



**SULTAN**  
RESOURCES

11th February 2021

## **BROAD ZONES OF VEINING AND SULPHIDE MINERALISATION AT THE TUCKLAN PROJECT, LACHLAN FOLD BELT, NSW**

- **First phase of maiden RC/Diamond drill program of 1,554.3m completed in 6 holes**
- **Zones of veining, alteration and sulphide mineralisation *up to 136m thick* intersected:**
  - **Multiple vein sets**
  - **Pyrite, pyrrhotite, sphalerite, galena and chalcopyrite all identified**
- **Veining and sulphides coincident with strong I.P. chargeability high, confirming the presence of a sulphide bearing hydrothermal system**
- **Assay results expected end-March due to laboratory backlog**
- **Results from soil geochemistry to the east of the drilling have been received and are being interpreted**

Sultan Resources Limited (ASX: SLZ) (**Sultan** or **Company**) is pleased to announce that it has completed the first phase of its maiden drill program at its 100% owned Tucklan Gold project in the east Lachlan fold belt, NSW. Core from the initial phase has been logged, and intervals for assay analysis have been dispatched. The Company commenced drill-testing of Induced Polarisation (IP) anomalies beneath strong gold and copper surface geochemistry at the Tucklan project in December 2020 (see ASX Announcement 07/12/2020).

### **Drilling Program - Tucklan**

The initial phase of the maiden drill programme at Tucklan comprised 6 RC percussion holes, including two with diamond drilling tails, for a total of 1,544.3m (Figure 1, Appendix 1). Three holes reached their target depth of ~350m and three holes did not reach planned depth due to excessive ground water. Should assay results warrant, Sultan will return to Tucklan to complete the unfinished holes with diamond tails and drill additional holes into any significant mineralisation plus drill test additional soil geochemical targets. The basement geology at Tucklan has been interpreted as Ordovician Tucklan Formation and Silurian Dungerey Volcanics of the Rockley - Gulgong Volcanic Belt, within the Macquarie Arc. The host rocks are considered to have potential to contain multiple styles of mineralisation including porphyry Cu-Au, epithermal Au and McPhillamy's-style bulk tonnage Au.

**Sultan Resources Ltd**

ACN: 623652 522

### **CORPORATE DETAILS**

**ASX Code: SLZ**

### **DIRECTORS**

**STEVEN GROVES**  
MANAGING DIRECTOR

**JEREMY KING**  
CHAIRMAN

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NON-EXECUTIVE DIRECTOR

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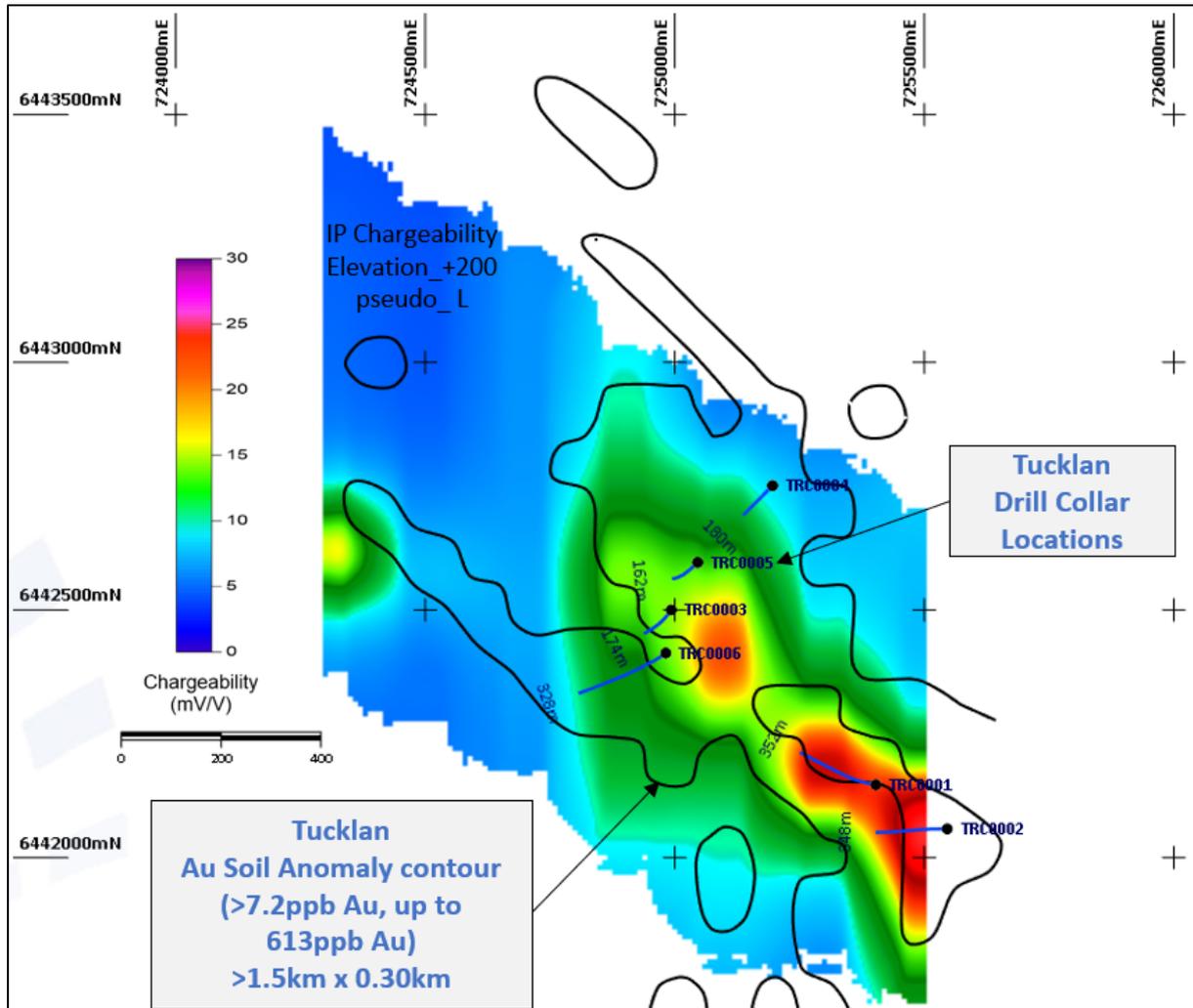


Figure 1: Drill collar locations over IP Chargeability pseudo image with Soil Au >7.2ppb contour (black outline)

## Geological Observations

Logging of the drill chips and core has been very encouraging and revealed broad zones of hydrothermally altered volcanics and coherent volcanic facies that contain multiple generations of veining and sulphide mineralisation in some holes. In particular, hole TRC0001, which tested a strong IP chargeability 'bullseye' target, intersected a 136m down hole zone (172m to 308m) of moderate to intense, multi-generational vein sets and associated disseminated, stringer and vein-hosted sulphide mineralisation within volcanoclastic sediments (Figures 2 - 5). Sulphide mineralisation was visually estimated to be at least 1.5% throughout the interval and dominated by pyrite and pyrrhotite though significant sphalerite (Zn-sulphide), galena (Pb-sulphide) and chalcopyrite (Cu-sulphide) were all noted in some veins. Numerous vein sets have been identified and include:

- Quartz Sulphide Veins
  - Quartz + Pyrrhotite veinlets
  - Quartz + Pyrite veins with chlorite halos
  - Pyrite/pyrrhotite veinlets
- Quartz-Carbonate-Sulphide veins
  - Quartz + Carbonate + Pyrrhotite/pyrite
- Quartz-Carbonate-Base Metals Veins
  - Quartz + Carbonate veins with Sphalerite + Galena + Pyrrhotite + Pyrite ± Chalcopyrite



The style of veining, sulphides and alteration is not interpreted to be typical of an epithermal gold system and could represent a similar style of mineralisation to the McPhillamy's Gold Deposit located in a similar geological setting ~130km to the south. The occurrence and volume of pyrite and pyrrhotite are considered sufficient to be responsible for the strong IP chargeability response targeted by TRC0001.

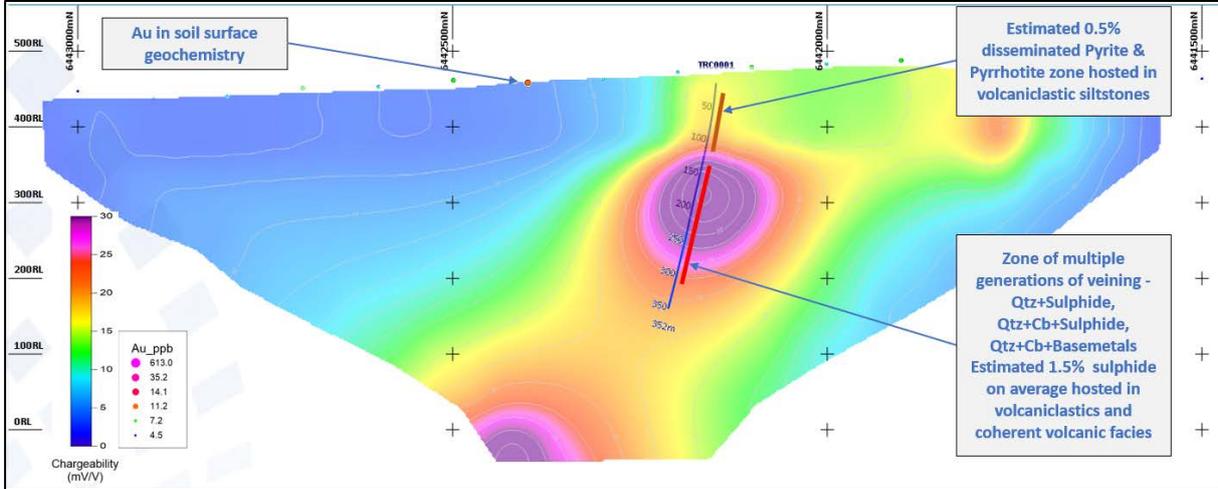


Figure 2: IP Chargeability Section 724300mE with TRC0001 (175m window) and surface Au in soils. The red bar on the hole trace represents the interval of veining and sulphide mineralisation and is coincident with the strong IP response.



Figure 3: Section of core from TRC0001 from 194.6m to 203.6m showing intensity and vein styles with alteration in volcanoclastic sediments.

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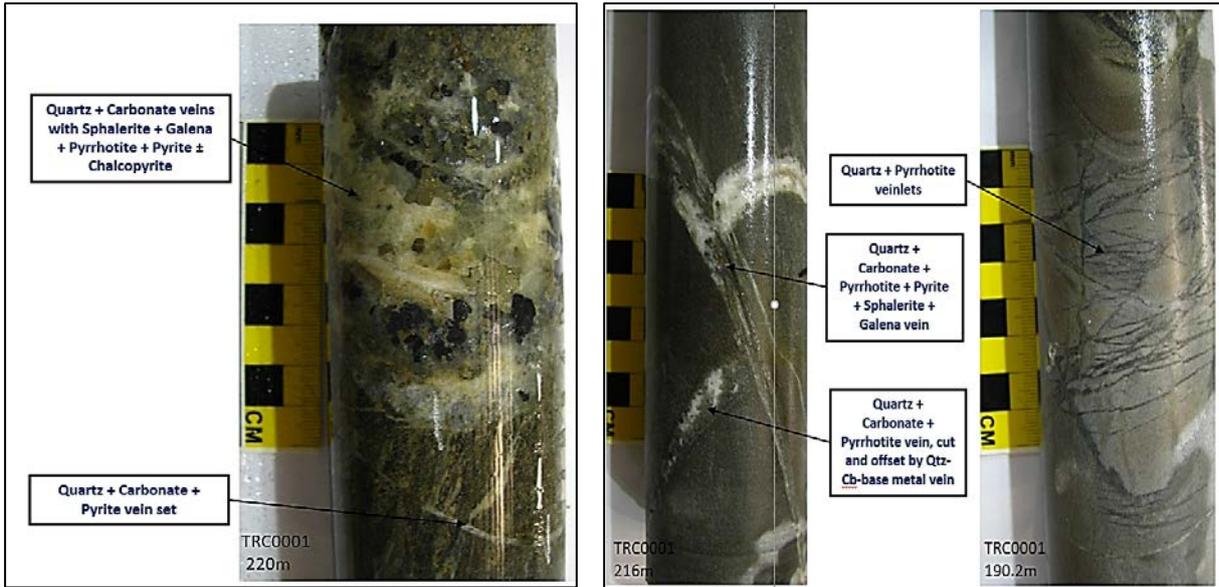


Figure 4: Close up examples of veining and sulphide mineralisation from hole TRC0001

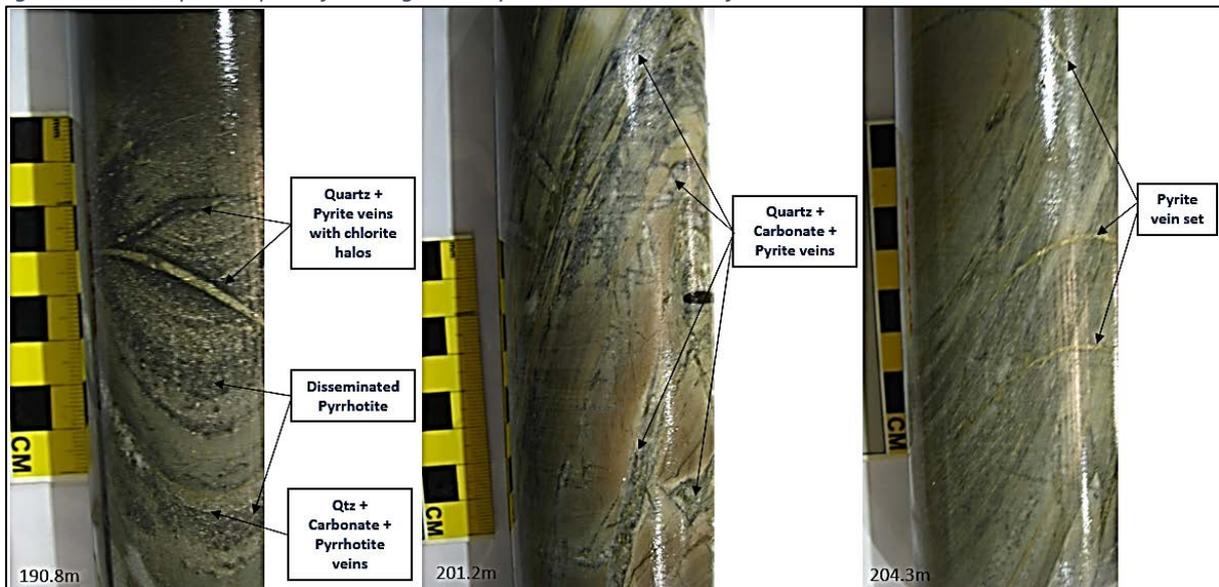


Figure 5: Close up examples of veining and sulphide mineralisation from hole TRC0001

## Discussion

From the initial exploration groundwork, the Tucklan prospect was originally considered prospective as an epithermal gold target with some potential for Au-rich VMS mineralisation possible. Characteristics such as a structurally-related magnetic low associated with prominent K-radiometric anomalism, extensive Au+pathfinder element soil geochemistry and coincident IP response elevated Tucklan to a drill-ready status. Field mapping had identified outcropping gold-mineralised rock displaying disseminated sulphides and adularia alteration indicative of a potential epithermal system (see ASX Announcement 02/06/2020). Although three of the 6 initial holes failed to reach their target depth, one hole, TRC0001 did pierce a strong IP ‘bullseye’ anomaly and revealed an impressive array of sulphide rich vein sets hosted in volcanoclastic sediments of a mineralisation type that is reminiscent of the McPhillamy’s Gold Deposit (ASX: RRL).

The McPhillamy’s Gold Project is a bulk tonnage gold deposit containing a total resource of 70Mt @ 1.0g/t for 2.29Moz (see Appendix 2, [regisresources.com.au/General/reserves-and-resources.html](https://www.regisresources.com.au/General/reserves-and-resources.html)). McPhillamys is interpreted as an orogenic gold deposit hosted in a shear zone within Silurian dacitic volcanoclastics<sup>1</sup>. Gold mineralisation is associated with a hydrothermal alteration assemblage of



quartz+carbonate(ankerite)+white mica (phengite) +pyrite+/-chalcopyrite+/-pyrrhotite+/-chalcocite+/-biotite. Elevated gold grades over 1 g/t are associated with very coarse euhedral pyrite, white mica, quartz and carbonate<sup>1</sup>. McPhillamy's is marked at the surface by coincident Au+As+Cu+Mo+Pb+Bi soil anomalies within a potassium radiometric anomaly. Pole-dipole IP has revealed a 55mv/v chargeability anomaly coincident with the mineralised shear zone.

Many of the characteristics associated with gold mineralisation at McPhillamy's can be observed in the core from TRC0001. Table 1, below, provides a comparison of the key features. Although the gold content of veining and alteration intersected in TRC0001 is not yet known, the extensive surface geochemical gold anomaly and presence of gold to over 1g/t in altered pyritic volcanic rocks at surface (see ASX Announcement 02/06/2020) indicates that a gold-fertile hydrothermal system has been operating at Tucklan. The discovery of a McPhillamy's-style gold system at Tucklan could be a company-transformative event for Sultan.

Assay results are expected towards the end of the March quarter due to the increased exploration activity in NSW and resultant sample backlog at the laboratory.

Table 1: Geological comparison between the McPhillamy's Gold Deposit and observations from TRC0001

		McPhillamy's	Tucklan (TRC0001)
<b>Host Rocks</b>		Late Silurian felsic volcanics, volcanics, minor shales (Mumbil Shelf - Anson Formation)	Late Silurian Dungaree volcanics felsic volcanics, shale and slate
<b>Proximity to Faults</b>		Located in fault splay of Godolphin Fault	Located in fault splay of Mudgee Fault
<b>Radiometrics</b>		Potassium (K) radiometric anomaly	Potassium (K) radiometric anomaly
<b>IP</b>		+50 mv/v coincident with mineralised shear zone	+ 50 mv/v bullseye anomaly
<b>Magnetics</b>		Magnetic low	Local magnetic low
<b>Hydrothermal Alteration</b>		sericite/illite + k-feldspar + quartz ± chlorite ± calcite ± siderite ± dolomite ± albite ± barite	<b>visual observations only</b> - sericite + rare weak k-feldspar as vein halos + quartz ± chlorite ± calcite ± siderite
<b>Ore Style Mineralogy</b>	Base Metal Zones	Stratiform and recrystallised pyrite ± sphalerite ± galena ± biotite ± tetrahedrite/tennantite hosted in the overlying siltstones ± shales	Recrystallised pyrite ± sphalerite ± galena ±pyrrhotite ± biotite hosted siltstones and sandstones
	Gold Rich Stratigraphic Footwall	Stringer pyrite ± chalcopyrite ± pyrrhotite ± gold, gold telluride, bismuth telluride, ± arsenopyrite best developed in the coarser volcanoclastic units as shear fabric controlled stringers	Yet to be determined
	Pyrite zones		Pyrite ± chalcopyrite ± pyrrhotite ± arsenopyrite

**Future Work Program - Tucklan**

Once assay results are received, the Company will decide if the drill program will continue with the addition of diamond tails to the holes affected by water and the completion of a further holes including possible air-core drilling. Results from recently received soil geochemistry is being interpreted and drill

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targeting will also be considered. IP surveying and soil geochemistry to close off the open-ended anomalous zone are ongoing.

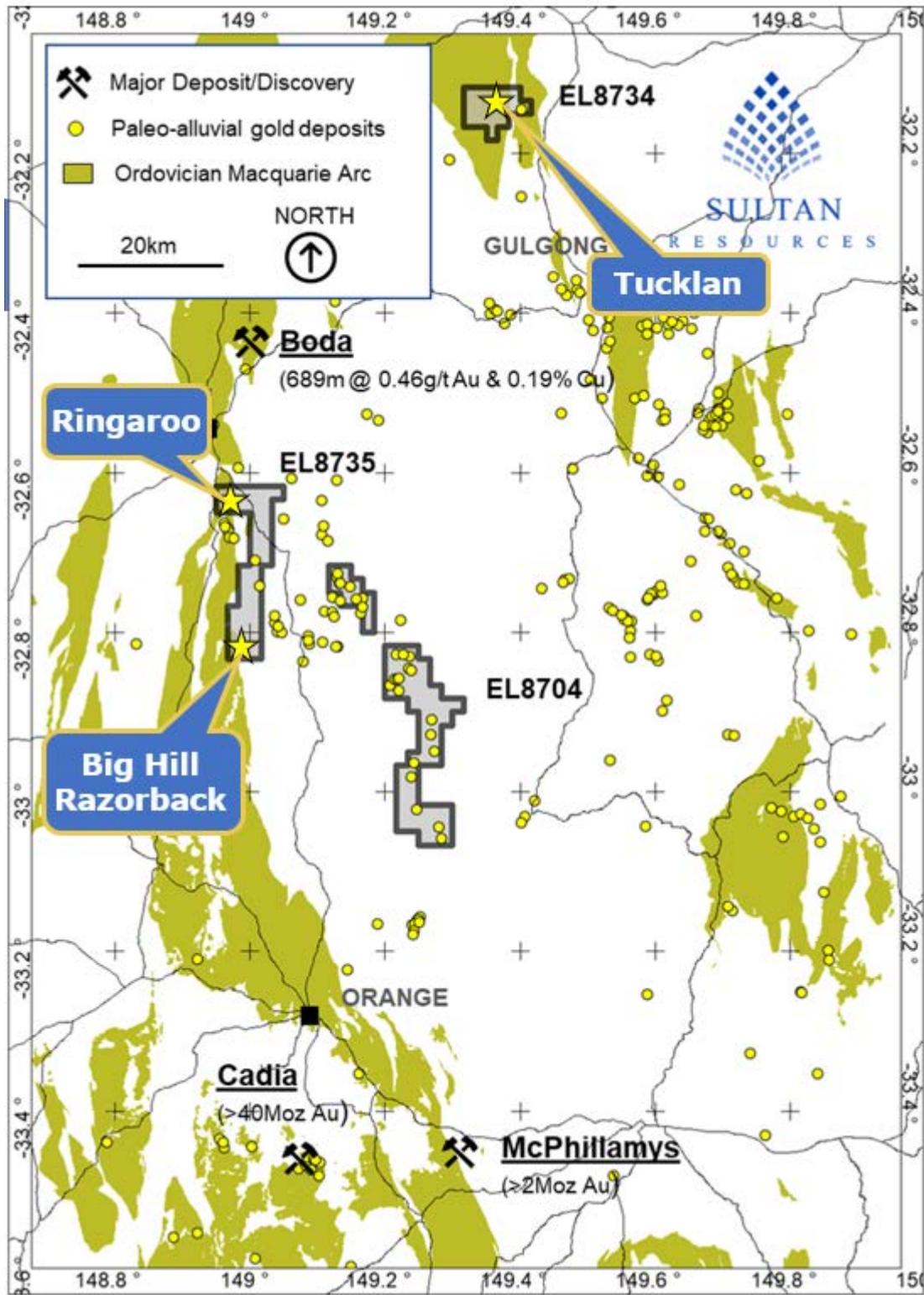


Figure 6: Location Map – Sultan Resources NSW Tenements over the prospective Macquarie Arc sequence

This announcement is authorised by Steve Groves, Managing Director



For further information contact:

**Managing Director**

Steve Groves

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**References:**

1. French T, Duerden P, Bigelow J, Simmons H, Flitcroft P, 2015: THE MCPHILLAMYS GOLD DEPOSIT, KINGS PLAINS, NSW. DISCOVERY HISTORY AND GEOLOGY OF THE MCPHILLAMYS GOLD DEPOSIT, LACHLAN FOLD BELT, NSW.

**Competent Persons Statement**

The information in this report that relates to Exploration Targets and Exploration Results is based on historical exploration information compiled by Mr Steven Groves, who is a Competent Person and a Member of the Australian Institute of Geoscientists. Mr Groves is Managing Director and a full-time employee of Sultan Resources Limited. Mr Groves has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the “Australasian Code for the reporting of Exploration Results, Mineral Resources and Ore Reserves”. Mr Groves consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

**Disclaimer**

In relying on the above mentioned ASX announcements and pursuant to ASX Listing Rule 5.23.2, the Company confirms that it is not aware of any new information or data that materially affects the information included in the above-mentioned announcements.

**About Sultan Resources**

Sultan Resources is an Australian focused exploration company with a portfolio of quality assets in emerging discovery terranes currently targeted by successful explorers such as Newcrest Mining, Alkane Resources, Gold Road Resources, and Sandfire Resources. Sultan’s tenement portfolio includes prospective targets for porphyry Au-Cu, structurally-hosted gold, Nickel, Cobalt and base metals and include tenements located in the highly prospective Lachlan Fold Belt of Central NSW as well as projects located within the southern terrane region of the Yilgarn Craton in south and south eastern Western Australia. Sultan’s board and management strategy is for a methodical approach to exploration across the prospects in order to discover gold and base metals that may be delineated via modern exploration techniques and exploited for the benefit of the company and its shareholders.

**Appendix 1: Collar Details of Drilled Holes**

HoleID	EASTING	NORTHING	RL	AZI	DIP	DEPTH
TRC0001	725403	6442147	470	281	-60	352.1
TRC0002	725546	6442058	463	270	-60	348
TRC0003	724993	6442500	462	215	-60	174
TRC0004	725196	6442751	452	225	-60	180
TRC0005	725046	6442596	452	225	-60	162
TRC0006	724982	6442413	471	233	-60	328.2



## Appendix 2: Details of Resources or Reserves referred to in this document

Group Mineral Resources as at 31 March 2020

Gold Project	Type	Cut-Off (g/t)	Measured			Indicated			Inferred			Total Resource		
			Tonnes (Mt)	Gold Grade (g/t)	Gold Metal (koz)	Tonnes (Mt)	Gold Grade (g/t)	Gold Metal (koz)	Tonnes (Mt)	Gold Grade (g/t)	Gold Metal (koz)	Tonnes Resource (Mt)	Gold Grade (g/t)	Gold Metal (koz)
McPhillamys	Open-Pit	0.4	-	-	-	69	1.0	2,280	1	0.6	10	70	1.0	2,290

[regisresources.com.au/General/reserves-and-resources.html](https://regisresources.com.au/General/reserves-and-resources.html)

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## Appendix 1: JORC Code, 2012 Edition Table 1 – Sultan Resources Ltd – Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary				
Sampling techniques	<ul style="list-style-type: none"> <li>Nature &amp; 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.</li> <li>Include reference to measures taken to ensure sample representivity &amp; 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 (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.</li> </ul>	<p>Rock sampling program</p> <ul style="list-style-type: none"> <li>Rock chip samples were taken in the during field inspection of the Tucklan gold target</li> <li>Rock samples were collected from surface outcrop and float</li> <li>Outcrop samples are resistant portions of the local geology and are considered to be in situ. Float samples are interpreted to have been sourced from local area..</li> <li>Samples weighing up to several kilograms were collected</li> </ul> <p>soil sampling program</p> <ul style="list-style-type: none"> <li>All soil sample points were located using a hand-held GPS with +/-5m accuracy utilising MGA zone 55 (GDA94) coordinate system. Surface organic matter was removed from the sample site using a hand pick and shovel and a 25cm x 25cm x 25cm deep hole was dug using a mattock, with a sample of primarily B soil horizon collected. The soil sample was screened using a 3mm mesh aluminium sieve and a 200-250 gram sub sample of -3mm fraction was retained in a labelled soil geochemical bag for analysis. Soil sample IDs and locations are stored digitally in a register which also notes sample content and conditions. External certified reference material / standards, blanks and duplicates are submitted every 50th, 51st and 52nd sample respectively for QAQC purposes.</li> </ul>				
Drilling techniques	<ul style="list-style-type: none"> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) &amp; details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented &amp; if so, by what method, etc.).</li> </ul>	<ul style="list-style-type: none"> <li>All 6 drill holes commenced with Reverse Circulation drilling using a track mounted drill rig –</li> <li>RC Hole Depths are as follows:</li> </ul> <table border="1"> <thead> <tr> <th>HoleID</th> <th>RC - DEPTH</th> </tr> </thead> <tbody> <tr> <td>TRC0001</td> <td>174</td> </tr> </tbody> </table>	HoleID	RC - DEPTH	TRC0001	174
HoleID	RC - DEPTH					
TRC0001	174					



Criteria	JORC Code explanation	Commentary
		<p>TRC0002      348</p> <p>TRC0003      174</p> <p>TRC0004      180</p> <p>TRC0005      162</p> <p>TRC0006      168</p> <ul style="list-style-type: none"> <li>• Diamond tails were added to TRC0001 and TRC0006 using truck mounted UDR 1000 drill rig</li> <li>• TRC0006 – Drilled from 168 – 173.4m (5.4m) HQ3 before casing off, reducing to NQ2 and drilling from 173.4 to 328.1m (154.7m) NQ2</li> <li>• TRC0001 – Drilled from 174 – 179.6m (5.6m) HQ3 before casing off, reducing to NQ2 and drilling from 179.6 to 352.10m (172.5m) NQ2</li> <li>• Both single shot and final multishot survey data was completed with a Axis Champgyro</li> <li>• Core orientation was completed using Boart Longyear Truecore orientation system</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>• <i>Method of recording &amp; assessing core &amp; chip sample recoveries &amp; results assessed.</i></li> <li>• <i>Measures taken to maximise sample recovery &amp; ensure representative nature of the samples.</i></li> <li>• <i>Whether a relationship exists between sample recovery &amp; grade &amp; whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The RC rig was fitted with a cone splitter with adjustable ports at the bottom of the cyclone. At the end of each 1m, the sample is dropped into the cone splitter with the sample bag attached to the right side port. The samples were collected on 2m composites, with the sample bag removed every 2m of drilling. Field duplicates were collected every 50 samples with a second sample bag attached to the left side port.</li> <li>• Rock chips were collected on 1m intervals from the excess sample bags, these samples were sieved and washed and collected into plastic chip trays.</li> <li>• Drill hole data, samples and geology logging is recorded on a purpose designed logging excel spreadsheet and stored on the company online storage site.</li> <li>• Diamond core was extracted from the inner tube and placed into plastic core trays at the drill rig. Core was transported to a core facility for processing and sampling. Recovery was assessed between core blocks and visual examination</li> </ul>



Criteria	JORC Code explanation	Commentary
		<p>of the core in the trays. Orientation was completed by reconstructing the core in it's original position using v rails and the orientation marks placed on the core by the drillers and marking the orientation line up and down the section.</p> <ul style="list-style-type: none"> <li>• Core was cut using an automatic Almonte core saw.</li> <li>• Sampling was composited on 2m per sample of half core for the NQ2 core and 1m samples of half core for the HQ3 core N/A</li> </ul>
Logging	<ul style="list-style-type: none"> <li>• <i>Whether core &amp; chip samples have been geologically &amp; geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies &amp; metallurgical studies.</i></li> <li>• <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</i></li> <li>• <i>The total length &amp; percentage of the relevant intersections logged.</i></li> </ul>	<p>Reverse Circulation and Diamond Drilling logging</p> <ul style="list-style-type: none"> <li>• At this point, both drill chips and diamond core have been reviewed by experienced geologists, final detailed geologically logging recorded on the excel spreadsheet logging system is yet to take place.</li> <li>• All core has been meter marked, Recovery and RQD completed, Orientated, alpha and beta measurements on structures and vein sets, core photography and sampling has been completed and recorded on the company logging and sampling excel spreadsheet</li> <li>• The description is qualitative and includes lithology, alteration and mineralisation</li> </ul>
Sub-sampling techniques & sample preparation	<ul style="list-style-type: none"> <li>• <i>If core, whether cut or sawn &amp; whether quarter, half or all core taken.</i></li> <li>• <i>If non-core, whether riffled, tube sampled, rotary split, etc. &amp; whether sampled wet or dry.</i></li> <li>• <i>For all sample types, the nature, quality &amp; appropriateness of the sample preparation technique.</i></li> <li>• <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li>• <i>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.</i></li> <li>• <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<p>Rock and soil sampling program</p> <ul style="list-style-type: none"> <li>• The sample preparation for both rock and soils follows industry best practise involving oven drying, crushing and pulverisation</li> </ul> <p>Reverse Circulation and Diamond Drilling sampling</p> <ul style="list-style-type: none"> <li>• The sample preparation for both RC and DD follows industry best practise involving oven drying, crushing and pulverisation</li> <li>• All diamond core is half core, with half being sent for analysis and half being kept.</li> <li>• All Reverse Circulation drilling was sampled using a cone splitter on the bottom of the rig cyclone. The right port collects the original sample, with the left port used for duplicates. The level of the splitter is frequently checked by the company representative at the rig and cleaned as required with</li> </ul>



Criteria	JORC Code explanation	Commentary
		<p>compressed air, wet samples have been collected, these samples are noted in the company sampling and logging excel spreadsheet.</p> <ul style="list-style-type: none"> <li>External certified reference material / standards, blanks submitted every 50th, 51st sample respectively for QAQC purposes for diamond drilling samples.</li> <li>External certified reference material / standards, blanks and duplicates are submitted every 50th, 51st and 52nd sample respectively for QAQC purposes for reverse circulation samples.</li> </ul> <p>Both Reverse Circulation and Diamond drill core sampling are appropriate for the rock types intersected and follows industry best practice</p>
<p><i>Quality of assay data &amp; laboratory tests</i></p>	<ul style="list-style-type: none"> <li><i>The nature, quality &amp; appropriateness of the assaying &amp; laboratory procedures used &amp; 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 &amp; model, reading times, calibrations factors applied &amp; their derivation, etc.</i></li> <li><i>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) &amp; whether acceptable levels of accuracy (i.e. lack of bias) &amp; precision have been established.</i></li> </ul>	<ul style="list-style-type: none"> <li>Reverse Circulation and Diamond drill samples are analysed for 48 elements including Ag, Al, As, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Fe, Ga, Be, Hf, In, K, La, Li, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, Rb, Re, S, Sb, Sc, Se, Sn, Sr, Ta, Te, Th, Ti, Tl, U, V, W, Y Zn and Zr using method ME-MS61 (four acid ICP-MS). Gold will be analysed separately using ALS method Au-AA22, with a lower detection limit of 0.001 ppm.</li> <li>Soil Samples were analysed for 53 elements including Au, Ag, Al, As, B, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Fe, Ga, Ge, Hf, Hg, In, K, La, Li, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, Pd, Pt, Rb, Re, S, Sb, Sc, Se, Sn, Sr, Ta, Te, Th, Ti, Tl, U, V, W, Y, Zn &amp; Zr using method AuME-ST44.</li> <li>External certified reference material / standards, blanks and duplicates are submitted every 50th, 51st and 52nd sample respectively for QAQC purposes.</li> </ul>
<p><i>Verification of sampling &amp; assaying</i></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>The use of twinned holes.</i></li> <li><i>Documentation of primary data, data entry procedures, data verification, data storage (physical &amp; electronic) protocols.</i></li> <li><i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>All data are verified by at least two experienced geologists.</li> <li>Data are stored in a digital database and interrogated using the ioGas™ geochemical software suite.</li> </ul>



Criteria	JORC Code explanation	Commentary
<i>Location of data points</i>	<ul style="list-style-type: none"> <li>• Accuracy &amp; quality of surveys used to locate drill holes (collar &amp; down-hole surveys), trenches, mine workings &amp; other locations used in Mineral Resource estimation.</li> <li>• Specification of the grid system used.</li> <li>• Quality &amp; adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>• A handheld GPS was used to locate each sample point. Accuracy of +/- 5m is considered reasonable</li> <li>• MGA94, Zone 55</li> <li>• Elevation were in AHD (MGA94, Zone 55)</li> </ul>
<i>Data spacing &amp; distribution</i>	<ul style="list-style-type: none"> <li>• Data spacing for reporting of Exploration Results.</li> <li>• Whether the data spacing &amp; distribution is sufficient to establish the degree of geological &amp; grade continuity appropriate for the Mineral Resource &amp; Ore Reserve estimation procedure(s) &amp; classifications applied.</li> <li>• Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>• Soil samples from the are collected across a grid spaced at <ul style="list-style-type: none"> <li>• Tucklan 100m x 100m sample spacing</li> </ul> </li> <li>• These spacings are considered reasonable to provide sufficient geochemical coverage over the target types sought.</li> <li>• For Reverse Circulation drill chips, 2m composite samples were collected, this is considered sufficient for the commodities under exploration</li> <li>• HQ3 diamond core has been sampled on 1m intervals</li> <li>• NQ2 diamond core has been samples on 2m composite intervals.</li> <li>• The sample spacing and compositing is considered reasonable to provide sufficient geochemical results for the target types sought.</li> </ul>
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> <li>• Whether the orientation of sampling achieves unbiased sampling of possible structures &amp; the extent to which this is known, considering the deposit type.</li> <li>• If the relationship between the drilling orientation &amp; the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed &amp; reported if material.</li> </ul>	<ul style="list-style-type: none"> <li>• Drilling was designed to intersect the recorded regional faults at as close as reasonable possible to perpendicular</li> </ul>
<i>Sample security</i>	<ul style="list-style-type: none"> <li>• The measures taken to ensure sample security.</li> </ul>	All geochemical samples are selected by geologists in the field and delivered to the lab by Sultan Resources contract field staff,
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li>• The results of any audits or reviews of sampling techniques &amp; data.</li> </ul>	<ul style="list-style-type: none"> <li>• Not applicable</li> </ul>



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

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement &amp; land tenure status</i>	<ul style="list-style-type: none"> <li><i>Type, reference name/number, location &amp; 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 &amp; environmental settings.</i></li> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>The licences include EL8734, EL8704 and EL8735, which together cover a total area of approximately 326 km<sup>2</sup> within the Lachlan Fold Belt of central NSW.</li> </ul> <p>All licences are in good standing</p>
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li><i>Acknowledgment &amp; appraisal of exploration by other parties.</i></li> </ul>	<ul style="list-style-type: none"> <li>Previous exploration over EL8734 has been limited. Work reported was generally generative in nature and at a reconnaissance level.</li> </ul>
<i>Geology</i>	<ul style="list-style-type: none"> <li><i>Deposit type, geological setting &amp; style of mineralisation.</i></li> </ul>	<p>The Project lies 45km northeast of the Boda Cu-Au porphyry discovery within the Late Ordovician – Early Silurian Tucklan Formation, Rockley - Gulgong Volcanic Belt, Macquarie Arc. The Tucklan Formation is considered to be synchronous with Phase 4 volcanism in the Macquarie Arc which is associated in time and space with the largest porphyry Au-Cu deposits. It is associated with historical gold workings that include numerous prospecting pits, plus a shallow shaft and adit. These form part of the overlooked &amp; extensive Tucklan gold field.</p> <p>The Lachlan Orogen is approximately 700 km wide and 1000 km long and has disputed complex evolutionary history. The Macquarie Arc is part of the eastern sub-province of the Lachlan Orogen and is the host to numerous porphyry Au–Cu deposits. It consists mainly of subduction-related Ordovician intermediate and mafic volcanic, volcanoclastic and associated intrusive rocks and was accreted to Gondwana in the Early Silurian, and underwent rifting and burial in the Middle to Late Silurian.</p> <p>It consists of four structural belts, namely, the western (Junee-Narromine), the central (Molong), the eastern (Rockley-Gulgong) Belt, and southern (Kiandra) volcanic belts. These belts have most likely been formed by rifting and dismemberment of a single arc, which developed along the boundary between the Australian and proto-Pacific plates during the Ordovician and was subsequently dismembered during the Silurian.</p> <p>An entirely intra-oceanic setting is postulated for the Macquarie Arc (Crawford et al., 2007), with four phases of arc-type magmatism, the earliest in the Early Ordovician,</p>



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		<p>and culminating in the Late Ordovician to Early Silurian. The four phases of volcanism in the Macquarie Arc relate to distinct groups of porphyritic intrusions that vary from monzodiorite-diorite through monzonite-granodiorite compositions and correspond with porphyry copper-gold and epithermal gold-silver mineralisation</p> <p><b>Lithology</b></p> <p>Based on the work discussed in this document, the rocks at Tucklan are classified to be of trachy-andesite to alkali basaltic volcano-sedimentary origin.</p>																																																	
Drill hole Information	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>Easting &amp; 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 &amp; azimuth of the hole</li> <li>down hole length &amp; interception depth</li> <li>hole length.</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not Material &amp; this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>Eastings, Northings and RL were collected using a handheld GPS locate each drill collar. Accuracy of +/- 5m is considered reasonable</li> <li>MGA94, Zone 55</li> </ul> <p>Elevation were in AHD (MGA94, Zone 55)</p> <table border="1"> <thead> <tr> <th>HoleID</th> <th>EASTING G</th> <th>NORTHING</th> <th>RL</th> <th>AZI</th> <th>DIP</th> <th>Total DEPTH</th> </tr> </thead> <tbody> <tr> <td>TRC0001</td> <td>725403</td> <td>6442147</td> <td>470</td> <td>281</td> <td>-60</td> <td>352.1</td> </tr> <tr> <td>TRC0002</td> <td>725546</td> <td>6442058</td> <td>463</td> <td>270</td> <td>-60</td> <td>348</td> </tr> <tr> <td>TRC0003</td> <td>724993</td> <td>6442500</td> <td>462</td> <td>215</td> <td>-60</td> <td>174</td> </tr> <tr> <td>TRC0004</td> <td>725196</td> <td>6442751</td> <td>452</td> <td>225</td> <td>-60</td> <td>180</td> </tr> <tr> <td>TRC0005</td> <td>725046</td> <td>6442596</td> <td>452</td> <td>225</td> <td>-60</td> <td>162</td> </tr> <tr> <td>TRC0006</td> <td>724982</td> <td>6442413</td> <td>471</td> <td>233</td> <td>-60</td> <td>328.2</td> </tr> </tbody> </table>	HoleID	EASTING G	NORTHING	RL	AZI	DIP	Total DEPTH	TRC0001	725403	6442147	470	281	-60	352.1	TRC0002	725546	6442058	463	270	-60	348	TRC0003	724993	6442500	462	215	-60	174	TRC0004	725196	6442751	452	225	-60	180	TRC0005	725046	6442596	452	225	-60	162	TRC0006	724982	6442413	471	233	-60	328.2
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Data aggregation methods	<ul style="list-style-type: none"> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades)&amp;cut-off grades are usually Material &amp; should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results &amp; longer lengths of low grade results, the procedure used for such aggregation should be stated &amp; 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>	<ul style="list-style-type: none"> <li>N/A</li> </ul>																																																	



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<i>Relationship between mineralisation widths &amp; intercept lengths</i>	<ul style="list-style-type: none"> <li>• <i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li>• <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> <li>• <i>If it is not known &amp; 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’).</i></li> </ul>	<ul style="list-style-type: none"> <li>• N/A</li> </ul>
<i>Diagrams</i>	<ul style="list-style-type: none"> <li>• <i>Appropriate maps &amp; sections (with scales) &amp; 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 &amp; appropriate sectional views.</i></li> </ul>	<ul style="list-style-type: none"> <li>• See maps and figures accompanying this ASX release.</li> </ul>
<i>Balanced reporting</i>	<ul style="list-style-type: none"> <li>• <i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low &amp; high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Reference has been made to anomalous levels of geochemical pathfinder elements in the document. This interpretation has been determined by experienced geologists retained by Sultan Resources using the ioGas™ geochemical software. It is impractical to present every result for all 53 elements across the sample population in this document. A map showing the distribution of anomalous Cu has been included for reference.</li> </ul>
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <li>• <i>Other exploration data, if meaningful &amp; material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size &amp; method of treatment; metallurgical test results; bulk density, groundwater, geotechnical &amp; rock characteristics; potential deleterious or contaminating substances.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The Induced Polarisation (IP) survey method is often used to determine the location of disseminated sulphides. Rocks containing sulphide minerals can be more readily charged than barren ground. An external current is applied, and charge separation can occur on sulphide grain boundaries. When the transmitted current is switched off the decay of the current can be measured.</li> <li>• The IP survey was completed by Fender Geophysics. The oversight of the survey and auditing (QAQC) and processing of data acquired was conducted by Alan Ortel, an experienced geophysicist.</li> <li>• The IP survey array used was Dipole-Dipole with a 100m receiver dipole size and a 100m transmitter dipole size. The transmitter dipole was moved at 100m intervals, achieving a 100m station spacing. All seven (7) lines are orientated North-South and spaced at 200m intervals. The transmitter used is a GDD-Tx4, 5kVA transmitter system and the receiver used in a GDD-Rx32. The survey was collected with a frequency of 0.25Hz.</li> </ul>



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<i>Further work</i>	<ul style="list-style-type: none"><li>• <i>The nature &amp; 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 &amp; future drilling areas, provided this information is not commercially sensitive.</i></li></ul>	<ul style="list-style-type: none"><li>• The transmitter and receiver electrode positions are located to hand-held GPS accuracy, generally +-3m (UTM projection GDA94 Zone 55).</li><li>• Other Geophysical data including publicly available magnetic and radiometric surveys have been referred to in interpreting the Tucklan Gold Target. All data are available from the NSW Department of Planning, Industry and Environment MinView website: <a href="https://minview.geoscience.nsw.gov.au">https://minview.geoscience.nsw.gov.au</a></li><li>• The focus on future work will be to ultimately generate targets for drilling. Work to enable this will include further soil sampling programs coupled with IP geophysics to locate bodies of disseminated sulphides beneath the surface. If sufficient encouragement is gained from this work, then deeper RC or diamond drilling is anticipated.</li></ul>