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("Tertiary" or "the Company")

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MINERAL RESOURCE ESTIMATE - STORUMAN FLUORSPAR PROJECT

Tertiary Minerals plc, a diversified mineral explorer and developer building a significant strategic position in the fluorspar sector, is pleased to announce a substantial maiden, JORC compliant, Mineral Resource Estimate for its Storuman fluorspar project in Sweden.

Highlights

- **JORC Indicated & Inferred Mineral Resource - 28 million tonnes grading 10.2% Fluorspar (CaF₂).**
- **90% of the Mineral Resource is in the "Indicated" category and delineated to a sufficiently high level of confidence to support detailed mine planning.**
- **Mineral Resource Estimate builds on the conclusions of the 2010 economic Scoping Study.**
- **Open pit constrained Mineral Resource contains 28% more fluorspar at less than half the waste to ore stripping ratio when compared to the Scoping Study optimised open pit.**
- **Deposit and open-pit mineralisation open to expansion.**
- **Environmental permitting studies under-way.**
- **Prefeasibility metallurgical testwork to be awarded soon.**

Commenting on today's news, Patrick Cheetham, Executive Chairman, said **"The definition of a maiden JORC compliant Mineral Resource is a value adding event for the Company and it has exceeded our expectations. The recent drilling success has enabled 90% of the Mineral Resource Estimate to be reported in the "Indicated" category, and yielded a 28% increase in the amount of fluorspar captured in an optimised open-pit at a significantly lower stripping ratio than previously predicted - despite the use of conservative fluorspar pricing assumptions"**.

Fluorspar is an essential raw material in the chemical, steel and aluminium industries and Tertiary controls an estimated four million tonnes of fluorspar across its two Scandinavian projects (Storuman in Sweden and Lassedalen in Norway).

ENQUIRIES

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SRK MINERAL RESOURCE ESTIMATE

The Mineral Resource being reported today for the Storuman Fluorspar Project has been derived by ¹SRK Consulting (Sweden) AB (“SRK”) and reported as follows using the terms and definitions given in the ²JORC Code:

Classification	Million Tonnes (Mt)	Fluorspar (CaF₂%)
Indicated	25.0	10.28
Inferred	2.7	9.57
Total	27.8	10.21

All figures are rounded to reflect the relative accuracy of the estimate

The fluorspar mineralisation at Storuman occurs in a flat lying sequence of arkosic sandstone and quartzite lying immediately above an older granite basement. The mineralised sequence is overlain by shale in some places, and everywhere by a layer of more recent glacial clays, sands and gravels.

The Mineral Resource Estimate is based on the results from 56 diamond drill holes completed by the Company in 2008 and 2010.

In order to estimate the Mineral Resource, SRK used the Company’s drilling data to construct a block model constrained by grade wireframes containing fluorspar mineralisation above a 2% CaF₂ cut-off (nominally the cut-off between mineralised and non-mineralised material) and by lithological wireframes that also incorporate geological information from 39 drill holes completed in the 1970s. The assay data from this historical drilling was not used for block grade estimation. The block model comprised blocks of dimensions 50m x 50m (X-Y axis) and 5m thick (Z axis). Down hole assay data was composited to uniform 2.5m lengths and sample grades were interpolated into the blocks using ³Ordinary Kriging.

By definition, a Mineral Resource must have reasonable prospects for eventual economic extraction and portions of a mineral deposit that do not have such prospects must be excluded from the estimate. To determine the final Mineral Resource Statement, the resulting blocks have been subjected to a Whittle pit optimisation ⁴exercise to determine the proportion of the material defined that meets this condition.

The economic parameters used by SRK for the Whittle pit optimisation⁵ were based, with only minor variation, on those determined by Scott Wilson Limited (“Scott Wilson”) for the Scoping Study completed in July 2010 and which had already been peer reviewed by SRK as part of the Scoping Study.

The Mineral Resource Estimate reported here is that constrained within the resulting pit outline. Some 90% of this has been classified in the “Indicated Mineral Resource” category

which means that confidence in the estimate is sufficient to allow the application of technical and economic parameters, and to enable an evaluation of economic viability.

The Company believes, therefore, that the reporting of a Mineral Resource Estimate, as defined by the JORC Code, is a significant value-adding event for the Company.

Comparison with 2010 Scoping Study

For the 2010 Scoping Study, and prior to the 2010 drilling programme, Scott Wilson carried out a similar Whittle Pit Optimisation exercise based on an earlier block model where the grade of the blocks was based on only the 10 drill holes then available from the Company's 2008 drilling programme. Whilst the original Scoping Study and new SRK pit optimisations are based on different block models, the Whittle Pit Optimisation exercise was carried out in the same manner in each case and the economic parameters assumed were materially the same. The Company therefore believes that a comparison of these results provides a useful insight into the increased resource base that has been established by the infill and extensional drilling carried out during late 2010.

The Scott Wilson (Scoping Study) optimised open pit contained 18 million tonnes of mineralised material at an average grade of 12.3% fluor spar (for 2.2 million tonnes of contained fluor spar) with a stripping ratio of 2.2 tonnes of waste per tonne of ore. SRK has now reported a larger open pit optimised Minerals Resource Estimate of 27.8 million tonnes at an average grade of 10.2% fluor spar (for 2.8 million tonnes of contained fluor spar) with a stripping ratio of 0.8 tonnes of waste per tonne of ore. The SRK optimised pit contains 28% more fluor spar in ore with a more favourable, lower, waste to ore stripping ratio despite being based on the same fluor spar price assumption.

It is common practice when producing a resource estimate to use optimistic commodity price assumptions in order to delineate material that has potential for "eventual economic extraction" at some stage in the future rather than just that which is economic at the time the estimate was produced. Notwithstanding this, however, in this case SRK agreed with the Company's request to use a fluor spar price that is conservative in today's market. The fluor spar price used for the Mineral Resource Estimate, US\$303/tonne at the mine gate, was estimated during the Scoping Study to be equivalent to a price of US\$357/tonne delivered into Rotterdam (°CIF basis). The CIF Rotterdam price is a recognised pricing basis. Currently the CIF Rotterdam price for Chinese fluor spar is listed at US\$460/tonne.

Use of a higher fluor spar price in the resource estimation process would have delivered a higher tonnage Mineral Resource Estimate with a lower grade but containing more fluor spar.

The 2010 Scoping Study delivered a base-case project NPV of US\$33 million, and an Internal Rate of Return (IRR) of 24% at a US\$303/tonne mine gate fluor spar selling price and a capital pay-back of less than 3 years. The Company notes that at the current fluor spar price of US\$460/tonne CIF Rotterdam the Company's Scoping Study base-case financial model generates a NPV of US\$123 million (at a comparable discount rate of 8%), an IRR of 50% and a 1.7 year payback. Although the grade-tonnage data on which this financial model is based is no longer current it serves to illustrate the positive effects of the rising fluor spar price.

The project NPV for a given optimised open pit mine shell is dependent on the mine scheduling that is applied to the ore and waste contained in the pit shell. In the Scoping Study, early scheduling of higher grade ore resulted in a rapid capital payback. The work carried out by SRK to date has not involved mine scheduling and so the financial model has not been updated. However, the Company believes that the higher contained fluor spar and lower stripping ratio would enhance project economics. This will be considered in due course as a part of the planned prefeasibility studies.

Further Work

It was originally intended that the Mineral Resource Estimate would evaluate the potential for underground extraction of the mineralisation at depth on the north-east side of (and outside of) the open-pit outlined by the Scoping Study. However, SRK has advised that the new Mineral Resource pit shell captures all of this mineralisation and so the potential limits of the open-pit mineralisation in this direction have not yet been determined. SRK has recommended a separate study be undertaken to examine the theoretical limits of open-pit mining and beyond this, whether underground mining could be considered as a viable option. The results of this study would provide guidance for future exploration drilling over the deeper parts of the deposit.

The mineralisation also remains open in other directions, including on the western side of the highway where continuations of the thicker sections of the mineralisation will be targeted in future drilling campaigns.

Given the above, a follow up drilling programme is now being planned as part of the prefeasibility study. In addition, the core collected from the recent drilling programme will be used for prefeasibility metallurgical testwork, a tender for which has been put out and which is expected to be awarded soon

The Company has also engaged Sweco AB, one of Europe's largest consulting engineering groups, to carry out an environmental permitting study and positive meetings have been held recently with the Storuman Regional Council, the County Environmental Board and the Mining Inspector. The Storuman project area has Swedish Government status as "a mineral deposit of national interest" and separately the Storuman Regional Council has advised that the area is designated for mining on its development plan.

Footnotes:

- 1. The Competent Persons responsible for this estimate are Mr Howard Baker of SRK Consulting (UK) Ltd and Mr Johan Bradley of SRK Consulting (Sweden) AB.*
- 2. The JORC Code is the Australasian Code for the reporting of Exploration results, Mineral Resources and Ore Reserves prepared by the Joint Ore Reserves Committee (JORC) of the Australasian Institute of Mining & Metallurgy, Australian Institute of Geoscientists and the Minerals Council of Australia and published in 2004).*
- 3. Ordinary Kriging is a geostatistical technique used, in this case, to estimate the grade of a block within the model from observations of its value in nearby drill holes.*
- 4. The Whittle Pit Optimisation exercise was not intended to generate an Ore Reserve, which, as defined by the JORC Code, is the economically mineable part of a Measured and/or Indicated Mineral Resource. An Ore Reserve includes diluting materials and allowances for losses which may occur when the material is mined. Appropriate assessments and studies have been carried out, and include consideration of and modification by realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors.*
- 5. The economic parameters used by SRK for the Whittle Pit Optimisation were a marginal cut-off-grade of 5.5% CaF₂; a mine-gate fluorspar price of US\$303/tonne; slope angles of 27 degrees in the glacial overburden, 45 degrees in the shale and 50 degrees in all other lithologies; a mining recovery of 97%; a mining dilution of 3%; a mining cost of US\$2.60 per tonne and incremental mining costs of US\$0.025/tonne/5m above the reference RL and US\$0.03/tonne/5m below the reference RL; process recovery of 82% and process operating costs of US\$10.6/tonne ore processed; and G&A (general & administration) costs of US\$3.10/tonne ore.*

6. *CIF – Cost, Insurance and freight – the price of fluorspar on a ship at the wharf at its destination port.*

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 dated June 2009. Mr Cheetham is a Member of the Institute of Materials, Minerals & Mining and also a member of the Australasian Institute of Mining & Metallurgy.

NOTES TO EDITORS

Background to the Company

Tertiary Minerals plc is an AIM-quoted mineral exploration and development company building a significant strategic position in the fluorspar sector. Fluorspar is an essential raw material in the chemical, steel and aluminium industries and Tertiary controls an estimated four million tonnes of fluorspar across its two Scandinavian projects (Storuman in Sweden and Lassedalen in Norway).

The Storuman Fluorspar Project is located in northern Sweden in an area with well-established infrastructure. It is located adjacent to the E12 highway, 25km from the regional town of Storuman, which connects the Project to the city and port of Umeå on the Gulf of Bothnia and to the port city of Mo-i-Rana in Norway.

A European Commission report recently named fluorspar as one of its 14 'critical mineral raw materials' for which a possible supply shortage would represent a substantial economic threat.

The Company also has interests in exploration and development of Gold, Iron, Tantalum, Niobium and Rare-earths in Finland and Saudi Arabia. Shares in the Company trade on AIM and also on PLUS Markets (ticker symbol 'TYM').

For further information: www.tertiaryminerals.com