# Building a Strategic Position in the **Fluorspar Sector**

# **AIM Announcement**

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Minerals plc

17 June 2015

## TERTIARY MINERALS PLC ("Tertiary" or "the Company")

# JORC Compliant Mineral Resource Estimate Increase at MB Project 67% Increase in the Company's Total Fluorspar Mineral Resource

Tertiary Minerals plc, the AIM traded company building a strategic position in the fluorspar sector, is delighted to announce a substantial increase in the JORC<sup>2</sup> (2012) compliant Mineral Resource Estimate for its MB Fluorspar Project in Nevada, USA

#### HIGHLIGHTS:

Applying a 9% fluorspar (CaF<sub>2</sub>) Cut-Off Grade:

- JORC compliant Indicated and Inferred Mineral Resource Estimate 86.4 million tonnes grading 10.7% CaF<sub>2</sub>
- JORC compliant Indicated Mineral Resource Estimate 6.1 million tonnes grading 10.8% CaF<sub>2</sub>
- JORC compliant Inferred Mineral Resource Estimate 80.3 million tonnes grading 10.7% CaF<sub>2</sub>
- Contained fluorspar more than doubled for the MB Project and a 67% increase in the Company's total fluorspar Mineral Resource asset base – JORC<sup>2</sup> compliant
- > The MB Fluorspar Deposit remains open at depth and in all lateral directions

**Commenting on today's announcement Managing Director, Richard Clemmey** said: "We are delighted the detailed planning that has gone into the Phase 3 drilling programme has resulted in a significant increase in the Mineral Resource Estimate, thereby achieving the overall objective of the programme. Within a relatively short time frame the Company has transformed the original Tonnage-Grade Estimate into JORC<sup>2</sup> compliant Mineral Resources."

"The MB Deposit remains open at depth and laterally in all directions and therefore we are very excited about the sheer size potential of the MB Deposit and believe that, eventually, the deposit size will far exceed the current estimates."

"The higher fluorspar grades and thick intersections which have been encountered in the newly defined Western Area during Phase 3 leads the Directors to believe that this area is closer to the core of the mineralised system where higher grade fluorspar mineralisation might be expected. We believe that a programme of geophysical work on the deposit will improve the Company's understanding of the geology and structural controls and therefore lead to improved planning for the next phase of drilling with the aim of targeting higher grades of fluorspar and increasing the already large Mineral Resource Estimate. Details of the geophysical programme and future drilling will be announced in due course."

### **ENQUIRIES**

<b>Tertiary Minerals plc</b> Patrick Cheetham, Executive Chairman Richard Clemmey, Managing Director	Tel: +44 (0)845 868 4580
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#### **Detailed Information**

The MB Fluorspar Deposit is located 19km south-west of the town of Eureka in central Nevada, USA. Eureka is located on US Highway 50 and the main railroad is located 165 km to the north of the deposit providing bulk freight distribution to the east and west of the USA.

The Mineral Resource being reported today for the MB fluorspar Project has been prepared by Wardell Armstrong<sup>1</sup> International Limited (WAI) following the guidelines of the JORC<sup>2</sup> Code (2012).

The MB Deposit is a large fluorine rich skarn hosted by Ordovician age carbonate sedimentary rocks. The mineralised zone extends for more than a kilometre from the postulated position of an unexposed granite.

A series of drilling campaigns between the 1960s and the 1980s were completed by various owners, and outlined the potential of the deposit. Assays and geological information from this historical drilling is available but there is limited information on assay procedure and the core has not been located. In 2013 the Company completed a two phase drilling programme comprising of 26 holes and totalling 3,223m across three areas of the deposit and in 2014 completed a third phase of drilling of 9 holes totalling 2,516m. Information from these programmes forms the basis for the current Mineral Resource Estimate. Significant drilling results from the 2013 and 2014 campaign have been included in previous announcements made by the Company and a map showing the location of the 2013 and 2014 drill programmes and the Mineral Resource outline is available on the Company's website at:

http://www.tertiaryminerals.com/projects/fluorspar-projects/mb-fluorspar-nevada-usa

The Company adopted rigorous QAQC procedures for its sample analysis including field, preparation, internal and external pulp duplicates, blank samples and series of standard samples in line with best international practice. Results were generally satisfactory.

The Mineral Resource Estimate and classification has been prepared in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves JORC Code (2012). Sample data was imported and verified before mineralised zones were defined to a cut-off grade of 2.0% CaF<sub>2</sub>. Samples were composited and subsequently used to produce a Mineral Resource Estimate of the CaF<sub>2</sub> mineralisation at the MB Project using ordinary kriging as the principal estimation method.

The fundamental consideration to classify a Mineral Resource in accordance with guidelines of the JORC Code (2012) is that it has a "reasonable prospect for eventual economic extraction". Mineral Resources are classified, in order of increasing geological confidence, into Inferred, Indicated and Measured categories.

An 'Indicated Mineral Resource' is that part of a Mineral Resource for which continuity, grade (or quality), densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of Modifying Factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit. Geological evidence is derived from adequately

detailed and reliable exploration, sampling and testing gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes and is sufficient to assume geological and grade (or quality) continuity between points of observation where data and samples are gathered.

An 'Inferred Mineral Resource' is the part of a Mineral Resource for which quantity and grade (or quality) are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade (or quality) continuity. It is based on the exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes.

WAI considers that the MB Project has been sufficiently explored to estimate Indicated and Inferred Mineral Resources as defined by JORC Code (2012).

WAI has classified the area of the southern part of the MB Project where the 2013 drilling has been completed roughly on an 80m x 80m grid and at least three north-south profile lines have been completed as Indicated Resources. WAI has classified the remainder of the deposit as Inferred Resources generally where estimated blocks are within 120m of a 2013 or 2014 drill hole.

The Mineral Resource is restricted to all material falling within an optimised pit shell created in NPV Scheduler and above a cut-off grade of 9%  $CaF_2$ . The base of the pit has a maximum depth of approximately 300m from current surface. The Mineral Resource Estimate for the MB Project is shown below.

MB Deposit Mineral Resource Estimate, 16 <sup>th</sup> June 2015 Cut Off Grade 9% CaF <sub>2</sub> (in accordance with the guidelines of the JORC Code (2012)			
	Density (t/m³)	Tonnes (Mt)	CaF₂ (%)
Measured	-	-	-
Indicated	2.6	6.1	10.8
Inferred	2.6	80.3	10.7

The overall grade of the Mineral Resource can be increased by applying a different cut-off grade, for example changing the applied cut-off grade to 10% increases the total Mineral Resource grade to 11.5% CaF<sub>2</sub>.

MB Deposit Mineral Resource Estimate, 16 <sup>th</sup> June 2015 Cut Off Grade 10% CaF <sub>2</sub> (in accordance with the guidelines of the JORC Code (2012)			
	Density (t/m³)	Tonnes (Mt)	CaF₂ (%)
Measured	-	-	-
Indicated	2.6	4.2	11.4
Inferred	2.6	46.2	11.5

#### Further Work

The higher fluorspar grades and thick intersections which have been encountered in the Western Area during Phase 3 leads the Company to believe that this area is closer to the core of the mineralising system where the Directors believe that higher grade fluorspar mineralisation may be found. A programme of geophysical work on the deposit is planned to improve the Company's understanding of the geology and structural controls and therefore lead to improved planning for the next phase of drilling with the dual aims of targeting higher grades of fluorspar and increasing the already large Mineral Resource. Details of the geophysical programme and future drilling will be announced in due course.

#### Foot Notes

<sup>1</sup>The information in this document that relates to the MB Project Mineral Resource is based on information compiled by Mr Alan Clarke, a Competent Person who is a Fellow and Chartered Geologist of the Geological Society of London. Alan Clarke is employed by Wardell Armstrong International and has no interest in, and is entirely independent of Tertiary Minerals. Alan Clarke has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in JORC 2012. Alan Clarke consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

<sup>2</sup>JORC is the Australasian Code for 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.

#### JORC Mineral Resource Accompanying Statements:

1. Mineral Resources are not reserves until they have demonstrated economic viability based on a Feasibility study or pre-feasibility study.

2. Mineral Resources are reported inclusive of any reserves.

3. The effective date of the Mineral Resource is 16<sup>th</sup> June 2015.

4. All figures are rounded to reflect the relative accuracy of the estimate.

5. Mineral resources are limited to an optimised open pit shell based on appropriate economic and mining parameters.

6. Mineral Resources for the MB Project have been classified following the guidelines of the JORC Code (2012) by Alan Clarke, an independent Competent Person as defined by JORC.

7. The Mineral Resource estimate has not been affected by any known environmental, permitting, legal, title, taxation, socio-political, marketing or any other relevant issues.

The information in this release has been compiled and reviewed by Mr. Richard Clemmey (BSc, 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 & Mining.

Cautionary Note: Traditional analytical methods measure fluorine content and fluorite ( $CaF_2$  - fluorspar) contents are calculated on the assumption that all fluorine is present as fluorite. Metallurgical testwork reviewed by the Company suggests this is likely although small amounts of fluorine can occur in mica and other minerals commonly present in skarn mineralised systems.

#### **Notes to Editors**

Tertiary Minerals plc (ticker symbol 'TYM') is an AIM-traded 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. Tertiary controls two significant Scandinavian projects (Storuman in Sweden and Lassedalen in Norway) and a large deposit of strategic significance in Nevada USA (MB Project).

#### JORC Code, 2012 Table 1 – Technical Summary

Section 1: Sampling Techniques and Data
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Criteria	Commentary
Sampling techniques	<ul> <li>Sampling was carried out using a mix of diamond and RC drill holes drilled under contract by Boart Longyear. In total 2 x diamond and 33 x RC holes were drilled.</li> <li>Holes were sampled and assayed at 5 foot intervals.</li> <li>Sample preparation was carried out at American Assay Labs, Reno, USA with the phase 2 sample analysis being carried out at PANalytical, UK and the phase 3 sample analysis being carried out at Bureau Veritas, Perth, Australia. All laboratories hold ISO/IEC 17025 accreditation.</li> <li>Phase 2 samples were analysed using Pressed Pellet X-Ray Fluorescence (PPXRF) spectrometry with a subset being subject to check analysis using Fused Bead X-Ray Fluorescence (FBXRF). Phase 3 samples were analysed by FBXRF by Bureau Veritas, Perth and external check analysis by FBXRF at PANalytical, UK with a sub-set being subject to check analysis with Fluorine Ion Specific Electrode.</li> </ul>

Criteria	Commentary
Drilling techniques	<ul> <li>The 2 x diamond drill holes were drilled using a Boart Longyear LF70 track mounted rig, drilling at HQ diameter.</li> <li>The first two RC holes were drilled using a Foremost Explorer 1500</li> </ul>
	rig with a
	<ul> <li>5¾" hammer bit (146mm).</li> <li>The remaining RC drilling (31 holes), across phase 2 and phase 3</li> </ul>
	drilling, was carried out by Boart Longyear using a Foremost MPD 1500 tracked rig with a
	• 5 <sup>1</sup> / <sub>2</sub> " centre return hammer apart from one hole, 14TMBRC027,
	where a conventional RC hammer was used for the majority of the hole.
Drill sample	Drill core sample recovery was logged and recorded by field
recovery	<ul><li>technicians and subsequently entered into the drill hole database.</li><li>Core recovery was generally good and improved with depth.</li></ul>
Logging	<ul> <li>Core and RC chips were logged into an Excel spreadsheet logging system recording lithology, structure and alteration.</li> </ul>
	<ul> <li>Every metre of drilling at the MB Project has been logged to the</li> </ul>
	same criteria.
	<ul> <li>Core and RC chips were photographed as standard during the logging procedure.</li> </ul>
	Core is stored at American Assay Labs in Reno.
Sub-sampling techniques and	<ul> <li>Core samples were sawn using a diamond core saw or split using a v-splitter with half core being sent for sample preparation.</li> </ul>
sample preparation	RC samples were drilled wet and collected from a rig mounted
	<ul><li>rotary splitter.</li><li>Core and RC samples were crushed to 90% passing 10 mesh</li></ul>
	(2mm) before being passed through a Jones riffle splitter to provide
	a 250g sub-sample pulverized to 95% passing 150 mesh (105
	micron) from which 20g was selected for assay for phase 1 and phase 2 and 50g for phase 3.
	<ul> <li>183 field duplicate samples were taken at a rate of 1:20 from a</li> </ul>
	random point within a set of 20 during the standard field sampling procedure. Broad agreement was seen in the analysis of the field
	duplicate analysis results.
Quality of assay data and laboratory	<ul> <li>Samples were crushed and pulverized to produce a 250g sub- sample passing 105µm from which 20g (phase 1 and 2) or 50g</li> </ul>
tests	(phase 3) was selected for assay.
	<ul> <li>For the majority of samples for phase 1 and 2 CaF<sub>2</sub> grade was determined using Pressed Pellet X-Ray Fluorescence (PPXRF).</li> </ul>
	For phase 3 primary analysis was by Fused Bead X-Ray
	<ul><li>fluorescence (FBXRF).</li><li>Assay data quality was determined through submission of</li></ul>
	<ul> <li>Assay data quality was determined through submission of standards, blanks and duplicates.</li> </ul>
	• For the first phase of drilling (2 x diamond and 2 x RC holes) QAQC
	protocol consisted of 3 blanks, 13 laboratory duplicates and 16 standards per 100 samples.
	<ul> <li>For the second and third phase of drilling (31 RC holes) QAQC</li> </ul>
	protocol consisted of 2 x pulp duplicates, 2 x blanks, 6 x standards with 2 each of F=8.99% (AMIS250), F=3.00% (diluted AMIS250)
	<ul> <li>and F=15.80% (diluted SARM15).</li> <li>In addition field duplicates and preparation duplicates were also</li> </ul>
	analysed as part of the QAQC procedures.
	<ul> <li>In addition 5% of samples were also analysed using Fused Bead XRF for phase 2 drilling and for phase 3 drilling 5% of samples</li> </ul>
	were also analysed by Fluorine Ion Specific Electrode. These
	same check samples across all phases of drilling were also analysed at an external laboratory.
	<ul> <li>Field duplicates performed well demonstrating consistent</li> </ul>
	distribution of mineralisation across samples.
	<ul> <li>Preparation duplicates performed well demonstrating appropriateness of preparation procedure.</li> </ul>
	Pulp duplicates performed well demonstrating precision of the

Criteria	Commentary
	<ul> <li>assaying method.</li> <li>Analysis between method duplicates indicated a bias towards PPXRF analysis returning higher grades when compared to FBXRF pointing to a potential inaccuracy in the assaying method.</li> <li>Blank samples performed well indicating little contamination.</li> <li>The between laboratory duplicates performed satisfactorily demonstrating no bias between laboratories.</li> <li>The AMIS 250 standard performed well using PPXRF and FBXRF.</li> <li>Diluted standards performed well using FBXRF but over reported using PPXRF. This is likely due to particle size effects or mineralogical effects as a result of the dilution using silica flour.</li> </ul>
Verification of sampling and assaying	<ul> <li>WAI inspected two diamond core drill holes in their entirety to compare logged lithology with drill core. WAI also inspected RC samples for comparison against logging. No issues were found.</li> <li>Twin holes were drilled to compare results of RC and diamond core holes.</li> <li>No twin holes were drilled for verification purposes against historical data but this historical data has not been used in the Mineral Resource Estimate.</li> <li>No adjustments to assay data have been made.</li> </ul>
Location of data points	<ul> <li>32 of 35 holes were surveyed downhole using a multi-shot Reflex MEMS Gyro tool at intervals of 50 feet.</li> <li>Two holes were not surveyed downhole as they were plugged before the arrival of the survey technician. One hole was not surveyed downhole after rods had to be blasted free after sticking during drilling.</li> <li>Downhole surveys were checked mathematically and visually for excessive deviation. No problems were identified.</li> <li>Drill hole collars were surveyed in co-ordinate system NAD83 Zone 11 using a Differential Global Positioning System DGPS. One hole was not surveyed with DGPS due to heavy snow cover. This hole was one of the twinned pairs and the collar co-ordinates for the twinned DC hole were used for its location during Mineral Resource Estimation.</li> <li>Topographic data was downloaded from the USGS National Map Website and forms part of the NED dataset (National Elevation Database). Data was provided in raster format and converted to XYZ ASCII by taking the midpoint of the cells. Accuracy of data is stated at 1/3 arc second.</li> </ul>
Data spacing and distribution	<ul> <li>Drilling of 16 holes in the south area of the MB Project has been completed on a grid at 80-120m spacing with 3 roughly N-S profiles with 4-6 holes on each with one set of twin holes.</li> <li>Across the rest of the deposit drilling has generally been completed on a spacing of 200-250m with one set of twin holes.</li> <li>Drilling was roughly vertical with little downhole variation in inclination and samples were taken at 5ft intervals.</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>The majority of the drilling (that covering the southern part of the project) has been completed on a grid at approximately 80m centres.</li> <li>Drilling was carried out roughly vertically from surface.</li> <li>There is no expected bias due to the orientation of the drilling with respect to the orientation of the mineralisation.</li> </ul>
Sample security	<ul> <li>Samples were transported directly from site to the preparation laboratory by the supervising geologist during Phase 1 and Phase 2 drilling. For Phase 3 drilling samples were collected from the field by AAL, the laboratory conducting sample preparation.</li> <li>Samples are logged into a laboratory information management system.</li> <li>Whilst in storage samples were kept in a secure area.</li> <li>Chain of custody between laboratories is managed by Tertiary.</li> </ul>

Criteria	Commentary
Audits or reviews	<ul> <li>Internal audits are conducted by all of the analytical laboratories used.</li> </ul>

Database integrity <ul> <li>The project database is held in Excel spreadsheets.</li> <li>Data held includes; collar location, downhole surveys, assay information, duplicate sample, standards and blank sample results and geological logging was initially completed on paper but a standard logging template was subsequently set up and used in excel format.</li> <li>Validation of the database was carried out during import of the data in to CAE Mining Studio 3 for production of the Mineral Resource Estimate, on major issues were found.</li> </ul> Site visits              The Competent Person visited site between 11 <sup>th</sup> and 12 <sup>th</sup> March 2014. The site visit included a general walkover of the project markers and a visit to the sample preparation laboratory to view drill core and RC samples. No site visit was carried out subsequent to the 2014 drilling as no material changes were deemed to have occurred.           Geological interpretation              The confidence in the geological formation is considered reasonable.            The googlogical setting is thought to be a skarn type deposit with fluorine mineralisation developed in a series of Ordovician marine sediments, primarily limestone of the Pogoica true ka Quartzite, a calcareous unit possibly formed as the result of the formation of dissolution cavilies.           Garnet alteration has been logged in holes in the west of the contral zone of drilling usually associated with higher temperature atteration and possibly indicating proximity to the source of the formation is considered reace of the formation is considered reace of the dilling usually associated with higher temperature atteration and possibly indicating proximity to the source of the formation of dissolution cavi	Criteria	Commentary
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Site visits       • The Competent Person visited site between 11 <sup>th</sup> and 12 <sup>th</sup> March 2014. The site visit included a general walkover of the project area, a field inspection of regional geology, inspecting drill hole markers and a visit to the sample preparation laboratory to view drill core anc RC samples. No site visit was carried out subsequent to the 2014 drilling as no material changes were deemed to have occurred.         Geological interpretation       • The confidence in the geological formation is considered reasonable.         • The geological setting is thought to be a skarn type deposit with fluorine mineralisation developed in a series of Ordovican marine sediments, primarily limestone of the Pogonip Group with some developed in the Copenhagen formation in the overlying Eureka Quartzite, a calcareous unit possibly formed as the result of the formation of discolution cavities.         • Garnet alteration has been logged in holes in the west of the central zone of drilling usually associated with higher temperature alteration and possibly indicating proximity to the source of the fluorspar mineralisation assumed to be a Cretaceous age granite.         • Geological logging has been carried out from drill core and RC samples.       • The Mineral Resource defined by the Tertiary drilling modelled as a single continuous area. The dimensions of the modelled mineralisation is open in all directions from the limit of the Mineral Resource model.         Dimensions       • The Mineral Resource defined to approximately 550-580m below current surface levels.         • Mineralisation is open in all directions from the limit of the Mineral Resource model.         • Ordinary kriging was used for estimation of CaF <sub>2</sub> % using CAE Mining Studio 3 software.	Database integrity	<ul> <li>Data held includes; collar location, downhole surveys, assay information, duplicate sample, standards and blank sample results and geological logging.</li> <li>Geological logging was initially completed on paper but a standard logging template was subsequently set up and used in excel format.</li> <li>Validation of the database was carried out during import of the data in to CAE Mining Studio 3 for production of the Mineral Resource</li> </ul>
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interpretation       reasonable.         The geological setting is thought to be a skarn type deposit with fluorine mineralisation developed in a series of Ordovician marine sediments, primarily limestone of the Pogonip Group with some developed in the Copenhagen formation in the overlying Eureka Quartzite, a calcareous unit possibly formed as the result of the formation of dissolution cavities.         Garnet alteration has been logged in holes in the west of the central zone of drilling usually associated with higher temperature alteration and possibly indicating proximity to the source of the fluorspar mineralisation assumed to be a Cretaceous age granite.         Geological logging has been carried out from drill core and RC samples.         Geological logging was used to define sub-domains within the overall model.         Dimensions       The Mineral Resource defined by the Tertiary drilling modelled as a single continuous area. The dimensions of the modelled mineralisation is open in all directions from the limit of the Mineral Resource model.         Estimation and modeling techniques       Ordinary kriging was used for estimation of CaF <sub>2</sub> % using CAE Mineralisation is open in all directions from the limit of infill drilling defining mineralisation between the previously modelled southerm and central areas.         Grade capping: No grade capping was applied as no outlier values were found after assessment of the assay database.         Composites: 5 foot composites were created using lithological wireframes as a control.         Variography: A variographic study resulted in reasonably robustly structured direction variograms but these are likely influenced by the relatively wide drill hole spacing and drill grid ori		2014. The site visit included a general walkover of the project area, a field inspection of regional geology, inspecting drill hole markers and a visit to the sample preparation laboratory to view drill core and RC samples. No site visit was carried out subsequent to the 2014 drilling as no material changes were deemed to have occurred.
<ul> <li>The geological setting is thought to be a skarn type deposit with fluorine mineralisation developed in a series of Ordovician marine sediments, primarily limestone of the Pogonip Group with some developed in the Copenhagen formation in the overlying Eureka Quartzite, a calcareous unit possibly formed as the result of the formation of dissolution cavities.</li> <li>Garnet alteration has been logged in holes in the west of the central zone of drilling usually associated with higher temperature alteration and possibly indicating proximity to the source of the fluorspar mineralisation assumed to be a Cretaceous age granite.</li> <li>Geological logging has been carried out from drill core and RC samples.</li> <li>Geological logging was used to define sub-domains within the overall model.</li> <li>Dimensions</li> <li>The Mineral Resource defined by the Tertiary drilling modelled as a single continuous area. The dimensions of the modelled mineralisation is currently defined to approximately 550-580m below current surface levels.</li> <li>Mineralisation is open in all directions from the limit of the Mineral Resource model.</li> <li>Ordinary kriging was used for estimation of CaF<sub>2</sub>% using CAE Mining Studio 3 software.</li> <li>Ordinary kriging was used for estimation of CaF<sub>2</sub>% using CAE Mining Studio 3 software.</li> <li>Grade capping: No grade capping was applied as no outlier values were found after assessment of the assay database.</li> <li>Grade capping: No grade capping was applied as no outlier values were found after assessment of the assay database.</li> <li>Composites: 5 foot composites were created using lithological wireframes as a control.</li> <li>Variography: A variographic study resulted in reasonably robustly structured directional variograms but these are likely influenced by the relatively wide drill hole spacing and drill grid orientation.</li> <li>Estimation. Estimation was carreid out using Ordinary kriging as the primary method. In</li></ul>		5 5
Dimensions       • The Mineral Resource defined by the Tertiary drilling modelled as a single continuous area. The dimensions of the modelled mineralisation are from 500m to 1,400m east-west and 1,600m maximum north-south.         • Mineralisation is currently defined to approximately 550-580m below current surface levels.       • Mineralisation is open in all directions from the limit of the Mineral Resource model.         Estimation and modelling techniques       • Ordinary kriging was used for estimation of CaF <sub>2</sub> % using CAE Mining Studio 3 software.         • Domains: A single domain was created as a result of infill drilling defining mineralisation between the previously modelled southern and central areas.         • Grade capping: No grade capping was applied as no outlier values were found after assessment of the assay database.         • Composites: 5 foot composites were created using lithological wireframes as a control.         • Variography: A variographic study resulted in reasonably robustly structured directional variograms but these are likely influenced by the relatively wide drill hole spacing and drill grid orientation.         • Estimation: Estimation was carried out using Ordinary kriging as the primary method. Inverse distance (squared) and Nearest Neighbour estimates were carried out for validation purposes.	Interpretation	<ul> <li>The geological setting is thought to be a skarn type deposit with fluorine mineralisation developed in a series of Ordovician marine sediments, primarily limestone of the Pogonip Group with some developed in the Copenhagen formation in the overlying Eureka Quartzite, a calcareous unit possibly formed as the result of the formation of dissolution cavities.</li> <li>Garnet alteration has been logged in holes in the west of the central zone of drilling usually associated with higher temperature alteration and possibly indicating proximity to the source of the fluorspar mineralisation assumed to be a Cretaceous age granite.</li> <li>Geological logging has been carried out from drill core and RC samples.</li> <li>Geological logging was used to define sub-domains within the</li> </ul>
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<ul> <li>Maximum extrapolation distance: Up to 120m from nearest 2013 or</li> </ul>		<ul> <li>Domains: A single domain was created as a result of infill drilling defining mineralisation between the previously modelled southern and central areas.</li> <li>Grade capping: No grade capping was applied as no outlier values were found after assessment of the assay database.</li> <li>Composites: 5 foot composites were created using lithological wireframes as a control.</li> <li>Variography: A variographic study resulted in reasonably robustly structured directional variograms but these are likely influenced by the relatively wide drill hole spacing and drill grid orientation.</li> <li>Estimation: Estimation was carried out using Ordinary kriging as the primary method. Inverse distance (squared) and Nearest</li> </ul>

Criteria	Commentary
	<ul> <li>historical drilling.</li> <li>A block size of 40m (X) x 40m (Y) x 10m (Z) was used in this model. This compares to an average drill hole spacing of 80m x 80m in the southern part of the deposit and an assumed bench height of 10m. Estimation was carried out in to parent cells only.</li> <li>No previous mining has taken place at site and so no reconciliation study was possible.</li> <li>No assumptions were made regarding the recovery of by-products.</li> <li>The block model was verified by comparing drill hole assays with modelled values visually and statistically by zone. Grade profile plots were also constructed to compare modelled grades and input composite grades.</li> </ul>
Moisture	Tonnage is estimated on a dry basis using a bulk in-situ density. No moisture content has been measured.
Cut-off parameters	<ul> <li>The Mineral Resource is restricted to all material falling within an NPV Scheduler pit shell, as described below, and above 9% CaF<sub>2</sub>.</li> </ul>
Mining factors or assumptions	<ul> <li>The project is deemed to be appropriate to being mined by standard open pit operations.</li> <li>Reported Mineral Resources were limited by an optimised open pit shell created using appropriate technical and economic parameters. These economic parameters are not reported here due to their sensitive commercial nature.</li> </ul>
Metallurgical factors or assumptions	<ul> <li>No metallurgical test work is available from the recent drilling by Tertiary. Samples have been selected for this analysis but results are not yet available. During the creation of an optimized open pit shell for limiting the reporting of Mineral Resources a processing recovery figure of 80% was used based on publicly available reports from Fluorspar operations worldwide.</li> </ul>
Environmental factors or assumptions	<ul> <li>No environmental studies have been conducted to determine impact of mining operations.</li> <li>It is assumed that the area of the MB Project will provide sufficient space for waste and process residue.</li> </ul>
Bulk density	<ul> <li>Tertiary submitted 27 samples from the 2 core drill holes for density measurement based on the standard Archimedes Principle.</li> <li>Samples were a mixture of Eureka Quartzite and Pogonip Formation.</li> <li>Density was assigned to the block model using average values for each major lithology. Density for overburden was assumed.</li> </ul>
Classification	<ul> <li>Classification was based on sample density and confidence in the geological and grade continuity.</li> <li>A portion of the southern area was classified as indicated. The deposit was classified as indicated where the sample spacing was approximately 80m x 80m and at least 3 complete north-south exploration profiles had been completed.</li> <li>The remainder of the deposit was classified as inferred generally up to 120m from the nearest recent drilling.</li> <li>The Mineral Resource estimate reflects the Competent Person's views of the MB Deposit.</li> </ul>
Audits or reviews	<ul> <li>WAI is not aware of any audits or reviews of this or any previous Mineral Resource Estimates.</li> </ul>
Discussion of relative accuracy/ confidence	<ul> <li>The relative accuracy and confidence in the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as set out in the JORC Code (2012).</li> <li>It is not deemed appropriate at this stage to conduct a geostatistical study to quantify the relative accuracy of the resource.</li> <li>The statement relates to global estimates of tonnes and grade.</li> <li>No production data is available for the MB Project as it has not previously been mined and hence no comparison of production data is possible.</li> </ul>