



27 January 2011

## DRILLING UPDATE - STORUMAN PROJECT

Tertiary Minerals plc, a diversified mineral explorer and developer building a significant strategic position in the fluorspar sector is pleased to announce an initial batch of drilling results from the resource definition drilling programme completed at its Storuman fluorspar project in Sweden during late 2010. The Company also announces the appointment of expert consultants, SRK Consulting (Sweden) AB (“SRK”) for Mineral Resource estimation.

### Key Points

- Resource definition drilling programme comprised 46 holes on 200m x 200m grid.
- 14 holes being reported today; results in line with expectations
- All 14 holes hit fluorspar mineralisation of economic significance.
- Results characterised by :
  - wide intervals of fluorite mineralisation suitable for open pit mining - up to 20.2m thick grading 11.2% fluorspar from bedrock surface in hole 10TS18.
  - discrete higher grade intervals that may be amenable to mechanised underground mining – e.g. 3.5m grading 23.4% fluorspar in Hole 10TS45 and 3.3m grading 19.4% fluorspar in Hole 10TS17.
- SRK Consulting (Sweden) AB (“SRK”) appointed for Minerals Resource Estimation.
- Publication of the maiden <sup>1</sup>JORC Mineral Resource Estimate for the project expected at the end of this quarter.

Further details of the resource definition drilling programme are contained in the Company’s announcements of 28 September 2010 and 17 November 2010. The programme comprised 46 holes drilled mainly on a 200m x 200m grid.

This release contains results for all 14 drill holes where complete assay results are now available. All 14 drill holes contain fluorspar grades of potential economic significance as shown in the accompanying table. Results are considered provisional as, although they have passed an initial quality control assessment, they are still subject to further independent check analysis.

All holes were drilled vertically and mineralisation is horizontally bedded and so reported thicknesses approximate to true thicknesses. Where drill hole numbers in the sequence are not shown in the accompanying table, assays for those holes are not yet available.

A drill hole location plan will be available shortly on the Company's website at <http://www.tertiaryminerals.com/storuman.html>. All of the holes being reported in this announcement were drilled within the broad area where mineralisation is expected to occur based on the Company's 2008 initial drill programme and on data from a 1970s drill programme carried out by Swedish company Gränges International.

The results are in line with the Company's expectations and confirm that mineralisation occurs in two main horizons – an upper fine grained re-crystallised sandstone (quartzite) – the "Upper Zone" and a lower coarser grained sandstone (arkose) – the "Lower Zone". There are transitional zones between the two zones and at the contact of the Upper Zone with the overlying shale and mudstone sequence.

Fluorspar mineralisation can occur in these transitional zones and in some cases the fluorspar grades in these zones are of economic significance and combine with the Upper and Lower zones into coherent wide mineralised intervals.

A number of holes hit mineralisation from bedrock surface (the rock surface closest to the land surface immediately beneath the transported unconsolidated overburden) indicating that complete mineralised sequence is not present in these holes, the upper parts of the mineralised sequence having been eroded away. These intervals are marked with an asterisk (\*) in the accompanying table.

All drilling results should be available by early March, subject to analytical quality control issues continuing to proceed to the Company's satisfaction. A full list of drilling results will then be published.

The estimation of Minerals Resources under the <sup>1</sup>JORC Code and the preparation of an accompanying independent report have been awarded to SRK Consulting (Sweden) AB. SRK will start this work in February with the objective to complete their report by the end of March, provided all assay results are available when anticipated.

Commenting on today's news, Patrick Cheetham, Executive Chairman, said: ***"the Board is satisfied with the results being reported today. They are in line with its expectations and we look forward to announcing the JORC Mineral Resource Estimate for the project at the end of this quarter."***

### **Sampling Quality Analysis and Quality Control**

The drill programme, including logging and drill core sampling was supervised by SRK and QA/QC is being supervised by Andrew Dixon an employee of the Company.

Diamond drill core was delivered to Laplab AB in Lycksele, Sweden, a division of Finnish company Labtium OY. Drill core was first logged, and photographed and then split in half using a diamond core saw prior to sampling. Half-core samples were crushed and a split of the crushed sample pulverised at Laplab. Sub-samples of the pulverised core samples (pulp) were then transported to Labtium in Finland for fluorine analysis. The QA/QC procedures that were followed include adding blind standard samples and duplicate pulp samples to the sample sequence prior to submission to Labtium.

Fluorine is assayed at Labtium using a fusion/ion-specific electrode method with routine checks by the XRF method. Labtium is accredited to ISO 17025:2005. Labtium's internal

quality control procedures include the regular analysis of repeats and reference materials. A number of duplicate pulps are being submitted by the Company to PANalytical (formerly the analytical division of the British Geological Survey) for check assay by XRF.

Fluorine is a light element and difficult to analyse for. The Company has a rigorous QA/QC procedure which sometimes means that samples have to be repeated and this can lead to delays in the publication of results as compared to other elemental analysis.

Fluorspar contents are being reported on the basis that all of the fluorine in the sample is present as fluorspar (rather than any other fluorine being mineral species). This has been validated by previous detailed mineralogical evaluation.

#### **Footnotes:**

<sup>1</sup>JORC is the Australasian 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 & Metallurgy, Australian Institute of Geoscientists and the Minerals Council of Australia.

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.

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#### **ENQUIRIES**

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#### **NOTES TO EDITORS**

##### **Background to the Company**

Tertiary Minerals 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).

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](http://www.tertiaryminerals.com)

### **Background to the Storuman Project**

The Storuman Fluorspar Project is located in northern Sweden in an area with well established infrastructure. It is located adjacent to the E12 highway, 20km 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.

The basis for the Storuman Project is a large area of flat lying, sandstone hosted fluorspar mineralisation that runs along either side of the valley occupied by the E12 highway. The mineralisation has been defined (but not closed off) by 49 drill holes; 39 completed by Gränges International Mining in the 1970s, and 10 by the Company in 2008.

A recently completed technical and economic scoping study shows that the 100% owned Storuman project could give a three year payback on US\$46 million of initial capital costs with a 24% IRR (Internal Rate of Return) predicted from pre-tax operating cash flows which average US\$17 million/year for first 5-years.

**Table of Significant Drilling Results**

<b>Hole No.</b>	<b>Intersection thickness (m)</b>	<b>% Fluorspar (CaF<sub>2</sub>)</b>	<b>From (m)</b>	<b>Horizon</b>
<b>10TS01</b>	<b>1.30m</b>	<b>11.49%</b>	15.70m	Lower
within	5.40m	5.74%	11.60m	Lower
<b>10TS02.</b>	<b>2.55m</b>	<b>11.60%</b>	13.40m	Upper
and	<b>3.55m</b>	<b>11.00%</b>	23.20m	Lower
both within	17.95m	7.21%	13.40m	Upper & Lower
<b>10TS03</b>	<b>13.35m</b>	<b>10.99%</b>	23.10m	Upper & Lower
inc.	<b>1.30m</b>	<b>17.90%</b>	23.10m	Upper
and inc.	<b>3.75m</b>	<b>13.07%</b>	27.25m	Upper
and inc.	<b>3.10m</b>	<b>16.87%</b>	33.35m	Lower
<b>10TS05</b>	<b>2.35m</b>	<b>15.2%</b>	19.35m	Upper
and	<b>4.25m</b>	<b>12.3%</b>	23.90m	Lower
inc.	<b>1.65m</b>	<b>20.5%</b>	26.50m	Lower
all within	15.55m	9.4%	14.60m	Upper & Lower
<b>10TS06</b>	<b>1.85m</b>	<b>10.8%</b>	20.6m	Upper
and	<b>5.25m</b>	<b>12.5%</b>	29.2m	Lower
inc.	<b>2.95m</b>	<b>17.5%</b>	31.5m	Lower
all within	17.75m	7.6%	16.70m	Upper & Lower
<b>10TS07</b>	<b>5.80m</b>	<b>10.4%</b>	40.60m	Upper
inc.	<b>1.55m</b>	<b>19.7%</b>	43.45m	Upper
both within	22.10m	4.11%	40.6m	Upper & Lower
<b>10TS11</b>	<b>*3.00m</b>	<b>16.2%</b>	14.25m	Lower
<b>10TS16</b>	<b>1.80m</b>	<b>21.4%</b>	6.50m	Upper
and	<b>10.60m</b>	<b>9.2%</b>	15.60m	Upper & Lower
inc.	<b>2.10m</b>	<b>12.36%</b>	15.60m	Upper
and inc.	<b>2.35m</b>	<b>16.20%</b>	21.60m	Lower
and inc.	<b>0.70m</b>	<b>23.0%</b>	25.50m	Lower
all within	19.70m	7.2%	6.50m	Upper & Lower

**Table of Significant Drilling Results ..Continued.....**

<b>Hole No.</b>	<b>Intersection thickness (m)</b>	<b>% Fluorspar (CaF<sub>2</sub>)</b>	<b>From (m)</b>	<b>Horizon</b>
<b>10TS17</b>	<b>0.70m</b>	<b>19.4%</b>	21.7m	Upper
and	<b>3.35m</b>	<b>19.4%</b>	34.1m	Lower
both within	15.75m	6.2%	21.7m	Upper & Lower
<b>10TS18</b>	<b>*20.20m</b>	<b>11.3%</b>	5.50m	Upper & Lower
inc.	<b>*6.95m</b>	<b>14.7%</b>	5.50m	Upper
<b>10TS40</b>	<b>*3.20m</b>	<b>16.8%</b>	9.30m	Lower
<b>10TS41</b>	<b>*9.35m</b>	<b>12.0%</b>	1.80m	Upper & Lower
inc.	<b>*5.36m</b>	<b>15.0%</b>	1.80m	Upper
within	<b>*13.85m</b>	9.2%	1.80m	Upper & Lower
<b>10TS43</b>	<b>1.00m</b>	<b>13.3%</b>	10.53m	Lower
within	<b>*4.53m</b>	7.8%	7.00m	Lower
<b>10TS45</b>	<b>17.30m</b>	<b>10.0%</b>	14.35m	Upper & Lower
inc.	<b>9.85m</b>	<b>15.2%</b>	21.80m	Lower
and inc.	<b>3.50m</b>	<b>23.4%</b>	28.15m	Lower

\* denotes reported intervals starting from bedrock surface