



## EXCELLENT METALLURGICAL RESULTS EAST SAMPSON DAM GOLD PROSPECT

### HIGHLIGHTS:

- **Excellent metallurgical test results from variability composite samples representing >99% of mineralisation within preliminary pit shell design:**
  - **Conventional cyanide leaching yielded 95.6% & 95.9% overall gold recovery replicating standard Kalgoorlie toll treatment processing;**
  - **Reasonably high gold recoveries of 41.8% to 52.9% from conventional gravity tests;**
  - **Elevated gold recovery via BLEG method for all five weathered composites;**
  - **Rapid leach kinetics (reaction rates) within typical reagent consumption allowances;**
  - **Rheological tests (flow & deformation of slurry) returned positive results on addition of viscosity modifier;**
  - **High recovery and rapid kinetics indicate that a coarser grind size may be acceptable.**

### NEXT STEPS:

- **Master composite metallurgical testwork results – Q4, 2020**
- **Approach Toll Treaters - Tests will provide confidence that ESD mineralisation is treatable through their mill under normal Goldfields operating conditions**

*“Moho is very encouraged by the positive metallurgical results on the East Sampson Dam samples, particularly as they represent >99% of mineralisation within preliminary pit shell design and the high overall gold recoveries have been achieved using conventional cyanide leaching similar to standard Kalgoorlie toll treatment plants”*

*Mr Shane Sadleir, Moho Managing Director*

#### CORPORATE DIRECTORY

NON EXECUTIVE CHAIRMAN  
Terry Streeter

MANAGING DIRECTOR  
Shane Sadleir

COMMERCIAL DIRECTOR  
Ralph Winter

NON EXECUTIVE DIRECTOR  
Adrian Larking

JOINT COMPANY SECRETARIES  
Ralph Winter / David McEntaggart

ASX: MOH

#### CORPORATE ADDRESS

L11/216 ST GEORGES TCE  
PERTH 6000

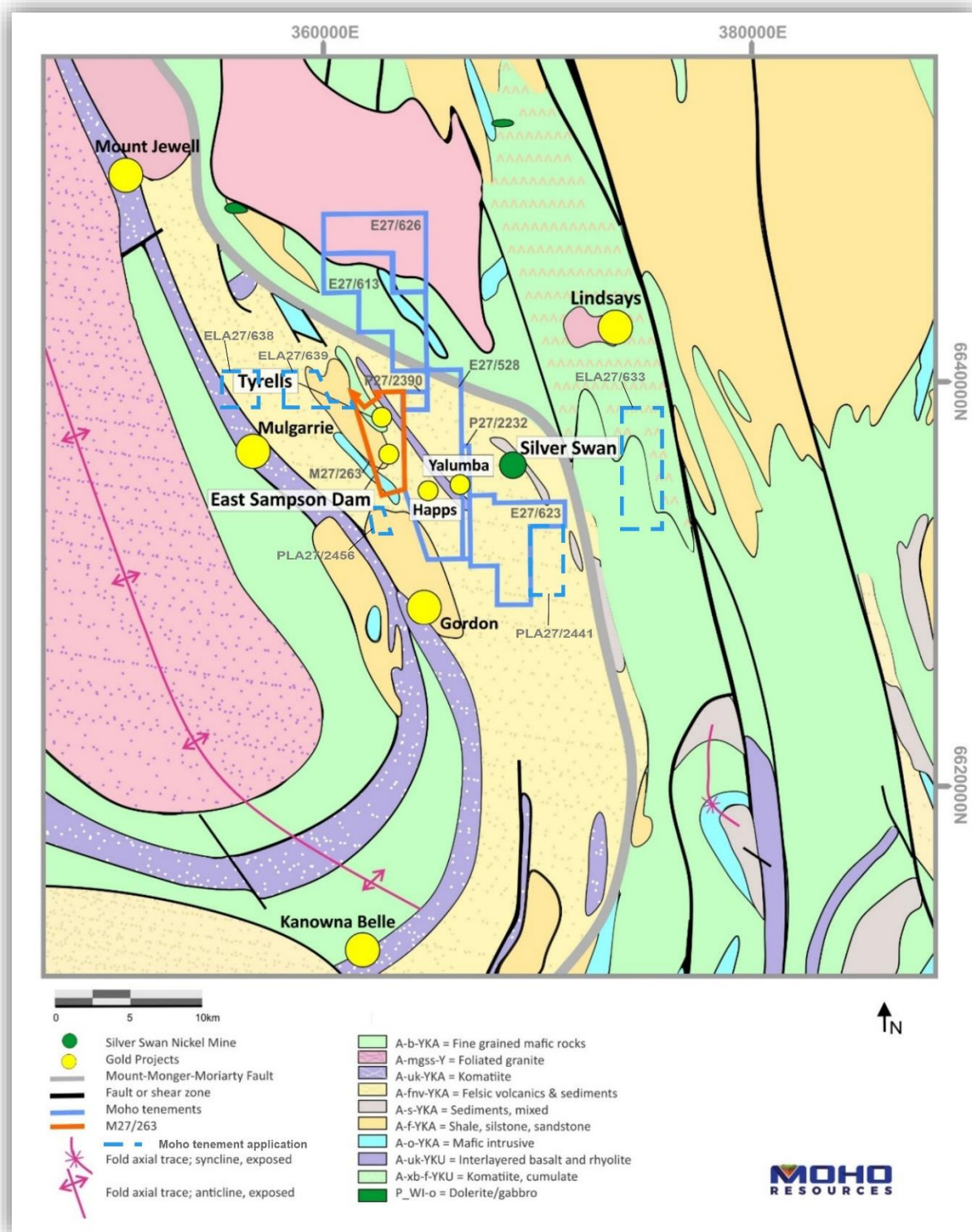
T +61 (08) 9481 0389  
+61 (08) 9463 6103

E [admin@mohoresources.com.au](mailto:admin@mohoresources.com.au)

W [www.mohoresources.com.au](http://www.mohoresources.com.au)

Moho Resources Ltd (ASX:MOH) (**Moho** or **Company**) is pleased to report the preliminary metallurgical test results on composite samples of gold mineralisation at the East Sampson Dam gold prospect on M27/263 (Figure 1).

As part of the scoping study assessing the potential viability of Moho’s East Sampson Dam gold mineralisation (ESD), the Company has appointed JT Metallurgical Services Pty Ltd (JT) to provide specialist toll treatment services for the management of metallurgical test work.



**Figure 1: Location of Moho’s tenements, including M27/263 (highlighted) in relation to regional geology of Silver Swan North Project**

## **Metallurgy Results:**

Key points from the gravity and leach tests (refer Table 1):

- o Excellent gravity and leach recoveries for the two weathered composites which best reflect over 99% of mineralisation in the current preliminary pit shell;
- o No optimisation of weathered composites has occurred (grind size, leach conditions, presence of viscosity modifier and carbon);
- o Very low level of deleterious elements (e.g. Cu & As) entered solution for all composites;
- o Lime and cyanide consumption rates were lower than typical toll milling allowance rates;
- o Elevated gold recovery via BLEG method for all five weathered composites (Figure 2);
- o Fresh composites representing <1% of mineralisation in the current preliminary pit shell had lower overall gravity and leach recoveries which indicates a degree of refractoriness;
- o Lower than expected fresh composite recoveries mirror the BLEG results closely (Figure 2);
- o Preg robbing (leached gold being absorbed by carbonaceous minerals) is not suspected based on kinetic leach samples.

The first test work phase has been conducted on nine variability composites of material derived from Moho's 2019 RC drilling program. These composites were selected to best represent the grade and nature of gold mineralisation at ESD modelled by Minero Pty Ltd and Minecomp Pty in their initial pit optimisation studies. The multiple variability composite samples are based on different lithologies, gold grades and degree of oxidation.

A metallurgical test work program was undertaken by JT to reflect the treatment of ESD mineralisation through Kalgoorlie toll treatment facilities. The test work conditions were designed to replicate these toll milling facilities operating parameters namely grind size, cyanide and dissolved oxygen concentrations, residence time and pH. Kalgoorlie sourced, hypersaline raw water was utilised in all tests to best gauge consumption rates of lime and cyanide.

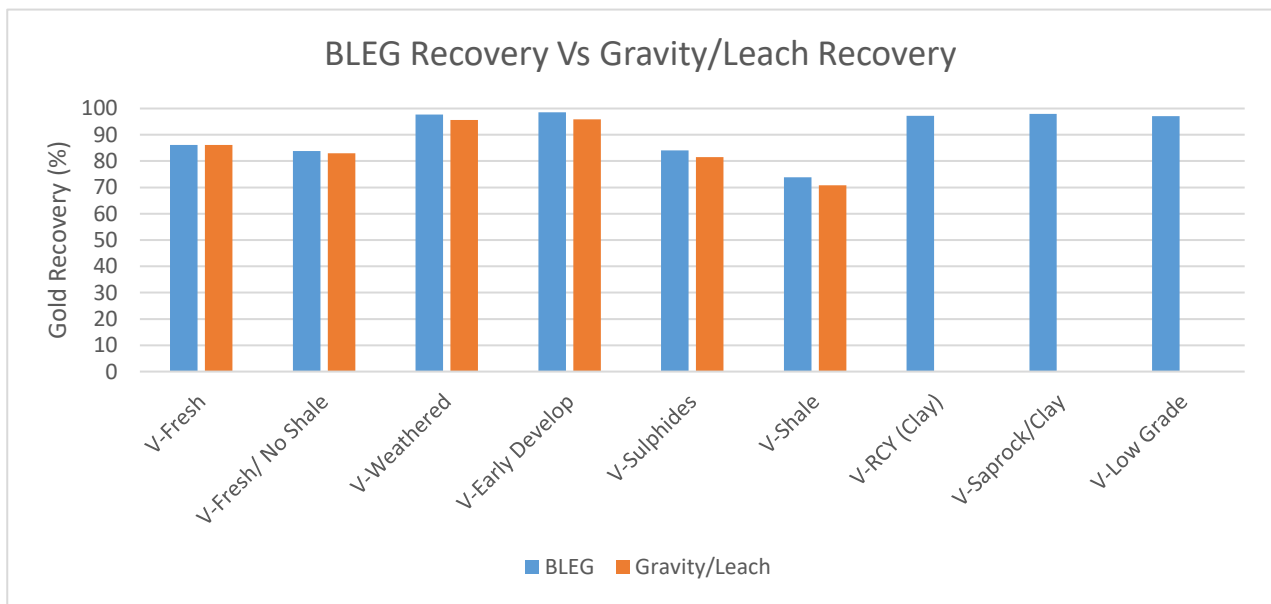
All compositing and metallurgical test work was conducted at Metallurgy Pty Ltd in Perth with solid assays conducted at NATA accredited Nagrom Laboratories in Perth. All composites were assayed via Bulk Leach Extractable Grade with Fire Assay finish (BLEG) to mitigate any possible effect of coarse gold with comprehensive assays completed on six of the nine variability composites. The other three variability composites were acquired purely for rheological test work. The comprehensive head assays (Table 1) showed that the six composites had low concentrations of common deleterious elements such as arsenic, copper, antimony and tellurium. Elevated organic carbon at 0.58% was noted in the 'Shale' variability composite.

Bulk 20 kg representative samples of six of the nine variability composites were ground to P<sub>80</sub> 300 micron then passed through a laboratory sized Knelson concentrator prior to intensive leaching of the gravity concentrate. This aimed to match the operation of an ACACIA leach reactor commonly used in the Goldfields for treatment of gravity gold concentrates. The conditions used mirrored those expected in a typical Kalgoorlie toll processing plant.

**Table 1: Gravity and Overall Gold Recoveries with Reagent Consumptions**

Description	Head Grade <sup>2</sup>	Recalc	Gravity	Overall Recovery	Residue	Lime	Cyanide
	g/t	g/t	%	%	g/t	kg/t	kg/t
Weathered <sup>1</sup>	4.49	3.97	52.9	95.6	0.18	6.27	0.7
Early Develop <sup>1,3</sup>	2.51	2.53	41.8	95.9	0.10	6.79	0.81
Fresh	4.04	4.68	44.1	86.1	0.65	4.96	0.52
Fresh/No Shale	3.67	3.65	26.7	83.0	0.62	6.7	0.6
High Sulphides	2.20	1.94	23.2	81.5	0.36	7.12	0.74
Shale	2.53	3.22	47.8	70.8	0.94	6.71	0.58

Notes: 1. Composites of weathered rocks; 2. via 1kg BLEG with Fire Assay Finish; 3. Shallow oxide mineralisation likely to be early mill feed



**Figure 2: Comparison between BLEG and Gravity/Leach recoveries on variability composites**

Test work also focused on the rheological slurring characteristics (i.e. flow and deformational) of the weathered composites. A total of five weathered composites with varying lithologies were subject to a comprehensive rheological testing at Fremantle Metallurgy under JT’s supervision. Each composite was ground to P<sub>80</sub> 106 micron in hypersaline raw water then tested at varying slurry densities and pH’s with the Weir Slump Ring and Haake VT550 Rheometer.

All five composites at 40% solids density returned favourable pumping, screening and mixing results. To offset increased viscosities at the more elevated pulp densities of 50% and 60% solids, addition of the Freeflow 750 viscosity modifier improved the slurry flow characteristics and its use in further test work and plant treatment is recommended.

**Future Testwork:**

A single master composite (MC) will be derived from the variability composites to represent potential mill feed grade and oxidation state as presented by the current preliminary pit shell. Optimisation test work focused on grind size and leach conditions will take place with the optimum conditions then replicated in the presence of activated carbon to reflect a standard Carbon-In-Pulp (CIP) plant. These tests will be conducted in the presence of a viscosity modifier.

These tests will provide toll millers, which Moho may approach to secure a Toll Milling Agreement, with confidence that the potential ESD mineralisation can be treated successfully through their mill at their operating conditions.

Parallel to the MC program, the fresh composite leach residues generated from Phase 1 of the test work will be subject to diagnostic leaching, size x assay and mineralogical testing. The outcomes of this will assist JT in understanding the causes of the lower recoveries of these particular composites.

**Next Steps:**

- Further metallurgical test work is proposed on a single master composite to represent potential mill feed grade to replicate potential toll mill treatment conditions.
- Optimisation test work focused on grind size and leach conditions will be undertaken in the presence of activated carbon to reflect a standard Carbon-In-Pulp (CIP) plant and in the presence of a viscosity modifier.
- These tests will provide toll millers, which Moho may approach to secure a Toll Milling Agreement, with confidence that the potential ESD mineralisation can be treated successfully through their mill at their operating conditions.
- Further test work will be performed to understand the causes of the lower recoveries from the fresh composite leach residues.

**Competent Persons Statement:**

Information in this announcement that relates to metallurgical test results is based on, and fairly represents, information and supporting documentation prepared from test work results generated by Metallurgy Pty Ltd, an independent Metallurgical test work facility. Brant Tapley as Director of Johnson Tapley Metallurgical Services Pty Ltd has signed off on all metallurgical test work results and reports generated from the test work. Mr Tapley is a Member of the AUSIMM and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person (or "CP") as defined in the 2012 Edition of the Australasian Code for Reporting of Information in this announcement that relates to metallurgy. Mr Tapley consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

**Moho's Interest in Silver Swan North Tenements:**

Moho is the 100% registered owner of granted tenements M27/263, E27/528, P27/2232, P27/2390 & E27/613 and applications for E27/623, E27/626, E27/633, E27/638, E27/639, P27/2441, & P27/2456 all of which comprise the Silver Swan North Project.

## About Moho Resources Ltd:



**MAP OF MOHO's PROJECT AREAS**

Moho Resources Ltd is an Australian mining company which listed on the ASX in November 2018. The Company is focused on gold and nickel exploration at Empress Springs, Silver Swan North and Burracoppin.

Moho's Board is chaired by Mr Terry Streeter, a well-known and highly successful West Australian businessman with extensive experience in funding and overseeing exploration and mining companies, including Jubilee Mines NL, Western Areas NL and Midas Resources Ltd.

Moho has a strong and experienced Board lead by geoscientist Shane Sadleir as

Managing Director, Commercial Director Ralph Winter and Adrian Larking, lawyer and geologist, as Non-Executive Director.

Highly experienced geologists Bob Affleck (Exploration Manager) and Max Nind (Principal Geologist) are supported by leading industry consultant geophysicist Kim Frankcombe (ExploreGeo Pty Ltd) and experienced consultant geochemists Richard Carver (GCXplore Pty Ltd) and Dr Carl Brauhart (CSA Global Pty Ltd).

Moho's geophysical programs and processing and analysis of the results are supervised by Kim Frankcombe (ExploreGeo Pty Ltd) who is a geologist and geophysicist with 40 years' experience in mineral exploration. He has worked for major mining companies, service companies and for over 20 years as an independent geophysical consultant. He was a member of the discovery team for several significant deposits including one Tier 1 deposit. He manages the ExploreGeo consulting group which provides specialist geophysical advice to explorers.

Dr Jon Hronsky (OA) provides high level strategic and technical advice to Moho. Jon has more than thirty years of experience in the global mineral exploration industry, primarily focused on project generation, technical innovation and exploration strategy development. He has worked across a diverse range of commodities and geographies, and has particular expertise in targeting nickel sulphide and gold deposits.

## ENDS

The Board of Directors of Moho Resources Ltd authorised this announcement to be given to ASX.

### For further information please contact:

Shane Sadleir, Managing Director  
T: +61 411 704 498  
E: [shane@mohoresources.com.au](mailto:shane@mohoresources.com.au)

Ralph Winter, Commercial Director  
T: +61 435 336 538  
E: [ralph@mohoresources.com.au](mailto:ralph@mohoresources.com.au)

## JORC Code, 2012 Edition – Table 1 report template

### Section 1 Metallurgically relevant JORC Compliance Table – East Sampson Dam

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></li> <li>• <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Material used in the metallurgical sampling of the East Sampson Dam mineralisation was selected from 22 recent RC drill holes **</li> <li>• Samples were selected and composited by Moho geologists and JT Metallurgical Services metallurgists to best reflect domains within the target mineralisation. These were selected using geological logging information and Fire Assay grades. All intervals were 1m.</li> <li>• Composites were generated by splitting out using rotary splitter the desired mass of each interval composite. The composite was then thoroughly combined by passing through a rotary splitter three times. All interval samples and composites were stored in a sealed, labelled bag inside the laboratory.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>• <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li>• <i>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.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Metallurgical testwork was conducted at Metallurgy Pty Ltd in Perth with all laboratory procedures used being commonly accepted and certified techniques for gold. Solid Samples were prepared and assayed at NATA accredited Nagrom Laboratories in Perth.</li> <li>• Duplicate 50g fire assays with an AAS finish were used to determine gold assays. This is a total technique and is considered appropriate for this level of testwork.</li> <li>• Quality control was carried out by inserting blanks and standards into the sampling chain. These all demonstrated acceptable levels of accuracy and precision.</li> <li>• The BLEG (Bulk Leach Extractable Gold) technique involves the pulverisation of 1kg of representative sample then intensive leaching using 2 AssayTabs for 24 hours. Conditions are measured at 24hours. The liquor is sampled for gold determination via AAS using blanks and certified standards. The residue is washed thoroughly twice then submitted for Duplicate Fire Assay 50g (FA50). Blanks and standards utilised.</li> <li>• A gravity concentration stage was completed to determine the quantity of gravity extractable gold. After the gravity concentrate is removed, the extraction of gold over time is determined by assaying the solution after various time periods using laboratory scale direct cyanide extraction</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>to stimulate an industry standard cyanide in leach (CIL) process. These methods are in line with industry standards for this style of gold mineralisation.</p> <ul style="list-style-type: none"> <li>Hypersaline Water used at Metallurgy Pty Ltd and Fremantle Metallurgy was sourced from a Kalgoorlie bore and is considered representative of future Plant raw water.</li> </ul>
<p><b>Metallurgical factors or assumptions</b></p>	<ul style="list-style-type: none"> <li><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.</i></li> <li><i>The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.</i></li> <li><i>Whether the metallurgical process is well-tested technology or novel in nature.</i></li> <li><i>The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.</i></li> <li><i>Any assumptions or allowances made for deleterious elements.</i></li> <li><i>The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.</i></li> <li><i>For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?</i></li> </ul>	<ul style="list-style-type: none"> <li>Metallurgical testwork is deemed appropriate for this style of mineralisation and commonly accepted across the WA Goldfields.</li> <li>Bulk testwork methods, BLEG and 20kg Gravity followed by 1kg representative cyanide bottle rolls mitigate any potential effect caused by coarse nuggety gold on grade or recovery determination</li> <li>All solution and solid samples are assayed in at least duplicate using commonly accepted and verified techniques.</li> <li>Selected test conditions best reflect actual plant conditions</li> <li>Comprehensive head assays were conducted on the six variability composites using NATA accredited Nagrom Laboratories in Perth</li> <li>Composites were selected to ensure all known domains were thoroughly represented in the target mineralisation</li> </ul>
<p><b>Data spacing and distribution</b></p>	<ul style="list-style-type: none"> <li><i>Data spacing for reporting of Exploration Results.</i></li> <li><i>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.</i></li> <li><i>Whether sample compositing has been applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>Metallurgical samples are taken from drill holes across the known mineralisation and are considered representative of the respective mineralised bodies which are location at various depths at East Sampson Dam. These samples are composited into grade domains</li> <li>Selected intervals were thoroughly composited by passing the composite through a rotary splitter three times.</li> </ul>
<p><b>Verification of sampling and assaying</b></p>	<ul style="list-style-type: none"> <li><i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li><i>Discuss any adjustment to assay data</i></li> </ul>	<ul style="list-style-type: none"> <li>Intersection assays were documented by Moho's exploration geologists and verified by Moho's Exploration Manager.</li> <li>Metallurgical test results were verified by JT Metallurgical Services metallurgist, Brant Tapley.</li> <li>All assay data were received in electronic format from Metallurgy Pty Ltd then checked and verified</li> <li>Original laboratory data files in Excel and PDF formats are stored together in Moho database</li> <li>There were no adjustments to the assay data</li> </ul>



Criteria	JORC Code explanation	Commentary
<b>Sample security</b>	<ul style="list-style-type: none"> <li><i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>Samples were immediately dispatched to the laboratory by Moho personnel and have at all times been in possession of Moho or its designated contractors. Chain of custody was maintained throughout</li> <li>Testwork residue samples are sealed inside labelled plastic bags and stored in cold storage</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li><i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<ul style="list-style-type: none"> <li>No formal audits or reviews completed. However, a scanning of sample quality against assay results for potential errors is undertaken, with no issues to date.</li> </ul>

### Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>No other material exploration data not already mentioned in the announcement or previous ASX announcements have been used in the metallurgical test work.</li> <li>Metallurgy Pty Ltd prepared six composites for metallurgical testwork and another three for rheology testwork only. Composites were generated by combining 1m interval samples via rotary splitter then homogenising three times. Metallurgical tests were carried out using representative sub-samples ground to P<sub>80</sub> 106 micron prior to gravity preconcentration using a 3" Laboratory sized Knelson prior to intensive leaching of the concentrate. The Intensive leach residue was thoroughly washed then recombined with the Knelson tailings for bottle roll leach testwork at conditions representative of Toll Milling facilities in Kalgoorlie. Solution samples were taken at 2, 4, 8, 16, 24 and 48 hours.</li> <li>See the main body of the announcement for metallurgical results</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li><i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<ul style="list-style-type: none"> <li>Ongoing work is planned as stated in this announcement</li> </ul>

\*\* See ASX release 11<sup>th</sup> February 2020 "SIGNIFICANT GOLD ASSAYS AT EAST SAMPSON DAM PROSPECT"