

Ref: /BSX/609/BSX099

# Quarterly Report for the period ending 31 December 2018

# **Highlights**

- Major new targets identified at BC Cobalt Project with significant Cu-Au-Co soil anomalies and coincident IP survey results indicating a large sulfide bearing body associated with the Jewel Copper-Gold-Cobalt Prospect;
- The new soil anomalies are **greater than 1.5 kilometres long** and with coincident chargeability and resistivity **signatures typical of sulfides** gives further evidence of a **major hydrothermal system** associated with the BC Cobalt Project (Refer Figures One, Two, Three, Four and Five);
- Erebor discovery of cobalt and visible gold delivered assays with grades of up to 2.3% cobalt and 32 g/t gold (Refer Figure Four);
- New surface rock chip samples taken from the Jewel Copper-Gold-Cobalt Prospect have also delivered high grade assay results including 5.6% copper and 5.1% copper (Refer Figures Two and Three);
- High grade Cobalt assays from surface rock chip samples taken from the new Erebor discovery included the following significant results (Refer ASX Announcement 9 October 2018 for full set of results):
  - o 2.3% cobalt, 32 g/t gold and 1.1% nickel
  - o **1.0% cobalt**
- o **1.0% cobalt**
- 0.6% cobalt

- 0.6% cobalt
- 0.5% cobalt
- o 0.4% cobalt
- The Erebor prospect is the **first discovery** of significant Cobalt-Gold mineralisation in the region **since the 1930's**;
- The Erebor discovery further suggests the potential for the BC Cobalt Project to host **multiple deposits akin to the Bou-Azzer primary Cobalt district in Morocco** (>50 deposits and 75 years of Cobalt production);
- Blackstone announced a placement to sophisticated investors to raise \$1.2m through the issue of 12.0 million shares at \$0.10 per share to fund further exploration of the BC Cobalt Project, Canada and the Silver Swan South Nickel-Gold Project, Western Australia

# BLACKSTONE FAST FACTS

 Shares on Issue
 108.2m

 Share Price
 \$0.08

 Market Cap
 \$8.65m

 ASX Code
 BSX

# BOARD & MANAGEMENT

Non-Exec Chairman Hamish Hallidav

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

BC Cobalt Project British Columbia, Canada

Cartier Cobalt-Nickel Project Ouebec, Canada

**Gold and Nickel Projects** Western Australia

- Silver Swan South
- Red Gate
- Middle Creek

#### REGISTERED OFFICE

Blackstone Minerals Limited ABN 96 614 534 226 Suite 3, Level 3, 24 Outram Street, West Perth, WA, 6005

T: +61 8 9425 5217 F: +61 8 6500 9982

E: admin@blackstoneminerals.com.au



# **Canadian Projects**

### **BC Cobalt Project (100% interest)**

#### Introduction

The BC Cobalt Project (335 km² of tenure) formerly the Little Gem Project is located 180 km north of Vancouver in British Columbia, Canada. The 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. Blackstone acquired the BC Cobalt Project in October 2017 and has since completed an extensive maiden exploration program including drilling, geochemical and geophysical surveys, with the initial results indicating potential for the project to host a world class Cobalt Belt in British Columbia.

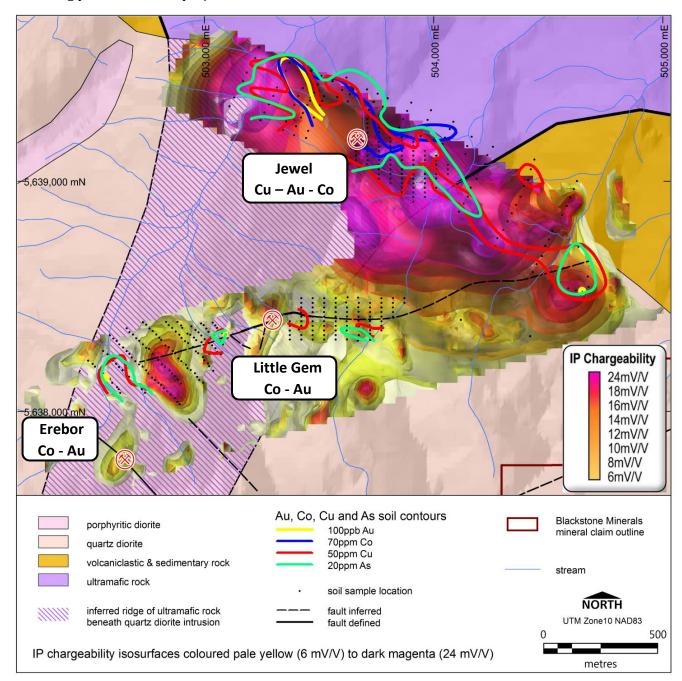


Figure One | BC Cobalt Project plan showing Copper, Gold and Cobalt soil contours and IP chargeability isosurfaces

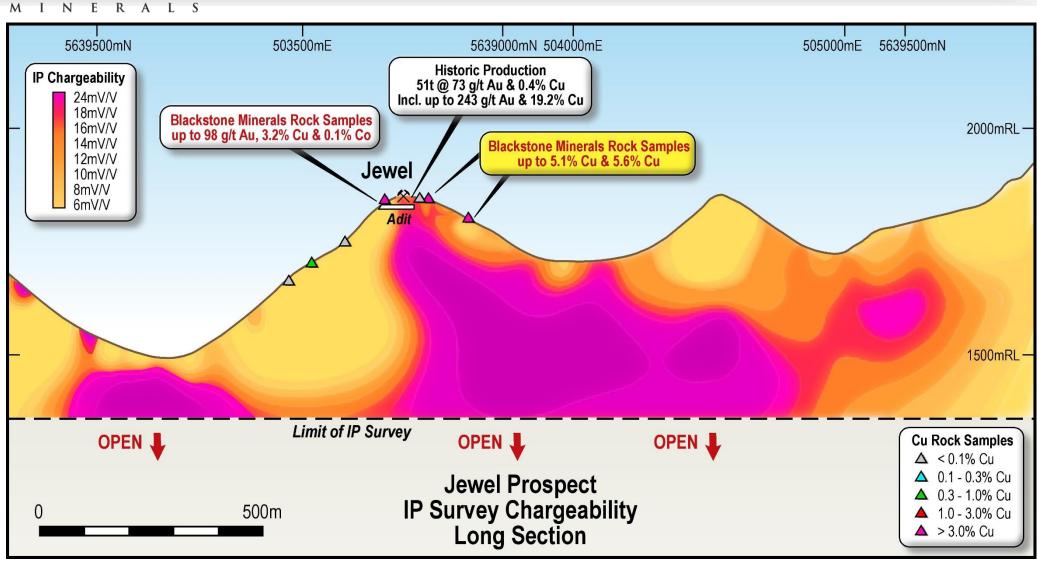


Figure Two | Long Section schematic of chargeability isosurfaces and surface rock samples at the Jewel Copper-Gold-Cobalt Prospect

Refer to previous ASX Announcement 16 October 2018 and 6 September 2017.



#### **Activities during the December Quarter**

During the December Quarter Blackstone completed an extensive soil sampling program and identified a number of major Copper-Gold-Cobalt targets centred on the Jewel Prospect, located 1.1 km north-northeast of the Little Gem Prospect. The new soil anomalies are greater than 1.5 kilometres long and coincide with a number of significant IP targets which are indicating a large sulfide bearing body at depth. The Copper, Gold and Cobalt soil anomalies are favourably located within a significant structural setting near the contact between the granodiorite and serpentinite (analogous geological setting to the deposits of the world class Bou-Azzer primary Cobalt district in Morocco).

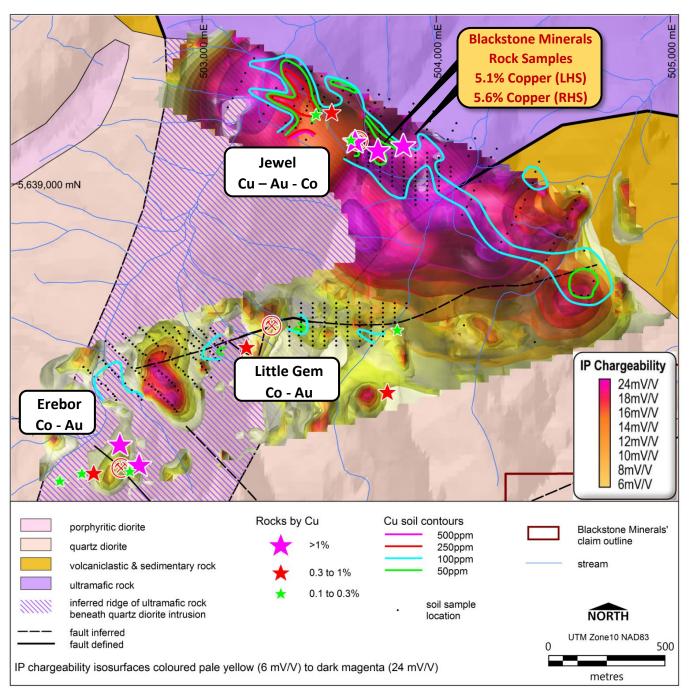


Figure Three | BC Cobalt Project plan showing Copper soil contours, rock samples and IP chargeability isosurfaces
Refer to previous ASX Announcement 16 October 2018



During the December Quarter Blackstone received new surface rock chip samples returning grades of up to 5.6% copper and 5.1% copper from the Jewel Prospect and received results from a new discovery of cobalt and visible gold Erebor with assay grades of up to 2.3% cobalt and 32 g/t gold. The Jewel Copper-Gold-Cobalt Prospect is located 1.1 km north-northeast of the Little Gem prospect and is associated with the high grade Jewel Underground Mine with historic production of 51 tonnes mined between 1938 and 1940. Average grades mined were 73g/t gold and 0.4% copper and the highest grades assayed were up to 243g/t gold and 19.2% copper. These historic grades have been supported by Blackstone Minerals rock chip samples of up to 98g/t gold, 5.6% copper, 0.1% cobalt¹.

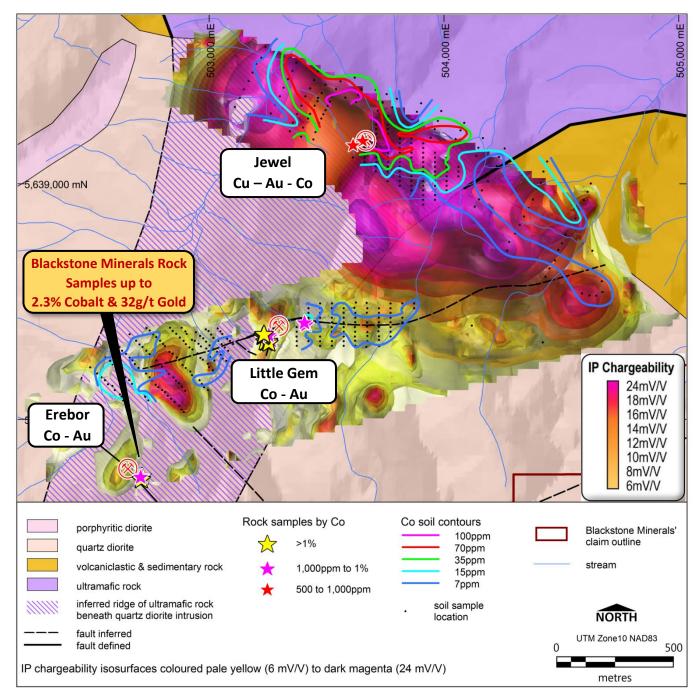


Figure Four | BC Cobalt Project plan showing Cobalt soil contours, rock samples and IP chargeability isosurfaces

<sup>1.</sup> Refer ASX Announcement 16 October 2018 and 9 October 2018.



In the late-1930's the sulfide ore mined at the historic Jewel Mine was unable to be substantially beneficiated by concentration and the gold values were not high enough to make a profit by direct shipping ore ("DSO") to smelters. After the small tonnage of ore was extracted at Jewel the claims lapsed and there was no further work conducted at the Jewel Copper-Gold-Cobalt Prospect until Blackstone Minerals acquired the BC Cobalt Project in October 2017. Since Blackstone acquired the Project, the Company has completed an extensive program of prospecting, stream sediment and soil sampling with the geochemical results coinciding and supporting the large-scale IP chargeability and resistivity signatures at Jewel. The Jewel prospect has no historical drilling and hence is a high priority drill target for Blackstone's next round of drilling planned to commence at the beginning of the 2019 field season (approximately May to October).

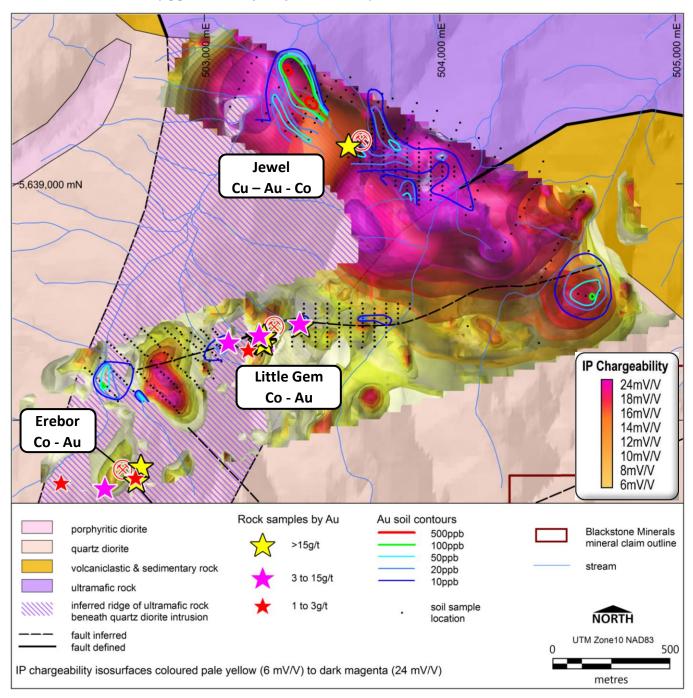


Figure Five | BC Cobalt Project plan showing Gold soil contours, rock samples and IP chargeability isosurfaces



Blackstone's geological model for the Jewel Mine suggests the Copper-Gold-Cobalt Prospect is favourably located within a similar geological setting to the underground mines of the world class Bou-Azzer primary Cobalt district in Morocco. The majority of the high grade underground primary Cobalt mines at Bou-Azzer are located near the contact of the serpentinised ultramafic and the quartz diorite. The historical Jewel Mine is likewise located within close proximity to the contact of the serpentinite and granodiorite bodies.

With the discovery of Cobalt-Gold mineralisation at Erebor returning grades up to **2.3% cobalt, 32 g/t gold, 1.6% copper and 1.1% nickel¹** combined with the multiple new large-scale IP anomalies indicating the potential source of the high grade mineralisation at Little Gem, Erebor, Jewel and Roxey, the Company continues to unlock the potential for multiple deposits in a region with geology analogous to the Bou-Azzer primary Cobalt district in Morocco (>50 deposits and over 75 years of Cobalt production). Regional targets continue to be generated from the data collected through prospecting and stream sediment sampling across the entire 48 strike km of untested geology prospective (see Figure Six) for further primary Cobalt and Gold mineralisation.

During the 2018 field season Blackstone took over 700 regional soil, rock chip and stream sediment samples throughout the entire  $335 \, \mathrm{km^2}$  of tenure at the high grade BC Cobalt Project. The Company is now awaiting the regional samples to be processed to better understand the full potential of the BC Cobalt Project to host further Cobalt-Gold mineralisation. Blackstone is increasingly confident that the BC Cobalt Project could host a belt-scale opportunity similar to the Bou-Azzer district in Morocco which will appeal to Cobalt end-users looking for a long term supply of the key ingredient in the cathode chemistry of the Lithium Ion battery. As the regional data continues to be processed over the coming months the Company will be in a better position to understand the potential for the Bralorne-Pioneer mining district to host a world class Cobalt camp.

There has been very little modern day exploration of the BC Cobalt Project 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 in the BC Cobalt Project is the Jewel Copper-Gold-Cobalt 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 BC Cobalt Project it has verified the mineralisation identified historically at the Little Gem Cobalt-Gold Prospect and the Jewel Gold-Copper-Cobalt Prospect and discovered a new high grade Gold-Copper Prospect named Roxey.

The Roxey Gold-Copper 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<sup>2</sup>. Mineralisation at Roxey is associated with quartz-pyrite altered diorite containing chalcopyrite. Surface rock chip samples taken to verify the mineralisation at the Jewel Copper-Gold-Cobalt prospect located 1.1 km north-northeast of Little Gem, returned up to 98 g/t gold and 3.2% copper<sup>2</sup>. 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<sup>2</sup>. 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.

1. Refer ASX Announcement 9 October 2018 2. Refer ASX Announcement 6 September 2017

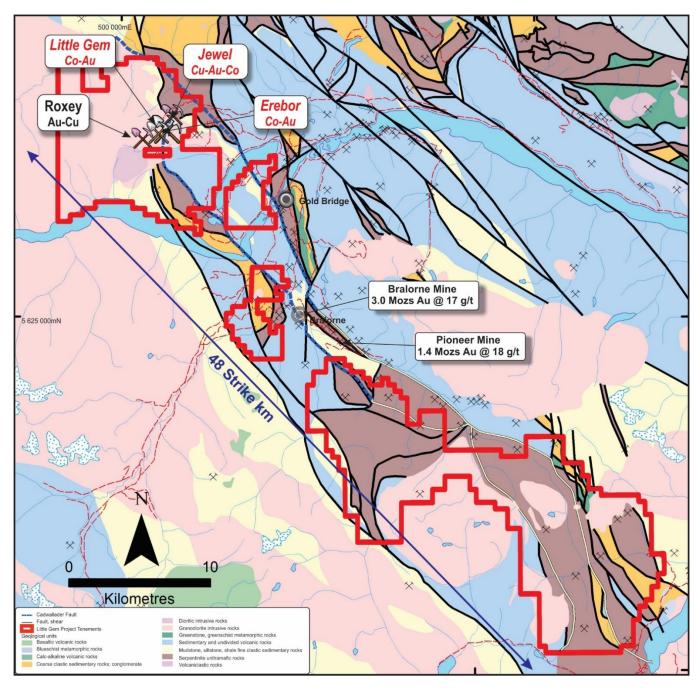


Figure Six | BC Cobalt Project Geological Setting<sup>1</sup>

# **Cartier Project (100% interest)**

The Cartier Cobalt-Nickel Project (9 km² of tenure) is located 440 km north-east of Quebec City. Historic exploration (1990's) on the project for Voisey's Bay Style Nickel and Copper has identified Cobalt within two prospects named Lac St Pierre Zones 1 & 2. During the December Quarter the Company continued to progress work on the project to understand the full potential of the Cartier Project.

<sup>1.</sup> Refer ASX Announcement 6 September 2017 and 26 July 2017



# **Australian Projects**

# Silver Swan South Project (100% interest)

#### Introduction

The Silver Swan South Project comprises of one granted exploration licence E27/545 and six granted prospecting licences, P27/2191 – 2196 covering an area of 38.5 km². The Project is along trend of the massive nickel sulphide Silver Swan Deposit (pre-mining ore reserve of 655 kt at 9.5% Nickel) and associated deposits (pre-mining resource of 10.4 Mt at 1.0% Nickel), and only 8 km northeast of the major Kanowna Belle Gold Mine (+5 Moz gold endowment).

#### **Activities during the December Quarter**

During the December Quarter Blackstone continued to work on finalising priority targets for drill testing in the coming months.

Highlights of the Project include:

- Blackstone's second phase aircore drilling program at Silver Swan South intersected gold mineralisation and extensive basement geochemical anomalism at the **Black Eagle** prospect<sup>1</sup> with the following result:
  - 10 m @ 3.2 g/t Au from 68 m within;
     15 m @ 2.2 g/t Au from 64 m to EOH (Refer Figures Seven and Eight).
- The above results have significantly upgraded the Black Eagle prospect and when combined with previous reconnaissance results of **3m** @ **3.5g/t Au from 60m** sees Black Eagle **elevated to a priority drill target**.
- The Silver Swan South project is located 8 km along strike and encompasses the interpreted extension of the Fitzroy Shear Zone which hosts the Kanowna Belle Gold Mine (+5 Moz gold endowment);
- Aircore drilling will also target the Black Hawk prospect following up on an initial 3 m @ 2.6 g/t Au from 52 m intersected in the first phase of drilling at Silver Swan South;

Blackstone's initial drilling at Silver Swan South was targeting both gold hosted by structural targets along strike from the Kanowna Belle Gold Mine (+5Moz gold endowment), and nickel sulfide mineralisation associated with ultramafic units along strike from the Silver Swan and Black Swan Nickel Mines (combined endowment 166kt Ni metal). The initial programs were designed to test for basement hosted mineralisation, using air core drilling, to improve definition of gold and base metal anomalism identified by previous reconnaissance style drilling.



#### MINERALS

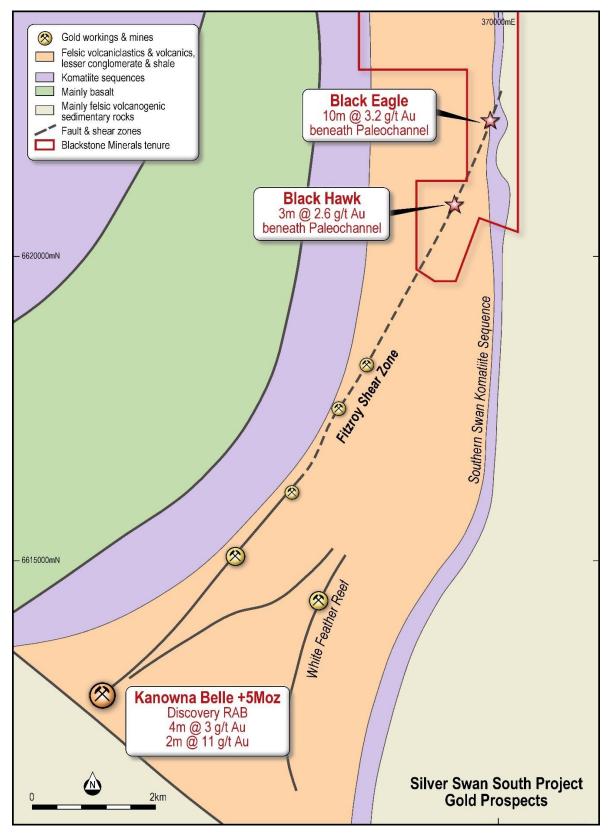


Figure Seven | Silver Swan South Gold Prospects

Refer ASX Announcement 1 March 2018



E R A

N

370000mE Felsic volcaniclastics & volcanics, 6623000mN lesser conglomerate & shale Komatiite sequences Mainly felsic volcanogenic sedimentary rocks Fault & shear zones Air Core drill collar **Black Eagle Prospect Basement Au Geochemistry Contours** 1000 ppb **RIA167** > 500 ppb 3m @ 3.5 g/t Au > 100 ppb > 50 ppb SNAC070 LKNA0116 10m @ 3.2 g/t Au in weathered basement 4m @ 1.3 g/t Au Kanowna Belle Ore Body Plan at Comparative Scale 6622000mN Plan projection of Kanowna Belle Ore Body at 50m beneath surface CRC LEME Open File Report 58 Southern Swan Komatiite Unit 500m SNAC027 7m @ 1.3 g/t Au in weathered felsic rock to EOH, Incl. 3m @ 2.6 g/t Au 6621000mN

Figure Eight | Silver Swan South Gold Prospects with Basement Gold Geochemistry Contours

**Black Hawk Prospect** 



# Red Gate Project (100% interest)

#### Introduction

The Red Gate Project consists of one granted Exploration Licence E31/1096 covering an area of 145.2 km<sup>2</sup>. The Project is centred 10 km north of the Porphyry Gold Mine (0.9 Moz gold endowment), 140 km northeast of Kalgoorlie. Historical exploration work has mostly targeted the Porphyry North Prospect where shallow, outcropping mineralisation has been defined. There is the potential to discover further mineralisation at Porphyry North and several other prospects nearby.

#### **Activities during the December Quarter**

Blackstone Minerals has entered into a Binding Option Agreement (refer ASX Announcement 6 August 2018) with Expose Resources Limited (ASX code: EXX) formerly named Golden Pacific Resources Limited to divest 100% of the Red Gate Project. Expose Resources lodged a Prospectus with the Australian Securities and Investments Commission (ASIC) on 9 October 2018. The Initial Public Offering ("IPO") process has been delayed due to difficult capital markets. For a copy of the Prospectus please visit the Expose Resources website: www.goldenpacificresources.com.au

The material terms of the agreement are:

- Blackstone has extended an exclusive irrevocable Option to Purchase to EXX until 21 March 2019. EXX shall complete its IPO and list on the ASX by 21 March 2019;
- Upon EXX achieving an ASX listing the Option to Purchase will be deemed to be exercised by EXX and the Purchase Price shall be payable to Blackstone;
- The Purchase Price shall be \$500,000 in cash payable within 5 days of EXX listing on the ASX and \$500,000 worth of EXX shares, to be issued at the IPO price, payable and to be issued within 10 business days of EXX listing on the ASX;
- The shares issued shall be subject to any escrow requirements imposed by the ASX.

# Middle Creek Project (95% interest)

#### Introduction

The Middle Creek Project is adjacent to Millennium Minerals Limited's Nullagine Gold Project (where the Golden Eagle operations have produced >400 koz gold since 2012 and as at 31st July 2018 had a 1.1Moz resource inventory¹), in the Pilbara region of Western Australia (Refer Figure Nine) and consists of 22 prospecting licence applications covering 39.7 km² within the Mosquito Creek belt.

#### **Activities during the December Quarter**

During the December quarter Blackstone completed a reconnaissance surface sampling program at Middle Creek. Assay results from the program are pending as of the end of the quarter.

1. Refer to Millennium Minerals Limited ASX announcement 31 July 2018



MINERALS

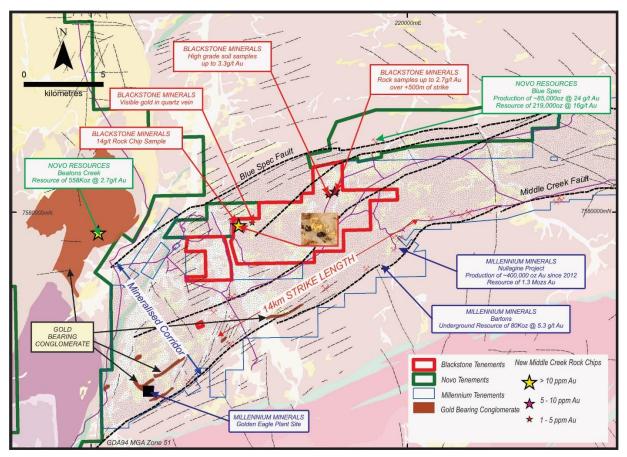


Figure Nine | Geology of the Middle Creek Project area

1. As per previous quarterly report 31 July 2018.

Yours sincerely

Scott Williamson Managing Director T: +61 8 9425 5217

#### **About Blackstone**

Blackstone Minerals Limited **(ASX code: BSX)** is actively exploring the high grade BC Cobalt Project in British Columbia, Canada. Blackstone is the first company in over 60 years to undertake systematic exploration for Cobalt at Little Gem and Jewel and within the surrounding areas that is the BC Cobalt Project. 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.



#### **Competent Person Statement and Disclaimer**

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.

The company confirms that it is not aware of any new information or data that materially affects the information included in the relevant market announcement and that all material estimates in the relevant market announcement continue to apply and have not materially changed.



# **Appendix One| Tenements**

# Mining tenements held at the end of December 2018 Quarter

Project	Location	Tenement	Interest at December 2018
Little Gem	British Columbia, Canada	501174, 502808	100%
	British Columbia, Canada	503409, 564599	100%
	British Columbia, Canada	573344, 796483	100%
	British Columbia, Canada	844114, 1020030	100%
	British Columbia, Canada	1047915, 1055449	100%
	British Columbia, Canada	1046246, 1046253	100%
	British Columbia, Canada	1050797, 1052563	100%
	British Columbia, Canada	1052564, 1052989	100%
	British Columbia, Canada	1052990, 1052991	100%
	British Columbia, Canada	1052992, 1052993	100%
	British Columbia, Canada	1055836, 1055837	100%
	British Columbia, Canada	1055838, 1055839	100%
	British Columbia, Canada	1055840, 1055859	100%
	British Columbia, Canada	1055860, 1055861	100%
	British Columbia, Canada	1055862, 1055863	100%
	British Columbia, Canada	1055864, 1052630	100%
		1052893	100%
Cartier	Quebec, Canada	2459824, 2459825	100%
	Quebec, Canada	2459826, 2459827	100%
	Quebec, Canada	2459828, 2459829	100%
	Quebec, Canada	2463107, 2463108	100%
	Quebec, Canada	2463109, 2463110	100%
	Quebec, Canada	2463111, 2463112	100%
	Quebec, Canada	2463113, 2463114	100%
	Quebec, Canada	2463115,	100%
Silver Swan South	Eastern Goldfields	E27/545	100%
	Eastern Goldfields	P27/2191	100%
	Eastern Goldfields	P27/2192	100%
	Eastern Goldfields	P27/2193	100%
	Eastern Goldfields	P27/2194	100%
	Eastern Goldfields	P27/2195	100%
	Eastern Goldfields	P27/2196	100%
Red Gate	Eastern Goldfields	E31/1096	100%
Middle Creek	Western Australia	P46/1900, P46/1901,	95%
	Western Australia	P46/1902, P46/1903,	95%
	Western Australia	P46/1904, P46/1905	95%
	Western Australia	P46/1906, P46/1907	95%
	Western Australia	P46/1907, P46/1908	95%
	Western Australia	P46/1909, P46/1910	95%
	Western Australia	P46/1911, P46/1912,	95%
	Western Australia	P46/1914, P46/1915,	95%
	Western Australia	P46/1916, P46/1917	95%
	Western Australia	P46/1918, P46/1919	95%
	Western Australia	P46/1920,	95%
	Western Australia	P46/1913	Application



### Mining tenements acquired and disposed during the December 2018 Quarter

Project	Location	Tenement	Interest at beginning of Quarter	Interest at end of Quarter
Mining tenem	ents relinquished			
Mount Deans South	Western Australia	P63/2032 P63/2033 P63/2037	100%	-
Mining tenem Nil	ents acquired			

### Beneficial percentage interests in joint venture agreements at the end of the Quarter

Project	Location	Tenement	Interest at end of Quarter
Nil			

# Beneficial percentage interests in farm-in or farm-out agreements acquired or disposed of during the Quarter

Project	Location	Tenement	Interest at beginning of Quarter	Interest at end of Quarter
Mining tenements	relinquished			
Nil Mining tenements	s acquired			
Nil	, acquir cu			