

## AIM Announcement

29 November 2012

TERTIARY MINERALS PLC  
[www.tertiaryminerals.com](http://www.tertiaryminerals.com)  
("the Company")

### MB Project Review Defines Fluorspar Deposit with World Class Potential

Further to the Company's announcement on 3 September of the acquisition of the MB fluorspar project in Nevada USA ("the MB Project"), Tertiary Minerals plc is delighted to announce the results of its due diligence review which defines a major fluorspar deposit that, the Company believes, could have world class potential.

#### HIGHLIGHTS:

- Newly acquired data reveals widespread thick and flat-lying zones of open-pit mineable fluorspar mineralisation not bottomed by the majority of vertical drill holes e.g.:  
*50 metres grading 12.3% CaF<sub>2</sub> from 1.5 metres deep to end of Asarco hole A4*  
*75 metres grading 10.9% CaF<sub>2</sub> from 6.1 metres deep to end of Union Carbide hole DHB77*  
*125 metres grading 11.6% CaF<sub>2</sub> from 9.1 metres deep to end of Asarco hole A1*
- Significant drilling results extend over an area of 1.5km by 1.5km and between surface and at depths of at least 400m. Mineralisation remains open in all directions.
- Claim block doubled with additional 49 claims staked for total claim area of 1,712 acres.
- Zinc, beryllium and molybdenum values in some drill holes may be significant.

The acquisition of the MB Project is in line with the Company's strategy to build and develop a portfolio of long-life, high value fluorspar resources in stable, democratic and 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.

Commenting today, Executive Chairman Patrick Cheetham said: **"When we announced the MB Project in September we only had access to data from 84 mostly shallow holes drilled in the 1960s on the periphery of the deposit with one or two deeper holes suggesting the *potential* for a large deposit."**

**"We have since unearthed data from an additional 24 deeper drill holes located throughout the mineralisation which now confirm it to be a major fluorspar deposit. Whilst check infill drilling is required to define a code-compliant Mineral Resource, the Company believes the MB deposit could rank amongst the largest fluorspar deposits in the World."**

The Company has advised the claim owner, Nevada Fluorspar LLC, that its due diligence is complete and that the lease/option agreement is no longer conditional.

A map and three cross sections illustrating the scale of mineralisation can be seen on the following pages. More detailed information and a complete tabulation of significant drilling results follow the maps and cross sections.

### **ENQUIRIES:**

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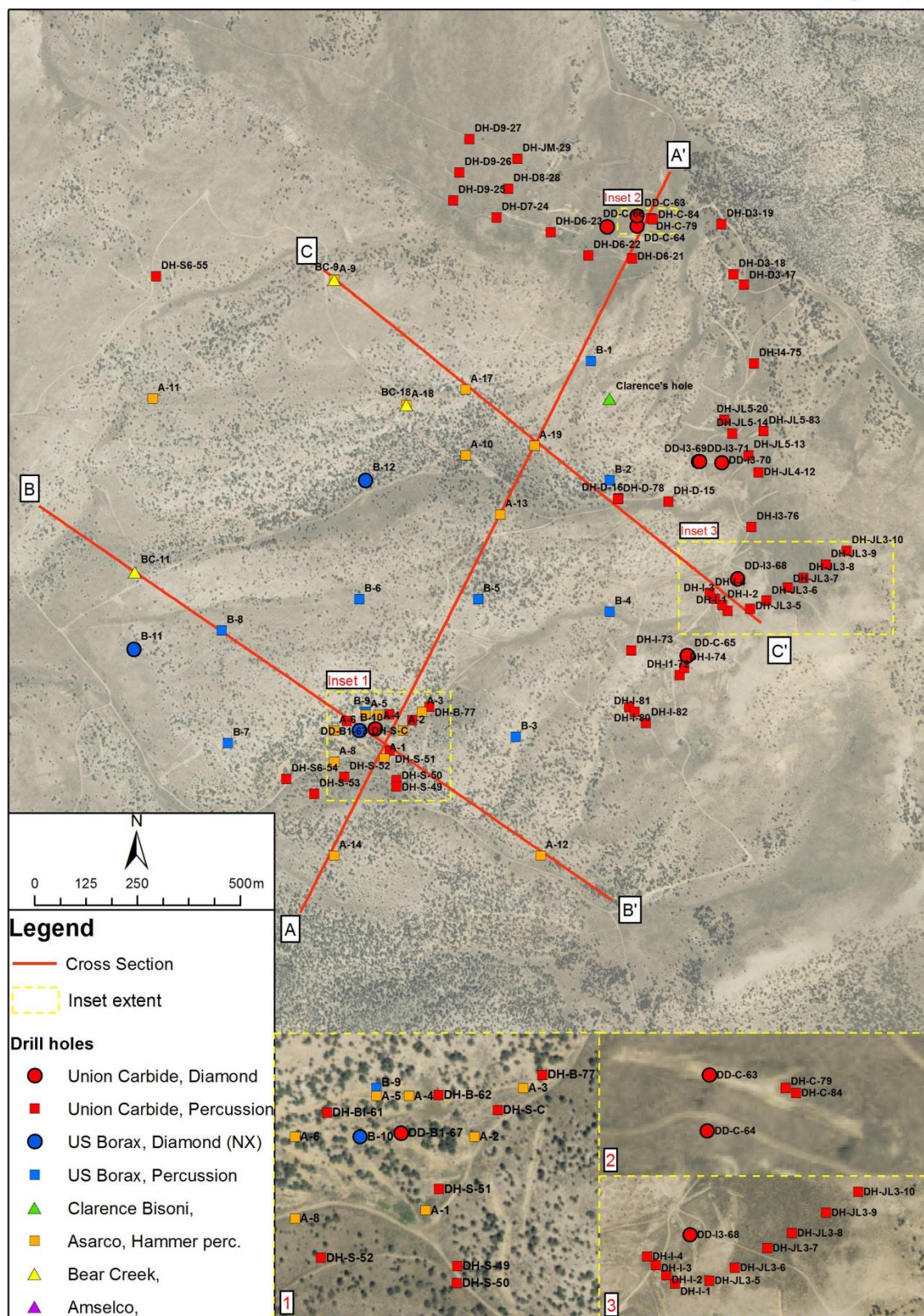
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### **CONTENTS FOLLOWING:**

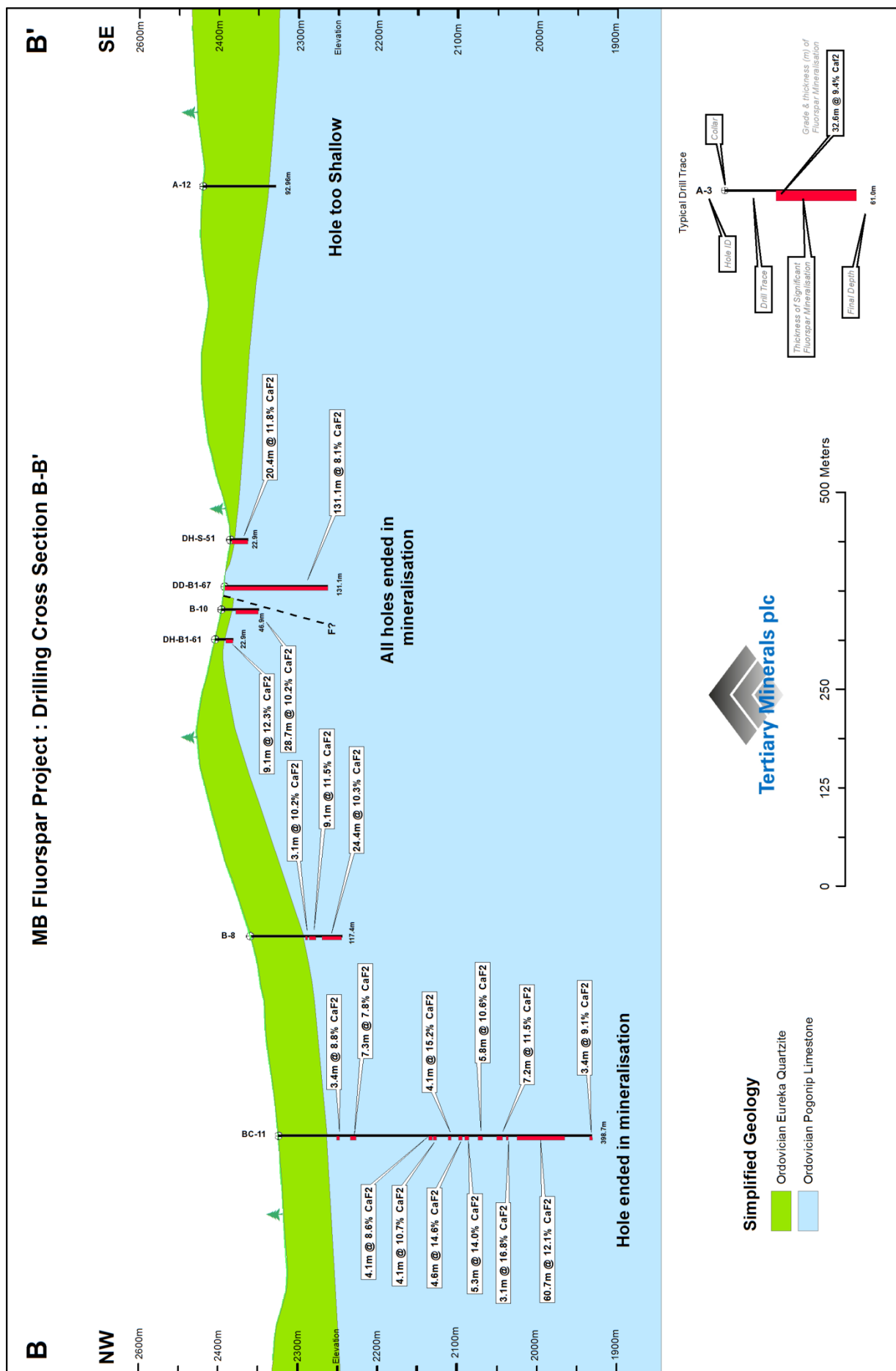
- ❖ MB Fluorspar Project : Historic Drill Plan.
- ❖ MB Fluorspar Project : Drilling Cross Section A-A'.
- ❖ MB Fluorspar Project : Drilling Cross Section B-B'.
- ❖ MB Fluorspar Project : Drilling Cross Section C-C'.
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- ❖ Notes to Editors.
- ❖ Table - Summary of Significant drill intersections.



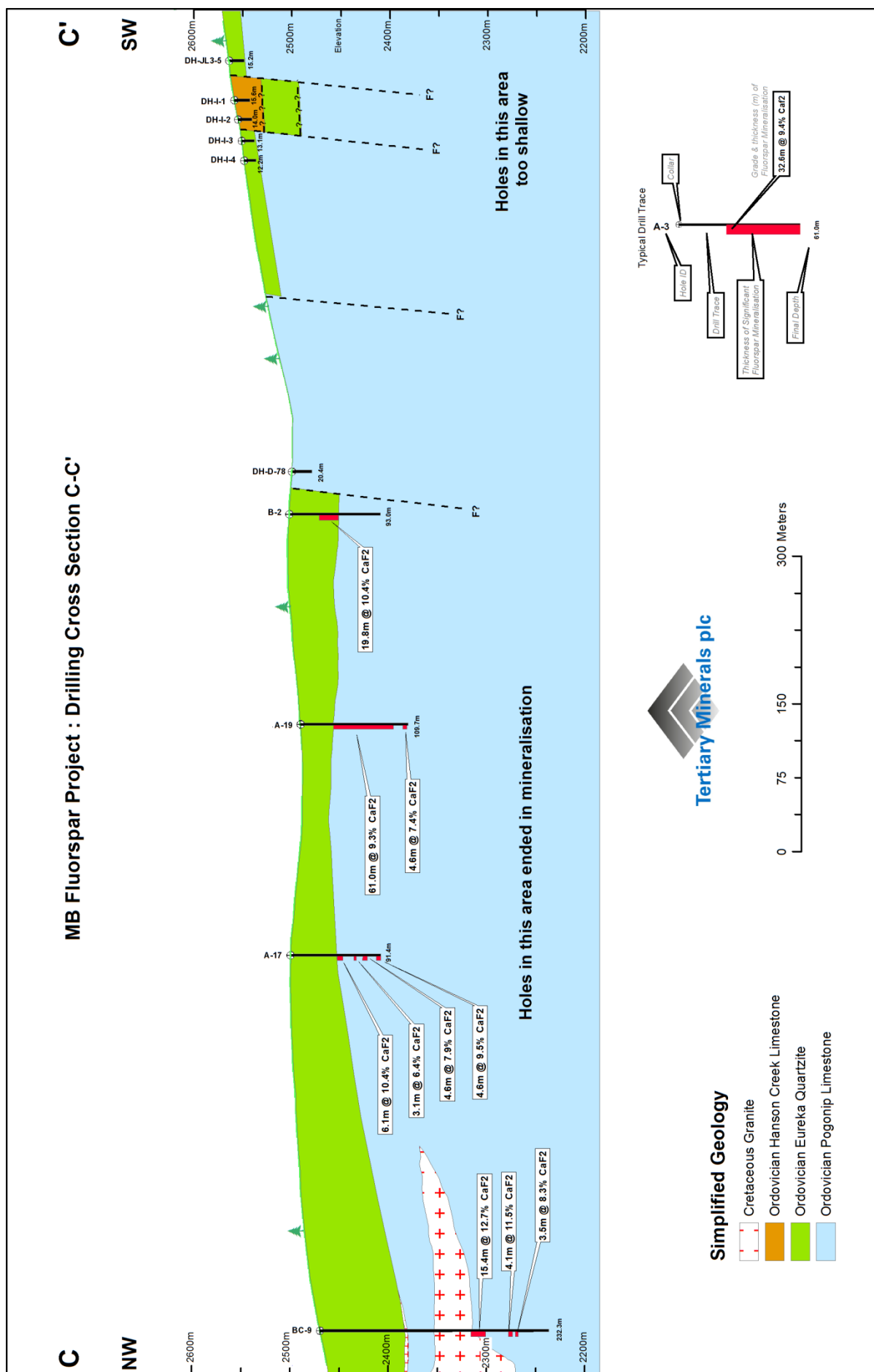
# MB Fluorspar Project : Historic Drill Plan











## **Detailed Information**

The MB Project claims are located in an area of good infrastructure 19km southwest of the County town of Eureka in central Nevada, USA.

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.

### ***Historic Exploration Results***

The MB Property was first explored in the 1960s by Union Carbide for beryllium and subsequently for different commodities by a number of different companies including Asarco, Bear Creek Mining, U.S.Borax, Amselco, Arimetco and Homestake. A total of 108 drill holes were completed.

In Nevada there is no requirement for exploration companies to submit results to Government and so historical exploration data is often difficult to obtain and sometimes lost. When the acquisition of the MB Project was announced on 3 September 2012 only the Union Carbide exploration data was available. This comprised data from 84 mostly shallow holes (average depth 23m) drilled around the periphery of the deposit as it is now known.

Over the past three months the Company has been able to source all of the drill results of the subsequent explorers, which although mainly exploring for other commodities, included fluorspar (fluorine) in their analyses. Most of this additional drilling was significantly deeper than the Union Carbide drilling and builds a clearer picture of the large scale of the mineralisation. The data includes a report by Asarco which refers to a tonnage-grade estimate of 110 million tonnes grading 10%  $\text{CaF}_2$ . All of the Asarco drilling falls within the Property. Drilling carried out after Asarco included even deeper drilling by Bear Creek Mining which shows that fluorspar mineralisation was continuing at the end of holes nearly 400m deep.

All significant drill results are shown in the attached table. Significant drilling results extend over an area of ***1.5km by 1.5km with drill intersections both from surface and at depths of up to 400m. Drill intersections in the range of 20-130m thick grading c.10% fluorspar are numerous and the majority of such holes ended in fluorspar mineralisation.*** Higher grade intersections are also reported ***e.g. 13.7m grading 21.3%  $\text{CaF}_2$  from 44.20m in Asarco hole A10 and 14.9m grading 20.6%  $\text{CaF}_2$  from 331 metres in Bear Creek hole BC11.***

### ***Geology & Style of Mineralisation***

At the MB Project flat lying fluorspar mineralisation occurs as a skarn-type replacement of flat lying limestone beneath a quartzite cap. The source of the mineralising fluids in skarn systems is usually a granite intrusive and mineral grades tend to increase where fluid flows are focused or pooled – for example at impermeable barriers such the overlying quartzite. The style of mineralisation also tends to change with distance from the source intrusion and is often higher grade, sometimes with associated base or precious metal mineralisation, proximal to the source granite and lower grade in more distal zones. The source granite has not yet been intersected and so there is an exciting additional target for high grade mineralisation in proximal zones not yet tested by drilling.

Whilst most holes were analysed for fluorspar, assaying for other elements has been sporadic. Nevertheless there are results showing ore-grade beryllium ***e.g.:***

***11.9m grading 0.42% beryllium oxide in Bear Creek hole BC11 from 386.8m to base of hole,***

***and highly anomalous zinc and molybdenum e.g.:***

***10.5m grading 2.49% zinc from 157.86m in Bear Creek hole BC9 &  
3.0m grading 0.56% molybdenum from 103.6m in Asarco holes A10.***

**Further Work**

The Company has been unable to locate historic drill core or other drill samples from the MB Project. They may not have been preserved. Consequently the Company is not currently in a position to carry out any re-sampling of historic samples to generate comparative data that would allow the historical results to be used in a modern estimate of a code-compliant Mineral Resource. However, it is anticipated that the available data is sufficiently detailed to allow a compliant tonnage-grade range estimate to be produced and classified as an Exploration Target under <sup>1</sup>JORC. Quotes are now being obtained for this work.

It is anticipated that only limited infill drilling will then be needed to define a JORC Compliant Mineral Resource.

**Project Claims & Terms of Acquisition Terms**

The MB Project is held by the Company under a Lease/Option Agreement from private company Nevada Fluorspar LLC ("Lessor"). Payments and expenditure commitments were subject to the Company completing satisfactory due diligence by 30<sup>th</sup> November 2012.

In addition to compiling and reviewing historical data the Company has carried out a legal compliance review of the claims and staked a further 49 claims to extend the property. The MB Project now comprises 89 contiguous unpatented mining claims covering an area of 1,712 acres.

The Company has advised the Lessor that its due diligence is complete and that the agreement is no longer conditional and it has made the requisite payment of US\$30,000 to the Lessor.

In order to maintain its interest in the lease agreement in future years the Company must make quarterly payments of US\$6,250 from 30 November 2013 rising in annual increments up to US\$50,000 from 30 November 2021. It must also commit to annual exploration expenditures of US\$150,000 by 30 November 2013 rising in annual increments up to US\$500,000 by 30 November 2016.

The Company is also required to issue 500,000 new ordinary shares in the Company to the Lessor on 30 November 2013.

The Lessor is also due a 3% Net Revenue Royalty on production and the annual payments will be credited towards this royalty. Payments and annual expenditure commitments will cease when a decision has been made to commence commercial mining operations based on a detailed feasibility study and all permit applications have been submitted.

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 payment of \$1,000. The Company can withdraw from the lease/option agreement at any time.

**Foot Notes**

1. 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 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.
3. Cautionary Note: The analytical (assay) results referred to in this release are based on historic exploration company data. The Company has not yet been able to locate original samples for check analysis. Analytical methods used at the Project in the past are not completely documented and whilst there is no reason to doubt that the data reflects the results obtained, no statement can be made regarding the reliability of historic analytical data. Traditional analytical methods measure fluorine content and fluorite (CaF<sub>2</sub>, fluorspar) contents are calculated on the assumption that all fluorine is present as fluorite. Metallurgical testwork reviewed by the Company suggest 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-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. Tertiary controls two significant Scandinavian projects (Storuman in Sweden and Lassedalen in Norway) and, now, a large deposit of strategic significance in Nevada USA (MB Project).

## MB Project: Summary of Significant drill intersections

("Significant" = 6% cut-off, and including 10% cut-off, both minimum 3m thickness)

Company	Drill Hole Number		Down Hole Thickness	Grade Fluorspar CaF2 (%)	From (m)	To (m)	Hole Depth (m)	Comment
Bear Creek	BC-9		15.39	12.7	152.86	167.94	232.26	
		inc.	5.94	19.4	152.86	158.80		
		and	4.11	11.5	190.96	195.07		
		and	3.35	8.3	197.82	201.17		
Bear Creek	BC-11		3.35	8.8	74.37	77.72	398.68	Significant mineralisation to EOH
		and	7.32	7.8	91.44	98.76		
		and	4.11	8.6	191.26	195.38		
		and	4.11	10.7	196.75	200.86		
		and	4.11	15.2	215.49	219.61		
		and	4.57	14.6	228.60	233.17		
		and	5.33	14.0	236.98	242.32		
		and	5.79	10.6	253.59	259.38		
		and	7.16	11.5	277.06	284.23		
		and	3.05	16.8	288.95	292.00		
		and	<b>60.66</b>	<b>12.1</b>	<b>302.97</b>	<b>363.63</b>		
		inc.	7.32	21.2	302.97	310.29		
		inc.	14.94	20.6	331.01	345.95		
		and	3.35	9.1	395.33	398.68		
Asarco	A-18		6.10	7.1	50.29	56.39	108.20	Significant mineralisation to EOH
		and	<b>32.00</b>	<b>11.8</b>	<b>76.20</b>	<b>108.20</b>		
Bear Creek	BC-18	and	3.05	10.3	111.25	114.30	434.64	Drilled from base Asarco A-18
		and	12.19	9.4	117.35	129.54		
		and	3.05	10.9	137.16	140.21		
		and	7.62	8.7	146.30	153.92		Mineralised at EOH
Bisoni	Clar.		<b>41.15</b>	<b>10.6</b>	<b>73.15</b>	<b>114.30</b>	118.87	Mineralised at EOH
		inc.	9.14	19.1	73.15	82.30		
Asarco	A-1		<b>32.00</b>	<b>10.0</b>	<b>15.24</b>	<b>47.24</b>	60.96	Mineralised at EOH
Asarco	A-2		<b>50.29</b>	<b>12.2</b>	<b>1.52</b>	<b>51.82</b>	60.96	Mineralised at EOH
		inc.	<b>18.29</b>	<b>16.1</b>	<b>1.52</b>	<b>19.81</b>		
Asarco	A-3		<b>54.86</b>	<b>9.4</b>	<b>6.10</b>	<b>60.96</b>	60.96	Significant Mineralisation to EOH
Asarco	A-4		<b>51.82</b>	<b>12.3</b>	<b>9.14</b>	<b>60.96</b>	60.96	Significant Mineralisation to EOH
		inc.	15.24	18.0	13.72	28.96		
Asarco	A-5		53.34	9.7	7.62	60.96	60.96	Significant Mineralisation to EOH
Asarco	A-6		<b>22.86</b>	<b>8.7</b>	<b>13.72</b>	<b>36.58</b>	60.96	Mineralised at EOH
		inc.	9.14	9.8	41.15	50.29		
Asarco	A-8		7.62	7.6	12.19	19.81	60.96	Significant Mineralisation to EOH
		and	4.57	9.9	24.38	28.96		
		and	6.10	7.5	42.67	48.77		
		and	3.05	7.9	57.91	60.96		
Asarco	A-10		<b>124.97</b>	<b>11.6</b>	<b>9.14</b>	<b>134.11</b>	134.11	Significant Mineralisation to EOH
		inc.	13.72	21.3	44.20	57.91		
		inc.	<b>28.96</b>	<b>16.7</b>	<b>62.48</b>	<b>91.44</b>		
Asarco	A-11		3.05	7.3	54.86	57.91	99.06	Mineralised at EOH
		and	6.10	8.9	59.44	65.53		

Company	Drill Hole Number		Down Hole Thickness	Grade Fluorspar CaF2 (%)	From (m)	To (m)	Hole Depth (m)	Comment
Asarco	A-13		6.10	7.7	56.39	62.48	86.87	Significant Mineralisation to EOH
		and	19.81	10.2	67.06	86.87		
Asarco	A-17		6.10	10.4	47.24	53.34	91.44	Significant Mineralisation to EOH
		and	3.05	6.4	64.01	67.06		
		and	4.57	7.9	73.15	77.72		
		and	4.57	9.5	86.87	91.44		
Asarco	A-19		<b>60.96</b>	<b>9.3</b>	<b>33.53</b>	<b>94.49</b>	109.73	Mineralised at EOH
		and	4.57	7.4	103.63	108.20		
US Borax	B-2		19.81	10.4	30.48	50.29	92.96	Mineralised at EOH
		inc.	3.05	23.1	47.24	50.29		
US Borax	B-4		3.05	13.6	85.34	88.39	108.20	Mineralised at EOH
US Borax	B-5		3.05	7.8	39.62	42.67	99.06	Significant Mineralisation to EOH
		and	<b>36.58</b>	<b>10.1</b>	<b>62.48</b>	<b>99.06</b>		
US Borax	B-6		<b>42.67</b>	<b>10.4</b>	<b>56.39</b>	<b>99.06</b>	99.06	Significant Mineralisation to EOH
US Borax	B-7		<b>38.10</b>	<b>7.2</b>	<b>53.34</b>	<b>91.44</b>	111.25	Mineralised at EOH
US Borax	B-8		3.05	10.2	70.10	73.15	117.35	Mineralised at EOH
		and	9.14	11.5	74.68	83.83		
		and	<b>24.38</b>	<b>10.3</b>	<b>91.44</b>	<b>115.82</b>		
		inc.	3.05	22.9	108.20	111.25		
US Borax	B-9		9.14	11.3	16.76	25.91	117.35	Mineralised at EOH
		and	<b>65.53</b>	<b>8.9</b>	<b>28.96</b>	<b>94.49</b>		
		inc.	<b>21.34</b>	<b>12.2</b>	<b>30.48</b>	<b>51.82</b>		
US Borax	B-10		<b>28.65</b>	<b>10.2</b>	<b>18.29</b>	<b>46.94</b>	46.94	Significant Mineralisation to EOH
US Borax	B-12		<b>36.58</b>	<b>9.8</b>	<b>18.29</b>	<b>54.86</b>	64.01	Significant Mineralisation to EOH
		inc.	7.62	13.9	18.29	25.91		
		and	3.05	8.8	60.96	64.01		
U.Carbide	DH-S-B		3.05	7.3	0.00	3.05	9.14	Mineralised at EOH
U.Carbide	DH-B-C		10.36	11.7	1.83	12.19	12.19	Significant Mineralisation to EOH
U.Carbide	DH-H9-31		4.57	12.9	4.57	9.14	15.24	Mineralised at EOH
U. Carbide	DH-S-49		3.05	10.6	15.24	18.29	57.91	Mineralised at EOH
		and	<b>21.34</b>	<b>11.7</b>	<b>25.91</b>	<b>47.24</b>		
		inc.	15.24	13.3	27.43	42.67		
U.Carbide	DH-S-50		<b>21.34</b>	<b>10.8</b>	<b>3.05</b>	<b>24.38</b>	24.38	Significant Mineralisation to EOH
U.Carbide	DH-S-51		<b>20.42</b>	<b>11.8</b>	<b>2.44</b>	<b>22.86</b>	22.86	Significant Mineralisation to EOH
		inc.	9.14	15.6	6.10	15.24		
U. Carbide	DH-BI-61		9.14	12.3	13.72	22.86	22.86	Significant Mineralisation to EOH
		inc.	3.05	19.8	15.24	18.29		
U.Carbide	DH-B-62		18.29	18.2	4.57	22.86	22.86	Significant Mineralisation to EOH
		inc.	10.67	26.8	12.19	22.86		
		inc.	3.05	35.9	13.72	16.76		

Company	Drill Hole Number		Down Hole Thickness	Grade Fluorspar CaF <sub>2</sub> (%)	From (m)	To (m)	Hole Depth (m)	Comment
U.Carbide	DD-C-63		<b>28.65</b>	<b>8.8</b>	<b>12.19</b>	<b>40.84</b>	53.95	Mineralised at EOH Hole dips 45° towards 90°
U.Carbide	DD-C-64		3.05	6.8	10.67	13.72	44.20	Mineralised at EOH
		and	19.81	10.6	19.81	39.62		Hole dips 45° towards 107°
U.Carbide	DD-I-65		4.57	12.8	0.00	4.57	106.53	
		and	3.81	11.5	13.72	17.53		
		and	3.96	8.4	58.52	62.48		
U.Carbide	DD-C-66		<b>33.68</b>	<b>7.5</b>	<b>29.11</b>	<b>62.79</b>	62.79	Significant Mineralisation to EOH
		inc.	4.88	13.1	57.91	62.79		Hole dips 44° towards 113°
U.Carbide	DD-B1-67		<b>131.06</b>	<b>8.1</b>	<b>0.00</b>	<b>131.06</b>	131.06	Significant Mineralisation to EOH
		inc.	<b>28.96</b>	<b>9.4</b>	<b>28.96</b>	<b>57.91</b>		
		inc.	28.65	9.1	61.26	89.92		
		inc.	7.62	13.7	96.01	103.63		
U.Carbide	DDI370		4.57	8.2	0.00	4.57	35.66	
U.Carbide	DDI-1-72		4.57	12.1	0.00	4.57	7.62	
U.Carbide	DD-I-73		3.05	7.7	4.57	7.62	34.44	
U.Carbide	DD-I-74		3.66	10.6	0.00	3.66	57.61	Hole dips 45° towards 122°
U.Carbide	DH-I-75		4.57	6.6	3.05	7.62	57.61	
		and	3.05	6.5	18.29	21.34		
U.Carbide	DH-I3-76		7.62	9.2	3.05	10.67	51.82	Significant Mineralisation to EOH
		and	4.57	6.4	15.24	19.81		
		and	15.24	8.1	22.86	38.10		
		and	9.14	8.0	42.67	51.82		
U.Carbide	DH-B-77		<b>73.15</b>	<b>10.9</b>	<b>6.10</b>	<b>79.25</b>	101.30	Mineralised at EOH
		inc.	<b>27.74</b>	<b>12.9</b>	<b>18.29</b>	<b>46.02</b>		
U.Carbide	DH-C-79		15.24	11.3	0.00	15.24	15.24	Significant Mineralisation to EOH
		inc.	3.05	21.5	1.52	3.05		
U.Carbide	DH-I-80		19.81	8.2	0.00	19.81	19.81	Significant Mineralisation to EOH
U.Carbide	DH-I-81		17.98	9.6	3.05	21.03	21.03	
		inc.	5.79	11.5	15.24	21.03		
U.Carbide	DH-JL5-83		<b>28.96</b>	<b>12.0</b>	<b>0.00</b>	<b>28.96</b>	28.96	Significant Mineralisation to EOH
		inc.	21.34	14.4	0.00	21.34		
U.Carbide	DH-C-84		9.14	9.1	0.00	9.14	9.14	Significant Mineralisation to EOH
<b>All holes drilled vertically unless otherwise stated.</b>								
<b>Significant Mineralisation to EOH:</b> means reported interval extends to end of hole.								
<b>Mineralised at EOH:</b> means lower grade mineralisation extends to end of hole								