Ref: /BSX/609/BSX032

# 5.0% Cobalt, 137 g/t Gold, 3.2% Copper and Gold Discovery at Little Gem Cobalt/Gold Project

Blackstone Minerals Limited **(ASX code: BSX)**, is pleased to announce that the Company, as part of its due diligence program at the recently acquired Little Gem Cobalt-Gold Project, has discovered a new high grade Gold prospect named Roxey. Surface rock chip samples taken at **Roxey** assayed up to **24 g/t gold & 1.9% copper**. In addition to the discovery at Roxey, Blackstone has also received rock chip results from the **Jewel prospect** located 1.1 km north-northeast of Little Gem, with assays returning up to **98 g/t gold** and **3.2% copper.**

**Highlights of the sampling program at the Little Gem Project include:**

- Surface rock chip samples taken at **Roxey, located 1.5 km along strike from the high grade Little Gem Cobalt-Gold prospect** assayed up to **24 g/t gold & 1.9% copper** (Refer Figure One and Table One for full set of results);
- Verification rock chip samples taken at the **Little Gem Cobalt-Gold prospect** returned results of up to **5.0% cobalt & 34 g/t gold, 4.8% cobalt & 89g/t gold** and **0.65% cobalt & 137 g/t gold** (Refer Image One and Table One for full set of results);
- Surface rock chip samples were also taken to verify the mineralization at the Jewel prospect located 1.1 km north-northeast of Little Gem and returned up to **98 g/t gold** and **3.2% copper** (Refer Figure One and Table One for full set of results);
- Recent work confirms high grade cobalt and gold mineralization at Little Gem is **open both along strike and down dip;**
- The Little Gem Project covers an area of 195 km$^2$ and 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)** which retains the status of the foremost gold producer in British Columbia and the sixth largest in Canada (Refer Figures One and Three).

Blackstone's Technical Director commented; *"A combination of reconnaissance and verification sampling at the Little Gem Project has delivered excellent results including a new Gold discovery. The Little Gem Project continues to deliver very high grade results and the Company looks forward to accelerating explorations efforts over the coming months."*

**Blackstone Fast Facts**

| | |
|---|---|
| Shares on Issue | 35.8m |
| Share Price | $0.25 |
| Market Cap | $8.95m |
| ASX Code | **BSX** |

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Non-Exec Chairman

Andrew Radonjic
Technical Director

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**RECENT ANNOUNCEMENTS**

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Blackstone Acquires High Grade Cobalt/Gold Project in British Columbia, Canada (26/07/2017)

Appendix 5B & Quarterly Report (21/07/2017)

79g/t Au rock chip extends mineralisation to 4 km Red Gate Project, WA (11/07/2017)

Change of Registered Address (07/07/2017)

Second New Porphyry Zone Identified at Red Gate Project, WA (25/05/2017)

**PROJECTS**

**Red Gate Project**
(Gold)

**Middle Creek Project**
(Gold)

**Silver Swan South Project**
(Gold & Nickel)

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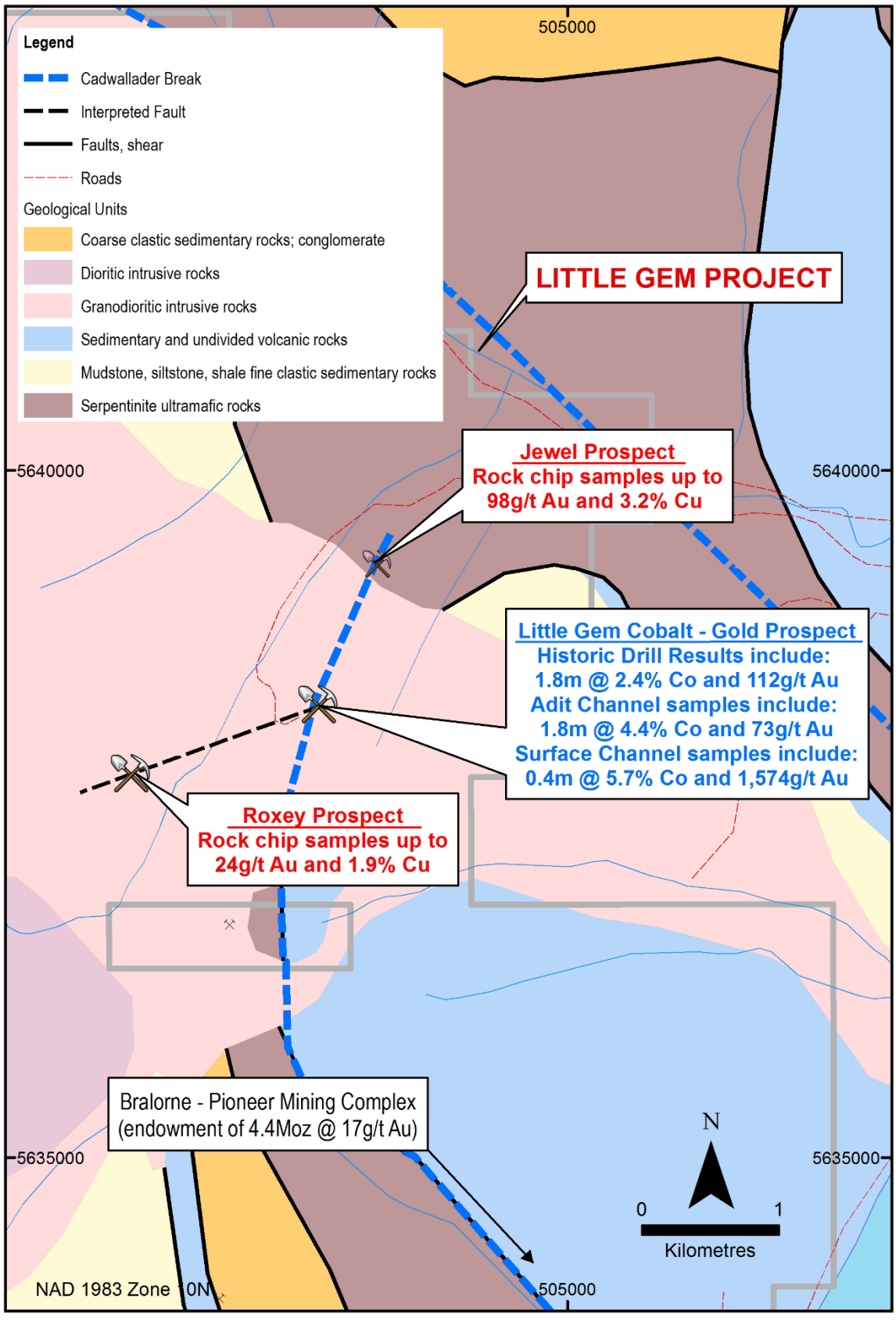
**Figure One | Little Gem Project- reconnaissance and verification sampling results with historic drill and channel results**



Blackstone recently completed a site visit as part of the due diligence program at the recently acquired Little Gem Cobalt-Gold Project in British Columbia, Canada (Refer Figure Two). Samples were taken to verify the mineralisation identified historically at the Little Gem Cobalt-Gold Prospect and the Jewel Gold Prospect and to test other exploration opportunities within the project area. Results led to the discovery of a new high grade Gold prospect named Roxey.

The **Roxey Gold prospect is located 1.5 kms west-southwest of the Little Gem Cobalt-Gold prospect** and is **along strike to the cobalt–gold mineralization at Little Gem**. Blackstone visually identified Roxey during the 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 Figure One and Table One for full set of results)**.** Mineralization at Roxey is associated with quartz-pyrite altered diorite containing chalcopyrite.

The verification rock chip samples taken at the Little Gem Cobalt-Gold prospect returned results of up to **5.0% cobalt & 34 g/t gold, 4.8% cobalt & 89g/t gold, 0.65% cobalt & 137 g/t gold and 3.1% cobalt & 24g/t gold** (Refer Image One and Table One for full set of results). These results confirm the High Grade nature of Little Gem and support historical drill results such as **1.8 m @ 2.4% cobalt & 112 g/t gold, 3.3 m @ 1.4% cobalt & 12.3 g/t gold, 2.9 m @ 0.9% cobalt & 12 g/t gold, 4.1 m @ 1.4% cobalt & 11.3 g/t gold and 3.3 m @ 1.4% cobalt & 80 g/t gold** (Refer BSX Announcement 26 July 2017 for full set of results).

Surface rock chip samples were also taken to verify the mineralisation at the Jewel prospect located 1.1 km north-northeast of Little Gem and returned up to **98 g/t gold** and **3.2% copper** (Refer Figure One and Table One 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 Table Two for full set of results). Mineralization at Jewel sits in an ultramafic near the easterly trending/steep south dipping contact with the quartz diorite/granodiorite that hosts the Little Gem Prospect.

The Company continues to finalize preparations for its maiden drilling program at the High Grade Little Gem Cobalt-Gold Prospect and looks forward to defining other exploration targets within the Project area so it can deliver a steady flow of exploration results from activity in the current field season.

**Figure Two | Location of the Little Gem Project**

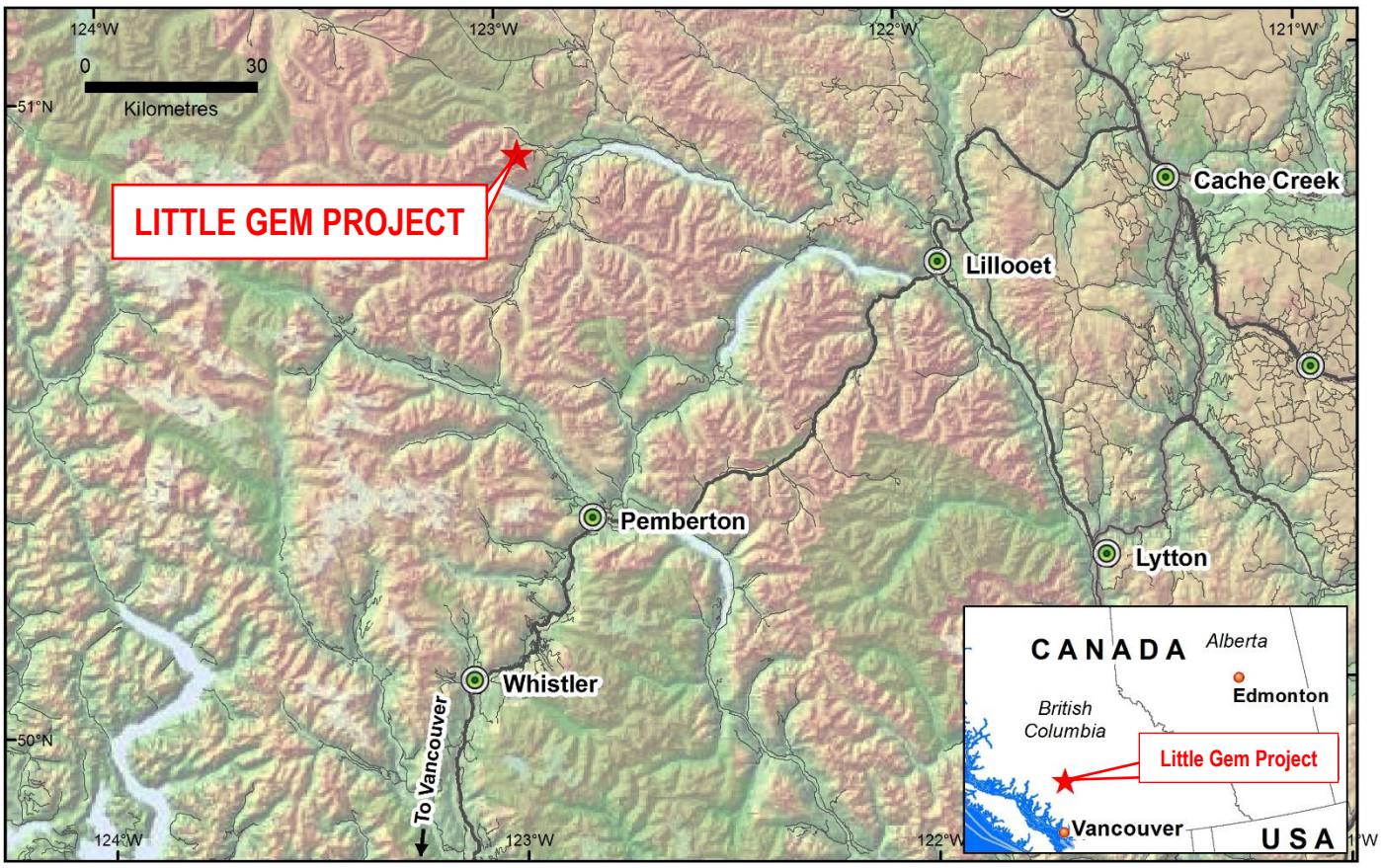



**Image One | Recent sample of mineralisation taken on the site visit to Little Gem assaying 17.5 g/t gold and 0.53% cobalt**

## Little Gem Cobalt-Gold Prospect- Background

The Little Gem Cobalt-Gold Prospect was discovered in the 1930's by prospectors identifying a pink cobalt-bloom on weathered mineralization 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: **1.8 m @ 2.4% cobalt & 112 g/t gold, 3.3 m @ 1.4% cobalt & 12.3 g/t gold, 2.9 m @ 0.9% cobalt & 12 g/t gold, 4.1 m @ 1.4% cobalt & 11.3 g/t gold and 3.3 m @ 1.4% cobalt & 80 g/t gold** from drilling, and **1.8 m @ 4.4% cobalt & 73 g/t gold, 2 m @ 3.1% cobalt & 76 g/t gold, 1.5 m @ 5.4% cobalt & 26 g/t gold and 1.3 m @ 4.0% cobalt & 29 g/t gold** from underground channel sampling and **0.4 m @ 5.7% cobalt & 1,574 g/t gold, 1.8 m & 5.1% cobalt & 17.8 g/t gold and 0.1 m @ 4.6% cobalt & 800 g/t gold** from surface channel sampling (Refer BSX Announcement 26 July 2017 for maps and 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 Two). 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. 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. (Refer BSX Announcement 26 July 2017 for full description of the Project's Geology).

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.

## Cobalt Market Commentary

Cobalt contributes up to 60% of the value of Lithium Ion Batteries which in turn accounts for 42% 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 35% 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 16% 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$27.50/lb (US$61,000/t) over the last 21 months. 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. A recent example was the shutdown of copper mining in the Katanga Province in the DRC due low copper prices which cut 3% of the world's cobalt supply.

Yours sincerely

**Andrew Radonjic**
**Technical Director**

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.

**Figure Three | Little Gem Geological Setting**

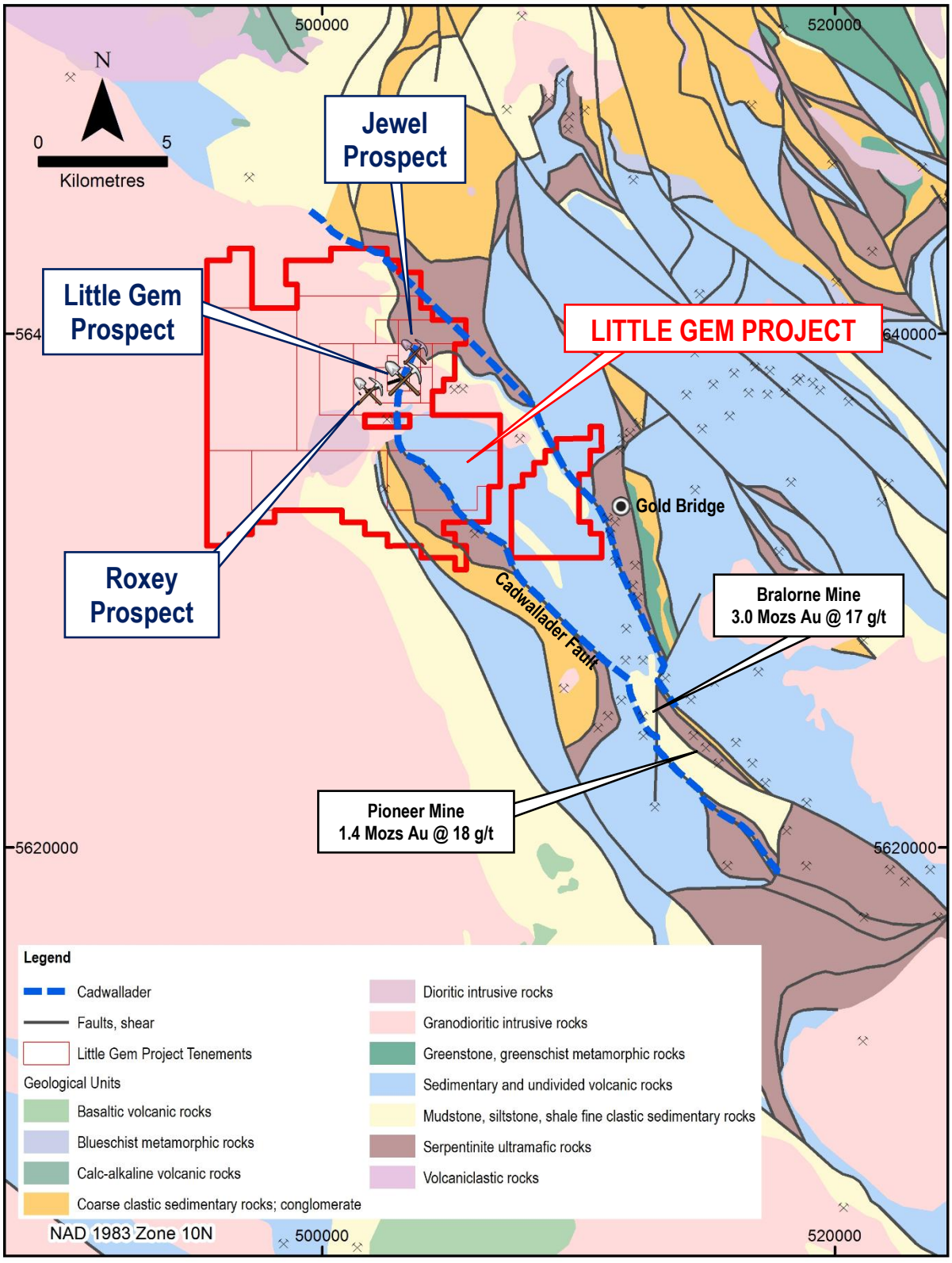


**Table One | Little Gem Project - reconnaissance and verification sampling results**

| Prospect | Sample | East | North | Au g/t | Co ppm | Ni ppm | Cu ppm | Ag g/t | Description |
|---|---|---|---|---|---|---|---|---|---|
| Little Gem | SOLG001 | 503099 | 5638345 | 4.7 | 13 | 8 | 483 | 0.5 | thick quartz vein with trace chalcopyrite |
| Little Gem | SOLG003 | 503165 | 5638334 | 0.10 | 9 | 11 | 45 | <0.5 | thin quartz + epidote + potassium feldspar veins cutting sericite-altered diorite |
| Little Gem | SOLG004 | 503215 | 5638339 | 0.01 | 19 | 12 | 85 | <0.5 | quartz + siderite vein in siderite-altered diorite |
| Little Gem | SOLG005 | 503253 | 5638338 | 137 | 0.647 % | 23 | 1 | 0.9 | lenses of massive sulfide |
| Little Gem | SOLG006 | 503255 | 5638338 | 0.27 | 16 | 9 | 4 | <0.5 | thin quartz + siderite vein with trace pyrite and arsenopyrite cutting siderite-altered diorite |
| Little Gem | SOLG006A | 503255 | 5638338 | 4.9 | 734 | 47 | <1 | <0.5 | altered diorite with disseminated sulfide |
| Little Gem | SOLG006B | 503255 | 5638338 | 89 | 4.76 % | 398 | 4 | 1.3 | lenses of massive sulfide within altered diorite |
| Little Gem | SOLG008 | 503231 | 5638353 | 24 | 3.12 % | 874 | 2 | <0.5 | massive sulfide boulders from around the Adit 1 portal |
| Little Gem | SOLD009A | 503231 | 5638367 | 34 | 4.94 % | 0.53 % | 3 | 1.0 | lens of massive sulfide in wall and roof of Adit 1 |
| Little Gem | SOLG009B | 503231 | 5638367 | 0.19 | 232 | 25 | 4 | <0.5 | diorite with disseminated arsenopyrite |
| Little Gem | SOLG010 | 503254 | 5638369 | 56 | 0.764 % | 82 | 1 | <0.5 | disseminated to massive sulfide |
| Little Gem | SOLG011 | 503285 | 5638377 | 0.05 | 37 | 12 | 22 | <0.5 | thin, weathered quartz + siderite veins in siderite-altered diorite |
| Little Gem | SOLG012 | 503232 | 5638364 | 10 | 2.57 % | 0.238 % | 5 | <0.5 | massive sulfide lens in weakly siderite-altered diorite |
| Little Gem | SOLG013 | 503062 | 5638382 | 7.5 | 0.157 % | 50 | <1 | <0.5 | float of altered diorite with disseminated sulfide |
| Little Gem | SOLG014 | 503000 | 5638400 | 0.13 | 151 | 16 | 3 | <0.5 | float of limonitic brecciated quartz + siderite veins with minor pyrite |
| Little Gem | SOLG015A | 503000 | 5638400 | 18 | 0.530 % | 84 | 1 | <0.5 | float boulders of massive sulfide |
| Little Gem | SOLG015B | 503000 | 5638400 | 20 | 0.386 % | 28 | 3 | <0.5 | float of altered diorite with disseminated sulfide |
| Little Gem | SOLG015C | 503000 | 5638400 | 28 | 0.738 % | 68 | 1 | <0.5 | float boulders of massive sulfide |
| Little Gem | SOLG023 | 503450 | 5638404 | 0.44 | 16 | 11 | 98 | <0.5 | limonitic silicified granodiorite |
| Roxey | SOLG016 | 502478 | 5638247 | 0.12 | 139 | 0.229 % | 31 | <0.5 | float boulders of ultramafic, trace sulfide |
| Roxey | SOLG017 | 502371 | 5638068 | 0.14 | 28 | 7 | <1 | <0.5 | float cobbles of bleached diorite |

| Prospect | Sample | East | North | Au g/t | Co ppm | Ni ppm | Cu ppm | Ag g/t | Description |
|---|---|---|---|---|---|---|---|---|---|
| Roxey | SOLG018 | 502038 | 5637765 | 0.05 | 69 | 81 | 679 | <0.5 | float of iron oxide-stained quartz + pyrite altered diorite |
| Roxey | SOLG019A | 501818 | 5637801 | 24 | 28 | 26 | 1.94 % | 24 | 10m thick outcrop of iron oxide-stained quartz + pyrite altered diorite |
| Roxey | SOLG019B | 501818 | 5637801 | 0.19 | 42 | 43 | 791 | <0.5 | float of diorite with minor chalcopyrite in vugs |
| Roxey | SOLG020 | 501836 | 5637770 | 0.13 | 48 | 83 | 0.435 % | 1.9 | float boulders of quartz + biotite + chalcopyrite altered diorite |
| Jewel | SOLG024 | 503654 | 5639189 | 0.14 | 631 | 1970 | 3.21 % | 1.0 | serpentinite with malachite veinlets |
| Jewel | SOLG025 | 503613 | 5639170 | 98 | 888 | 0.100 % | 498 | 3.4 | limonite sample from Jewel portal (adit inaccessible) |
| Jewel | V394208 | 503554 | 5639311 | 0.23 | 62 | 108 | 0.422 % | 0.8 | thin dacite dyke cutting ultramafic, trace disseminated pyrite and malachite |
| Jewel | V394209 | 503622 | 5639299 | 0.30 | 88 | 73 | 505 | <0.5 | thin dacite dyke cutting ultramafic |
| Jewel | V394210 | 503636 | 5639192 | 0.05 | 112 | 91 | 0.123 % | <0.5 | thin dacite dyke cutting ultramafic, trace disseminated malachite |

**Notes:**
Co, Ni and Cu results >1000 ppm expressed as percent
Au rounded to two significant figures, Ag rounded to one significant figure, percent level base metals rounded to 3 significant figures
Coordinates in UTM Zone 10N WGS84

**Table Two | Jewel Project – Adit Channel and Rock Chip Samples**

| Location | Nominal Sample Number | East UTM10WGS84 * | North UTM10WGS84 * | RL m* | Length m | Au g/t | Ag g/t | Cu % | Description |
|---|---|---|---|---|---|---|---|---|---|
| At collar Inclined Shaft at lower western end | 1 | 503613 | 5639170 | 1800 | 0.18 | 54.2 | 34 | n/a | mineralized vein |
| Outcrop 3m east of collar of western inclined shaft | 2 | 503613 | 5639170 | 1800 | 0.6 | 75.4 | trace | n/a | mineralized vein |
| 30m above & SE of western shaft is second inclined shaft, sample 3m from collar in drift heading south | 3 | 503613 | 5639170 | 1800 | 0.45 | 43.2 | trace | n/a | junction of two mineralized veins |
| Outcrop between the two inclined shafts 13.5m NE of lower shaft | 4 | 503613 | 5639170 | 1800 | 0.45 | 152.9 | trace | n/a | mineralized vein in oxide |
| ENE drift in upper adit (10.5m NNE of western shaft) 6.6m SSEt x-cut then 18m into drift | 5 | 503613 | 5639170 | 1800 | 0.225 | 52.8 | 14 | n/a | mineralized vein |
| Grab sample from stockpile in southern drift upper adit | 6 | 503613 | 5639170 | 1800 | na | 36.3 | trace | n/a | pile of oxidized ore |
| 30m WSW of upper adit is the intermediate adit sample taken 45m from portal heading ENE | 7 | 503613 | 5639170 | 1800 | 0.09 | 0.7 | trace | n/a | mineralized vein |
| Intermediate adit sample taken 22.8m from portal heading ENE | 8 | 503613 | 5639170 | 1800 | 0.3 | 37.0 | trace | n/a | mineralized vein |
| 4.5m in from the portal of the Intermediate Adit | 9 | 503613 | 5639170 | 1800 | 0.15 | 38.4 | trace | n/a | mineralized vein |
| 19.5m west from portal of intermediate adit is a gulch, selected sample of vein material | 10 | 503613 | 5639170 | 1800 | na | 70.6 | 3 | n/a | selected vein material |
| Sample taken from the western end of a vein which extended 75m west from the gulch | 11 | 503613 | 5639170 | 1800 | 0.15 | 24.7 | 21 | n/a | mineralized vein |
| Lowest adit (117m WNW from intermediate adit) selected vein sample near portal | 12 | 503613 | 5639170 | 1800 | na | 22.6 | 3 | n/a | sulfide rich mineralization |
| Lowest adit (117m WNW from intermediate adit) selected vein sample near portal | 13 | 503613 | 5639170 | 1800 | na | 6.9 | 137 | 19.3 | sulfide rich mineralization |

All sampling and assays by B.T. O'Grady of the British Columbia Department of Mines in 1937
na=Not applicable as grab sample not a channel sample across the mineralized zone
* Only one survey point is available for the Jewel prospect and may represent the upper adit portal. The reading was taken with a handheld GPS.
n/a= not assayed

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| Sampling techniques | • Nature and quality of sampling (e.g.: 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.<br>• Measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.<br>• 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 (e.g.: '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 (e.g.: submarine nodules) may warrant disclosure of detailed information. | • Rock samples reported in the attached Table 1 were collected from outcrop, subcrop and float by Blackstone Minerals personnel.<br>• Samples were approximately 0.5 to 3 kg each and considered sufficient size to be representative of the mineralization of interest.<br>• The samples were submitted to and assayed by ALS Canada Ltd, Vancouver ("ALS"). |
| Drilling techniques | • Drill type (e.g.: core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc..) and details (e.g.: 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..). | • Estella Mines completed twelve short AX (nominally 30 mm diameter) diamond drill holes for 203.4 m from Adit 2. Collar orientations and results were only reported from seven of the twelve holes, but there is no accurate information about collar locations, other than all holes were drilled from Adit 2. It is assumed the core was not orientated, Recoveries were only qualitatively reported for seven of the twelve holes were generally poor in mineralised material.<br>• Northern Gem Mining drilled four AX sized diamond core holes for 212.5 m from Adit 2 and 853 m of diamond core drilling from Adit 3. Locations and collar orientations were only reported for the four holes drilled from Adit 2, and there is no information about survey methods and it is assumed that the core was not orientated, Lost core zones were recorded within mineralised material.<br>• Anvil Resources drilled two BQ (37 mm diameter) diamond core holes for 373.8 m from surface in the footwall beneath Adit 3. No information is available about how the original collars were surveyed but drill pads were located by handheld GPS to nominal 10 m accuracy in July 2017. Hole orientations were only recorded at the collar. Core recovery was reportedly better than 98%. |
| Drill sample recovery | • Method of recording and assessing core and chip sample recoveries and results assessed.<br>• Measures taken to maximise sample recovery and ensure representative nature of the samples.<br>• 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. | • Core loss is commonly reported but no quantitative recovery information is available and it is not possible to make any conclusions about potential sampling bias. |
| Logging | • 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.<br>• Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.<br>• The total length and percentage of the relevant intersections logged. | • Rock samples collected by Blackstone Minerals were logged by suitably qualified geologists.<br>• Detailed geological logging is only available for the Anvil Resources drill holes.<br>• Only summary lithological information (i.e. mineralised or not) is available for the Estella Mining and Northern Gem Mining drill holes and the BC Department of Mines adit sampling.<br>• There are no core photos.<br>• The available information is not considered adequate for Mineral Resource estimation. |



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| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| Sub-sampling techniques and sample preparation | • If core, whether cut or sawn and whether quarter, half or all core taken.<br>• If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.<br>• For all sample types, the nature, quality and appropriateness of the sample preparation technique.<br>• Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.<br>• 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.<br>• Whether sample sizes are appropriate to the grain size of the material being sampled. | • The rock samples collected by Blackstone Minerals geologists were not subsampled for assay.<br>• There is no information regarding how the Estella Mining and Northern Gem Mining drill core was sampled.<br>• There is no information regarding how the BC Department of Mines channel sampling of adits was conducted.<br>• Gold Bridge Mining channel samples were collected by hammer and chisel in a continuous manner up both walls and roof of the adits on 2m intervals. Each sample weighed approximately 5 kg.<br>• Anvil Resources did not report assaying their drill core.<br>• There is no quality control data. |
| 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.<br>• 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.<br>• Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established. | • The Blackstone rock samples submitted to ALS for preparation and assay were crushed to 70% passing 2 mm then riffle spit to produce a 250 g subsample which was pulverised to 85% passing 75 microns. The analytical pulps were then assayed by industry standard 50 g charge lead collection fire assay with AAS finish for Au, and Co, Cu Ni and Ag by 4 acid digest including HF with ICPAES finish<br>• There is no information about how the Estella Mining and Northern Gem Mining, BC Department of Mines assays were conducted.<br>• Gold Bridge Mining samples were submitted to International Plasma Labs Ltd or ALS Minerals, Vancouver where they were fine crushed to 70% passing 2 mm, from which 250 g splits were taken and pulverised to 85% passing 75 microns in a ring pulveriser. Au was determined by 30g fire assay with AAS finish, Co was determined by aqua regia digestion with ICP-AES finish.<br>• Client standards and blanks were not included in Blackstone Minerals rock sample submission to ALS.<br>• Use of blanks and assay standards with historic sampling has not been reported. |
| Verification of sampling and assaying | • The verification of significant intersections by either independent or alternative company personnel.<br>• The use of twinned holes.<br>• Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.<br>• Discuss any adjustment to assay data. | • The assay results are compatible with the observed mineralogy.<br>• While at this stage there has been no verification assaying or quality control data, there is good agreement in the magnitude of Au and Co results reported by previous explorers and the BC Department of Mines.<br>• None of the previous explorers twinned holes.<br>• Primary data is stored and documented in industry standard ways.<br>• Assay data is as reported by the previous explores and BC Department of Mines and has not been adjusted in any way other than to convert from imperial to metric units (ounces per ton to grams per tonne for Au, and inches and feet to metres).<br>• Remnant assay pulps and core are not available. |
| Location of data points | • 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.<br>• Specification of the grid system used.<br>• Quality and adequacy of topographic control. | • The locations of Blackstone Minerals rock samples reported in Table 1 were determined by handheld GPS with nominal accuracy of ±10 m.<br>• Adits 1, 2 and 3 have relocated by handheld GPS with nominal accuracy of ±10 m by a suitably qualified consultant engineer in July 2017. The geometry of the underground mine workings is derived from historic mine maps registered in UTM Zone 10N WGS84 via GPS location of the portals. The position of underground drilling by Estella Mining and Northern Gem Mining, and channel sampling by the BC Department of Mines has been derived from these registered historic mine plans. |



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| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | • At the Jewel Prospect of the three adits mined only one adit has been relocated with a handheld GPS with a nominal accuracy of ±10m. Is it believed that this is the upper adit but this has to have been verified.<br>• The Anvil Resources drill hole sites were relocated by handheld GPS with nominal accuracy of ±10 m by a suitably qualified consultant engineer in July 2017.<br>• The locational accuracy of the Estella Mining and Northern Gem Mining drill holes, and the BC Department of Mines channel sampling is considered adequate to confirm exploration potential but is in no way adequate for resource estimation.<br>• All co-ordinates were recorded in UTM Zone 10N datum WGS84.<br>• 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 | • Data spacing for reporting of Exploration Results.<br>• 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.<br>• Whether sample compositing has been applied. | • Only visibly mineralized or altered rocks were sampled for assay and sampling is of a reconnaissance nature.<br>• The reported data is not of sufficient locational accuracy or density to establish mineral resources. |
| 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.<br>• 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. | • The historic exploration and mining activity shows the presence of a moderately to steeply south-southeast dipping zone of Au and Co mineralisation 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 a broader zone (several metres) of disseminated sulfarsenide mineralisation within altered granodiorite.<br>• Much of the historic drilling has been oblique or at low angle to the interpreted strike and dip of the mineralisation.<br>• Surface and underground channel sampling by the BC Geological Survey is thought to have been conducted approximately perpendicular to the strike and dip of mineralisation. |
| Sample security | • The measures taken to ensure sample security. | • 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 is not known.<br>• Rock samples reported in Table 1 were collected by Blackstone Minerals personnel, and transported and dispatched to ALS by Blackstone Minerals and Cobalt One Energy Corporation ("Cobalt One") personnel. |
| Audits or reviews | • The results of any audits or reviews of sampling techniques and data. | • The assay results agree well with the observed mineralogy.<br>• Surface sampling to verify and extend these results is a high priority. |

## 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.<br>• 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. | The Little Gem exploration targets are located within British Columbia mineral claims 501174, 502808, 503409, 573344 and 1046246 which Cobalt One has an option over to acquire up to 100% by April 7 2020. Blackstone Minerals has 100% of Cobalt One Shareholder Agreements executed with the Company's shareholder meeting the final closing condition for the acquisition of Cobalt One.<br>• 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, and their work form the basis of the results described herein. |
| Geology | • Deposit type, geological setting and style of mineralisation. | • The Little Gem Project is located within the Bralorne-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.<br>• The Little Gem prospect itself is a hypothermal cobalt-sulpharsenide and gold vein, 2.3 kilometres east northeast of Dickson Peak, lies within the margin of the Jurassic to Tertiary Coast Plutonic Complex (Cretaceous Penrose lobe pluton). Host rocks consist 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 granodiorite 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 values 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 sulpharsenide minerals. Surrounding the ore, strongly bleached and sericitized granodiorite containing disseminated sulphides, 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 host rocks and the association of uraninite with hornblende, biotite, apatite, allanite, monazite, orthoclase, cobalt sulpharsenides, arsenopyrite and molybdenite is indicative of high temperature, possibly magma-derived, hydrothermal fluids.<br>• Jewel Gold Prospect is 1.1kms NNE of Little Gem and sits in an ultramafic near the easterly trending/steep south dipping contact with the quartz diorite/granodiorite that hosts the Little Gem Prospect. |



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| Criteria | Explanation | Commentary |
|---|---|---|
| | | • The Roxey Gold prospect is located 1.5 kms west-southwest of the Little Gem Cobalt-Gold prospect and is along strike to the cobalt–gold mineralization at Little Gem. Mineralization at Roxey is associated with quartz-pyrite altered diorite containing chalcopyrite. |
| Drill hole Information | • 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:<br>- easting and northing of the drill hole collar;<br>- elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar;<br>- dip and azimuth of the hole<br>- down hole length and interception depth;<br>- hole length.<br>• 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. | • The Company's best understanding of the historic drill hole and surface and underground channel sample locations, orientations and lengths for Little Gem are given in Appendix One of the BSX Announcement on 26 July 2017 whereas for Jewel the appropriate information is given in Table 2 of this release..<br>• The locational information is considered sufficient to indicate potential for significant mineralization but in no way sufficient quality for detailed geological modelling or resource estimation. |
| Data aggregation methods | • In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.<br>• 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.<br>• The assumptions used for any reporting of metal equivalent values should be clearly stated. | • Drilling, channel and rock results are as recorded in the source historic reports.<br>• There has been no cutting of grades.<br>• Table 2 includes all assay intervals as recorded in the source historic reports.<br>• Metal equivalent values are not reported. |
| Relationship between mineralisation widths and intercept lengths | • These relationships are particularly important in the reporting of Exploration Results.<br>• If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.<br>• If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known'). | • Much of the historic drilling has been oblique or at low angle to the interpreted strike and dip of the mineralisation, and is not a reasonable indication of true thickness.<br>• Surface and underground channel sampling by the BC Geological Survey is thought to have been conducted approximately perpendicular to the strike and dip of mineralisation and is considered a reasonable representation of true thickness.<br>• Historic sampling has been focussed on massive mineralisation and the extent and thickness of disseminated mineralisation remains largely undefined. |
| Diagrams | • 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. | • Appropriate exploration plans are included in the body of this release.<br>• Because of uncertainties in exact drill hole locations and orientation sections are not considered reasonable at this stage. |
| Balanced reporting | • 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. | • The reported historic exploration results are considered reasonably representative of identified mineralised zone at the Little Gem and Jewel prospects. |
| Other substantive exploration data | • 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. | • The geophysical anomalies presented in Figure 3 of the BSX Announcement on 26 July 2017 are based on an airborne magnetic, VLF-EM and radiometric survey conducted by Geotronics Surveys Ltd and Columbia Geophysical Services for Major Resources Ltd in 1979. Magnetic and VLF-EM data were recorded by Sabre Electronics receivers and recorded onto MFE model M-22 CAHA dual channel strip chart recorders. The VLF-EM was conducted at 18.6Khz. Radiometric data was recorded by a Model |

| Criteria | Explanation | Commentary |
|---|---|---|
| | | 118 Royal Scintillator manufactured by Precision Radiation Instruments Ltd.<br>• Appropriate reconnaissance exploration plans are included in the body of this release. |
| Further work | • The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).<br>• Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. | • Blackstone Minerals proposes to conduct a significant programme of geological mapping and sampling followed by exploration drill testing.<br>• Appropriate exploration target plans are included in the body of this release. |