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## TESTWORK & SCOPING STUDY UPDATE

- **Recent testwork achieves metallurgical breakthrough**
  - **Fluorspar concentrate produced to saleable specifications**
  - **Programme to be accelerated toward completion of scoping study**
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Tertiary Minerals plc (“Tertiary” or “the Company”) is pleased to provide the following update on the status of the scoping study for development of its large Storuman Fluorspar deposit in Sweden and to advise on the progress of metallurgical testwork.

Recently completed metallurgical testwork has successfully produced a fluorspar concentrate to a specification that would be saleable to consumers of acid-grade fluorspar with respect to both chemical and grain-size specifications (acid-grade fluorspar is the highest value grade of fluorspar in high volume commercial use).

The latest results, from tests being carried out at the metallurgical laboratories of SGS Minerals Services (Lakefield, Canada), are a breakthrough for the project. Previous testwork carried out in the 1970s produced fluorspar with acceptable chemical specifications, but only on samples that were ground to a grain size that was too fine for use in the majority of consuming acid plants around the world.

Tertiary’s testwork programme initially focused on reproducing the grinding conditions used in the 1970s testwork in order to investigate critical reagent schemes and conditions for fluorspar flotation (“flotation” is the principal mineral separation technology used in production of acid-grade fluorspar). The initial tests were successful in achieving acceptable chemical specifications - albeit at the same fine grain size. The latest test, carried out on more coarsely ground material has produced saleable fluorspar concentrate within the grain size limits required by acid-grade consumers. Further tests are in progress to evaluate other metallurgical parameters, including fluorspar recovery, and to provide information for operating and capital cost estimates.

The testwork programme has been progressing cautiously until now both in order to maximise the cost benefit of individual tests and also to preserve financial resources. Following these latest results and the recent fundraising announced by the Company, the pace of work on the metallurgical testwork will be increased with a view to completing the scoping study as soon as critical-path testwork allows.

### **Further info:**

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## **Background**

Fluorspar is the commercial name for the industrial mineral fluorite (calcium fluoride - chemical formula  $CaF_2$ ). It is the main industrial source of fluorine for the manufacture of hydrofluoric acid and derivative fluorine chemicals including refrigerants, PTFE (Teflon™) and aluminium hydrofluoride, a flux used in the reduction of alumina to aluminium. It is also used as a flux in steel making, in the ceramics industry and in the manufacture of nuclear fuel (uranium hexafluoride).

Fluorspar consumers, several of which are based in Europe, have been facing critical supply shortages as traditional supplies from China are diverted to meet growing Chinese domestic demand. China has imposed export quotas and export taxes to discourage export and thus ensure domestic supplies.

Tertiary's scoping study was initiated in late 2008 to follow up drilling results which confirmed the potential for a very large deposit of fluorspar on the Company's 100% owned exploration licences at Storuman. The deposit is flat lying and has been indicated by drilling to occur over an area of at least 2km by 1.2km. It is located in an area with well established infrastructure adjacent to a sealed highway 20km from the regional town of Storuman. Storuman is connected by road and rail to the city and port of Umeå on the Gulf of Bothnia. In the other direction the highway leads to the port city of Mo-i-Rana in Norway.

A conceptual target for the Company is a mining operation producing at least 100,000 tonnes per annum of acid grade fluorspar. The world market for fluorspar is just over 5 million tonnes per annum of which 65% is for acid grade fluorspar.

The scoping study to evaluate the technical and economic viability of developing the Storuman fluorspar deposit was awarded to Scott Wilson Ltd, an international design and engineering consultancy, which will be responsible for modelling the mineralisation, conceptual mine and process plant design, infrastructure, capital and operating costs estimation and financial modelling. Metallurgical testwork is being carried out by SGS Lakefield in Canada in consultation with the Company's metallurgical consultant, Delta Minerals Ltd, which will also provide a conceptual mineral processing flowsheet on which the process plant design will be based. URS Nordic AB, a wholly owned subsidiary of URS Corporation, has provided advice to Tertiary Minerals plc on the environmental and social permitting process for the Storuman mine development for inclusion in the Scoping Study.