

Ref: /BSX/609/BSX079

# Blackstone Continues to Intersect +1.0% Cobalt at Little Gem

Blackstone Minerals Limited ("**Blackstone**" or the "**Company**"), is pleased to announce diamond drilling results from the very high grade Little Gem Cobalt-Gold Project ("Little Gem") in British Columbia, Canada.

### **Highlights**

- Blackstone has received assays from the first three drill holes (LGD17-001R, LGD18-001 & LGD18-002) of the Company's maiden drilling program at the very high grade Little Gem Cobalt-Gold Project;
- Significant results to date from the maiden drilling program at Little Gem include (Refer Figures One and Two):

**LGD17-001R 1.1 m @ 3.0% cobalt and 44 g/t gold;** within

4.3 m @ 1.0% cobalt and 15 g/t gold.

(Refer ASX Announcement 9 January 2018 for full set of results)

**LGD18-002 1.0 m @ 1.2% cobalt and 5 g/t gold**; within

3.2 m @ 0.8% cobalt and 4 g/t gold.

- Blackstone has consistently intersected a significantly larger alteration zone than previously interpreted, highlighting potential for a major hydrothermal system at Little Gem;
- Blackstone has initiated a geophysical survey to test for further high grade Cobalt-Gold prospects within the +1.8km strike target zone at Little Gem and the nearby (serpentinite/granodiorite) contact zone at the Jewel prospect, both of which are analogous to the world class Bou-Azzer primary Cobalt district in Morocco;
- Little Gem is favourably located less than 15 km along strike from the Bralorne-Pioneer mining complex (endowment of 4.4 Moz at 17 g/t Au) (Refer Figure Three).

Blackstone's Managing Director commented; "Results from the first three drill holes have confirmed Little Gem has some of the world's highest grade Cobalt-Gold mineralisation. We are looking forward to the next round of assays and results from geophysical surveys to define the full potential of the mineralised system and the extensive alteration zone discovered at Little Gem."

## BLACKSTONE FAST FACTS

Shares on Issue 96.2m Share Price \$0.365 Market Cap \$35.1m ASX Code **BSX** 

## BOARD & MANAGEMENT

Non-Exec Chairman Hamish Halliday

Managing Director Scott Williamson

**Technical Director** Andrew Radonjic

Non-Exec Directors
Stephen Parsons
Michael Konnert

**Joint Company Secretaries**Michael Naylor
Jamie Byrde

## ADVANCING THE FOLLOWING PROJECTS

High Grade (3% Cobalt & 20 g/t Gold) Little Gem Project British Columbia, Canada

Cartier Cobalt-Nickel Project Ouebec, Canada

**Gold and Nickel Projects** Western Australia

- Silver Swan South
- Middle Creek
- Red Gate

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#### Little Gem Cobalt-Gold Project

Blackstone Minerals Limited has commenced its maiden drilling program at the very high grade Little Gem Cobalt-Gold Project in British Columbia, Canada. The drilling program started late in the 2017 field season and drilling re-commenced in late April for the 2018 field season. Drilling to date has intersected the Little Gem structure within metres of the interpreted target. The Little Gem alteration halo is significantly larger than previously estimated, and the 2018 drilling to date has consistently intersected a broad alteration zone, highlighting potential for a major hydrothermal system at Little Gem. Assay results are pending for the next three holes in the maiden drilling program at Little Gem. Significant results from the first three drill holes at Little Gem include:

**LGD17-001R 1.1 m @ 3.0% cobalt and 44 g/t gold;** within

4.3 m @ 1.0% cobalt and 15 g/t gold.

(Refer ASX Announcement 9 January 2018 for full set of results)

**LGD18-002 1.0 m @ 1.2% cobalt and 5 g/t gold**; within

3.2 m @ 0.8% cobalt and 4 g/t gold.

(Refer Image One and Table One & Two for full set of results and drill hole information)

The Company has initiated a geophysical survey to test for further high grade Cobalt-Gold prospects within the recently identified +1.8 km strike target zone at Little Gem and the nearby Jewel prospect located 1.1km north-northeast of Little Gem. The Jewel prospect is located near the (serpentinite/granodiorite) contact zone which is prospective for Cobalt-Gold mineralisation analogous to the world class Bou-Azzer primary Cobalt district in Morocco.

Image One | Little Gem drill hole LGD18-002 mineralised intersection

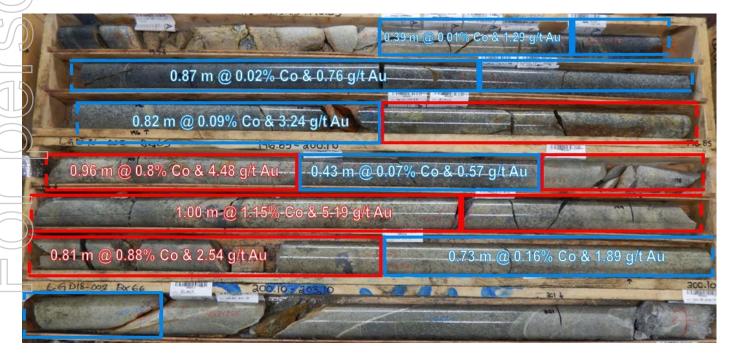




Figure One | Plan view of drilling to date at Little Gem

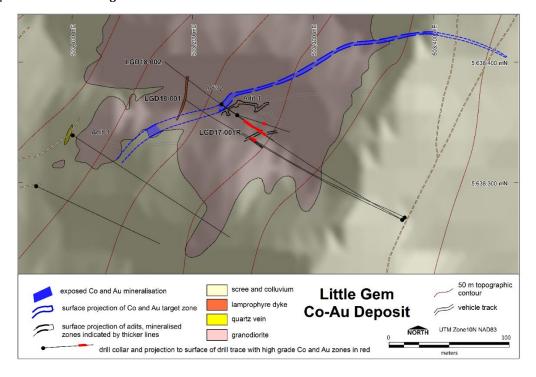
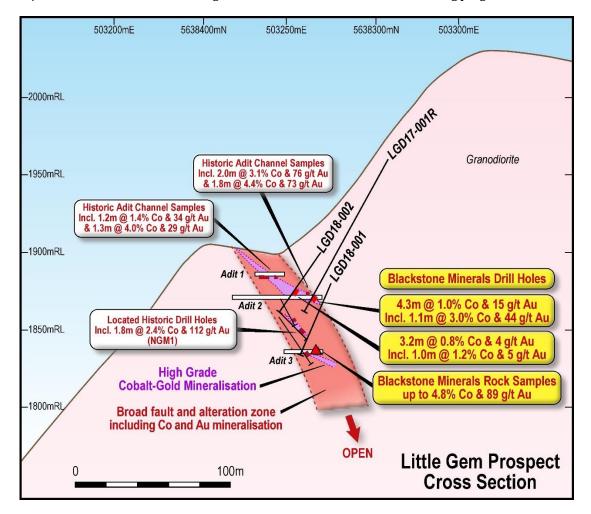


Figure Two | Little Gem Cross Section showing initial three holes from the maiden drilling program





The Little Gem Project was discovered in the 1930's by prospectors identifying a pink cobalt-bloom on weathered mineralisation that led to three adits being developed. A total of 1,268 m of drilling was completed from underground and detailed channel sampling was taken from the adits. Results from this work generated some exceptional Cobalt and Gold assays including:

Historic drilling 1.8 m @ 2.4% cobalt & 112 g/t gold

3.3 m @ 1.4% cobalt & 12 g/t gold; and 4.1 m @ 1.4% cobalt & 11 g/t gold.

Underground channel sampling 1.8 m @ 4.4% cobalt & 73 g/t gold; and

2.0 m @ 3.1% cobalt & 76 g/t gold.

Surface channel sampling 0.4 m @ 5.7% cobalt & 1,574 g/t gold; and

0.1 m @ 4.6% cobalt & 800 g/t gold.

(Refer ASX Announcement 26 July 2017 for full set of results)

Little Gem is mostly underlain by granite of the Coast Plutonic Complex and ultramafic rocks on what is interpreted to be the northern extension of the Cadwallader fault zone (Refer Figure Three). These are the major geological units and structures important to the mineral deposits either as the host rocks or sources of the mineralising fluids that gave rise to the Bridge River mining camp. The camp has 60 mineral localities including the Bralorne-Pioneer mining complex (endowment of 4.4 Moz at 17 g/t Au) which retains the status of the foremost gold producer in British Columbia and the sixth largest in Canada. Little Gem is only 15 km along strike to the north of the Bralorne-Pioneer mining complex.

There has been very little modern day exploration at Little Gem with the main activities being airborne geophysical surveys (including magnetic, radiometric and electromagnetic ("EM") surveys) in the 1970's and a further two drill holes completed in 1986.

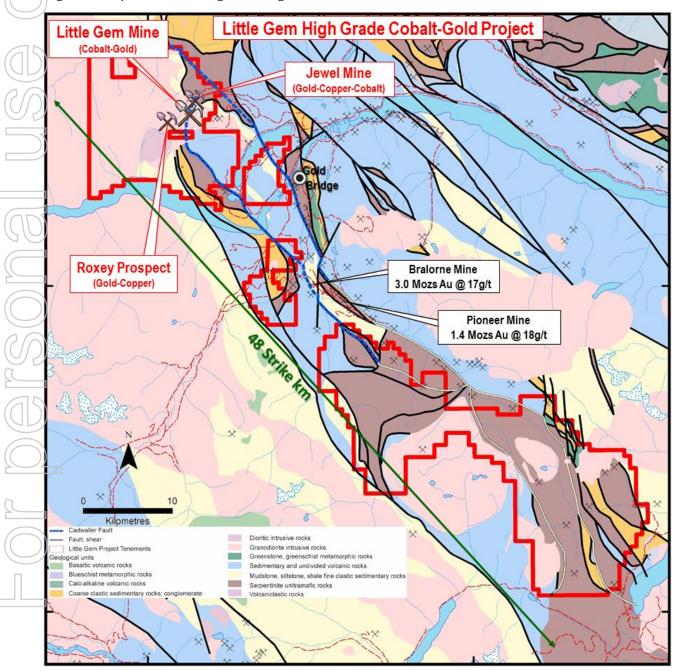
The second mineral occurrence at the Little Gem Project is the historic Jewel Gold Prospect which supported some gold production from 1938 to 1940 and is located only 1.1 km north-northeast of the Little Gem Mine. Since Blackstone began working on the Little Gem Cobalt-Gold Project it has verified the mineralisation identified historically at the Little Gem Cobalt-Gold Prospect and the Jewel Gold Prospect and discovered a new high grade Gold prospect named Roxey.

The Roxey Gold prospect is located 1.5 km west-southwest of the Little Gem Cobalt-Gold prospect. Blackstone visually identified Roxey during the due diligence site visit and took rock chip samples within the target area which assayed up to **24 g/t gold**, **1.9% copper & 24 g/t silver** (Refer ASX Announcement 6 September 2017). Mineralisation at Roxey is associated with quartz-pyrite altered diorite containing chalcopyrite.



Surface rock chip samples taken to verify the mineralisation at the Jewel prospect located 1.1 km north-northeast of Little Gem, returned up to **98 g/t gold** and **3.2% copper** (Refer ASX Announcement 6 September 2017 for full set of results). These results confirm what Blackstone's recent investigation has revealed with historical samples of up to **0.6 m @ 75 g/t gold and 0.45m @ 153 g/t gold** from underground and surface channel sampling and up to **6.9 g/t gold, 19.25% copper & 137 g/t silver** from underground rock chip sampling (Refer ASX Announcement 6 September 2017 for full set of results). Mineralisation at Jewel sits in a serpentinised ultramafic near the easterly trending/steep south dipping contact with the quartz diorite/granodiorite that hosts the Little Gem Prospect.

Figure Three | Little Gem Geological Setting



(Source: Refer ASX Announcement 26 July 2017 & 6 September 2017)



#### **Cobalt Market Commentary**

Cobalt contributes up to 60% of the value of Lithium Ion Batteries which in turn accounts for greater than 50% of demand for cobalt. The lithium ion battery is projected to become the world's most significant source of power with the use in electric vehicles ("EV") being the key driver. Bloomberg forecasts 55% of vehicles sold by 2040 will be electric, currently only 1% of global sales are EVs. Consequently, cobalt demand is expected to rise at 5% compound annual growth rate ("CAGR") over the next 4 years. Cobalt's other main use at 20% is in superalloys which compliments the battery demand as high-tech industry grows.

Cobalt is expected to have a supply deficit as currently mining is only just meeting demand. The cobalt price has risen significantly from US\$10/lb (US\$22,000/t) to US\$40/lb (US\$87,000/t) over the past 2 years. Current prices are still well short of the 2008 high of US\$52/lb (US\$115,000/t) which was the last time cobalt was in deficit.

Approximately 98% of the world's supply of cobalt comes from copper and nickel production with 15 mines representing half of the world's supply. This makes the supply stream for cobalt highly sensitive to disruptions caused by mine related issues. Currently more than 50% of the world's supply of cobalt is a by-product of copper production from the Democratic Republic of Congo (DRC).

Yours sincerely

Scott Williamson Managing Director T: +61 8 9425 5217

#### About Blackstone

Blackstone Minerals Limited **(ASX code: BSX)** is actively exploring the very high grade Little Gem Cobalt-Gold project in British Columbia, Canada. Blackstone is the first company in over 60 years to undertake systematic exploration for Cobalt at Little Gem and within the surrounding district. Blackstone owns a large land holding with 48 km of untested strike potential of highly prospective geology analogous to the world class Bou-Azzer primary Cobalt district in Morocco. Blackstone is actively exploring for nickel and gold in the Eastern Goldfields and gold in the Pilbara region of Western Australia. Blackstone has a board and management team with a proven track record of mineral discovery and corporate success.

The information in this report that relates to Exploration Results and Exploration Targets is based on information compiled by Mr Andrew Radonjic, a full time employee of the company and who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Andrew Radonjic has sufficient experience which is relevant to the style of mineralisation and type of deposits under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Andrew Radonjic consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.



#### Table One | Assay Results from LGD18-001 & LGD18-002

Hole	From	To	Interval	Au g/t	Co %	Ni %	Comments
	m	m	m				
LGD18-001	186.50	187.50	1.00	0.03	< 0.01	< 0.01	
	187.50	188.40	0.90	0.03	< 0.01	< 0.01	
)	188.40	189.40	1.00	0.05	< 0.01	< 0.01	
	189.40	190.40	1.00	0.02	< 0.01	< 0.01	
	190.40	191.50	1.10	0.01	< 0.01	< 0.01	includes 2.2g/t Silver
	191.50	192.40	0.90	-0.01	< 0.01	< 0.01	
1	192.40	193.15	0.75	0.01	< 0.01	< 0.01	includes 3.4g/t Silver
	193.15	193.85	0.70	-0.01	< 0.01	< 0.01	
1	193.85	194.50	0.65	0.01	< 0.01	< 0.01	
	194.50	195.00	0.50	-0.01	< 0.01	< 0.01	
	195.00	196.00	1.00	0.01	< 0.01	< 0.01	
	196.00	197.00	1.00	0.01	< 0.01	< 0.01	
LGD18-002	191.88	192.88	1.00	0.01	< 0.01	< 0.01	
	192.88	193.86	0.98	0.01	< 0.01	< 0.01	
	193.86	194.24	0.38	0.01	< 0.01	< 0.01	
	194.24	194.63	0.39	1.29	0.01	< 0.01	
	194.63	195.50	0.87	0.76	0.02	< 0.01	
	195.50	196.32	0.82	3.24	0.09	< 0.01	
	196.32	197.28	0.96	4.48	0.80	0.08	
	197.28	197.71	0.43	0.57	0.07	< 0.01	
	197.71	198.71	1.00	5.19	1.15	0.21	- 3.2m @ 0.8% Co & 4g/t A
	198.71	199.52	0.81	2.54	0.88	0.12	5,
	199.52	200.25	0.73	1.89	0.16	< 0.01	
	200.25	201.18	0.93	0.02	< 0.01	< 0.01	
	201.18	202.18	1.00	0.01	< 0.01	< 0.01	
	202.18	203.18	1.00	-0.01	< 0.01	< 0.01	
)	203.18	204.12	0.94	0.17	< 0.01	< 0.01	
	204.12	204.82	0.70	0.01	<0.01	< 0.01	
	204.82	205.75	0.93	0.14	0.08	< 0.01	
	205.75	206.26	0.51	0.13	0.06	< 0.01	
	206.26	207.26	1.00	0.01	< 0.01	< 0.01	
	207.26	208.09	0.83	-0.01	< 0.01	< 0.01	
	208.09	208.59	0.50	-0.01	< 0.01	< 0.01	
	208.59	209.59	1.00	-0.01	< 0.01	< 0.01	
	209.59	210.60	1.01	-0.01	< 0.01	< 0.01	
	210.60	211.04	0.44	0.01	<0.01	<0.01	
	211.04	211.35	0.44	-0.01	<0.01	0.01	
	211.04	212.09	0.74	0.01	<0.01	<0.01	
<del> </del>	212.09	213.00	0.74	-0.01	<0.01	<0.01	
	213.00	213.84	0.91	-0.01	<0.01	<0.01	
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#### Table Two | Reported drill collar coordinates, orientation and end of hole depths

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Hole	East UTM Zone10 NAD83	North UTM Zone10 NAD83	RL ASL (metres)	Azimuth (°) UTM	Dip (°)	End of hole (metres)	Core type
	(metres)	(metres)					
LGD18-001	503374	5638269	2006	295	-46	305	HQ & NQ
LGD18-002	503374	5638269	2006	301	-40	312.12	HQ



#### I N E R A M L

#### **Appendix One**

JORC Code, 2012 Edition | 'Table 1' Report

#### **Section 1 Sampling Techniques and Data**

Criteria	JORC Code explanation	Commentary		
Sampling techniques	<ul> <li>Nature and quality of sampling (eg: cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>Diamond core drilling was used to obtain samples.</li> <li>Drill core was cut by diamond core saw and continuous half (NQ) or quarter (HQ) core sample was taken for assay in intervals ranging from 0.3 m to 1.5 m according to lithological criteria.</li> <li>Sample weights for assay ranged from 1.1 kg to 4.4 keach (mean 2.3 kg).</li> <li>Drilling and sampling was supervised by a suitably qualified Blackstone Minerals geologist.</li> </ul>		
Drilling techniques	Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	<ul> <li>HQ (64 mm) and NQ diameter (48 mm) diamond condrilling conducted by Radius Drilling using a R2000 diamond coring rig.</li> <li>Drill core was orientated wherever possible, and all holes were downhole surveyed with a multi-shot camera.</li> </ul>		
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul> <li>Recoveries were calculated by a Blackstone Minerals geologist by measuring recovered core length vs downhole interval length.</li> <li>Drill core recovery through the mineralised zones averaged 98%.</li> <li>There is no discernible correlation between Au and Co grades and core recovery (correlation coefficient &lt;0.15).</li> </ul>		
Logging	<ul> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	A total of 617 m was drilled.     All of the drill core was geologically logged and photographed by a suitably qualified Blackstone Minerals geologist. Alteration and mineralisation mineral abundances were visually estimated.     Mineral Resources have not been estimated.     The detail of geological logging is considered sufficient for mineral exploration.		



Criteria	Explanation	Commentary
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all subsampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>NQ drill core was cut in half lengthwise by diamond core saw and continuous half core sample bagged for assay in lithological intervals ranging from 0.3 m to 1.5 m as determined by the Blackstone Minerals geologist. All NQ samples submitted for assay comprised half core leaving continuous remnant in the trays for future reference or sampling as necessary. Half core sampling was considered sufficient for the nature of mineralisation and NQ core diameter. Duplicate samples were not collected.</li> <li>HQ drill core was cut in quarter lengthwise by diamond core saw and continuous quarter core sample bagged for assay in lithological intervals ranging from 0.3 m to 1.5 m as determined by the Blackstone Minerals geologist. All HQ samples submitted for assay comprised quarter core leaving continuous remnant in the trays for future reference or sampling as necessary. Quarter core sampling was considered sufficient for the nature of mineralisation and HQ core diameter. Duplicate samples were collected and confirm primary sampling results are adequate for the current level of exploration.</li> <li>Sample weights for assay ranged from 1.1 kg to 4.4 kg each (mean 2.3 kg).</li> <li>The bagged core samples were submitted to ALS Global, Vancouver ("ALS"), British Columbia for preparation and assay.</li> <li>At ALS the half core samples were dried and crushed to -2 mm, then 250 g was split from each and pulverised to 85% passing 75 microns to produce the analytical pulps.</li> </ul>
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.  For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.  Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	<ul> <li>Gold was analysed by industry standard 50g charge fire assay with AAS finish to a 0.01 g/t lower limit of detection (ALS method Au-AA26).</li> <li>Cobalt and other base metals were determined by industry standard 4 acid digestion (including HF) with ICPAES finish at ALS.</li> <li>Commercially certified gold and cobalt reference materials of appropriate grades were included in the assay sample submissions by Blackstone Minerals at a minimum rate of at least one Au standard and one Co standard per 20 samples.</li> <li>All results for the Au and Co assay standards are within 10 % of the reference values.</li> </ul>
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>The assay results are compatible with the observed mineralogy.</li> <li>The assay results agree well with historic mining and exploration results (Refer BSX Announcement 26 July 2017).</li> <li>Twinned holes were not used and not considered necessary at this early stage of exploration.</li> <li>Primary data is stored and documented in industry standard ways.</li> <li>Assay data is as reported by ALS and has not been adjusted in any way.</li> <li>Remnant assay pulps are currently held in storage by the assay laboratory.</li> </ul>



Criteria	Explanation	Commentary
Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	Drill hole collar locations were determined by handheld GPS considered accurate to ±5 m.     All co-ordinates were recorded in UTM Zone 10N NAD83.     Topographic control is provided by BC government 20,000 topographic map sheets and a Digital Terrain Model based on the 30 m Shuttle Radar Topographic Mission data.
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>The drilling is of reconnaissance nature and not conducted on a regular grid spacing.</li> <li>All visibly altered or mineralised zones in the drill core were sampled and assayed (see above). Data compositing has not been applied.</li> <li>The reported drill results are not sufficient to establish mineral resources.</li> </ul>
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.      If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	<ul> <li>Exploration and mining activity shows the presence of a moderately to steeply south-southeast dipping zones of Au and Co mineralisation within a broader alteration and fracture zone of at least 230 m strike extent. In detail, the mineralised zone comprises two or more parallel sulfarsenide-rich veins up to 2 m thick within the as yet poorly delineated zone of disseminated sulfarsenide mineralisation and iron carbonate, quartz, sericite, chlorite and biotite altere granodiorite.</li> <li>Surface and underground channel sampling by the B Geological Survey is thought to have been conducted approximately perpendicular to the strike and dip of mineralisation.</li> <li>Much of the historic drilling has been oblique or at low angle to the interpreted strike and dip of the mineralisation.</li> <li>LGD18-001 and LGD18-002 have been drilled at a high angle to the dip but somewhat oblique to the interpreted strike of mineralisation because of logistical constraints. Further drilling is required to refine orientation and define extent of the</li> </ul>
Sample security	The measures taken to ensure sample security.	<ul> <li>mineralised zone.</li> <li>The chain of custody for samples from collection to dispatch to assay laboratory for the various historic explorers and miners, and BC Department of Mines i not known.</li> <li>The chain of custody for LGD18-001 and LGD18-002 drill core samples from collection to dispatch to assa laboratory was managed by Blackstone Minerals personnel. Sample numbers were unique and did no include any locational information useful to non-Blackstone Minerals personnel. The level of security is considered appropriate.</li> </ul>
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	<ul> <li>The assay results agree well with the observed mineralogy.</li> <li>The assay results agree well with historic mining and exploration results (Refer BSX Announcement 26 Jul 2017).</li> <li>Further drilling is planned to define the shape and extent of the mineralised zone.</li> </ul>



#### **Section 2 Reporting of Exploration Results**

(Criteria listed in the preceding section also apply to this section)

Criteria	Explanation	Commentary
Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.  The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	LGD18-001 and LGD18-002 are located within British Columbia mineral claim number 501174 owned 100% by Cobalt One Energy Corporation, a wholly owned subsidiary of Blackstone Minerals Ltd. Standard governmental conditions apply to all of the Licences that make up the Little Gem Project.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Estella Mining, Northern Gem Mining Corporation,     Anvil Resources, Gold Bridge Mining and the BC     Department of Mines were the most significant     previous explorers of the Little Gem prospect (Refer     to BSX announcement 26 July 2017 and available     from <a href="http://blackstoneminerals.com.au">http://blackstoneminerals.com.au</a> )
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>The Little Gem Project is located within the Bralome Pioneer mining district (endowment of 4.4Moz at 17g/t Au) of the Bridge River region, British Columbia. The project area is mostly underlain by granite of the Coast Plutonic Complex and ultramafic rocks on what is interpreted to be the northern extension of the Cadwallader fault zone. These are the major geological units and structures important to the mineral deposits either as the host rocks or sources of the mineralizing fluids that gave rise to the Bridge River mining camp.</li> <li>The Little Gem prospect itself is a hypothermal cobalt-sulfarsenide and gold vein, 2.3 kilometres eas northeast of Dickson Peak andlies within the margin of the Jurassic to Tertiary Coast Plutonic Complex (Cretaceous Penrose lobe pluton). Host rocks consis of granodiorite, minor hornblende-biotite-quartz diorite, diorite and gabbro, which are intruded by feldspar porphyry dykes. A broad, east trending and steeply south dipping fault zone cuts the granodiorit near the eastern contact with older sedimentary and volcanic rocks of the Mississippian to Jurassic Bridge River Complex (Group). Shears in the zone contain two parallel ore shoots ranging in width from ten centimetres to a few metres. Irregular lenses of almost solid sulphides contain cobalt and gold value in association with danaite, loellingite, safflorite, arsenopyrite, scheelite and minor molybdenum. Uraninite, occurs rarely in the gangue along with coarse-grained allanite, apatite, feldspar, quartz, chlorite, sericite, calcite, erythrite and limonite. Gold occurs mainly as microscopic veinlets of the native metal within and adjacent to the sulfarsenide minerals. Surrounding the ore, strongly bleached an sericitized granodiorite containing disseminated sulfides, residual quartz, feldspar and kaolin grades into unaltered granodiorite. The metallic minerals occur with the gangue in coarsely crystalline masses but are in general younger than most of the gangue minerals. The combination of the batholithic</li></ul>



Criteria	ı	Explanation	Commentary
Drill hole	EInformation	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:         <ul> <li>easting and northing of the drill hole collar;</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar;</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth;</li> <li>hole length.</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	<ul> <li>All Blackstone Minerals drill hole coordinates, depths, orientations, hole lengths and significant assay results are given in Tables One and Two.</li> <li>The Company's best understanding of the historic drill hole and surface and underground channel sample locations, orientations and lengths are given in the BSX announcement of 26 July 2017.</li> </ul>
Data agg		<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul> <li>All drill results given in Table One represent the intervals as sampled and assayed.</li> <li>Upper cuts have not been applied.</li> <li>Metal equivalent values are not used.</li> </ul>
	sation widths and lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	<ul> <li>All intervals reported in Table One are down hole.</li> <li>LGD18-001 and LGD18-002 have been drilled at a high angle to the dip but somewhat oblique to the interpreted strike of mineralisation because of logistical constraints. True thickness is currently estimated at c. 70% of down hole thickness.</li> <li>Extent and thickness of disseminated sulfarsenide mineralisation and potential for multiple massive sulfarsenide bodies remains poorly defined. Further drill testing is required.</li> </ul>
Diagram	s	<ul> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	<ul> <li>Appropriate exploration plans and sections are included in the body of this release.</li> <li>Coordinates and orientation of drill holes LGD18-001 and LGD18-002 are also given in Table Two.</li> </ul>
Balanced	l reporting	<ul> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	Assay results and intervals as sampled are reported in Table One.
Other su explorati		<ul> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul>	<ul> <li>Bulk density, geotechnical and metallurgical work have not been implemented at this reconnaissance stage of exploration drilling.</li> <li>Appropriate reconnaissance exploration plans are included in the body of this release.</li> </ul>
Further		<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>Blackstone Minerals proposes to conduct further drilling and associated activities to better define and extend the identified mineralised zone.</li> <li>An appropriate exploration target plan is included in the body of this release.</li> </ul>