



# SUNRISE RESOURCES PLC

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1 November 2012

## STUDY UPDATE – DERRYGINAGH BARITE PROJECT

Sunrise Resources plc (“Sunrise” or “the Company”), the AIM-quoted diversified mineral exploration and development specialist, wishes to advise the results from its scoping study (“the Study”) for its Derryginagh barite project in Ireland (“the Project”).

The Study, completed by Wardell Armstrong International Ltd (“WAI”), shows that a significant increase in the tonnage of defined mineralisation is required to demonstrate financial viability based on current cost estimates and product pricing assumptions - but also concludes that the mineralisation is open to expansion and recommends a programme of drilling and further metallurgical testwork be undertaken.

Patrick Cheetham, Executive Chairman of the Company, commented today: **“In all scenarios considered by the Study, the Project shows good operating costs margins but the Project has moved away from the original low capital cost concept as metallurgical testwork results dictated a more complex plant design than originally envisaged. In addition tonnage estimates are necessarily constrained by the drilling carried out so far.”**

**“Overall the Study shows that we have some way to go before we have a project that will provide a satisfactory return on capital employed under the Study models. There is, however, an opportunity to simplify the metallurgical process, expand the deposit and position the project such that revenues are increased relative to capital and operating costs. We will now step up our discussions with potential customers and industry partners to ensure that the beneficiation plan for the Project will optimise the potential revenues for this increasingly scarce commodity and reflect these in a further evaluation of the Project.”**

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## ***The Project***

The Derryginagh barite project is located near Bantry, County Cork, in the south-west of the Irish Republic. White barite was produced from Derryginagh intermittently in the period 1864-1922 and drilling (four holes) was carried out by Dresser Minerals in the 1980s.

The Company is targeting the Derryginagh barite deposit for the production of high value white "paint-grade" barite for use as mineral filler in paints and plastics. An initial drilling programme was carried out by the Company in 2011 and this, together with a programme of metallurgical testwork, forms the basis for the Study.

## ***Mineral Resource Estimation***

WAI carried out geological modelling of the historic and recent Company drill data and, for the purpose of the Study, derived a base-case tonnage-grade estimate of 394,000 tonnes grading 81% barite by block modelling using vein outline wireframes provided by the Company and grade estimation by the Inverse Distance Weighting estimation method.

This tonnage-grade estimate was not classified by WAI according to <sup>1</sup>JORC standards as QA/QC data was not available for the Dresser drill holes and there is some uncertainty over the exact locations of these holes. Otherwise the data would have supported estimation of an Inferred Mineral Resource under JORC guidelines.

## ***Mining***

The Study considered mine production rates of between 50,000 (base case) and 90,000 tonnes per annum corresponding to product output rates of 27,600 – 48,000 tonnes per annum of white barite concentrate.

After allowances for sterilisation around old mine workings, mine pillars and mine dilution the base-case tonnage grade estimate supports total mine production of 278,340 tonnes at 67% barite.

The mining methods suggested for the Derryginagh mineralisation are a combination of Alimak stoping and longitudinal retreat stoping, with ore being hauled to surface via a decline located to the north of the deposit. The base-case mine life is six years.

Mining capital and operating costs were estimated for both owner operated and contract mining scenarios.

## ***Mineral Processing***

The Study considered processing of the ore by means of gravity methods. The process selection includes crushing, ball milling, desliming and size classification and gravity beneficiation using a combination of spirals, shaking tables and multi gravity separators. The final concentrate grade was estimated at 98.5% barite with both coarse (50-500 microns, 80% of total) and a fine (less than 50 microns, 20% of total) concentrates produced.

## **Project Opportunities**

- WAI considers that the available geological information at this stage does not fully reflect the perceived potential of the Derryginagh project as the deposit is open down dip and further drilling may increase the Mineral Resource base sufficiently to support an extended life of the mine and enhanced project economics.
- The current mineral processing flow-sheet is more complex than originally envisaged as metallurgical testwork has not been performed according to mineralogical predictions. There is an opportunity to improve and simplify the process plant design with potential benefits to capital and operating costs.
- The revenue assumptions may be conservative. An opportunity exists to achieve substantially higher sales price by fine grinding the barite product. The additional capital and operating costs involved need to be fully evaluated.

## **Footnotes**

1. *JORC is the Australian Code for the reporting of exploration results, Mineral Resources and Ore Reserves prepared by the Joint Ores Reserves Committee (JORC) of the Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and the Minerals Council of Australia.*
2. *The technical economic evaluation presented in the Study is not based on any JORC compliant Mineral Resource classification and should be considered preliminary in nature. There is no certainty that the economic forecast will be realised. Capital and operating costs are also preliminary in nature and may vary once further metallurgical testwork is undertaken and quotations from suppliers are received.*
3. *The information in this release has been compiled and reviewed by Mr Richard Clemmey (B.Sc. Hons, CEng, MIQ, MIMMM, ARSM) who is a qualified person for the purposes of the AIM Note for Mining and Oil & Gas Companies dated June 2009. Mr Clemmey is a Chartered Engineer and a member of the Institute of Materials, Minerals and Mining.*

## **Notes to Editors**

### **About Sunrise Resources plc**

Sunrise Resources plc is a diversified mineral exploration and development specialist.

The Company's objective is to develop profitable mining operations to sustain the Company's wider exploration efforts and create value for shareholders through the discovery of world-class deposits.

The Company is evaluating a product opportunity for white barite in south-west Ireland and diamond exploration interests in Western Australia & Finland.

Shares in the Company trade on AIM under the symbol "SRES".

[www.sunriseresourcesplc.com](http://www.sunriseresourcesplc.com)