

17 October 2024

# VISIBLE GOLD IDENTIFIED AT SING SIX – SING WELL WITH VEINING IDENTIFIED ALONG 2KM ZONE

### **Highlights:**

- Field mapping and chip sampling completed at Sing Six and Sing Well Prospects with 201 samples collected for assaying
- Angular free gold samples collected at surface across multiple locations along an interpreted 200m-300m wide NE-SW trending shear zone
- In addition to free gold collected at surface, visible gold was also identified within outcropping quartz/iron oxide veins sampled across the NE-SW zone
- Intense foliation and alteration observed within host rocks associated with mineralised veins along a 2km length of the NE-SW zone sampled to date
- Gold occurrences at Sing Six Sing Well are 6km SW of the newly discovered
   Titan gold target and ARV's Carlow gold/copper project
- Sing Six Sing Well, Titan and Carlow are all interpreted to occur within the wide Regal Thrust structural corridor which includes multiple shears and faults

**Artemis Resources Limited** ('**Artemis**' or the '**Company**') (ASX/AIM: **ARV**) is pleased to announce that ground reconnaissance across the Sing Six and Sing Well prospects has identified surface gold and mineralised veins with associated wider alteration zones across a wide 2km long area 6km southwest of the recent Titan gold discovery.

**Executive Director George Ventouras** commented: "Once again our exploration team has successfully identified and collected visible gold samples across our tenement portfolio. We are encouraged by the level of surface and vein hosted gold that has been discovered, especially in a known mineralised area such as Sing Six. This bodes well for further potential exploration success and these clues are leading us to the source of the gold which is very exciting."



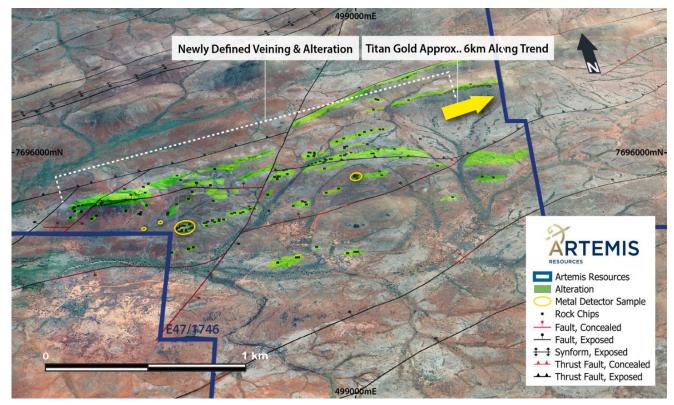


Figure 1. Sing Six prospect with rock chip (vein & alteration) and sample locations

### Sing Six and Sing Well Prospects

The Sing Six and Sing Well prospects are located in the central part of the Silica Hills tenement E47/1746. The Sing Six and Sing Well prospects have been previously explored using wide spaced soil sampling and local metal detector sampling. A limited air-core drill program comprising 14 holes for total of 376m was also completed at Sing Six in 2020 with best intercept reporting 2m @ 0.97 g/t Au from 9m.

In May 2024, the Company followed up previous ground reconnaissance work at the Sing Six prospect with a second phase of surface sampling and mapping. The primary focus of this program was to gain a better understanding of the distribution of surface veining, related structures and alteration zones which may be indicative of the potential for a large gold mineralised system.

More recent field mapping and rock chip sampling across the Sing Six-Sing Well area has identified multiple locations of outcropping mineralised veins across a 2km long newly defined target area. Visible gold has been identified in surface samples and outcropping veins providing early encouragement of the prospectivity for this area.

Coarse angular free gold in surface cover has also been identified immediately around veins which contain visible gold and further along trend for approximately 1km. Characteristics observed in free gold samples suggest proximity to vein sources.



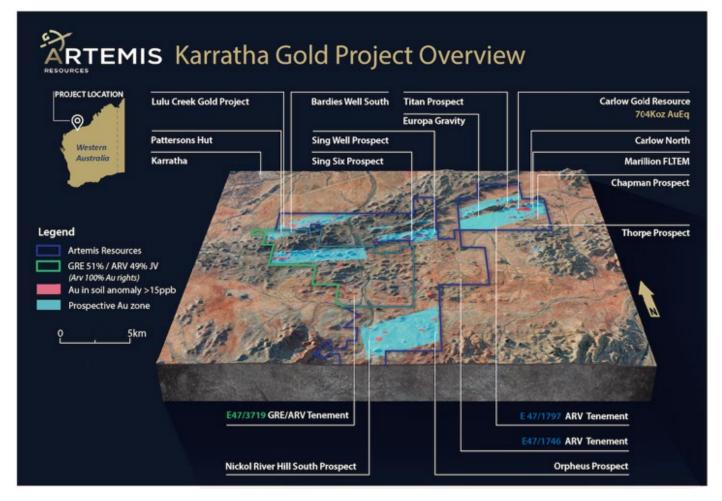


Figure 2. Artemis West Pilbara tenements showing location of current prospects including Sing Six and Sing Well

Veins were mapped across multiple parallel trends which are broadly parallel to the Regal Thrust structural corridor which extends northeast into the gold target area of the Titan prospect and is possibly associated with the Carlow gold/copper deposit.

ARV's Karratha based technical team has identified veins comprised of quartz-iron oxide and quartz-carbonate (less iron) with multiple samples displaying visible gold.

Associated with veins are zones of strong foliation and host rock alteration mapped across multiple parallel shears for approximately 2km. Single veins are predominantly steeply dipping, commonly range from 1cm to 10cm width, and occur as multiple sets in alteration zones up to 200m wide. Importantly, the vein hosted gold mineralisation and associated alteration may outline the wider potential to be tested by drilling.

Approximately 201 surface chip samples have been collected and dispatched to the laboratory for assaying. Results will be announced once received.





Figure 3. Visible gold in quartz-iron oxide vein material located at Sing Six prospect

	Loca	tion			
Sample ID	mN	mЕ	Weight gm	Visual Gold Estimate (%)	Vein Type (major minerals)
24AR26-208	7695284	498026	232	2-5	Iron oxide-quartz

Cautionary statement: Visual estimates of mineral abundance should never be considered a proxy or substitute for laboratory analyses where concentrations or grades are the factor of principal economic interest. Visual estimates also potentially provide no information regarding impurities or deleterious physical properties relevant to valuations. A number of vein rock chip samples were selected based on presence of visible gold during the sampling programs.





Figure 4. Sample of altered basalt with thin veining displaying visible gold from Sing Six prospect

	Loca	ıtion		Visual Gold	
Sample ID	mN	mE	Weight gm	Estimate (%)	Vein Type (major minerals)
24AR26-209	7695287	498022	268	1	Qz-Fe Vein at alteration contact

Cautionary statement: Visual estimates of mineral abundance should never be considered a proxy or substitute for laboratory analyses where concentrations or grades are the factor of principal economic interest. Visual estimates also potentially provide no information regarding impurities or deleterious physical properties relevant to valuations. A number of vein rock chip samples were selected based on presence of visible gold during the sampling programs. The high-grade gold results reflect the irregular nature of the gold mineralisation. It should be noted that further sampling in close proximity to these high-grade zones may produce varying and very contrasting results. Some vein samples presented in diagrams may not have been analysed by a laboratory as the Company has chosen to keep them for type specimens.





Figure 4. Visible gold in iron oxide vein material located at Sing Six prospect

	Loca	tion			
Sample ID	mN	mЕ	Weight gm	Visual Gold Estimate (%)	Vein Type (major minerals)
24AR26-206	7695292	498044	38	2	Iron oxide-quartz

Cautionary statement: Visual estimates of mineral abundance should never be considered a proxy or substitute for laboratory analyses where concentrations or grades are the factor of principal economic interest. Visual estimates also potentially provide no information regarding impurities or deleterious physical properties relevant to valuations. A number of vein rock chip samples were selected based on presence of visible gold during the sampling programs.



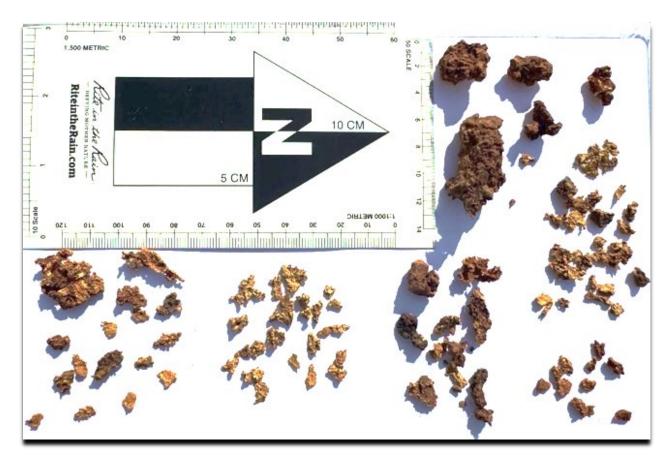


Figure 5. Visible gold in quartz iron oxide vein material located at Sing Six prospect



	Location				
Sample ID	mN	mЕ	Weight gm	Visual Gold Estimate (%)	Vein Type (major minerals)
24AR26-211	7695284	498027	236	1	Qz fe vein

Cautionary statement: Visual estimates of mineral abundance should never be considered a proxy or substitute for laboratory analyses where concentrations or grades are the factor of principal economic interest. Visual estimates also potentially provide no information regarding impurities or deleterious physical properties relevant to valuations. A number of vein rock chip samples were selected based on presence of visible gold during the sampling programs.



**Figure 6.** Samples of free gold collected during metal detector sampling along vein trends at Sing Six. The shape and angular nature of gold samples suggest close proximity to the gold source

This announcement was approved for release by the Board.

For further information contact Mr George Ventouras / Executive Director <a href="mailto:info@artemisresources.com.au">info@artemisresources.com.au</a>



### **Competent Person Statement**

The information in this report that relates to Exploration Results was prepared/compiled by Mr Adrian Hell BSc (Hons), a Competent Person who is a member of the Australasian Institute of Mining and Metallurgy (MAusIMM). Mr Hell is a technical consultant to Artemis Resources Ltd. Mr Hell 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 Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Hell consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

#### No New Information

To the extent that this announcement contains references to prior exploration results and Mineral Resource Estimates for the Carlow Gold/Copper Project which have been cross referenced to previous market announcements made by the Company, unless explicitly stated, no new information is contained. The Company confirms that it is not aware of any new information or data that materially affects the information included in the relevant market announcements and, in the case of estimates of Mineral Resources, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed.

### ASX announcements referred to in this release;

Artemis Resources, Diamond Drilling Underway at Carlow Castle, 18 September 2020

Artemis Resources, High Grade Rock Chip Gold Assays, 12 June 2024

Artemis Resources, Titan Prospect Results - Clarification Statement, 17 September 2024

Artemis Resources, High Grade Gold Vein Discovery at Titan Prospect Amended, 16 August 2024

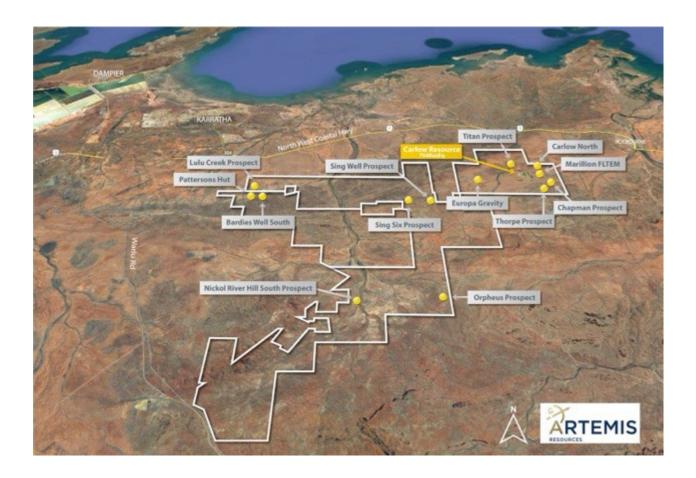
Artemis Resources, High Grade Gold Vein Discovery at Titan Prospect, 15 August 2024



#### **About Artemis Resources**

Artemis Resources (ASX/AIM: ARV; FRA: ATY; US: ARTTF) is a gold, copper and lithium focused resources company with projects in Western Australia. The Company's main projects include;

- Karratha Gold Project including the Carlow Castle 704koz AuEq gold-copper-cobalt project in the West Pilbara.
- Karratha Lithium Project including the high grade Mt Marie Lithium Prospect and the Osborne Lithium JV (Artemis 49%; GreenTech Metals (ASX:GRE 51%)).
- Paterson Central Gold/Copper project in the Paterson Province (located adjacent to Greatland Gold / Newmont's recent gold-copper discovery at Havieron and only ~42km from the Newmont Telfer gold mine).
- Artemis also owns the Radio Hill processing plant, located only 35km from Karratha.



Artemis is focused on discovering multiple gold prospects within its +200km<sup>2</sup> tenement package that can build upon the initial Mineral Resource at Carlow. The majority of the tenement package has been lightly explored and is now the subject of methodical exploration programs with a view to identify new gold zones, veins, structures and faults.

The Company will also continue to progress the Karratha Lithium project including the high grade Mt Marie prospect and will look to advance this exciting project through further field work which will lead to drilling the most advanced targets in due course.



# Appendix 1 JORC Table

# Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>Samples referred to in this report are obtained from random in situ rock chip samples collected by Artemis Resources during field reconnaissance exercises. Rock chips containing visible gold have been selectively sampled from in-situ veining.</li> <li>Rock chip sample weight is approximately 100gm to 2kg. Formal registered weights to be confirmed at Laboratory.</li> <li>The rock chip samples of the veins are irregularly spaced which is considered appropriate for "regional-scale" reconnaissance-level gold exploration.</li> <li>Rock chips are random, subject to bias and often unrepresentative for the typical widths and assay grades required for economic consideration. They are by nature difficute duplicate with any acceptable form of precision or accuracy.</li> <li>In some instances, a small 4-tonne excavator was used to expose vein material for sampling.</li> <li>High iron oxide parts of the vein sampled vary in hardness &amp; friability and easily fragmented during sampling. Samples may comprise of combined many multiple fragments.</li> <li>Samples were dispatched to ALS Global Laboratories in Perth for analysis.</li> </ul>



		Analysis included:
		<ul> <li>Au-AA26 – Au 50g FA AA finish</li> <li>Au-GRA22 – default overlimit method - 50g FA with Gravimetric finish; upper limit of the method 10,000ppm; ME-MS6148 element four acid digestion and ICP-MS finish.</li> <li>Trigger default overlimit method also requested for Ag, Cu, and Zn</li> <li>Au analysis turned off for samples 24AR11-004, 24AR11-005 &amp; 24AR11-008 due to significant Au concentration which is unable to be processed in geochemical fire assay facility, likely &gt;1%</li> <li>A selection of vein samples which contained significant visible gold (field observation determination of approximately &gt; 5% visible gold VG) or those that reached over limits values at ALS will be subsequently analysed using gravimetric finish at Independent Assay Laboratories (IAL).</li> </ul>
Drilling techniques	Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	<ul> <li>Not applicable, as no drilling was undertaken.</li> <li>No mention is made in this announcement of exploration results including drilling conducted by other companies on nearby tenements.</li> </ul>
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> </ul>	Not applicable as no drilling has been undertaken.



	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.	
Logging	<ul> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>Logging of rock chips are collected using Fulcrum App which has been set up for project geology requirements. Data recorded includes GPS location, lithology, mineralisation, alteration, structure. All data is captured using field note pad – Samsung Active-3. The level of logging detail is sufficient for exploration reconnaissance purposes.</li> <li>Alteration interpretation is preliminary and determined by field observation and correlated using QGIS work flows</li> <li>Structural interpretation is preliminary and based on field limited structural recordings. This work remains ongoing.</li> </ul>
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the insitu material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>No sub sampling of rock chip samples has been undertaken as part of this program.</li> <li>2 rock chip samples pulverised on site to test for visual fine gold distribution and assaying.</li> </ul>



Quality	o f
assay data an	d
laboratory	
tests	

- The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.
  - For geophysical tools, spectrometers, 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.
  - Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.

- Rock chip samples were dispatched to ALS Global Laboratories in Perth for analysis using their ME\_MS61L (48 elements), and Au-AA26 (1 element) for 49 elements in total.
- The laboratory reported the use of standards and blanks as part of the analyses for QA/QC.
- No standards or blanks were submitted by the company.
- Samples with visible gold and reporting Au overlimit at ALS were processed at IAL using gravimetric finish [or other description to match the level of description of the analysis technique that we have provided for the ALS method].

Verification of sampling and assaying

- The verification of significant intersections by either independent or alternative company personnel.
- sampling and The use of twinned holes.
  - Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.
  - Discuss any adjustment to assay data.

- Rock chip sample and geological information is recorded in the field with co-ordinates saved from in built tough book GPS and handheld GPS used in the field.
- All rock chip samples were inspected and described by Artemis geologists in the field.
- Field data is entered into Fulcrum App before being loaded into a database.
- All data has been maintained, validated, and managed by administrative geologist.
- Analytical results received from the lab have been loaded directly into the database with no manual transcription of these results undertaken,
- Original lab certificates have been stored electronically.
   Below detection limit data presented as 1/2 of the lower detection limit of the method and over the detection limit results presented as the upper detection limit of the method



Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>Sample points were determined by in built tough book GPS and hand held GPS which is considered appropriate for the reconnaissance nature of the sampling.</li> <li>GPS error is approximately 1-5m for Easting &amp; Northing and up to 10m for elevation (m)</li> <li>All sample location coordinates are provided in the Geocentric Datum of Australia (GDA94 Zone 50).</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>Not applicable due to the reconnaissance nature of the sampling.</li> <li>No attempt has been made to demonstrate geological or grade continuity between sample points.</li> <li>No sample compositing is applied to samples.</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul> <li>Samples were collected from outcropping in situ veins. If visible gold in veining is observed this material have been selectively sampled. This sample material comprising quartz-iron oxides and visible gold likely reflects the nuggety nature of the mineralised system.</li> </ul>
Sample security	The measures taken to ensure sample security.	Sample security is by way of chain of custody.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No review of the sampling techniques has been undertaken.





# Section 2 Reporting of Exploration Results - revised

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status  Exploration done by other parties	<ul> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul> <li>The project tenement covers an area of 126km² and comprises granted tenement: E47/1746</li> <li>All Artemis Project tenures are 100% owned by Artemis Resources subsidiary company KML No 2 Pty Ltd E47/1746 &amp; E47/1797 with the exception of E47/3719 which is subject to a GreenTech Metals/Artemis Resources 51%/49% Joint Venture</li> <li>The tenement is in good standing with DEMIRS and there are no known impediments for exploration on these tenements.</li> <li>Previous explorers in the region include but not limited to are Westfield Minerals, Consolidated Gold Areas, Open Pit Mining and Exploration, Legend Mining, Agip Exploration, Titan Resources and Fox Resources.</li> </ul>
Geology	Deposit type, geological setting and style of mineralisation.	Surface mineralisation is consistent with structure-controlled shear zone lodes in Archean low grade metamorphic and accretionary terrains. Implications for intrusion related mineralised systems is also being considered.
Drill hole Information	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:         <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> </ul> </li> </ul>	Not applicable as no drilling has been undertaken



	<ul> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> <li>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.</li> </ul>	
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	Not applicable as no data aggregation has been used.
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	Not applicable as surface sampling is reconnaissance in nature



Diagrams	<ul> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	maps are provided in the body of this
Balanced reporting	, , , , , , , , , , , , , , , , , , , ,	nt discusses the findings of recent Impling and field mapping observations. If pending pending.
Other substantive exploration data	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.  Mining and Open F Sing Well – Sing S Sing Well – Sing S Best intercept (SSRC007) (re 2020)  • Geochemical completed by ASX on 5th N	•
Further work	lateral extensions or depth extensions or large-scale reconnaissance an step-out drilling). gold associated mi	s plans to conduct further ground nd sampling to outline the size of the potentia neralised envelop. This work will contribute re advance assessments and eventual drill