

# AIM Announcement

29 June 2023

# Reese Ridge Project Update

Sunrise Resources plc is pleased to announce the receipt of high-grade zinc, lead and silver analytical results from samples collected during a recent field visit to the Reese Ridge Project in Nevada, USA.

#### **HIGHLIGHTS**:

- Field visit made to follow up on a Company reconnaissance mapping sample that had yielded an unexpectedly high zinc content of 15.9% zinc.
- > Original sample site has been revisited and two additional grab samples yielded:
  - Sample No 52303: 13.6% zinc, 12.8% lead, 146ppm silver.
  - Sample No.52304: 29.6% zinc, 0.3% lead, 7ppm silver.
- Samples occur within a larger altered area containing widespread zinc-lead-silver values (see announcement of 15 March 2023).
- Low resistivity zone defined during historical geothermal exploration programme is a priority drill target.
- Geological setting and mineralogical evaluation of the samples suggests a Carbonate Replacement Deposit ("CRD") style of base-precious metal mineralisation.
- CRD deposits can be large and high-grade as seen in the Taylor (Hermosa) Deposit in the neighbouring State of Arizona which was purchased by South 32 for \$1.6 billion in 2018 and is now under development.

### Commenting today, Executive Chairman Patrick Cheetham said:

"We are delighted to have revisited the original high grade sample site and to have obtained such high zinc, lead and silver values in these follow up samples. As with the original reconnaissance sample, the high zinc values in these new rock samples came as a very pleasant surprise. We believe the zinc occurs in these samples as secondary minerals, formed from weathering of zinc sulphides. These secondary zinc minerals are visually unremarkable and difficult to distinguish from the host rock, even for experienced mineralogists. These very high zinc grades could have been easily missed by earlier prospectors and explorers.

The Reese Ridge Project is now emerging as an exciting target for zinc-lead silver mineralisation and has many of the characteristics of a CRD deposit and, as such, presents a very attractive exploration target."

# Further information

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# Shares in the Company trade on AIM. EPIC: "SRES".

Website: www.sunriseresourcesplc.com

# Market Abuse Regulation (MAR) Disclosure

The information contained within this announcement is deemed by the Company to constitute inside information as stipulated under the Market Abuse Regulations (EU) No. 596/2014 which forms part of UK domestic law by virtue of the European Union (Withdrawal) Act 2018 ('MAR'). Upon the publication of this announcement via Regulatory Information Service ('RIS'), this inside information is now considered to be in the public domain.

# Additional Information

The Reese Ridge Project is located on the south side of prospective Humboldt Structural Zone, 52 miles south-southwest of Battle Mountain, Nevada.

The Project has evolved from the Company's Reese River industrial limestone project and was first suggested as an interesting target when prospecting by the Company yielded an unremarkable limestone sample containing a few spots of the lead sulphide mineral galena which was submitted for analysis and returned a value of 15.9% zinc (alongside 0.3% lead and 17ppm silver). The high zinc content was unexpected and unexplained and given a low priority.

Since then, various Company prospecting campaigns have focused on a broader area containing numerous conspicuous iron-rich gossans of generally limited extent but which attracted the Company's attention and that of early prospectors and were found to contain exotic geochemistry and consistently anomalous zinc, lead and silver with values up to 6.8% zinc, 3.3% lead and 51g/t silver. 43 samples taken from these gossans and old workings averaged 0.86% zinc.

In May 2023 the original high-grade zinc sample site was revisited and two further samples collected and analysed with the following results:

- Sample No 52303: 13.6% zinc, 12.8% lead, 146ppm silver.
- Sample No.52304: 29.6% zinc, 0.3% lead, 7ppm silver.

Sample 52303 contained visible galena and so the high lead content was to be expected. However, the very high zinc values in both samples were again a surprise as the samples were otherwise unremarkable. It is believed that the zinc in these samples is present as secondary zinc oxide, carbonate or silicate minerals. These minerals are difficult to identify in the field in an area where the rocks are significantly altered and do not have the stand-out character of iron rich gossans and are easily overlooked.

Whilst the widespread high visibility iron rich gossans at Reese Ridge are part of the same mineralising system, they were likely a red herring to the early prospectors and our own earlier follow up sampling campaigns given that less visually distinctive samples are now confirmed to contain very high zinc levels.

The geological setting and geological features of the target are consistent with a Carbonate Replacement Deposit (CRD) style of mineralisation. These can be large and high grade. A relevant example is the Hermosa Project in the neighbouring State of Arizona which was acquired by South 32 in a US\$1.3 billion takeover and which includes the Taylor Deposit (138 million tonne Mineral Resource with a zinc equivalent grade of 8.61%) now under development.

The project claims lie adjacent to the Reese River geothermal system which has been explored for geothermal energy. This exploration has included a number of geophysical techniques common to the mineral exploration industry, including VTEM and MT electromagnetic methods.

Both VTEM and MT surveys have independently identified a zone of low resistivity at a depth of about 250m below the surface mineralisation. This is an attractive drill target and is considerably enhanced by the high zinc values now being reported. Further work is required to better define the resistivity anomaly prior to drill testing.

Various plans and photos illustrating the information in this news release will be available on the Company's website at: https://www.sunriseresourcesplc.com/reese-ridge-project-nevada

### **Technical Glossary**

**Gossan:** An exposed, oxidised portion of a mineral deposit, often rust-coloured due to a high content of iron oxide formed from the oxidation of metallic sulphide minerals.

**VTEM™: Versatile Time Domain Electromagnetic.** A low frequency geophysical exploration system developed, patented and trademarked by Geotech. VTEM<sup>™</sup> has good depth penetration and is useful for detecting conductive sulphides and discriminating between low and high resistivity zones. Zones of low resistivity can be due to sulphides and/or clay alteration associated with a number of styles of mineralisation commonly found in Nevada.

*MT: Magnetotelluric.* An electro-magnetic survey and imaging system that use naturallyoccurring ionospheric current sheets and lightning storms - passive energy sources - to map geologic structures to depths of up to 500 metres or more. The MT geophysical survey method combines measurements of the earth's electric field and magnetic field over a wide band of frequencies. Low frequencies sample deep into the earth and high frequencies correspond to shallow samples.

**Secondary.** A term applied to minerals formed from the oxidation of the original (primary) minerals, usually sulphide minerals, as a result of weathering.

# **Qualified Person Information:**

The information in this release has been compiled and reviewed by Mr. Patrick Cheetham (MIMMM, MAusIMM) who is a qualified person for the purposes of the AIM Note for Mining and Oil & Gas Companies. Mr. Cheetham is a Member of the Institute of Materials, Minerals & Mining and also a member of the Australasian Institute of Mining & Metallurgy.





