Tertiary Minerals plc

www.tertiaryminerals.com
("Tertiary" or "the Company")

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MINERAL RESOURCE ESTIMATE - LASSEDALEN 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 Lassedalen fluorspar project in Norway.

Highlights

- **JORC Inferred Mineral Resource - 4 million tonnes grading 25% Fluorite (CaF_2) containing 1 million tonnes of Fluorite.**
- **Company's total JORC Mineral Resources increased by 34% to 3.8 million tonnes contained Fluorite (CaF_2) across its two fluorspar projects (Storuman, Sweden & Lassedalen).**
- **Resource Estimate cut-off grade based on mine-gate fluorspar price of US$350/tonne fluorspar - some US$200 below current prices.**
- **Lassedalen fluorspar deposit remains open to expansion at depth and along strike.**

Commenting on today's news, Patrick Cheetham, Executive Chairman, said **"We are very pleased to announce this significant increase to the Company's JORC classified Mineral Resource base. The definition of a robust maiden Mineral Resource at Lassedalen gives Tertiary a firm basis to progress scoping and feasibility studies for this, the Company's second European fluorspar project, and further supports our ambition to become a major supplier of fluorspar in Europe."**

Fluorspar is the name given to a commercial concentrate of the mineral fluorite (CaF_2). It is an essential raw material in the chemical, steel and aluminium industries. Tertiary now controls JORC Minerals Resources totalling nearly four million tonnes of fluorspar across its two Scandinavian projects.

ENQUIRIES

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SRK MINERAL RESOURCE ESTIMATE

The Lassedalen fluorspar project is located in an area of excellent infrastructure, 80km south west of Oslo in Norway.

The Mineral Resource being reported today for the Lassedalen Fluorspar Project has been prepared by [1]SRK Consulting (Sweden) AB ("SRK") and reported as follows using the terms and definitions given in the [2]JORC Code:

Classification	Million Tonnes (Mt)	Fluorspar (CaF_2%)
Inferred	4.0	24.6%
Total	**4.0**	**24.6%**

Fluorspar mineralisation at Lassedalen occurs in a steeply south-dipping east-west trending vein system outcropping along the floor of the Lassedalen valley. The geometry of the mineralisation is suited to underground rather than open-pit mining methods.

The Mineral Resource Estimate is based on a database that includes geological and other data from 29 surface drill holes drilled by Norsk Hydro A/S in the 1970s, historic assay data from 26 of these holes and recent assay data generated by Tertiary Minerals plc from re-logging and re-sampling of 23 of the surface drill holes carried out in 2011. The database also includes drill sampling data from an underground development drive established 50m below surface during World War II.

SRK has modelled two separate zones of mineralisation; the South Vein, defined by surface and underground drill sampling and the North Vein which is a possible branch vein from the western end of the South Vein.

The North Vein is interpreted from underground maps and drill sampling data but no survey data is available for the now flooded underground workings. Furthermore, there is no down hole survey data for the surface drilling and so there is the possibility that South and North veins are one and the same. Given this uncertainty the North Vein is excluded from the current Mineral Resource estimate.

In order to estimate the Mineral Resource, SRK used the drill data to construct mineralised domains within mineralised wireframes at a cut-off grade of 10% CaF_2 (nominally the cut-off between mineralised and non-mineralised material).

The assay data from core-resampling and historic assaying was used for block grade estimation. The block model comprised blocks of dimensions 1m (north) x 50m (east-west) 10m (vertical). Down hole assay data was composited to uniform 2m lengths and sample grades were interpolated into the blocks using [3]Ordinary 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 which parts of the mineralisation can be included in the final Mineral Resource Statement, the resulting blocks have been subjected to a Mineable Shape Optimiser (MSO) study (Datamine's floating stope optimisation programme[4]).

The economic parameters used for the MSO were set by SRK using various estimated mining and processing costs[5] and a mine-gate fluorspar price of US$350/tonne. This resulted in a cut-off grade of 11% CaF_2 which, when applied to the mineralised blocks, captured materially all of the modelled fluorspar mineralisation into the Mineral Resource Estimate.

A mine-gate fluorspar price of US$350/tonne is estimated by the Company to be roughly equivalent to US$380 [6]CIF Rotterdam. Currently the CIF Rotterdam price for Chinese fluorspar is published at US$600/tonne.

As a check on the MSO output, the mineralisation model was imported into Datamine's Mining Reserve Optimiser (MRO). This confirmed that all of the wireframed mineralisation can be included in the Minerals Resource Estimate even when tested at a higher cut of grade of 15% which is equivalent to a mine gate fluorspar price of US$262, all other parameters being equal.

The Company considers that mineralisation at Lassedalen has not been closed off by the historical drilling along strike or at depth and that there is good potential for the discovery of additional mineralisation.

Further Work

The Company believes that the maiden Lassedalen Mineral Resource Estimate is more than sufficient to justify more detailed evaluation for commercial production and scoping study metallurgical testwork is already in progress to demonstrate that acid grade fluorspar can be produced from Lassedalen.

Footnotes:

1. *SRK's Mineral Resource Estimate is an independent report prepared by Mr Howard Baker (MAusIMM(CP)) and Mr Johan Bradley (CGeol FGS, EurGeol). Mr Howard Baker is a Competent Person as defined by JORC in regard to the Mineral Resource Estimation techniques and compilation of the Mineral Resource Statement. Mr Johan Bradley is a Competent Person as defined by the JORC Code in regard to the geology and style of mineralisation under investigation.*

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 floating stope 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. In the case of Ore Reserves, 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 Optimisation were a marginal cut-off-grade of 11% CaF_2; a mine-gate fluorspar price of US$350/tonne; a mining cost of US$20/tonne; process recovery of 89% and process operating costs of US$11/tonne ore processed; and G&A (general & administration) costs of US$4/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 (ticker symbol 'TYM') 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 two significant Scandinavian projects (Storuman in Sweden and Lassedalen in Norway).

A European Commission report has named fluorspar as one of its 14 'critical mineral raw materials' for which a predicted supply shortage would represent a substantial economic threat. The fluorspar market is going through a 'paradigm shift' – with China evolving from a large net exporter to a potential net importer. Tertiary Minerals plc is one of a limited number of listed companies offering exposure to looming fluorspar market shortage.

The Company has diversified its risk with projects in a variety of commodities in Finland and Saudi Arabia. Shares in the Company trade on AIM and also on PLUS Markets.

For further information: www.tertiaryminerals.com