

21 November 2023

HIGH-GRADE ROCK CHIPS CONFIRM NEW TARGET AT CALICO SILVER AT THE KINGMAN PROJECT

Key Highlights:

- Rock chip sampling at Calico Silver epithermal prospect has returned high-grade silver results within the northern claims at the Kingman Project, Arizona.
- Highest grade results include:
 - o 678 g/t Ag, 0.07 g/t Au from rock chip 1671147
 - o 58 g/t Ag, 0.27 g/t Au, 0.11 % Zn from rock chip 1671241
 - o 68 g/t Ag, 1.13 % Cu from rock chip 1671245
 - 64 g/t Ag, 0.78 % Cu from rock chip 1671146
- East-West trending, shallow historical workings with no modern exploration located only 1km north of the main project area.
- Reconnaissance exploration program comprising geological mapping, rock chip sampling scheduled for 2024.
- Mineral Resource Estimate on schedule for release in December 2023.

Riedel CEO David Groombridge commented:

"I am thrilled to share the remarkable high-grade silver results from rock chip sampling at the Calico Silver prospect which has uncovered a highly prospective new target area for the Company. The exceptionally high silver content discovered in these samples demonstrates the immense potential of the Kingman Project and that the mineral system is now demonstrably larger, with multiple highgrade mineralised trends that are untouched by modern exploration methods.

Our team is excited to accelerate work at Calico in 2024 and we remain committed to unlocking further value for our stakeholders through continued exploration and diligent analysis.

Riedel remains focussed on delivery of the Mineral Resource Estimation for Tintic by the end of 2023. Flora, fauna, and cultural surveys have been completed and detailed metallurgical test work is underway. The mineral resource will underpin a preliminary economic study paving the way for the submission of mining permitting with relevant authorities in Q2 2024".

Riedel Resources Limited (**ASX: RIE**, **Riedel** or the **Company**) is pleased to advise on rock chip sampling (geochemical) completed at the Calico Silver prospect, part of the Company's Kingman Project in Arizona, USA.

Calico Silver prospect

The Calico Silver prospect is situated in the northern area of the current claim package and consists of several historical workings trending E-W and dipping sub-vertically. The workings are hosted within the same Proterozoic gneiss unit as the Tintic deposit.

Sampling involved geologically selecting breccia veins on mined ore dumps that displayed characteristic epithermal textures including colloform banding, open space vugs with clasts of grey sulphide-quartz in a silicified-carbonate cement. Silver grades up to 678 g/t Ag (sample ID 1671147) were returned with associated low levels of gold, copper, zinc, and lead.

Sample ID	Hole Type	Easting*	Northing*	RL*	Au (ppm)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
1671144	Rock Chip	750783	3924981	1216	0.002	2	250	20	80
1671145	Rock Chip	750766	3924980	1216	0.008	6	2640	90	60
1671146	Rock Chip	750622	3924991	1205	0.01	64	7850	20	120
1671147	Rock Chip	750622	3924981	1205	0.072	678	150	380	630
1671241	Rock Chip	753550	3925553	1496	0.27	58	370	960	1120
1671242	Rock Chip	753550	3925543	1496	0.005	1	2270	20	40
1671243	Rock Chip	753540	3925555	1496	0.002	1	3170	10	20
1671244	Rock Chip	752974	3925387	1407	0.002	1	20	60	10
1671245	Rock Chip	750577	3925040	1208	0.008	68	11300	300	190

Table 1: Rock chij	o sample ri	esults from	the Calico	Silver prospect.
TUDIC I. NOCK CIT	s sumple n	courto from	the cunco	Shver prospece.

* All coordinates stated are in grid WGS84/UTM Zone 11N.

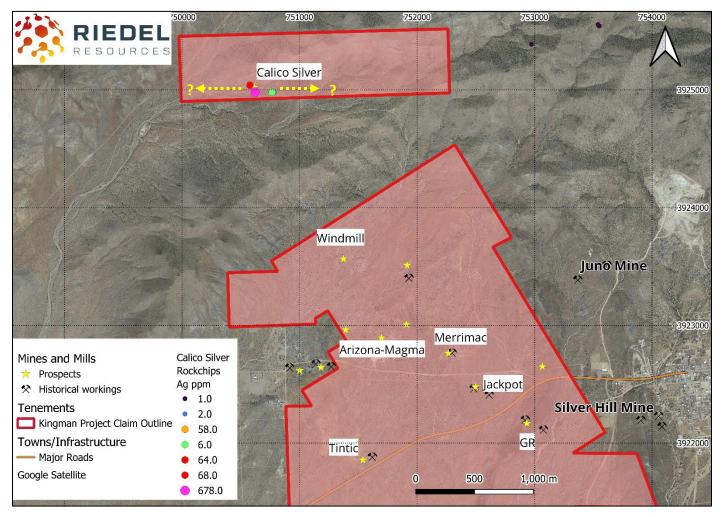


Figure 1: Silver (Ag ppm) from rock chip samples at the Calico Silver prospect. The Calico claim area is situated ~1.5km north of the RIE main claim area and ~3km north of the Tintic deposit.



Figure 2: Sample 1671147 from the Calico Silver prospect which returned 678 g/t silver.

Exploration work program

A regional soil program is planned for 2024 across the entire Kingman Project area which will incorporate reconnaissance geology mapping and sampling at Calico Silver to establish the continuation of the structure to the east and west.

Targets identified will undergo detailed work programs that will culminate in drill permitting with the Bureau of Land Management (BLM) with drilling of priority targets to occur in 2024. This will ensure that a complete project pipeline is generated and continually assessed with the objective of adding resources to the Project.



Figure 3: CEO David Groombridge at historical shaft workings at the Calico Silver prospect. Rock chip samples that returned 678 g/t Ag were from workings ~200m to the east on the hill in background of image.

This announcement was approved for release by the Board of Directors of Riedel.

-ENDS-

This announcement has been authorised for release by the Riedel Board.

For further information please contact:

David Groombridge – CEO Riedel Resources Limited 4/6 Richardson St, West Perth, WA, 6005, Australia Tel: +61 (08) 9226 0866 <u>admin@riedelresources.com.au</u>

Competent Person Statement

The information in this announcement that relates to exploration results is based on information compiled by Mr David Groombridge, who is a Member of the Australasian Institute of Mining and Metallurgy ("AusIMM"). Mr Groombridge is a full-time employee of the Company and has sufficient experience in the style of mineralisation and type of deposit under consideration and qualifies as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Mineral Resources and Ore Reserves' (the "JORC Code"). Mr Groombridge holds securities in Riedel Resources Limited and consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

About Riedel Resources Limited

Riedel Resources Limited listed on ASX on 31 January 2011 and is an Australian-based exploration company focused on the exploration for gold, silver and base metals in Australia and Arizona, USA.

Further information can be found at the Company's website www.riedelresources.com.au

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	 Nature and quality of sampling (e.g., cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g., 'reverse circulation drilling was used to obtain 1m 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. 	 Rock chip samples of selected zones of outcrop or from historical workings mullock dumps. Samples of vein material are deemed representative of the vein that was mined from the workings. All samples were between 1-3kg and were individually labelled and geologically logged.
Drilling techniques	Drill type (e.g., core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g., 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).	No drilling methods were used to collect the samples.
Drill sample recovery	 Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. 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. 	 No drilling methods were used to collect the samples.
Logging	 Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	 No drilling methods were used to collect the samples. Geology logging of the rock chip samples was recorded. Logged records are qualitative in nature with textural and descriptive geological features identified and quantitative with logging of mineral percentages.

Criteria	JORC Code explanation	Commentary
Sub-sampling techniques and sample preparation Quality of	 If core, whether cut or sawn and whether quarter, half or all cores taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality, and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub- sampling stages to maximise representivity of samples. 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. Whether sample sizes are appropriate to the grain size of the material being sampled. The nature, quality and appropriateness of 	 No drilling methods were used to collect the samples. Samples were submitted to American Assay
assay data and laboratory tests	 The flattle, 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 (e.g., standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e., lack of bias) and precision have been established. 	 Samples were submitted to American Assay Laboratory (ALS) in Reno. Samples were submitted for a 34-element analysis. Au was analysed by Fire Assay fusion (30g) followed by atomic absorption spectrometer (AAS). Other elements analysed including Ag, As, Ba, Be, Ca, Cd, Co, Cu, Fe, Ga, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, S, Sb, Sc, Sr, Th, Ti, Tl, U, V, W, and Zn. A prepared sample (0.25g) is digested in a 4-Acid digestion (hydrochloric, hydrofluoric, perchloric and nitric acids) followed by an by inductively coupled plasma-atomic emission spectrometry (ICP-AES). The techniques are considered quantitative in nature. As discussed previously, CRMs were inserted by the Company and the laboratory also carries out internal standards in individual batches. Sample preparation for fineness were carried by the ALS Laboratory as part of their internal procedures to ensure the grind size of 85% passing 75 micron was being attained. No repeat or duplicate analysis for samples was completed.
Verification of sampling and assaying	 The verification of significant intersections by either independent or alternative company personnel. The use of twinned drillholes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	 Contract geological personnel were involved in the collection and interpretation of the results. Company personnel have visited the sample sites to validate. Twinning by drilling is not applicable. Location and sample description data was collected in the field by recording GPS waypoints and hand recording sample number, coordinate and geology. This data was transferred to a digital spreadsheet. Laboratory data was provided in spreadsheet format and merged with the field data using the sample number. No adjustments have been made to assay data.
Location of data points	 Accuracy and quality of surveys used to locate drillholes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control. 	 No drilling methods were used to collect the samples. The grid projection is WGS 84 UTM zone 11N. Diagrams and location table are provided in the report. Sample locations were recorded by handheld GPS units that are considered appropriate.

Criteria	JORC Code explanation	Commentary
Data spacing and distribution	 Data spacing for reporting of Exploration Results. 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. Whether sample compositing has been applied. 	 Sample locations were selected based on the availability of the material to sample. The location of the samples are provided in the table of the results and in Figure 4. The sample results released in this report will not be used to calculate mineral resources. No compositing.
Orientation of data in relation to geological structure	 Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. 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. 	 Rock chips at Calico Silver were collected based on rock type. No drilling methods were used.
Sample security	The measures taken to ensure sample security.	 Samples are collected by Company personnel in calico bags. Samples are transported directly via road freight (FedEx Express) to the laboratory with a corresponding submission form and consignment note. The laboratory checks the samples received against the submission form and notifies the Company of any missing or additional samples. Once the laboratory has completed the assaying, the pulp packets, pulp residues and coarse rejects are held in the Laboratory's secure warehouse. On request, the pulp packets are returned to the site warehouse on secure pallets where they are stored.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No external audits or reviews have been undertaken at this stage.

Section 2, Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Criteria Mineral tenement and land tenure status	 JORC Code explanation Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	Commentary• The samples were collected on the northern claims of the Kingman Project held in the name of Flagstaff Minerals (USA) Inc.• Riedel is unaware of any impediments to obtaining a licence to operate in the area.• Riedel Resources achieved \$5m spend milestone and has acquired 51% of Flagstaff Minerals (USA) lnc ("Flagstaff"). Refer to Riedel's ASX announcement dated 28/03/2023.• Riedel is earning a 90% interest in Flagstaff via a further \$5m spend now underway. Refer to Riedel's ASX announcement dated 2/5/2023.• The claim package applicable to the Flagstaff Option Agreement is set out below: Serial Claim Name Number Name

Criteria	JORC Code explanation	Commentary
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	• Historic production and exploration from the workings at the Calico Silver prospect are unknown.
		• No other exploration has occurred at Calico Silver.
Geology	Deposit type, geological setting, and style of mineralisation.	 The Kingman Project is located along the western flank of the Paleoproterozoic (Cerbat Mountains of the Mojave Province in northwest Arizona. The Cerbat Mountains are a typical block-faulted range of the Basin and Range physiographic province of the southwest United States and consists of Supracrustal metasedimentary and metavolcanic rocks including pillow basalts, which have been intruded by granitoids including the Diana and Chloride Granitoids. Supracrustal rocks within the Cerbat Mountains were subjected to two periods of metamorphism and deformed at granulite facies and are represented by amphibolite's, migmatitic garnet-biotite schists, gneiss quartzo-feldspathic gneisses, impure quartzite, and rate metachert and BIF. Granitoids have been deformed into biotite- and hornblende bearing quartzofeldspathic gneiss, with contacts and internal fabrics parallel to foliation within the enclosing wall rocks. Cretaceous to Eocene (80-40Ma) granites were intruded into the Cerbat Mountains during the Laramide Orogeny. These porphyry Cu-Mo intrusions extend NW-SE from Sonora in Mexico to the Mineral Park deposit situated 8km to the SE of Tintic and abuts the Projects Claims. Mineralisation within the Project consists of multiple NW-NNW striking, structurally controlled vein-systems of Intermediate to Low-Sulphidation Epithermal character. Mineralisation consists of quartz, sphalerite, galena and pyrite with associated gold and silver.
Drillhole Information	 A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes: easting and northing of the drillhole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drillhole collar dip and azimuth of the hole down hole length and interception depth hole length. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	 No drilling was undertaken. All rock chip sample results have been released.
Data aggregation methods	 In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g., cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the 	 No drilling was undertaken. No averaging or aggregating of rock chip results was undertaken. Individual results have been reported.

Criteria	JORC Code explanation	Commentary
	 procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated 	
Relationship between mineralisation widths and intercept lengths	 These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g., 'down hole length, true width not known'). 	• No drilling was undertaken.
Diagrams	 Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of the drillhole collar locations and appropriate sectional views. 	 Appropriate maps are provided in the body of the text.
Balanced reporting	 Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced avoiding misleading reporting of Exploration Results. 	 All assay results for the rock chip sampling have been reported in Appendix 1.
Other substantive exploration data	 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. 	 A ~5,000m reverse circulation resource drilling program has been completed at the Company's Tintic prospect in 2023 with a Mineral Resource Estimate anticipated at the end of November 2023.
Further work	 The nature and scale of planned further work (e.g., tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	 The Company plans to commence geological mapping with an associated soil and rock chip program across the northern claims inclusive of the Calico Silver prospect area, in 2024 to expand on rock chip results within this announcement. The Company plans to drill test priority targets identified from the soil and mapping program once results have been analysed. Diagrams are within the body of this report.