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("Tertiary" or "the Company")

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SUCCESSFUL COMPLETION OF TECHNICAL AND ECONOMIC SCOPING STUDY FOR LASSEDALEN FLUORSPAR PROJECT

Tertiary Minerals plc is pleased to announce the successful completion of an independent Scoping Study ("the Study") on the Company's 100% owned Lassedalen fluorspar project ("the Project") in Norway. The Study was prepared by Wardell Armstrong International Ltd. and the Project economic analysis based on the Study indicates that an underground mine and processing plant is commercially viable. At a production rate of 100,000 tonnes of acid grade fluorspar concentrate per year, the Study projects US\$325 million in revenue over a 6.6 year minelife and US\$78 million initial capital cost. Annual pre-tax cashflow in excess of US\$25 million is predicted, with payback within 34 months of the production start date.

Highlights

- Pre-Tax NPV at 10% Discount Rate of US\$ 31.6 million
- Pre-Tax IRR of 20.2%
- Payback in 34 Months on Initial Capex of US\$ 78 million
- Further Drilling Planned Aimed at Increasing the Size of the Deposit

Richard Clemmey, Operations Director of the Company, commented today: "I am pleased with the positive results of the Lassedalen Scoping Study. These results further strengthen the implementation of Tertiary's strategy to become a leading fluorspar producer through the development of the Company's 100% owned fluorspar projects. Lassedalen and Storuman will have a combined production target of 200,000 tonnes of acid grade concentrate per year.

"The results of the Study, coupled with firm fluorspar prices and the declining supply of fluorspar from China, gives the Company confidence to progress the Lassedalen project to the next stage of development with further drilling now planned. The Board looks forward to updating the market in due course."

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The Project

The Lassedalen fluorspar project is located in Southern Norway, 80km southwest of Oslo and 5km southwest of the historic silver mining town of Kongsberg. The Project is located adjacent to the E134 highway which connects the Project to the sea port of Drammen 50km to the east.

The physiography of the local area comprises lowland hills and valleys with the fluorspar mineralisation occurring as a steeply dipping vein within a breccia zone along a valley floor. The deposit was previously worked for a short time during the Second World War where fluorspar was extracted and used in a flux for aluminium smelting. In the early 1970's the deposit was explored by Norsk Hydro A/S which completed a programme of 29 diamond drill holes, 61 underground percussion holes and metallurgical testwork.

In 2011 Tertiary recovered the historic drill core, in storage at the Norwegian Geological Survey at Løkken, and carried out a programme of re-logging and sampling. This data formed the basis of the independent JORC¹ compliant Mineral Resource Estimate carried out by SRK Consulting (Sweden) AB (SRK) earlier this year which estimated an Inferred Mineral Resource of 4 million tonnes grading 24.6% fluorite (CaF₂), open at depth and along strike.

The Study

The Study was prepared by Wardell Armstrong International Ltd. (WAI) which was responsible for the key components including metallurgical testwork, mining, minerals processing, tailings storage facility, infrastructure, environmental and financial evaluation. The SRK Mineral Resource Estimate, block model and wireframes were used by WAI as a basis for the Study.

Mining

A mining rate of 543,000 tonnes of ore per year was used to attain a target output of 100,000 tonnes per year of acid grade fluorspar concentrate. The mining method chosen for the Lassedalen deposit is sub level open stoping and the mine would be owner operated. The mine will be a fully mechanised operation, utilising diesel powered load haul dumps and articulated haul trucks to haul the ore from the mine to a surface processing plant via an incline ramp.

Based on the SRK block model and assumptions of 10% mine dilution and 95% mine recovery, the processing plant will mill a total of 3.6 million tonnes at a head grade of 22.4% resulting in an initial mine life of 6.6 years.

Mineral Processing

WAI has carried out a programme of metallurgical testwork (bench scale) during which acid grade fluorspar concentrate has been produced. The testwork formed the basis of the mineral processing flowsheet used in the Study. The Lassedalen ore is envisaged to be processed using three stage crushing, ball milling, pre-flotation of the sulphide minerals and flotation of the fluorite to produce acid grade fluorspar concentrate assaying 97.5% CaF₂.

The estimated recovery of fluorite in the process plant will be 80.3% with the plant designed to treat 543,000 tonnes per year of ore on a 24 hour, 5 days per week operating schedule.

Financial Analysis

A pre-tax cashflow model was generated for the Project by WAI using the Study's estimates for capital expenditure (capex) and annual operating expenditure (opex) for the life of mine production schedule which have been estimated to a cost accuracy of +/-35%.

The target grade for manufacture and sales from Lassedalen is high grade acid grade fluorspar (>97.5% CaF₂) as this represents the largest share of the fluorspar market by volume and is also

the highest value fluorspar concentrate in terms of price per tonne. The current price for acid grade fluorspar is quoted at US\$500–530 per tonne CIF (cost, insurance and freight) Rotterdam (source: Industrial Minerals). For the purpose of the Study, a selling price of US\$491 per tonne CIF Rotterdam has been assumed which represents the average mid-market price in the years 2009, 2011 and 2012 (leaving out 2010 which was heavily affected by the global financial crisis).

Parameters for the financial model:

Total Ore Mined	3,595,922 tonnes
Total Acid Grade Concentrate Produced	662,685 tonnes
Life of Mine	6.6 years
CaF ₂ Selling Price CIF Rotterdam	US\$491 per tonne
Initial Capex	US\$77.8 million
Sustaining and Mine Closure Capex	US\$9.1 million
Gross Revenue over Life of Mine	US\$325 million
Total Pre-Tax Cashflow	US\$95 million
Net Present Value (NPV) at 10% Discount Rate	US\$31.6 million
Pre-Tax Internal Rate of Return (IRR)	20.2%
Payback	34 months

Conclusions and Opportunities

- The Study indicates project economics which are sufficiently robust to support progress of the Lassedalen project to the next stage of development of which the first priority will be additional drilling
- The available geological information at this stage does not fully reflect the perceived potential of the Lassedalen project as the deposit appears to be open along strike and down dip
- Further drilling may increase the ore base sufficiently to support an extended life of the mine and enhanced project economics. The financial model suggests a 25% increase in the mineable ore could increase the Pre-Tax NPV by 66% to US\$52.5 million and Pre-Tax IRR to 24.1%
- An opportunity also exists to pre-concentrate the ore using sensor based sorting or gravity separation which, if successful, could potentially reduce capital and operating costs of the project

Footnote

- 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 based on an Inferred 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.

ABOUT TERTIARY

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).

For more information on Tertiary, please visit <u>www.tertiaryminerals.com</u>