

## **VTX COMMISSIONS LASER ORE SORTER**

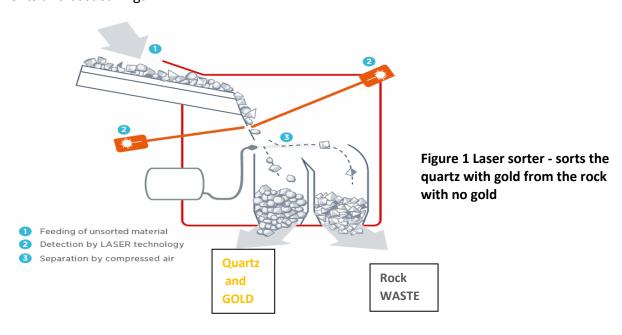
### **HIGHLIGHTS:**

- Ore sorter/pre concentrator now being commissioned at the Hill End gravity gold plant.
- With the new Sorter installed, TOMRA technicians are over this week commissioning the laser sorter and incorporating it into the Hill End gravity gold plant.
- The sorter commissioning is being undertaken while the gravity concentrator is commissioning/processing gold ore.
- Vertex operators are being trained by Gekko Technicians
- Reward gold mine ore sorts perfectly, with 79% mass reduction & 337.20% increase in grade in the 8mm to 50mm range. (refer to VTX ASX announcement 11 of September 2024)

TOMRA's LASER sorting technology (Sorter) separates gold bearing quartz ore from waste (slate & greywacke) before it enters the processing plant.

Vertex believe ore sorting technology can positively impact the sustainability and profitability of Vertex's operations at Reward by.

- Gravity processing significantly higher -grade ore post sorting, and less feed tonnes, resulting in reduced.
  - ✓ plant running time
  - ✓ operator hours
  - energy & water consumption, leading to,
  - ✓ lower operating costs and
  - ✓ reduced carbon footprint.
- Further Tailings material (sand) can be significantly reduced in volume, leading to further ESG benefits and cost savings.





Vertex Minerals Limited (ASX:VTX, **Company**) is pleased to announce that it has commenced commissioning the recently installed Ore sorter/pre concentrator at the Hill End Gold plant

Vertex's Executive Chairman, Roger Jackson commented: "The ore sorting installation and commissioning is very exciting as this presents incredible commercial and environmental benefits for Vertex. It has been shown that Reward Gold ore is perfectly suited for this technology. By upgrading the Reward high-grade ore material to an even higher grade, significantly reduces the processing costs and increasing the returns per tonne".

### Reward Gold sorting success can be attributed to several factors:

- The ability of TOMRA's LASER system to detect, classify, and eject quartz away from the relatively low to nil -grade host-rock
- The liberation of quartz from host-rock at this size fraction
- The reliability of gold association to quartz in this ore
- Reward Greywacke perfectly separates from the quartz in blasting and crushing



Figure 2 Gekko technician testing the mechanical components of the Ore sorter



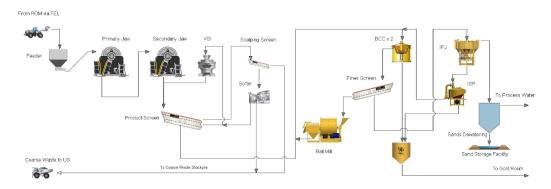


Figure 3 The Hill End Gravity Gold plant with sorter flow sheet. Small and simple.



Figure 4 Gekko Installation and commissioning team on top of the Ore Sorter





Figure 5 Birds eye view of the Hill End Gravity Gold plant with sorter (left side)



Figure 6 Picture of the Tomra laser sorter

This announcement has been approved by the Vertex Board of Directors

### **Further Information:**

Roger Jackson, Executive Chairman

Tully Richards, Technical Director tully@vertexminerals.com.au



#### 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 appear.

#### 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 COMPLIANCE STATEMENTS

Where statements in this announcement refer 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.

# APPENDIX 1 - JORC CODE, 2012 EDITION - TABLE 1 - REWARD GOLD MINE ORE SORTING

# Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	<ul> <li>Samples were selected for from the Reward Gold Mine Waste piles, as representative of the Ore using a hand-held scoop.</li> <li>The geology of the reward Gold Mine is auriferous subvertical quartz veins with greywacke or turbidite country rock.</li> </ul>
Drilling techniques	<ul> <li>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).</li> </ul>	N/A. Samples were from mining.
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	N/A. Samples were from mining.
Logging	<ul> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>N/A. Samples were from mining. Geological logging was not relevant to the processing test work.</li> </ul>
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>Samples were from mining. Scooped samples were placed in 20 litre plastic buckets.</li> <li>QAQC is limited to the internal lab procedures. Duplicates were not collected for this sampling programme.</li> <li>The samples are believed to be representative for the purposes for which they were collected.</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external</li> </ul>	Samples were assayed at ALS Orange using Fire Assay with a 50g charge.

Criteria	JORC Code explanation	Commentary
	laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	
Verification of sampling	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> </ul>	N/A. Samples were from mining.
and assaying	<ul> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> </ul>	
Location of data points	<ul> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	Sample locations were taken from the operational mining stockpiles
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	N/A. Samples were from mining.
Orientation of data in	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> </ul>	N/A. Samples were from mining. They are from blasted material
relation to geological structure	<ul> <li>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.</li> </ul>	There is no known sample biasing.
Sample security	The measures taken to ensure sample security.	The samples were transported to ALS Orange via our Director
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No audit was undertaken for this programme.

# **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	<ul> <li>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.</li> <li>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.</li> </ul>	<ul> <li>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.</li> <li>First Tiffany Resources Corporation is registered as having a 15% free carried interest in EL5868.</li> <li>The site is covered by EPL 12008, scheduled activity is mining for minerals.</li> <li>The tenure is 100% owned by Vertex</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>The historical exploration data has been collected by Vertex Limited and has been reported to high standards.</li> <li>The methods of exploration and techniques used are considered appropriate for the deposit types sought (Au)</li> </ul>

Criteria	JORC Code explanation	Commentary
Geology	Deposit type, geological setting and style of mineralisation.	Reef gold
Drill hole Information	<ul> <li>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:         <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> </ul>	N/A as they were collected at stockpiles
Data aggregation methods	<ul> <li>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.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	N/A No aggregation methods were used or required for this test work
Relationship between mineralisation widths and intercept lengths	<ul> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>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').</li> </ul>	N/A Stockpile material
Diagrams	<ul> <li>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.</li> </ul>	N/A. Samples were from existing mining areas. Next to the Hill End Gravity Gold Plant
Balanced reporting	<ul> <li>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.</li> </ul>	All relevant assays have been reported.
Other substantive exploration data	<ul> <li>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.</li> </ul>	All relevant geological information has been reported.

Further work	•	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).	N/A. Samples were from existing mining areas.
	•	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially	
		sensitive.	