

17 November 2021

- RIEDEL RECEIVES ADDITIONAL HIGH-GRADE GOLD AND SILVER ASSAY
  RESULTS FROM SURFACE SAMPLING AT KINGMAN PROJECT, USA
  - > FIRST KINGMAN RC DRILL RESULTS EXPECTED LATER THIS MONTH

## **Highlights:**

- Riedel receives further high-grade gold and silver assays up to 169 g/t gold and 377 g/t silver from geochemical surface sampling over the south-east of the Kingman Project in north-west Arizona, USA
- Elevated zinc and lead samples also returned from the surface sampling program including assay results up to 7.1% lead and 6.5% zinc
- First assay results from Riedel's recent RC drill program at Tintic anticipated later this month

**Riedel Resources Limited** (ASX:RIE, Riedel or the Company) is pleased to announce results of further surface sampling within the claim areas staked earlier this year at its Kingman Project in northeast Arizona, USA. Sampling achieved high-grade gold and silver assay results predominantly in the south-east part of the project area, including:

- Sample 1671216 (South-East zone) 67.6 g/t gold & 217 g/t silver
- Sample 1671229 (South-East zone) 28.9 g/t gold & 377 g/t silver (& 6.7% lead)
- Sample 1671230 (South-East zone) 169 g/t gold & 143g/t silver
- Sample 1671232 (South-East zone) 9.1 g/t gold & 198g/t silver (& 7.1% lead)
- Sample 1671248 (Towne Extended) 3.1 g/t gold & 83 g/t silver.

Riedel also received several additional elevated lead and zinc results from the surface sampling program, including:

- Sample 1671234 (South-East zone) 2.5% lead
- Sample 1671236 (East Comanche) 6.5% zinc
- Sample 1671238 (Towne Extended) 4.0% lead
- Sample 1671257 (Water Tank) 1.9% lead.

Riedel Chairman Michael Bohm stated: "We are pleased to achieve further high-grade gold and silver results from surface sampling at the Kingman Project. While surface sampling is a targeting tool and drilling is the final arbiter, it is nice to have these results to hand as they support the previous high-grade assay results achieved from surface sampling reported earlier this year."

"We have a substantial land position in our Kingman Project with multiple mineralised targets in the south, in addition to our primary areas of focus at Tintic - where we recently wrapped-up an RC drilling program targeting extensions to the high grades achieved earlier this year<sup>2</sup> - and the historic Merrimac/Arizona-Magma mine areas in the north of the project area.

"We keenly awaiting the first batch of assay results from the recent RC drilling that focussed on Tintic - which we still target to have to hand later this month as previously advised."

Significant surface sampling results are shown in Figure 1 below.



Figure 1 – Kingman Project showing location of latest significant surface assay results relative to the recently drilled historic Tintic mine area and nearby copper/moly occurrences previously mined by others (note the proximity of Highway 93 located approximately 3km to the west of the Kingman Project area).

<sup>&</sup>lt;sup>1</sup> Refer ASX announcement dated 3 August 2021

<sup>&</sup>lt;sup>2</sup> Refer ASX announcement dated 23 March 2021

The Company confirms it is not aware of any new information or data that materially affects the information included in the announcements.

### **Project Background**

The Kingman Project is located in north-west Arizona, USA, approximately 90 minutes' drive from downtown Las Vegas and within 5km of a major highway (refer Map 1).



Map 1 - Location of Riedel's Kingman project in Arizona, USA

The project was mined predominantly for high-grade gold and silver from the 1880s until the early 1940s - which coincided with the outbreak of WWII. Following limited drilling near Tintic in the 1990s, 11 diamond holes were drilled on the property in late 2019 which intersected multiple zones of high-grade gold, silver and lead from shallow depths, confirming the extensive mineralisation potential of the area (refer Riedel ASX announcement dated 23 October 2020).

In April 2021, Riedel completed a 5,000m RC drill program over several historic mine areas on the property, including at Tintic, Merrimac, Arizona Magma and Jim's. This drilling returned numerous high-grade gold and silver assay results including 3.8m at 98.9g/t gold and 151g/t silver from 20.6m at Tintic (refer ASX announcement dated 23 March 2021). In addition, it confirmed a 1.8km long exploration target associated with the historic Jim's mine to host significant gold, silver, zinc and lead mineralisation as shallow as 1.5m below surface (refer Riedel's ASX announcement dated 19 April 2021).

The Kingman Project has seen minimal modern exploration. Riedel's RC drill program completed in April 2021 was its first at Kingman, where it is looking to acquire up to an 80% interest in via its December 2020 Agreement with Flagstaff Minerals Limited and Flagstaff Minerals (USA) Inc (refer Riedel's ASX announcement dated 23 October 2020).

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

-ENDS-

#### Competent Person Statement

Information in this release that relates to Exploration Results is based on information compiled by Mr Sean Whiteford, who is a qualified geologist, a member of the Australian Institute of Mining and Metallurgy, and a consultant to Riedel Resources Limited. Mr Whiteford has sufficient experience which 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 Whiteford consents to the inclusion in this release of the matters based on his information in the form and context in which it appears. Mr Whiteford is not a shareholder of the Company.

### Forward Looking Statements

This release includes forward looking statements. Often, but not always, forward looking statements can generally be identified by the use of forward looking words such as "may", "will", "expect", "intend", "plan", "estimate", "anticipate", "continue", and "guidance", or other similar words and may include, without limitation statements regarding plans, strategies and objectives of management, anticipated production or construction commencement dates and expected costs or production output.

Forward looking statements inherently involve known and unknown risks, uncertainties and other factors that may cause the company's actual results, performance and achievements to differ materially from any future results, performance or achievements. Relevant factors may include, but are not limited to, changes in commodity prices, foreign exchange fluctuations and general economic conditions, increased costs and demand for production inputs, the speculative nature of exploration and project development, including the risks of obtaining necessary licences and permits and diminishing quantities or grades of resources or reserves, political and social risks, changes to the regulatory framework within which the company operates or may in the future operate, environmental conditions including extreme weather conditions, recruitment and retention of personnel, industrial relations issues and litigation.

Forward looking statements are based on the company and its management's good faith assumptions relating to the financial, market, regulatory and other relevant environments that will exist and affect the company's business and operations in the future. The company does not give any assurance that the assumptions on which forward looking statements are based will prove to be correct, or that the company's business or operations will not be affected in any material manner by these or other factors not foreseen or foreseeable by the company or management or beyond the company's control.

Although the company attempts to identify factors that would cause actual actions, events or results to differ materially from those disclosed in forward looking statements, there may be other factors that could cause actual results, performance, achievements or events not to be anticipated, estimated or intended, and many events are beyond the reasonable control of the company. Accordingly, readers are cautioned not to place undue reliance on forward looking statements.

Forward looking statements in this release are given as at the date of issue only. Subject to any continuing obligations under applicable law or any relevant stock exchange listing rules, in providing this information the company does not undertake any obligation to publicly update or revise any of the forward looking statements or to advise of any change in events, conditions or circumstances on which any such statement is based.

#### For further information please contact:

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#### **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

# **JORC Code, 2012 Edition – Table 1**

## **Section 1 Sampling Techniques and Data – Surface Rock Sampling**

Criteria	JORC Code explanation	Commentary	
Sampling techniques	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.	Rockchip samples were collected using hammer and chisel, with the sampling depth ranging from surface to cm to 20cm. The samples were geologically logged and placed into pre-numbered calico bags. Calicos were then sealed inside polyweave bags for transportation to the laboratory.	
	<ul> <li>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</li> <li>was pulverised to produce a 30 g charge for fire assay'). In other</li> </ul>	Sampling was done under Flagstaff Minerals (USA)/Riedel Resources standard procedures. The laboratory applied internal QAQC protocols.  See further details below.	
		All samples were pulverized at the lab to 85% passing -75µm to produce a 25g charge for Fire Assay with an AA finish. Samples were also	
		digested using a Four Acid digestion with an ICP-AES finish. High grade gold samples were additionally assayed by Fire Assay using a gravimetric finish. High grade silver and base metal samples were additional assayed using a four acid digestion and ICP-AES finish.	
		All samples were assayed by ALS Laboratories.	
	<ul> <li>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).</li> </ul>	No new drilling results reported.	

Criteria	JORC Code explanation	Commentary		
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.	No new drilling results reported.		
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	No new drilling results reported.		
	The total length and percentage of the relevant intersections logged.	No new drilling results reported.		
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 in-situ 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>	All samples were prepared at the ALS Laboratory in Tucson. Samples were dried and pulverised to 85% passing 75µm and a sub sample of up to 200g retained. A nominal 50g charge was used for Au and multi-element analysis. The procedure is industry standard for this type of sample and analysis.  The target sample size for hand samples is between 250g – 1000g, which is considered appropriate for this style of sampling and the geological setting.		
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.  The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	Samples were analyzed at ALS Laboratories in Reno, Nevada and Vancouver, British Colombia. For gold the analytical method used wa Au-AA23 which is digestion by Fire Assay with an AA finish. Any sample assaying greater than 10ppm Au were further analyzed by Au-GRA21 Both methods are considered appropriate for the material and mineralization and measure total gold content.  Samples were also analyzed by method ME-ICP61a which is a four-acid digestion with an ICP-AES finish for base metal determinations. This method is considered appropriate for the material and mineralization.		

Criteria	JORC Code explanation	Commentary		
	<ul> <li>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.</li> </ul>	No new Geophysical results reported.		
	Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	External lab or umpire checks are not considered necessary for early stage exploration projects.		
Verification of sampling and	The verification of significant intersections by either independent or alternative company personnel.	Not carried out at this early stage of exploration.		
assaying	The use of twinned holes.	No twinned holes at this early stage of exploration.		
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	All field logging was logged on paper logs and in digital format in an excel spreadsheet. Copies of all logs are stored on a cloud-based storage system as well as at the office in Kingman Arizona.		
	Discuss any adjustment to assay data.	No assay data adjusted.		
Location of data points	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.	Sample locations were determined by handheld GPS, which is considered accurate to ±5m in Northing and Easting.		
	Specification of the grid system used.	The grid system used is WGS84 Zone 11.		
	Quality and adequacy of topographic control.	RLs are allocated to the sample point using a DTM derived from detailed topography. The accuracy is estimated to be better than 2m in elevation.		
Data spacing and distribution	Data spacing for reporting of Exploration Results.	Variable. As per plan provided in the body of the announcement.		

	<ul> <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>	No resource estimation made.  No sample compositing was applied.
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.	Rockchip samples were taken across known mineralized zones to determine the width of mineralization.
	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.	Not applicable.
Sample security	The measures taken to ensure sample security.	Samples were delivered to the ALS Laboratory in Tucson Arizona. ALS maintains the chain of custody once the samples are delivered with an audit trail available on the ALS webtrieve website.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	Sampling and assaying techniques are considered to be industry standard. At this stage of exploration, no external audits or reviews have been undertaken.

# Section 2 Reporting of Exploration Results – Surface Rock Sampling

Criteria	JORC Code explanation	Commentary		
Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	The samples were taken within the Flagstaff Minerals (USA) Inc claim group property. Riedel Resources can earn up to an 80% interest in the property (refer Riedel's ASX announcement dated 23/10/2020). The claims sampled reported herein were as follows:  - FLG 184-185-186		
		- FLG 194-195-196-197 - FLG 204-205-206-207 - FLG 211-212-213-214-215 - FLG 217-218-219		
	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.	The claims are administered by the Bureau of Land Management and are in good standing. The Company is unaware of any impediments to obtaining a licence to operate in the area.		
Exploration done by other	Acknowledgment and appraisal of exploration by other parties.	Historic production from, and exploration of, the northern part of the property as follows:		
parties		Underground mining at Arizona Magma conducted from the 1880's to 1942.		
		Drilling by Chandeleur Bay Resources at Tintic was conducted in 1997-98. High grades were reported in two drill holes in 1988 and 37 holes from 1997.		
		The Merrimac mine was mined for Au/Ag/Pg/Zn until 1905.		
		The Tintic mine was mine for Au/Ag/Pb/Zn in 1942.		
		None of the previous work would be considered to be of JORC standard.		
Geology	Deposit type, geological setting and style of mineralisation.	The property is located along the Northwest flank of the Cerbat Mountains of Arizona. The Cerbat Mountains are a typical block-faulted range of the Basin and Range physiographic province of the southwest United States and are underlain by a strongly deformed package of Precambrian rocks including quartz feldspar gneiss, amphibolite schist, and biotite schist intruded by both Precambrian diorite and granite and by Laramide intrusions. The property contains multiple structurally controlled veinsystems. A Low-Sulphidation Epithermal Character has been observed in ore material from historic dumps across the property. As the property is approximately 8km from the Mineral Park Cu porphyry mine, vein mineralization related to an unknown porphyry is also of interest.		

Criteria	JORC Code explanation	Commentary		
Relationship between mineralisation and intercept lengths	These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the widths and drill hole 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 (eg 'down hole length, true width not known').	Surface rock chip and dump sampling only (no drill holes results reported herein).		
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	Refer to the figures in the body of this announcement for relevant plans including a tabulation of analytical results.		
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	Details of sample results are included in Appendix 1 and in the body of the announcement.		
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.	al   d   /,		
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step- out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	mineralized structures.		

# Appendix 1

**Table 1: Surface sample location information** 

Sample Number Target Name		Туре	Sample Easting (wgs84-11N)	Sample Northing (wgs84-11N)	Elevation (m asl)	
1671215	South-East Zone	Rockchip	756104	3918489	1166	
1671216	South-East Zone	Rockchip	756215	3918455	1160	
1671220	South-East Zone	Rockchip	755267	3920479	1191	
1671225	South-East Zone	Rockchip	755827	3918432	1147	
1671226	South-East Zone	Dump	755827	3918422	1147	
1671227	South-East Zone	Rockchip	755781	3918466	1158	
1671228	South-East Zone	Rockchip	755781	3918456	1158	
1671229	South-East Zone	Dump	755781	3918446	1158	
1671230	South-East Zone	Rockchip	755769	3918472	1166	
1671232	South-East Zone	Rockchip	755964	3918540	1151	
1671233	South-East Zone	Rockchip	756028	3918611	1169	
1671234	South-East Zone	Dump	755941	3918627	1162	
1671235	East Comanche	Rockchip	755421	3919661	1183	
1671236	East Comanche	Rockchip	755421	3919651	1183	
1671237	East Comanche	Dump	755421	3919641	1183	
1671238	Towne Extended	Dump	755736	3919885	1205	
1671239	East Comanche	Rockchip	755802	3919667	1196	
1671240	East Comanche	Rockchip	755780	3919657	1198	
1671241	41 Northern Target		753550	3925553	1493	
1671242	Northern Target	Rockchip	753550	3925543	1492	
1671243	Northern Target	Rockchip	753540	3925555	1500	
1671244	Northern Target	Rockchip	752974	3925387	1434	
1671245	Northern Target	Rockchip	750577	3925040	1224	
1671246	Northern Target	Rockchip	751767	3922258	1170	
1671247	Northern Target	Rockchip	751475	3922069	1162	
1671248	Towne Extended	Rockchip	755535	3919986	1190	
1671249	Towne Extended	Rockchip	755627	3920052	1202	
1671250	Towne Extended	Rockchip	755615	3919948	1200	
1671252	Towne Extended	Rockchip	755650	3919893	1205	
1671253	Water Tank	Rockchip	755625	3919359	1206	
1671255	Water Tank	Rockchip	755777	3919291	1209	
1671256	Water Tank	Rockchip	755688	3919285	1205	
1671257	Water Tank	Rockchip	755674	3919339	1207	

 Table 2: Significant results – surface sampling

Sample Number	Au g/t	Ag g/t	Pb (ppm)	Pb (%)	Zn (ppm)	Zn (%)
1671215	1.84	37	17,300	1.7%	60	0.0%
1671216	67.60	217	4,580	0.5%	50	0.0%
1671220	0.05	29	2,020	0.2%	2,670	0.3%
1671225	1.56	23	4,030	0.4%	280	0.0%
1671226	4.36	90	60,600	6.1%	840	0.1%
1671227	0.03	1	210	0.0%	780	0.1%
1671228	1.10	83	1,140	0.1%	400	0.0%
1671229	28.90	377	66,600	6.7%	1,370	0.1%
1671230	169.50	143	2,570	0.3%	840	0.1%
1671232	9.11	198	71,100	7.1%	500	0.1%
1671233	0.38	21	520	0.1%	170	0.0%
1671234	0.26	70	25,400	2.5%	1,190	0.1%
1671235	0.52	63	9,650	1.0%	10,850	1.1%
1671236	0.31	68	4,320	0.4%	64,900	6.5%
1671237	0.28	227	4,250	0.4%	760	0.1%
1671238	0.33	79	40,100	4.0%	1,940	0.2%
1671239	0.03	27	1,840	0.2%	920	0.1%
1671240	0.02	3	640	0.1%	270	0.0%
1671241	0.27	58	960	0.1%	1,120	0.1%
1671242	0.01	1	20	0.0%	40	0.0%
1671243	0.00	1	10	0.0%	20	0.0%
1671244	0.00	1	60	0.0%	10	0.0%
1671245	0.01	68	300	0.0%	190	0.0%
1671246	0.74	3	700	0.1%	20	0.0%
1671247	1.51	7	150	0.0%	40	0.0%
1671248	3.13	83	19,250	1.9%	1,070	0.1%
1671249	0.00	0.5	40	0.0%	20	0.0%
1671250	0.17	12	350	0.0%	640	0.1%
1671252	0.19	9	1,090	0.1%	430	0.0%
1671253	0.02	7	810	0.1%	320	0.0%
1671255	0.02	5	990	0.1%	690	0.1%
1671256	0.01	4	180	0.0%	790	0.1%
1671257	0.83	42	18,600	1.9%	2,080	0.2%