

Superior Resources Limited

ABN 72 112 844 407

Registered Office: Level 2, 87 Wickham Terrace, Spring Hill Queensland 4000 Postal Address: PO Box 10288 Brisbane Adelaide Street Queensland 4000 Telephone: 07 3839 5099 Facsimile: 07 3832 5300 Email: manager@superiorresources.com.au

ASX ANNOUNCEMENT

19 January 2016

TICK HILL – MAIDEN MINERAL RESOURCE ESTIMATE

- Superior announces maiden Mineral Resource estimate for the Tick Hill Tailings Project.
- Estimate: 630,000 @ 1.08 g/t Au containing 680kg (22,000 troy ounces) gold.
- Cyanide leach test work on washed tails residue re-ground to <15um, reported 95% – 98% extraction (recovery) of contained gold.

Superior Resources Limited (ASX Code: **SPQ**) (**Superior** or **Company**) is pleased to announce a maiden Mineral Resource estimate for the Tick Hill Tailings Project:

Total tailings contained Mineral Resource estimate – 630,000t @ 1.08 g/t Au, for 22,000 contained troy ounces (@ 0.5 g/t cut-off grade).

The Mineral Resource estimate represents the completion of a series of drilling programs and metallurgical test work which commenced during July 2015 under a joint venture arrangement with JV partner, Diatreme Resources Limited (**DRX**).

With the completion of the Mineral Resource estimate, the JV parties will now expedite a scoping study towards a commercial model for a re-processing operation and also commence the environmental permitting regulatory procedures. The Company is currently aiming to complete the scoping study early in the second calendar quarter and finalise the environmental permitting by the end of June 2016.

MINERAL RESOURCE ESTIMATE

The Tick Hill Gold Mine operated from August 1991 through to March 1995, with the processing plant comprising crushing and milling circuits designed to deliver a product with a p80 of 70µm to a CIL circuit for gold recovery. Tailings were discharged into a tailings storage facility (**TSF**) comprising two paddocks of a "turkeys nest" construction with a perimeter embankment and a clay core to retain the tailings (Figure 1).

Following successful exploration drilling programs in July and September 2015, and completion of a comprehensive first stage metallurgical test work program with positive results in December 2015, sufficient data is available to develop a resource model for the Tick Hill tailings material.



The Mineral Resource estimate for the Tick Hill tailings is 630,000t at 1.08 g/t Au, using a 0.5 g/t Au cut-off grade (Table 1).

Category	Location	Au cut-off g/t	Material Volume '000 m ³	Material Density	Material '000 t	Au g/t	Au kg	Au t oz
INDICATED	West Paddock	0.5	245	1.4	345	0.80	275	8,800
INDICATED	East Paddock	0.5	205	1.4	285	1.42	405	13,000
INDICATED	TOTAL	0.5	450	1.4	630	1.08	680	21,800

TABLE 1: TICK HILL TAILINGS RESOURCE ESTIMATE

The drill hole information that was used for the resource estimate is set out in Table 2. Figure 1 shows the location of the Tick Hill tailings resource and the drill hole collars. Representative cross sections of the mineralised tailings material are presented as Figures 2 and 3.

Technical details concerning the deposit, exploration drilling program and the resource estimation are presented in Appendix 1 (including JORC Table 1), and summarised below.

A summary of information that may be material to understanding the mineral resource estimate includes:

- **Geology** the mineralisation comprises fine sand and silt tailings material within the two paddocks of the historic Tick Hill Gold Mine TSF;
- **Sampling** 1 metre interval samples were collected via a cyclone from aircore drilling of the TSF and submitted to a commercial laboratory. Sub-sampling of samples >3.2kg in weight was by riffle splitting. Samples were pulverised and a split taken for analysis;
- **Drilling** drilling was undertaken by a DRX-owned and operated aircore drilling rig utilising NQ rods and a blade bit with 3m drill runs. All drill holes are vertical;
- **Classification** the Mineral Resource is classified as Indicated based on the drill and assay data spacing (25m spaced offset grid with 1m downhole samples);
- **Analysis** samples were analysed for gold only using a 50g charge for FA (ALS method AA26);
- Estimation Micromine software was used to construct a 3D wireframe for each tailings paddock, using a combination of high resolution DEM data, drill log data and reported TSF design parameters. A block model was generated within the wireframe and gold values assigned by ID3 interpolation of the drill assay data;
- **Cut-off grade** all material within the TSF is considered mineralised so that a defined cut-off grade has not been routinely applied to drill data. Evaluation of the resultant block model shows that a nominal cut-off grade of 0.5 g/t Au can be applied to the reported resource estimate; and
- Mining and metallurgical parameters possible mining methods include conventional truck and shovel mining or hydraulic mining. Mining will be relatively simple given the shallow depth/thickness of the mineralisation, lack of overburden and the free-digging nature of the material. Metallurgical test work shows that very high levels of gold extraction can be achieved by cyanide leaching of re-ground tailings material (95% – 98% extraction (recovery) of contained gold).

Based on exploration drilling results, the combined weighted average grade for the western paddock was calculated at 0.81 g/t Au (88.8m at 0.73 g/t Au from reconnaissance drilling and 107.1m at 0.88 g/t Au from infill drilling) and the combined weighted average grade for the eastern paddock was calculated at 1.42 g/t Au (74.1m at 1.42 g/t Au from reconnaissance drilling and 81.2m at 1.43 g/t Au from infill drilling).



The tailings dam was calculated to have an average weighted grade of **1.08 g/t Au** based on the combination of reconnaissance and infill drilling (including a top cut of 4.0 g/t Au).

The metallurgical test work completed to date indicates that very high levels of gold extraction can be achieved by cyanide leaching of re-ground tailings material, and this coupled with a significant proportion of water soluble gold provides encouragement that efficient processing of the Tick Hill tailings material can be achieved.

Further studies are being planned to help determine the optimal grain size required to balance leach extraction rates with energy requirements for regrinding of the tailings, which will then allow the design of a process flowsheet and determination of capital and operating costs.

This information will enable the development of a financial model to assess the economic feasibility for the mining and processing of the tailings material.

Managing Director, Mr Peter Hwang today said:

"The completion of the maiden Mineral Resource estimate is a significant milestone for the project and the Company. We have been very satisfied with the efficiency of the process and the minimal cost exposure to Company to reach this point."

"In moving forward with the project, we are focusing on expediting a scoping study and commercial model on the re-processing project and together with third party specialists, we are examining the potential to access remaining higher grade hardrock gold adjacent to the previous underground mine workings."

Peter Hwang Managing Director

Contact:

Further Information:

Mr Carlos Fernicola (07 3831 3922) Mr Peter Hwang (07 3839 5099) www.superiorresources.com.au manager@superiorresources.com.au

The information in this report, insofar as it relates to Exploration Results and Mineral Resources is based on information compiled by Mr Ian Reudavey, who is a full time employee of Diatreme Resources Limited and a Member of the Australian Institute of Geoscientists. Mr Reudavey has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he has undertaken to qualify as a Competent Person as defined in the 2012 Edition of 'The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Reudavey consents to the inclusion in the report of the matters based on the information in the form and context in which it appears.

Certain statements made in this report may contain or comprise certain forward-looking statements. Although Superior Resources Limited believes that any estimates and expectations reflected in such forward-looking statements are reasonable, no assurance can be given that such expectations will prove to have been correct. Accordingly, results and estimations could differ materially from those set out in the forward-looking statements as a result of, among other factors, changes in the economic and market conditions, success of business and operating initiatives and changes in the regulatory environment. Superior undertakes no obligation to update publicly or release any revisions of any forward-looking statements to reflect events or circumstances after the date of this report or to reflect the occurrence of unanticipated events.

	Easting	Northing	ы	Hole	Din	A-7i	S	Significant I	ntersection	
Hole ID	Lasting	Northing	KL.	Depth	ыр	A21	From	То	Interval	Au g/t
THT001	388746	7605591	349.1	8.7	-90°	0°	0.5	8.7	8.2	1.20
THT002	388748	7605542	349.5	7.7	-90°	0°	0.6	7.6	7.0	1.34
THT003	388748	7605489	350.0	7.6	-90°	0°	0.6	7.6	7.0	1.36
THT004	388693	7605592	348.7	8.1	-90°	0°	0.6	8.1	7.5	0.97
THT005	388694	7605545	349.0	7.1	-90°	0°	0.6	7.1	6.5	1.54
THT006	388697	7605491	349.8	6.7	-90°	0°	0.5	6.7	6.2	1.85
THT007	388702	7605442	350.7	6.6	-90°	0°	0.6	6.6	6.0	1.58
THT008	388650	7605593	348.1	6.2	-90°	0°	0.6	6.2	5.6	1.15
THT009	388646	7605543	348.6	6.3	-90°	0°	0.6	6.3	5.7	1.62
THT010	388647	7605493	349.2	6.1	-90°	0°	0.6	6.1	5.5	1.27
THT011	388649	7605443	349.9	5.7	-90°	0°	0.6	5.6	5.0	1.82
THT012	388648	7605398	350.5	4.5	-90°	0°	0.6	4.5	3.9	1.51
THT013	388550	7605590	348.8	6.6	-90°	0°	0.6	5.6	5.0	0.66
THT014	388545	7605544	349.3	7.6	-90°	0°	0.6	6.6	6.0	0.48
THT015	388546	7605493	350.3	8.6	-90°	0°	0.6	8.6	8.0	0.85
THT016	388549	7605444	350.5	8.3	-90°	0°	0.6	8.3	7.7	0.79
THT017	388549	7605391	351.2	8.6	-90°	0°	0.6	8.6	8.0	1.08
THT018	388499	7605591	349.0	7.6	-90°	0°	0.6	7.6	7.0	0.62
THT019	388497	7605543	349.9	8.8	-90°	0°	0.6	8.8	8.2	0.58
THT020	388495	7605493	350.4	9.1	-90°	0°	0.6	9.1	8.5	0.82
THT021	388495	7605446	350.7	9.1	-90°	0°	0.6	9.1	8.5	0.74
THT022	388449	7605593	349.3	6.8	-90°	0°	0.8	6.8	6.0	0.46
THT023	388446	7605537	350.3	8.8	-90°	0°	0.8	8.8	8.0	0.64
THT024	388447	7605493	350.6	8.7	-90°	0°	0.8	8.7	7.9	0.83
THT033	388722	7605615	348.8	5.4	-90°	0°	0.4	4.4	4.0	1.15
THT034	388722	7605564	349.2	8.2	-90°	0°	0.5	8.1	7.6	1.51
THT035	388722	7605515	349.6	6.7	-90°	0°	0.5	6.7	6.2	1.86
THT036	388722	7605464	350.4	7.0	-90°	0°	0.2	7.0	6.8	1.67
THT037	388672	7605615	348.1	6.7	-90°	0°	0.6	6.6	6.0	0.93
THT038	388671	7605564	348.6	6.4	-90°	0°	0.4	6.4	6.0	1.23
THT039	388670	7605515	349.1	6.3	-90°	0°	0.6	6.3	5.7	1.68
THT040	388671	7605464	349.9	6.4	-90°	0°	0.6	6.4	5.8	1.55
THT041	388672	7605415	350.5	5.6	-90°	0°	0.7	5.6	4.9	1.54
THT042	388623	7605612	347.2	5.8	-90°	0°	0.6	4.6	4.0	0.79
THT043	388622	7605561	348.1	6.1	-90°	0°	0.6	6.1	5.5*	1.33
THT044	388622	7605513	348.7	6.2	-90°	0°	0.7	6.2	5.5	1.42
THT045	388622	7605462	349.3	6.2	-90°	0°	0.6	6.2	5.6	1.41
THT046	388622	7605411	350.1	6.4	-90°	0°	0.6	6.4	5.8	1.49
THT047	388624	7605367	350.8	4.0	-90°	0°	0.5	4.0	3.5	1.87
THT048	388568	7605618	349.4	7.4	-90°	0°	0.5	7.4	6.9	0.38
THT049	388570	7605567	348.6	7.3	-90°	0°	0.7	7.3	6.6	0.60
THT050	388571	7605516	350.3	8.5	-90°	0°	0.8	8.5	7.7	0.95
THT051	388573	7605465	350.5	8.2	-90°	0°	0.5	8.2	7.7	1.08
THT052	388574	7605414	350.9	8.0	-90°	0°	0.5	8.0	7.5	0.96
THT053	388574	7605365	351.3	3.7	-90°	0°	0.9	3.7	2.8	2.59^
THT054	388521	7605612	349.0	8.8	-90°	0°	0.4	8.8	8.4*	0.98
THT055	388522	7605565	349.0	7.2	-90°	0°	0.4	7.2	6.8*	0.45
THT056	388522	7605515	349.9	9.1	-90°	0°	0.6	9.1	8.5	0.85
THT057	388520	7605469	350.3	8.7	-90°	0°	0.6	8.6	8.0	0.93
THT058	388520	7605415	351.1	8.8	-90°	0°	1.0	8.8	7.8	1.02
THT059	388474	7605611	348.9	7.9	-90°	0°	1.4	7.9	6.5*	0.55
THT060	388474	7605563	349.7	8.3	-90°	0°	0.6	8.3	7.7*	0.82
THT061	388474	7605511	350.3	8.5	-90°	0°	0.6	8.5	7.9	1.03
THT062	388473	7605464	350.7	8.4	-90°	0°	0.6	8.4	7.8	0.94
THT063	388448	7605445	351.0	57	-90°	٥°	12	57	45	0.98

Table 1: Tailings Mineral Resource Drill Hole Information

Notes to Table 1:

- Coordinates are UTM, Zone 54, GDA94 from handheld GPS
- Hole Depths and Intervals in metres
- RL assigned from high resolution project DTM Intervals marked with * have missing samples (no sample return from drilling) Intervals marked with ^ have had a top cut of 4.0 g/t applied



Figure 1: Location Map, Tick Hill Tailings resource outline and drill collars on Google Earth



Northern End



ASX Release - 19 January 2016 - Page 6 of 6



Western Paddock



Eastern Paddock

Figure 3: Drill Section (N – S, looking W), Tick Hill Tailings resource outline and drill trace (5x vertical exaggeration)

ASX Release – 19 January 2016 – Page 7 of 7

Appendix 1: JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data (Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	 Nature and quality of sampling (e.g. 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. 	 Air core drilling was used to obtain 1m samples from which ~1.5kg was pulverized to produce a 50g charge for fire assay. Samples are 1m down hole intervals of air-core drill cuttings collected from rigmounted cyclone, the entire sample was collected on site and later riffle split, with half retained for reference (and bulk sample) and half submitted to the laboratory, with further riffle splitting of those samples >3.2kg in weight prior to pulverising. 1m sample intervals are considered appropriate for drilling of mineralised tailings.
	• In cases where industry standard work has been done this would be relatively simple (e.g. '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 (e.g. submarine nodules) may warrant disclosure of detailed information.	
Drilling techniques	 Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, ourger, Bongko, papia, etc.) and dataile (e.g. core diameter, triple or standard 	Vertical NQ air-core drilling utilizing blade bit, 3m drill runs.
leciniques	tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).	• Drilling technique was continually adjusted to suit the prevailing drilling. conditions (e.g. dry, moist, wet with variable clay content).
Drill sample	 Method of recording and assessing core and chip sample recoveries and require appaged 	Field assessment and logging of sample recovery and sample quality.
recovery	Managura takan ta mavimina sampla rassurary and angura raprosentativa	Sample weight from laboratory used to assess sample recovery.
	 Measures taken to maximise sample recovery and ensure representative nature of the samples. 	Clearance of drill string after every 1m drill interval.
	 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. 	 Sample chute cleaned between samples and regular cleaning of cyclone to prevent sample contamination.
		No relationship is evident 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 	Geological logging of the total hole by field geologist, with retention of sample in chip trays to allow subsequent re-logging / re-interpretation of data.
		 Tailings dam is capped by ~0.6m rock and topsoil, with a clay base – both were

Criteria	JORC Code explanation	Commentary
	 Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography. 	readily identifiable from the tailings material.
		Qualitative logging includes material lithology and colour.
	I he total length and percentage of the relevant intersections logged.	Logging data stored in both hardcopy and digital format.
Sub-sampling	• If core, whether cut or sawn and whether quarter, half or all core taken.	Sub-sampling was undertaken off site after samples had air dried, by riffle sub-samples (25 mm and 10 mm) with half a sample submitted to Al O lab are target.
and sample preparation	 If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry. 	splitting (25mm aperture) with hair sample submitted to ALS laboratory in Townsville for sample preparation, and half sample retained for reference and/or bulk sample.
	 For all sample types, the nature, quality and appropriateness of the sample preparation technique. 	• Sample was oven dried, weighed, riffle split if >3.2kg, and pulverized.
	Quality control procedures adopted for all sub-sampling stages to maximise	50g sub-sample for assay is riffle split from homogenized pulverised sample.
	representivity of samples.	 Two field duplicates were submitted from this exploration program; results are within reasonable ranges.
	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.	Sample size is considered appropriate for the material sampled.
	 Whether sample sizes are appropriate to the grain size of the material being sampled. 	
Quality of assay data	 The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. 	 Analysis undertaken by ALS Townsville utilizing AA26 (50g Fire Assay), with a 0.01 ppm Au detection limit.
tests	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.	 Assaying and laboratory procedures are considered appropriate for gold, technique is considered a total analysis.
		No external quality control procedures have been adopted at this time.
	 Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established. 	
Verification of sampling and	 The verification of significant intersections by either independent or alternative company personnel. 	 Significant intersections have been verified by company personnel from both Diatreme Resources and Superior Resources.
assaying	The use of twinned holes.	No twinned holes have been drilled at this time.
	• Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	 Geological data captured on paper and stored in electronic format, assay data stored in electronic format.
	Discuss any adjustment to assay data.	 An adjustment was made to one sample assay, with an assay grade of 43.4 g/t Au being cut to 4.0 g/t Au (based on maximum assay from reconnaissance drilling) for calculation of significant intersections.
Location of	 Accuracy and quality of surveys used to locate drill holes (collar and down- hole surveys), trenches, mine workings and other locations used in Mineral 	Handheld GPS survey of drill hole collars, accurate to within 4m.

ASX Release – 19 January 2016 – Page 9 of 9

Criteria	JORC Code explanation	Commentary
data points	Resource estimation.	UTM coordinates, Zone 54, GDA94 datum.
	Specification of the grid system used.	Topographic control was established by applying RL values from a high
	Quality and adequacy of topographic control.	resolution DTM included with technical data package from previous owner.
Data spacing	Data spacing for reporting of Exploration Results.	 Drill holes spaced at 50m x 50m, with the infill drilling offset 25m E-W and N-S from the reconnaissance drilling
distribution	• Whether the data spacing and distribution is sufficient to establish the degree	nom the recommands and of mining.
	of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	 Drill spacing and distribution is sufficient to allow reporting of exploration results.
	Whether sample compositing has been applied.	 Downhole sample compositing has been applied for reporting of exploration results as a length weighted total hole intersection.
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 deposit type.	 Vertical drill holes are considered appropriate for unbiased sampling of the target mineralization.
geological structure	 If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this charlet be accorded and amount of it material. 	 Exploration drilling has been completed on a regular grid within each paddock of the tailings dam.
	snoula de assessea ana reportea il material.	 The dam was filled from the southern end, with tailings and water flowing north along the natural slope of the ground surface.
		 There are no comprehensive records available for the operation / utilisation of the tailings dam.
Sample security	The measures taken to ensure sample security.	 Sample collection and transport from the field was undertaken by company personnel, with samples delivered directly to the laboratory.
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	 No audits or reviews of the sampling techniques and data have been undertaken at this time.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	 Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known 	 The Tick Hill tailings dam occurs within ML7094 and ML7096 in Queensland, adjoining mining leases held by Diatreme Resources Limited. The Tick Hill Gold Project (incorporating ML's 7094, 7096, 7097) is operated as a Joint Venture between Diatreme Resources Limited and Superior Resources Limited.

Criteria	JORC Code explanation	Commentary
	impediments to obtaining a licence to operate in the area.	 Exploration was conducted under an approved Plan of Operations for exploration and rehabilitation activity.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	 No exploration of the tailings dam has been undertaken by other parties.
Geology	Deposit type, geological setting and style of mineralisation.	 The Tick Hill tailings dam comprises tailings material from the Tick Hill Gold Mine CIL processing plant, which operated from 1992 to 1995
		Mineralisation occurs within silt and clay tailings material.
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: 	 Drill hole collar table with significant intersections is included in the main body of the announcement.
	 easting and northing of the drill hole collar 	
	o elevation or RL (Reduced Level) of the drill hole collar	
	o dip and azimuth of the hole	
	 down hole length and interception depth 	
	o hole length.	
	 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. 	
Data aggregation methods	 In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated. 	 Exploration results are reported as a length weighted average of the total hole intercept, as the basal sample was truncated at the intersection of the clay base and is typically <1m.
	 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. 	• A top cut of 4.0 g/t Au was applied to one high grade assay of 43.4 g/t Au, as this is believed to represent an outlier in the database which may reflect coarse gold. The top cut of 4.0 g/t Au is based on the maximum assay returned from reconnaissance drilling.
	 The assumptions used for any reporting of metal equivalent values should be clearly stated. 	 Drill intervals with no sample return were treated as blanks / gaps in the data with no assay value assigned. Two such drill intervals were reported from the reconnaissance drilling, and seven from infill drilling.
Relationship between	 These relationships are particularly important in the reporting of Exploration Results. 	 As the mineralization is associated with tailings fill a maximum beaching slope of 2° can be assumed.
widths and intercept	• If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	• All drilling is vertical; hence the drill intersection is essentially equivalent to the true width of mineralisation.

Criteria	JORC Code explanation	Commentary
lengths	 If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known'). 	• However, the geometry and controls of grade distribution within the tailings are unknown at this time.
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. 	 A map of the drill collar locations and the tailings dam is included in the main body of the announcement. Representative cross sections of the drilling are included in the main body of the announcement.
Balanced reporting	 Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results. 	 Not applicable, all results have been reported.
Other substantive	 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. 	 Geological observations suggest an increase in clay content down the tailings profile and towards the northern end of the tailings dam.
data		No bulk density measurements have been undertaken.
		• Water was encountered at the base of the tailings on the northern margin of the tailings dam and two holes could not be completed.
		• First stage metallurgical test work completed using ~40kg bulk samples from each paddock. Calculation of bulk sample head feed grades from this work was slightly lower (<10%) than grades calculated from the contributing drill samples (E paddock 1.27 g/t Au cf. 1.33 g/t Au, W paddock 0.71 g/t Au cf. 0.77 g/t Au). Results have indicated that with re-grinding very high levels of gold extraction can be achieved by cyanide leaching.
Further work	 The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	 Metallurgical test work will continue with a focus on optimal grind size to allow development of a preliminary process flow sheet.

Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	 Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. 	 Drill data logged manually in the field, uploaded to Micromine and validated during loading in to master database.

Criteria	JORC Code explanation	Commentary
	Data validation procedures used.	General database validation using Micromine prior to resource estimation.
		Detailed database validation by manual/visual checking using Micromine.
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	Competent Person planned and supervised the exploration drilling campaigns and is familiar with the layout, mineralisation and material characteristics of
	• If no site visits have been undertaken indicate why this is the case.	the failings dam.
Geological interpretation	Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.	 There is high confidence in the geological interpretation given the mineralisation comprises tailings material within a tailings dam.
	Nature of the data used and of any assumptions made.	• The geological interpretation of the mineralisation is based upon reported
	• The effect, if any, of alternative interpretations on Mineral Resource estimation.	operations, historical photographs of the failings dam, and drill logging.
	• The use of geology in guiding and controlling Mineral Resource estimation.	 Alternative interpretations on Mineral Resource estimations have limited effect.
	The factors affecting continuity both of grade and geology.	 Geology has limited use in guiding and controlling Mineral Resource estimation for tailings mineralisation.
		 Continuity of grade is believed to be affected by feed grades of the mill, placement and sequencing of tails outlets in the tailings dam and sedimentary processes relating to deposition of tailings slurry.
Dimensions	 The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource. 	 The Mineral Resource is confined to two cells of a polygonal tailings dam. The tailings dam fill has a surface area of approximately 8 ha and maximum dimensions of 360m E-W (each cell 170m) and 290m N-S. The tailings material is capped by 0.4 to 1.2m of rocky soil and ranges in thickness from 4 to 8.5m.
Estimation and modelling	The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining,	 Resource estimation was undertaken using Micromine software, with inverse distance cubed interpolation method used for Au.
techniques	interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a	• Au grades were cut to 4.0 g/t Au (applicable to one sample only).
	description of computer software and parameters used.	 Mine production records suggest that 685,000t of tailings was generated on- site with a total gold recovery of 97% from one averaging 22.6 g/t Au (i.e. 0.7
	 The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. 	 g/t Au in tailings). No assumptions have been made regarding recovery of by-products.
	The assumptions made regarding recovery of by-products.	• There has been no estimation of deleterious elements (none known).
	 Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation). 	 A block size of 15m x 15m x 1m has been used, with a search ellipse of 50m x 35m x 3m used, minimum 2 and maximum 8 samples.
	In the case of block model interpolation, the block size in relation to the average	• The resource estimate shows good correlation with wireframe volumes and

Criteria	JORC Code explanation	Commentary
	 sample spacing and the search employed. Any assumptions behind modelling of selective mining units. Any assumptions about correlation between variables. Description of how the geological interpretation was used to control the resource estimates. Discussion of basis for using or not using grade cutting or capping. The process of validation, the checking process used, the comparison of model 	 raw drill assay data. The block model was validated visually and statistically against drill hole data.
Moisture	 data to drill hole data, and use of reconciliation data if available. Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content. 	Tonnages are estimated on a dry basis.
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.	 A nominal 0.5 g/t Au cut-off grade has been applied, but all of the tailings within the tailings dam is considered mineralised.
Mining factors or assumptions	• Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	 Possible mining methods include hydraulic mining and conventional truck and shovel mining. No assumptions have been made regarding mining dilution as it is considered that all tailings will be able to be mined from within the confining boundaries (clay lined walls and floor) of the tailings dam.
<i>Metallurgical factors or assumptions</i>	• The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	• Preliminary metallurgical test work has demonstrated that the gold in the tailings includes a water soluble component that will be readily recoverable, and that conventional cyanide leaching of re-ground tailings achieves very high levels of gold extraction. There is no evidence of refractory or 'locked' gold in the tailings. While a process flow sheet has yet to be developed, the metallurgical test work to date has not identified any significant issues.
Environmental factors or assumptions	 Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an 	 The potential environmental impacts have yet to be determined in detail, but will largely be confined to existing disturbance associated with previous mining operations on the site. No waste rock disposal will be required. Process residue (tailings) can be confined to existing disturbance on site (e.g. decant pond or returned to tailings dam as a staged backfill).

Criteria	JORC Code explanation	Commentary
	explanation of the environmental assumptions made.	
Bulk density	 Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit. Discuss assumptions for bulk density estimates used in the evaluation process of the different materials. 	 An assumed bulk density of 1.4 has been utilized for tonnage estimates, based on the theoretical density of silty tailings material. The assumed bulk density correlates with the defined volume of the tailings dam (generated from high resolution DTM, site surveys and drill data) and the reported mine production. The bulk density is assumed to be constant for both the silt and silty clay material.
Classification	 The basis for the classification of the Mineral Resources into varying confidence categories. Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). Whether the result appropriately reflects the Competent Person's view of the deposit. 	 The primary factor for resource classification is drill spacing i.e. Au assay data density, as the mineralisation comprises mill tailings deposited in a tailings dam. Gold assays have shown some variability, but there are believed to be sufficient assays to give confidence to global gold grades. The result and classification used reflects the Competent Persons understanding of the deposit.
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	• There have been no audits or reviews of the Mineral Resource estimate at this time.
Discussion of relative accuracy/ confidence	 Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate. The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available. 	 A high level of confidence is placed on tonnage estimates as the volume of mineralisation is well defined and previous mine production has been reported. A high level of confidence is placed on the global grade estimates due to drill spacing and sample quantity. However, there has been some variability in gold assays and poor repeatability of some samples. Head feed grades for the bulk sample were calculated to be slightly lower (<10%) than expected grades calculated from contributing drill samples. A moderate level of confidence is placed on the local grade estimates as there has been poor repeatability of some samples and short range grade variability may result from 'alluvial' processes during emplacement and deposition of tails slurry.