

## Drilling to Commence at Silver Swan South, Western Australia

Blackstone Minerals Limited (**ASX code: BSX**), is pleased to announce that drilling will commence at the Silver Swan South Project, located approximately 40 km northeast of Kalgoorlie (Refer Figure One), following the completion of target delineation, finalising drill access and the engagement of a drill contractor.

This initial phase of drilling will focus on the following:

- Further definition of gold targets associated with the interpreted northern extension of the Fitzroy Shear (controlling host structure at the Kanowna Belle Gold deposit) located 8 km along strike (Refer Figure Two).
- Infill historical, broad spaced, reconnaissance drilling which intersected up to 3.5g/t gold (Refer Blackstone Minerals Limited – Prospectus, released 15 December 2016).
- Target thickening of the ultramafic sequence considered highly prospective for nickel sulphides and located only 10km from the Silver Swan Nickel Mine (Refer Figure Two).
- Prioritise both gold and nickel targets for follow up RC drilling.

Blackstone's first phase of drilling at Silver Swan South will target both gold and sulphide nickel mineralization, associated with ultramafic units along strike from the Silver Swan and Black Swan Nickel Mines (Endowment 166kt Ni metal) and the Kanowna Belle Gold Mine (Endowment +5Moz Au). The program will test for basement hosted mineralization, using aircore drilling, to infill gold and base metal anomalism identified by previous reconnaissance style drilling.

Gold targets within the project area are associated with the interpreted northern extension of the Fitzroy Shear Zone, controlling structure for mineralization at Kanowna Belle. Previous vertical reconnaissance drilling has intersected up to 3 m @ 3.5g/t gold and 4 m @ 1.3g/t gold under transported lake clays. Blackstone's current drill program will focus on further defining the gold target in anticipation of follow up reverse circulation ("RC") drilling.

In addition to gold the Company's first drill program will also target sulphide nickel mineralisation associated with the ultramafic unit. The ultramafic unit is part of a sequence of komatiites which already hosts both the Silver Swan and Black Swan Nickel deposits only 10 km to the north (Refer Figure Two). This was further supported by rock samples taken during a recent geological mapping exercise with one sample (SOSNA019A) containing disseminated sulphides, returning 0.1% Cu and 0.1% Ni (See Table One for full set of sample results). Drilling will focus on further defining the nickel sulphide target as well as providing access for a potential down hole EM survey.

**Blackstone's Technical Director commented** "At Silver Swan South, Blackstone gets to test two targets for the price of one. The company is looking forward to testing for the interpreted strike extension of the controlling structure from a major gold deposit and for testing an ultramafic unit which is part of a sequence of komatiites which already hosts two major nickel deposits, both targets being within close proximity to Kalgoorlie."

### Blackstone Fast Facts

Shares on Issue	35.8m
Share Price	\$0.185
Market Cap	\$6.6m
ASX Code	BSX

### BOARD & MANAGEMENT

**Hamish Halliday**  
Non-Executive Chairman

**Andrew Radonjic**  
Technical Director

**Bruce McFadzean**  
Non-Executive Director

**Jamie Byrde**  
CFO & Company Secretary

### LISTING DATE

Monday 23 January 2017

### PROJECTS

Red Gate Project  
(right to earn 80% interest)  
- Targeting Gold

Middle Creek Project  
(95% interest)  
- Targeting Gold

Silver Swan South Project  
(100% interest)  
- Targeting Gold & Nickel

### REGISTERED OFFICE

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Figure One | Location of the Silver Swan Project

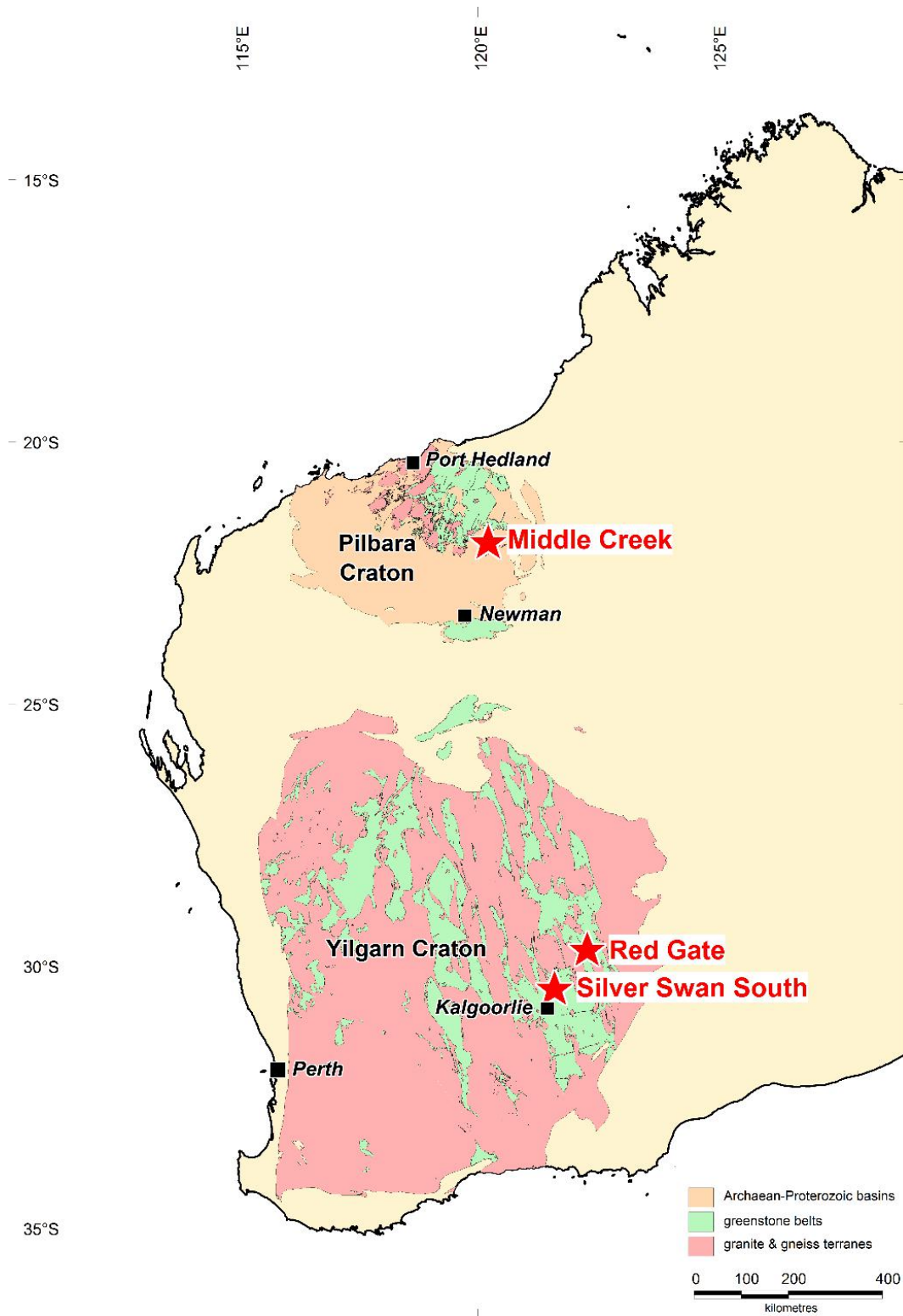
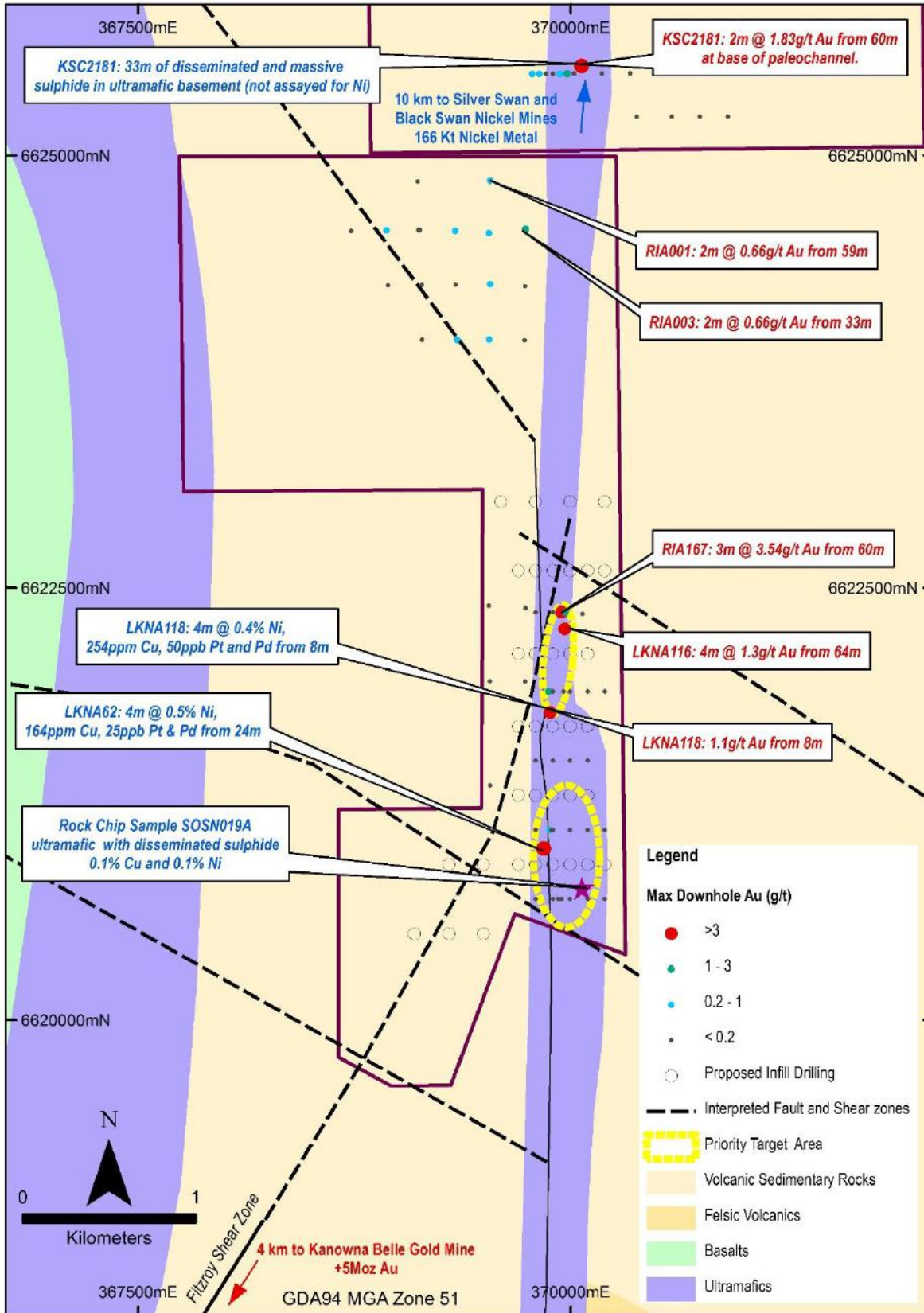


Figure Two | Silver Swan South Bedrock Geology Plan



**Table One | Reconnaissance surface rock sample results from Silver Swan South target areas**

Sample	Description	Au ppb	Cu ppm	Ni ppm	Co ppm	East MGA Zone51 GDA94	North MGA Zone51 GDA94
SOSN006	sub-crop of weathered sericitic amphibole dacite	1	13	10	2	370455	6623639
SOSN019A	outcrop of quartz & carbonate veined carbonate-altered ultramafic with trace malachite after disseminated chalcocopyrite	81	1060	1130	71	370069	6620760
SOSN019B	outcrop of quartz & carbonate veined carbonate-altered ultramafic	2	20	1660	94	370069	6620760
SOSN024	outcrop of silicified amphibole dacite	2	28	16	2	370193	6623966
SOSN025	outcrop of weathered amphibole and quartz phyric dacite	<1	10	8	3	370237	6623959

### Silver Swan South Project (100% interest) - Summary

The Silver Swan South Project comprises of one exploration licence application E27/545 and six granted prospecting licences, P27/2191 – 2196 covering an area of 47.2 km<sup>2</sup> and are located approximately 40 km northeast of Kalgoorlie. 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).

The Project area has been explored almost continuously now for 40 years however the majority of this work has been ineffective in terms of exploring for komatiite hosted massive nickel sulphide deposits, and largely focused on shallow gold deposits hosted within paleochannels. It is believed that much of the gold mineralisation encountered in the earlier work on the paleochannels was not alluvial but in fact the result of supergene processes. Numerous intersections of anomalous gold are recorded within the weathered and fresh bedrock, as are descriptions of alteration that suggest there is real potential for the discovery of significant primary gold mineralisation within the tenement area which Blackstone intends to target. Blackstone also plans to test the known komatiite units for sulphide nickel deposits by deep drilling and geophysical techniques.

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.

## M I N E R A L S

### Appendix One

JORC Code, 2012 Edition | 'Table 1' Report

#### Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections).

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li>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.</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 (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.</li> </ul>	<ul style="list-style-type: none"> <li>Rock samples were collected from outcrop and sub-crop by Blackstone Minerals Ltd geologists.</li> <li>Each rock sample weighed between 250g and 1500g and was of sufficient size to be representative of the outcrop of interest.</li> <li>The rock samples were submitted to and assayed by ALS Global, Perth ("ALS").</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>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.).</li> </ul>	<ul style="list-style-type: none"> <li>No drilling, not applicable</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>No drilling, not applicable</li> </ul>
Logging	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>The rock samples were qualitatively logged and described by a suitably qualified geologist.</li> </ul>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <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 sub-sampling 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 style="list-style-type: none"> <li>The rock samples were submitted ALS Global, Perth in their entirety where they were dried, crushed and pulverised to nominally 80% passing 75 microns for assay.</li> <li>No drilling so information regarding drill sampling not applicable.</li> </ul>

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Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Gold was analysed by industry standard 50g charge lead collection fire assay with AAS finish at ALS Global, Perth.</li> <li>Copper, nickel and cobalt were analysed by industry standard 4 acid digest (including HF) with ICP finish at ALS Global, Perth.</li> <li>Commercially certified reference materials were included in ALS batches by the client at a minimum rate of at least one standard per 20 samples.</li> <li>Results for the commercial assay standards assays are within 10% of the reference values for the elements of interest.</li> </ul>
Verification of sampling and assaying	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>The assay results are compatible with the observed mineralogy</li> <li>The use of twinned holes is not applicable at this stage (no drilling).</li> <li>Primary data is stored and documented in industry standard ways.</li> <li>Assay data is as reported by the laboratories and has not been adjusted in any way.</li> <li>Remnant assay pulps are held in storage by the assay laboratories.</li> </ul>
Location of data points	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>Sample locations were determined by handheld GPS considered accurate to <math>\pm 10</math> m.</li> <li>All co-ordinates were recorded in MGA Zone 51 datum GDA94.</li> <li>Topographic control is provided by government 250,000 topographic map sheets and a Digital Terrain Model based on the 30 m Shuttle Radar Topographic Mission data.</li> </ul>
Data spacing and distribution	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>Only visibly mineralized or altered rocks were sampled for assay and sampling is of a reconnaissance nature.</li> <li>The reported rock sampling data is in no way sufficient to establish mineral resources.</li> <li>Sample compositing has not been applied.</li> </ul>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>The reconnaissance rock sampling confirms the presence of a north striking ultramafic body flanked by dacitic volcanics, and of alteration potentially associated with gold mineralisation.</li> <li>No drilling, not applicable.</li> </ul>
Sample security	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>The chain of custody for samples from collection to dispatch to assay laboratory was managed by Blackstone Minerals personnel. Sample numbers were unique and did not include any locational information useful to non-Blackstone personnel. The level of security is considered appropriate for such reconnaissance sampling.</li> </ul>
Audits or reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>The assay results agree well with the observed mineralogy.</li> <li>No further reviews have been carried out at this reconnaissance stage.</li> <li>Further surface sampling to verify and extend these results is proposed.</li> </ul>

## M I N E R A L S

### 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	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>The Silver Swan South exploration targets are all located within granted Prospecting Licences P27/2191, P27/2192, P27/2193, P27/2194, P27/2195 and P27/2196 owned 100% by Black Eagle Pty Ltd which is wholly owned by Blackstone Minerals Ltd.</li> <li>Standard governmental conditions apply to the Prospecting Licences.</li> </ul>
Exploration done by other parties	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>Placer Dome Asia Pacific Ltd was the most significant previous explorer of the target area, conducting reconnaissance air core drilling that forms the basis of the targets shown on Figure 2. Results of the historic exploration activities are summarised and discussed in Blackstone Minerals' prospectus, released 15 December 2016 and available from <a href="http://blackstoneminerals.com.au">http://blackstoneminerals.com.au</a></li> </ul>
Geology	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>The exploration area is within the Eastern Goldfields, Western Australia which is prospective for gold and base metal deposits.</li> </ul>
Drill hole Information	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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 style="list-style-type: none"> <li>No drilling, not applicable.</li> </ul>
Data aggregation methods	<ul style="list-style-type: none"> <li>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.</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 style="list-style-type: none"> <li>No drilling, not applicable.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <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 (e.g. 'down hole length, true width not known').</li> </ul>	<ul style="list-style-type: none"> <li>No drilling, not applicable.</li> </ul>

## M I N E R A L S

Criteria	Explanation	Commentary
Diagrams	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>An appropriate exploration plan is included in the body of this release.</li> <li>No drilling, drill plans and sections are not applicable.</li> </ul>
Balanced reporting	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>All Blackstone Minerals reconnaissance rock sampling gold, copper, nickel and cobalt results from the Silver Swan South target areas are listed in Table One.</li> </ul>
Other substantive exploration data	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>Appropriate reconnaissance exploration plans are included in the body of this release.</li> </ul>
Further work	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (e.g. 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 style="list-style-type: none"> <li>Blackstone Minerals proposes to conduct further prospecting, geochemical sampling, aircore drilling, petrography and geophysical surveys to refine the targets before RC drill testing.</li> <li>An appropriate exploration target plan is included in the body of this release.</li> </ul>