditions were applied followed by a P₈₀ 15µm rougher concentrate regrind then a staged 6.5min cleaner where an additional 5g/t PAX and 14g/t MIBC was added. Four concentrates were generated resulting in a combined mass pull of 7.3%, concentrate grade of 61.3g/t Au at an open circuit staged recovery of 94.4%. Based on these encouraging results, a 12.5kg bulk cleaner test was conducted aiming to produce a single combined cleaner concentrate. As presented in Table 4, both cleaner concentrate grade and open circuit recovery



improved significantly with a larger float cell being employed, and changes to reagent addition, pull times and agitator speeds.



Figure 4: Open Circuit Rougher/Cleaner Testwork Flowsheet



Figure 5: Open Circuit Cleaner Float Test

| Table 4: Cleaner | Float | Summary |
|------------------|-------|---------|
|------------------|-------|---------|

| Test | Grind Size | Gravity Recovery to doré | Float Feed Grad e | Combine d Mass Pull | Combine d Cleaner Con Grade | Float Re | ecovery | Overall Gold Rec | Rougher Tails Grade |
|-----------------------------------|-----------------|--------------------------------|----------------------------|---------------------------|--------------------------------------|----------|---------|------------------------|---------------------------|
| | μm | % | Au, g/t | % | Au, g/t | Au % | S % | Au % | Au, g/t |
| Kinetic Rghr/ Cleaner (1kg) | 106µm (rahr) | 14.4 | 4.78 | 7.3 | 61.9 | 94.4 | 90.7 | 94.4 | 0.20 |
| Bulk Rghr/ Cleaner (12.5kg) | 15µm (clnr) | 14.4 | 4.55 | 4.9 | 89 | 96.8 | 95.6 | 97.3 | 0.08 |



Flotation Concentrate Assessment

The combined cleaner concentrate, cleaner tail and rougher tail samples were assayed and submitted for QEMScan mineralogical analysis (Table 5). The cleaner concentrate containing 89.4g/t Au and 27g/t Ag was dominated by pyrite (62.4%) with pyrite accounting for 98.7% of all sulphur. The presence of 6.83% quartz and 7.82% chlorite suggests further grade improvements are likely through optimisation, namely reducing non-sulphide gangue entrainment. Photomicrographs presented in Figure 6 confirm the dominance of well liberated pyrite and trace chalcopyrite. No visible gold was recorded in the concentrate reducing possible sampling bias if concentrate is to be treated offsite or sold.

| Elemer | nt/Mineral | Unit | Cleaner Con | Cleaner Tail | Rougher Tail |
|-----------|------------------|------|-------------|--------------|--------------|
| | Αu | g/t | 89.4 | 1.31 | 0.08 |
| | Ag | g/t | 27.0 | 1.10 | 0.09 |
| Elemental | S | % | 31.7 | 0.59 | 0.04 |
| | Fe | % | 31.8 | 8.06 | 4.14 |
| | Si | % | 7.59 | 21.9 | 34.5 |
| | Pyrite | % | 62.4 | 1.38 | 0.07 |
| Mineral | Chalcopyrit e | % | 1.08 | 0.02 | 0.00 |
| | Quartz | % | 6.83 | 31.1 | 66.0 |
| | Chlorite | % | 7.82 | 24.9 | 12.8 |

| Table 5: Cleaner Concentrate Assay and | d QEMScan Mineral Suite |
|--|-------------------------|
|--|-------------------------|



Figure 6: Cleaner Float Concentrate- Photomicrographs

Two representative sub-splits of the cleaner concentrate were subject to cyanidation leach tests with and without additional regrind to determine the overall recovery to doré via the employment of a gravity/float/con leach circuit. Staged gold extraction increased from 93.0% to 97.5% via regrinding the cleaner concentrate from P₈₀ 36µm to P₈₀ 13µm. When reground, the cyanide and lime consumption was 5.1kg/t and 2.7kg/t respectively, which equates to a very low 0.25kg/t and 0.13kg/t whole of ore respectively. It is likely that further improvements in dissolution rates and reagent consumptions are likely through pre-oxygenating the slurry prior to leaching. Due to the low flotation mass pull, the capital footprint of the UFG/Leach circuit will be relatively small.



Figure 7: Float Con Leach Cyanidation

| Table 6: Flowshee | Options Assessment- | Gold Recovery |
|-------------------|---------------------|---------------|
|-------------------|---------------------|---------------|

| | | 90 08 07 07 06 40 | | 5 10 | 15 20 | - 2000ppm [0 - pH 11 - Oxygen | CN], maint at 100 | 0ppm | |
|---|-------------|---|------|-------------------|---|-------------------------------------|---------------------------------|--------------------------|---------------------------------|
| | | | | Table 6: | As-is (P80 36 Figure 7: Float Co Flowsheet Option | Fime (Hours) | .3um Iation Gold Recovery | | |
| | | Stage | | Stage Recovery | Gravity Only | Gravity/ CIP | Gravity/ Float* | Gravity/ Float/ Leach | Gravity/ Float/ UFG/Leach |
| Q | Gra | vity Recove | ery | 15.6% | | | | | |
| C | Inter K | nsive leach nelson con | on | 92.2% | 14.4% | | | | |
| | Grav | vity Tails Lec (CIP) P ₈₀ 75µm | зch | 86.3% | | 87.2% | | | |
| | Flo | at Recover | γ | 96.8% | | | 97.3% | | |
| | Con L | each Reco no regrind) | very | 93.0% | | | | 91.5% | |
| | Con L (v | each Reco vith regrind) | very | 97.5% | | | | | 95.2% |

*offsite sale or treatment of concentrate

Table 6 presents the staged recovery and overall recovery for each flowsheet option. Gravity followed by flotation returned the highest gold recovery of 97.3% with the concentrate either sold or processed offsite by a third party. Alternatively, through the installation of an Ultra-Fine Grinding (UFG) and Leach circuit, 95.2% of the gold could be recovered and realised as bullion onsite.



Summary and Next Steps:

The Labyrinth gold mineralisation is highly amenable to flotation owing to the strong affiliation of gold with pyrite and the absence of common deleterious elements leading to a high gold grade, dominant pyrite concentrate. Mineralogical studies identified free gold as being ultrafine leading to the low gravity recovery hence an option exists to remove the gravity circuit thus producing an even higher value concentrate if sale terms are favourable.

This study illustrated the benefit of a finer grind size hence the implementation of an UFG mill on the float concentrate stream will be required prior to cyanidation. Opportunities to further improve flotation and dissolution kinetics and to reduce capital and operating cost will be the focus of future studies including the application of the baseline conditions identified in this program to variability diamond core samples.

Labyrinth are in a strong position based on these stand-out metallurgical results to conduct a preliminary economic study on the following three options:

- 1. Installation of a Gravity/Float/UFG Leach circuit
- 2. Installation of a Gravity/Float circuit for offsite sale/treatment of float concentrate
 - 3. Whole of Ore Toll Treatment or Ore Sales through discussions with nearby facilities

Near term production hence early cash-flow via toll treatment or ore purchase is possible with fifteen gold mills located within a 200km haulage distance from Labyrinth (Table 7). Of those, three have flotation circuits with the remaining being gravity/cyanidation, the closest being Kirkland Lake's Macassa Mill which operates a P₈₀ 40-45µm leach feed grind size ensuring improved recoveries.

| Company | Mill | Haulage Distance from Labyrinth (km) | Direction | Flowsheet | Capacity (TPD) |
|--------------------------|------------------------|--|-----------|-------------------------------|-------------------|
| Kirkland Lake | Macassa Mill | 64 | SW | CIP (P ₈₀ 40-45um) | 2,000 |
| Kirkland Lake | Holt Mill | 101 | NNW | Gravity/CIL | 3,000 |
| IAMGold | Westwood- Doyon Mill | 103 | E | Gravity/CIL | 3,000 |
| Agnico Eagle | Laronde | 110 | E | Float/CIL | 7,000 |
| Alamos | Young-Davidson | 124 | SW | Float/CIL | 8,000 |
| Yamana & Agnico Eagle | Canadian Malartic | 146 | E | CIL | 60,000 |
| Yamana | Camflo | 152 | E | CIL | 1,600 |
| McEwen Mining | Black Fox Mill | 156 | NW | CIL | 2,000 |
| Wesdome | Kiena | 161 | E | CIL | 700 |
| Agnico Eagle | Goldex | 164 | E | Gravity/Flotation | 8,000 |
| Eldorado Gold | Lamaque/ Sigma Mill | 175 | E | Gravity/ CIL | 2,600 |
| Pan American Silver | Bell Creek Mill | 187 | NW | Gravity/CIL | 4,400 |
| QMX | Aurbel Mill | 188 | E | CIL | 1,400 |
| Monarch Mining | Beacon Mill | 190 | E | Gravity/Leach | 750 |
| Newmont | Dome Mill | 197 | NW | Gravity/CIL | 12,000 |
| Abcort Mines | Sleeping Giant | 310 | NE | CIL | 750 |

Table 7: Nearby Processing Facilities



Figure 8 Nearby Processing Facilities (Sources: Ontario Ministry of Northern Development and Mines Statistics, https://www.geologyontario.mndm.gov.on.ca, History of Abitibi Gold Belt (2021) <u>https://www.visualcapitalist.com/sp/the-history-of-the-abitibi-gold-belt</u>).

This announcement has been authorised and approved for release by the Board.

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Forward-Looking Information

This announcement contains forward-looking information about the Company and its operations. In certain cases, forward-looking information may be identified by such terms as "anticipates", "believes", "should", "could", "estimates", "target", "likely", "plan", "expects", "may", "intend", "shall", "will", or "would". These statements are based on information currently available to the Company and the Company provides no assurance that actual results will meet management's expectations. Forward-looking statements are subject to risk factors associated with the Company's business, many of which are beyond the control of the Company. It is believed that the expectations reflected in these statements are reasonable but they may be affected by a variety of variables and changes in underlying assumptions which could cause actual results or trends to differ materially from those expressed or implied in such statements. There can be no assurance that actual outcomes will not differ materially from these statements.

Competent Person Statement

The information in this announcement to which this statement is attached relates to Metallurgical Testwork Results and is based on information compiled by Mr Brant Tapley. Mr Tapley is the Director of JT Metallurgical Services Pty Ltd and is a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy (AusIMM). Mr Tapley has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration, and to the metallurgical, processing and testwork techniques being used 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 Tapley consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.



APPENDIX 1: JORC CODE, 2012 EDITION – TABLE 1

SECTION 1 SAMPLING TECHNIQUES AND DATA

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

| 2 | Criteria | J | DRC Code explanation | Co | mmentary |
|--------|--------------------------|---|---|----|--|
| | 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. | • | Mineralised intercepts were selected based on assays received along with review of core photos to ensure representative samples were chosen. Intervals were selected to capture a range of ore zones and spread across the deposit to ensure representivity. A total of 40kg of material was selected across 5 drill hole from the underground diamond drilling program. Due to the drilling being BQ, crush sample reject from the laboratory was used to create the composite sample as no original core was preserved after sampling. |
| | 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). | • | Underground triple-tube diamond drilling using a LM90 diamond drilling rig with wireline core barrel recovery through the inside of the drill string and employing a BQ sized drill bit |
| Ω Ω | 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. | • | Drill core is assessed for core recovery during drilling operations. Core is meter marked by experienced contract geologists to core blocks inserted by drillers at the end of their runs. All care is taken to recover the entire core, however, some drilling conditions i.e broken ground can impede 100% recovery. Core recovery of the 2022 underground drill programme was 95%. There is no known 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. | • | All diamond drill core is logged for geology and fundamental geotechnical parameters are taken e.g. RQD, etc. All core logging is quantitive and a full record is taken by a qualified and experienced contract geologist. The full length of the drill hole is logged |
| | techniques and | • | If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled | • | reject of BQ samples. Individual samples were selected by contract |



| Criteria | JORC Code explanation | Commentary |
|-----------------------|---|---|
| sample preparation | 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 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. 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, handheid 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. | geologists. Samples were dried and composited to generate a 40 kg master composite. A 20 kg sub-sample at 300 um R₈₀ was used for the gravity concentration and a 1 kg sub-sample at 20 um P₈₀ was used for the bulk leach test. 2kg gravity tail splits were used for rougher floatation tests. 1kg open circuit cleaner tests were used to at P₈₀ 106µm for rougher tests. The same rougher conditions were applied followed by a P₈₀ 15µm rougher concentrate. All sample sizes and tests are deemed accurate for the nature of the test work being carried out. Metallurgical testing by gravity concentration and leaching was completed at Baselabs. The 20 kg sub-sample was subjected to gravity concentration. After the gravity concentrate was determined by assaying the solution after cyanide leaching (Cyanide Leach: pH 11.0, 50,000ppm NaCN, oxygen sparged, 20,000ppm LeachAid). The 1 kg sub-sample was subjected to a bulk leach extractible gold (BLEG) test (Cyanide Leach: pH 11.0, 5,000ppm NaCN, oxygen sparged, 20,000ppm NaCN, oxygen sparged, 2000 ppm LeachAid). Grind sensitivity rougher floatation tests were conducted on 2kg gravity tail splits at conditions conducive for sulphide and free gold recovery with the aim to generate a low mass pull, high grade concentrate for downstream analysis. Commonly applied PAX (100g/t), CuSO4 (100g/t) and MIBC Frother (28g/t) were dosed at natural pH generating five concentrates and a tail to observe gold, silver and sulphur floatation kinetics over 7.5 min float time. A 1kg open circuit cleaner test was conduced to reduce mass pull and increase concentrate grade as illustrated in Figure 4. A rougher grind size of P₈₀ 106µm was chosen though it's likely the grind size could be coarsened in future studies to reduce capital footprint and operating cost. The same rougher conditions were applied followed by a P₈₀ 15µm rougher concentrate regrind then a staged 6.5min cleaner where an additional 5g/t PAX and 14g/t MIBC was added. Two representative sub-splits of the |
| | 13 | |



| Verification of sampling and assayingThe verification of comparing assayingassayingThe us Docum storage DiscussLocation of data pointsAccura survey ResouData spacing and distributionData s Wheth of geo Ore Re Wheth | erification of significant intersections by either independent or alternativ any personnel. Se of twinned holes. mentation of primary data, data entry procedures, data verification, dat e (physical and electronic) protocols. Se any adjustment to assay data. acy and quality of surveys used to locate drill holes (collar and down-hours), trenches, mine workings and other locations used in Minera irce estimation. iccation of the grid system used. y and adequacy of topographic control. | e • • • • • • • • • • • • • • • • • • • | Metallurgical test results were verified by independent consult Metallurgical Services. No drilling being reported Data entry is all done electronically No adjustments were made The underground development has been flown by a drone as picked up by a surveyor creating high confidence in the topog control, which drillholes, both historical and recent, are refe against. All 2022 drillhole collars are marked out using a hand-held GPS end of each phase of drilling the drillhole collars are also picked u qualified surveyor. Downhole survey data were collected using Re trac single shot and Reflex Sprint IQ gyro tool. |
|---|--|---|---|
| Location of data points Data spacing and distribution Orientation of Uocation of Accura survey Resou Quality Data sp of geo Ore Re Wheth | acy and quality of surveys used to locate drill holes (collar and down-hol rs), trenches, mine workings and other locations used in Minera irce estimation. ication of the grid system used. y and adequacy of topographic control. pacing for reporting of Exploration Results. er the data spacing and distribution is sufficient to establish the degre logical and grade continuity appropriate for the Mineral Resource an | e • al • | The underground development has been flown by a drone as picked up by a surveyor creating high confidence in the topos control, which drillholes, both historical and recent, are refe against. All 2022 drillhole collars are marked out using a hand-held GPS end of each phase of drilling the drillhole collars are also picked of qualified surveyor. Downhole survey data were collected using Re trac single shot and Reflex Sprint IQ gyro tool. |
| Data spacing and distribution Orie Re Wheth Orientation of Whoth | pacing for reporting of Exploration Results. In the data spacing and distribution is sufficient to establish the degre logical and grade continuity appropriate for the Mineral Resource an | • | Data spacing was selected to cover the different mineralised la |
| Orientation of M/hoth | eserve estimation procedure(s) and classifications applied. Ier sample compositing has been applied. | d • • | best as possible. Sampling was undertaken for metallurgical testing. Sample compositing has been done to generate sufficient mat conduct metallurgical testing. |
| data in relation to geological structure should | The orientation of sampling achieves unbiased sampling of possible ores and the extent to which this is known, considering the deposit type relationship between the drilling orientation and the orientation of ke alised structures is considered to have introduced a sampling bias, the l be assessed and reported if material. | e• y s | Most drillhole orientations were designed to test perpendicular of perpendicular to the orientation of the intersected mineral Drilling was typically oriented perpendicular to the trend and m strike and dip of observed mineralisation on surface and elsew the project area. Due to the density of drilling and the orientation of drilling perpen to mineralized bodies, there is limited bias introduced by or orientation. |
| Sample • The m security | easures taken to ensure sample security. | • | The core samples are bagged and sealed with numbered securi Once samples arrive at the laboratory, the security tag corresponding samples are verified against logs. Site is occupied, and no samples were left at the project during field b Once notified, crush and pulp rejects are collected from the lab by company personnel and returned to site and stored securely Samples selected for metallurgical testing were selected by co geology personnel, collated and shipped in secure packaging v freight to Baselabs facility. |
| Audits or • The re reviews | sults of any audits or reviews of sampling techniques and data. | • | None conducted for the metallurgical testwork |