



**3 September 2012**

## **Project Lease & Option to Purchase Nevada Fluorspar Project**

As part of its strategy to become a significant global player in the strategically important fluorspar mining business, Tertiary Minerals plc is pleased to announce a lease agreement and option to acquire a group of mining claims in Nevada ("the MB Property"), western USA which has potential to host a substantial fluorspar deposit of international significance.

The lease of the MB Property is in line with the Company's strategy to acquire and develop long-life fluorspar mining assets in stable, democratic, mining friendly jurisdictions.

The US Government considers fluorspar to be a strategic mineral. There is a large market for fluorspar in the US and around the Pacific Rim, but currently no significant US production.

### **Highlights:**

- Located 19km southwest of county mining town of Eureka, Nevada
- Exploration by Union Carbide and others suggests large tonnage potential
- Thick near-surface mineralisation - majority of mineralised holes bottomed in mineralisation
- Pacific coast shipping options also face Asian fluorspar markets.
- Company commencing three month due diligence review

Commenting today, executive Chairman Patrick Cheetham said "This acquisition follows several months of negotiations and comes hot on the heels of a positive technical and economic scoping study for our Lassedalen fluorspar project in Norway. Whilst the Board will not be diverted from its focus to develop the Company's key European fluorspar projects, it is anticipated that due diligence will confirm this to be an exciting project that will diversify the Company's fluorspar development options, increase its ability to supply additional markets and substantially add value to the business it is building."

### **ENQUIRIES:**

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## The MB Property

The MB Property lease and option agreement has been made by the Company's newly incorporated wholly-owned Nevada subsidiary, Tertiary Minerals US Inc., with private company claim holder Nevada Fluorspar LLC ("the Lessor").

The project claims are located 19km southwest of the town of Eureka in central Nevada. Eureka is on US Highway 50 and is the administrative centre for Eureka County which hosts a number of major mines including Barrick's Ruby Hill Mine and other major deposits such as General Moly's Mt. Hope porphyry molybdenum development.

Nevada is long recognised as one of the most attractive mining jurisdictions in the world and the most attractive in the USA. 85% of Eureka's inhabitants are employed in the mining industry.

The MB Property comprises 40 contiguous unpatented mining claims covering an area of 810 acres. The Company has paid US\$10,000 by way of an initial payment and paid claim fees in the amount of US\$5,600 for the claim year starting 1 September 2012.

The project lease and option agreement allows for a three-month due diligence period during which time the Company will evaluate the project in further detail. Further payments and work commitments will be due over time if the Company continues with the lease beyond the due diligence date. The majority of such future payments will be credited against a royalty payable to the Lessor on future production.

The lease has a term of 50 years, is renewable, and includes an option exercisable at any time for Tertiary to assume ownership of the claims for a nominal payment subject to the royalty and other commitments to the Lessor. Further details will be provided when the Company has satisfactorily concluded its due diligence evaluation.

### *Previous Exploration and Results*

The MB Property and surrounding area was explored in the 1960s by Union Carbide for beryllium and subsequently, it is believed for different commodities by a number of different companies including Asarco, Bear Creek Mining, U.S.Borax, Amselco and Arimetco. At least 108 drill holes have been reported by the US Geological Survey.

The majority of the field exploration on the property was carried out by Union Carbide (80 drill holes and 86 surface trenches). A large volume of Union Carbide exploration data is available and although beryllium was their main target, all drill holes were analysed for fluorite (CaF<sub>2</sub>).

Fluorspar was reportedly the main target for Asarco which drilled at least 15 holes in the area, defined a fluorspar resource and carried out open-pit design. <sup>1</sup>Barton (1987) has reported the MB fluorspar deposit to be among the largest fluorspar deposits in the world containing greater than 110 million tonnes of material grading more than 10% fluorite.

The source of this tonnage-grade estimate and its location relative to boundaries of the MB Property is unknown. The detailed Asarco exploration data has not yet been located and this estimate is almost certainly not compliant with any recognised reporting code. Nevertheless, the Union Carbide exploration data supports the potential for a large deposit within the MB Property and the information in this release is based on the Company's preliminary review of this data as well as published scientific papers.

At the MB Property fluorspar mineralisation occurs as a skarn-type replacement of limestone beneath a capping of impermeable quartzite associated with a flat-lying zone of thrusting. Beryllium mineralisation appears to occur in at least one steeply dipping fault zone that extends to surface through the quartzite. This was the main target for Union Carbide and so most of their drilling was shallow.

The average depth of the 80 Union Carbide drill holes was only 23m and only eight holes were deeper than 50m. Significant fluorite mineralisation was encountered in the majority of those holes that penetrated the quartzite cap rock and the majority of those ended in significant fluorite mineralisation. Examples of mineralised intersections include:

Hole No.	Fluorite Intersection	From (depth from surface)	Comment
49	13.7m grading 13.9% CaF <sub>2</sub>	30.0m to end of hole	Hole ended in mineralisation
62	18.3m grading 18.2% CaF <sub>2</sub>	4.60m to end of hole	Hole ended in mineralisation
83	29.0m grading 12.0% CaF <sub>2</sub>	Surface to end of hole	Hole ended in mineralisation
67	131.1m grading 8.1% CaF <sub>2</sub>	Surface to end of hole	Hole ended in mineralisation

The deepest hole drilled, Hole 67, attests to the large tonnage potential. From surface to a final depth of 131.1m this hole was mineralised throughout. The mineralised drill holes extend over an area of approximately 1,600m by 800m.

Whilst the deposit is of low grade, these dimensions confirm a significant tonnage target that is likely to be mineable by open pit methods with a similar grade to the Company's Storuman project in Sweden where a positive technical and economic scoping study has already been completed.

#### *Metallurgical Characteristics*

A programme of metallurgical testwork was carried out in the 1960s by the US Bureau of Mines (now disbanded) on two samples of fluorite ore grading 27.1% and 10.5%CaF<sub>2</sub>. High grade concentrates grading 96-98% CaF<sub>2</sub> were produced with recoveries from 85-94% at a coarse grind and with limited cleaning stages. This offers encouragement that an acid grade of fluorite can be produced from the deposit.

#### **Due Diligence**

During the next three months the Company will carry out a programme of due-diligence and will look to formulate plans for funding and management of the project such that it does not unduly compete for management time and funding resources which will continue to be focused on the Company's two advanced fluorite projects in Europe.

This will include various claim survey work, further compilation and modelling of historical data and transport studies. For any industrial minerals project transport costs are a significant factor. The project is close to an established highway network, 675km by road from the nearest Pacific port and 130km from the nearest railway.

#### Foot Notes

*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.*

<sup>1</sup> *Barton, M.D., Lithophile-element mineralisation associated with Late Cretaceous two-mica granites in the Great Basin. Geology, v.15, p 337-340, April 1987*

#### **Notes to Editors**

Tertiary Minerals plc (ticker symbol 'TYM') is an AIM-quoted mineral exploration and development company building a significant strategic position in the fluorite sector. Fluorite is an essential raw material in the chemical, steel and aluminium industries. Tertiary controls two significant Scandinavian projects (Storuman in Sweden and Lassedalen in Norway).