

# Drilling at Four Mile Well Gold Project Commences

*Testing potential on interpreted greenstone corridor near Laverton*

## Highlights

- Air-core drilling has commenced at the Four Mile Well Gold Project north of Laverton
- 1200m drill program across gold target areas
- Untested geochemistry targets on interpreted greenstone corridor

Gold, lithium, and base metals exploration company Golden State Mining Limited (ASX code: "GSM" or the "Company") is pleased to provide an update on its exploration activities and new drill program now underway at the Four Mile Well project near Laverton, Western Australia.



Figure 1: Air-core drilling underway at the Four Mile Well Gold Project.

## Four Mile Well (100% GSM)

### Geochemical Sampling

GSM has recently completed an orientation geochemical program on two traverses over an historic arsenic-bismuth +/- gold soil anomaly (refer to September 2021 Quarterly activities report dated 29 October 2021). The aim of the orientation program was to validate the historic anomalous values, collected as conventional lag samples with a more appropriate ultra-fine soil fraction (UFF) analytical method determined from GSM's regolith analysis. The UFF technique was specifically developed for transported sand covered terrain as observed in the northern part of the Four Mile Well project.

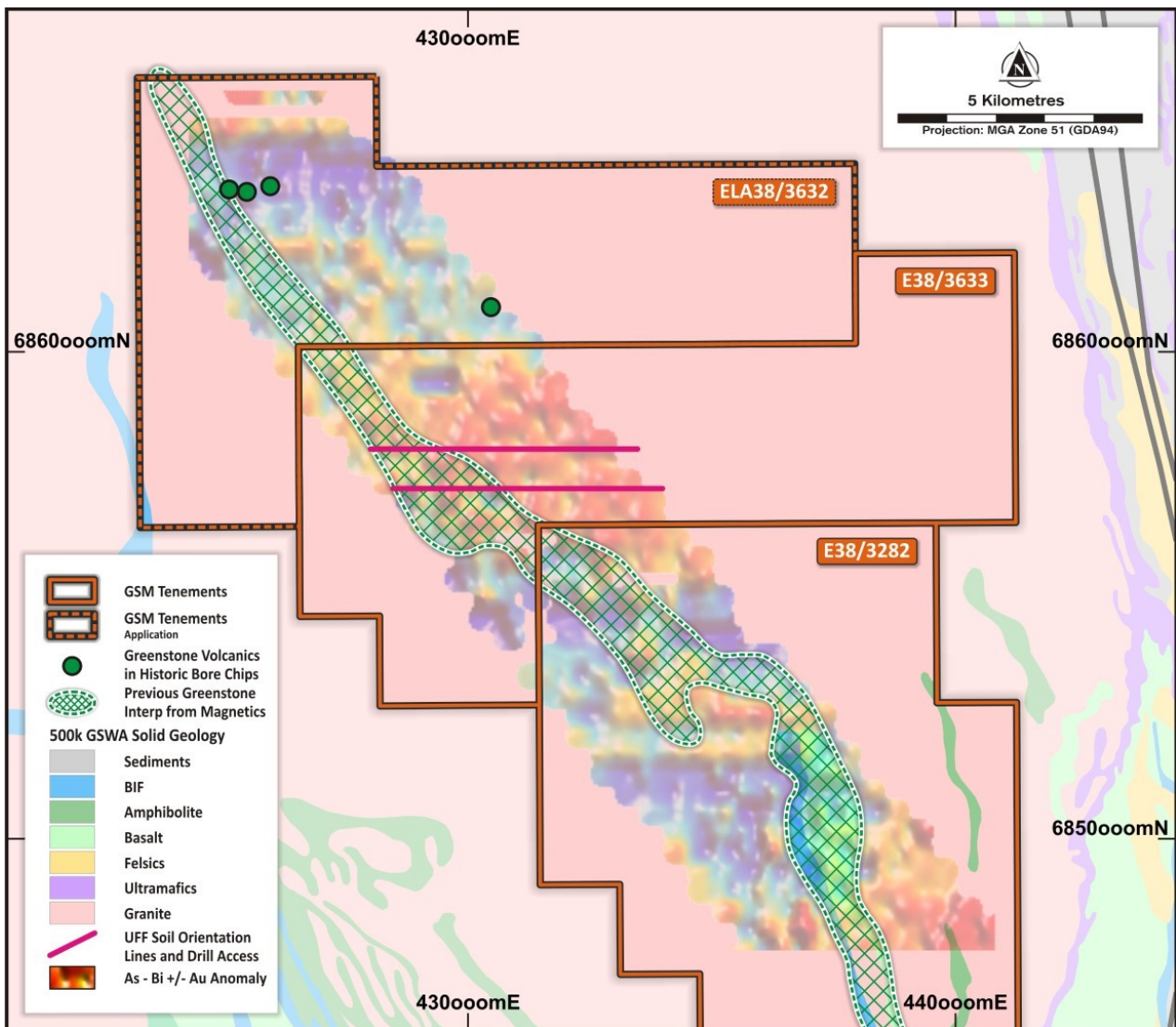


Figure 2: Four Mile Well plan showing recorded greenstone locations and soil orientation lines

Although UFF is a different collection and analytical method to the historic lag sampling, some broad correlations can be interpreted between the UFF geochemistry and the historic lag sampling results (refer to JORC table 1). The analysis has provided sufficient encouragement to undertake further

work and sampling over this area.

Reconnaissance work also revealed several historic, wide-spaced water bore collars located on the northern tenement application ELA 38/3632 (Figure 2) where remnant drill chips were collected for petrographic analysis. These drill chips were recorded as fine-grained schistose chlorite-sericite altered intermediate/volcanoclastic types, including some specimens with weak sulphide mineralisation. These findings demonstrate the presence of an untested corridor of altered greenstone rocks striking north-northwest beneath the sand covered northern portion of the Four Mile Well project in an area previously interpreted as buried granite by the GSWA. DMIRS WAMEX searches and field-checking has shown the northern portion of the Four Mile Well project has not been the subject of any effective reconnaissance drill testing.

### **Air-core Program**

The Company has now merged this latest surface geochemical and field observation dataset with the historic geochemistry data and aeromagnetic structural interpretation work. This generative work has resulted in the design of an approved ~1200m air-core (“AC”) drill program over prospective, untested structural and geochemistry corridors. This AC drill program commenced on Friday 17<sup>th</sup> of June.

**Golden State’s Managing Director, Michael Moore, commented:** *“The recent work that we completed at our Four Mile Well project has potentially identified a previously unrecorded greenstone rock package. This new interpretation, along with recent soil sampling work which provided correlation with historic data, has driven the fast tracking of an air-core drill program, which commenced late last week. It also reinforces the company’s significant expansion of its Four Mile Well exploration footprint in the past 12 months and it is keen to evaluate significant greenstone types recorded in old bores in the north of the project which is currently under application.”*

Ends

### **For further information please contact:**

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## Recently Acquired Projects

### **Payne's Find** (E59/2660, E59/2661, E59/2662, E59/2679 & E59/2680) – **Lithium & base metal**

Five exploration licence applications (~1200km<sup>2</sup>) immediately east and 30kms north of Payne's Find. Region contains known lithium-bearing pegmatites (e.g. Mount Edon & Goodingnow) with prospective geological setting of multiple "late-stage" intrusive episodes considered favourable for lithium mineralisation. Base metal potential on eastern margin of the Big Bell Suite 30kms east of the Meleya discovery (ASX:TEM).

### **Eucla Basin** (E28/3175 & E28/3176) – **Copper-Au & Nickel**

Two exploration licence applications (974km<sup>2</sup>) approximately 100kms north-east of Balladonia. Untested buried magnetic and gravity anomalies may represent a layered mafic-ultramafic intrusive target in the Albany-Fraser Province (similar age rocks to Nova-Bollinger nickel-copper deposit and Tropicana gold deposit).



### **Southern Cross East** (E77/2896, E77/2897 & E77/2898) – **Gold**

Three exploration licence applications for a total of 620km<sup>2</sup> approximately 60kms north-east of Southern Cross. Buried Archaean rocks with structural setting considered favourable for orogenic gold prospectivity in a long-lived gold mining region.

### **Yamarna** (E38/3671 & E38/3670) – **Gold-Nickel & PGE**

Two exploration licence applications (661km<sup>2</sup>) approximately 96kms north-northeast of Laverton. The location is situated on the same crustal suture as the Mt Alexander nickel sulphide discoveries and contains similar host rock potential.

### **Ashburton** (E08/3456 & E08/3469) – **Lead-Silver & Gold**

Two exploration licence applications for a total of 302km<sup>2</sup> approximately 12kms southwest of the Kooline airstrip, 135kms west of Paraburdoo. The tenements are considered prospective for VHMS style mineralisation in sediments proximal to basin bounding faults.

**BOARD OF DIRECTORS**

Damien Kelly

Non-Executive Chairman

Michael Moore Managing

Director

Brenton Siggs

Non-Executive Director

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**FORWARD LOOKING STATEMENTS**

As a result of a variety of risks, uncertainties and other factors, actual events, trends and results may differ materially from any forward looking and other statements mentioned or implied herein not purporting to be of historical fact. In certain cases, forward-looking information may be identified by (without limitation) such terms as "anticipates", "believes", "should", "could", "estimates", "target", "likely", "plan", "expects", "may", "intend", "shall", "will", or "would". Any statements concerning mining reserves, resources and exploration results may also be forward looking in that they involve estimates based on assumptions. Forward looking statements are based on management's beliefs, opinions and estimates as of the respective dates they are made. The Company does not assume any obligation to update forward looking statements even where beliefs, opinions and estimates change or should do so given changed circumstances and developments.

**COMPETENT PERSONS STATEMENT**

The information in this report that relates to Exploration Results, is based on information compiled by Geoff Willetts who is a Member of the Australian Institute of Geoscientists (AIG). Geoff Willetts is the Exploration Manager, a full-time employee of Golden State Mining Limited (GSM) and holds shares and options in the Company.

Geoff Willetts has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity currently being undertaken 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". Geoff Willetts consents to the inclusion in this report of the matters based on his information in the form and context in which it appears. Information on previous explorers and historical results are summarised in the Independent Geologist's Report of the Golden State Mining Limited Prospectus dated 22 August 2018.

This release was authorised by Mr. Michael Moore, Managing Director of Golden State Mining Limited.

## JORC CODE, 2012 Edition-Table 1: SECTION 1: SAMPLING TECHNIQUES AND DATA – FOUR MILE WELL PROJECT

Criteria	JORC Code Explanation	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <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>Include reference to 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 style="list-style-type: none"> <li><b>Historic geochemical sampling 1989</b></li> <li>(WAMEX Report A31251)</li> <li>A total of 2,180 surface lag samples were collected over on a 400m x 100m grid on 45 east-west striking traverses</li> <li>783 infill samples were collected over anomalous areas by 100m x 40m -6mm to +10# surface soil sampling on 18 east-west striking traverses</li> <li><b>GSM geochemical Sampling</b></li> <li>A total of 116 soil samples on 100m centres were collected at approx. 20cm depth on two east-west striking traverses spaced 800m apart.</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>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).</li> </ul>	<ul style="list-style-type: none"> <li>No drill data located.</li> </ul>
<b>Drill sample recovery</b>	<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 drill data located.</li> </ul>
<b>Logging</b>	<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>No drill data located</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<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><b>Historic geochemical sampling 1989</b></li> <li>WAMEX A31251: Surface lag samples sieved from -6mm to +10# fraction</li> <li>Infill lag samples sieved from -6mm to +10# fraction</li> <li>The sample preparation of the soil samples followed industry standard practice at the time.</li> <li><b>GSM geochemical sampling</b></li> <li>Soil samples sieved from -2mm fraction as per recommendations for the Ultrafine fine fraction (UFF) technique</li> </ul>
<b>Quality of assay data</b>	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying</li> </ul>	<ul style="list-style-type: none"> <li><b>Historic geochemical sampling 1989</b></li> </ul>

Criteria	JORC Code Explanation	Commentary
<b>and laboratory tests</b>	<p><i>and laboratory procedures used and whether the technique is considered partial or total.</i></p> <ul style="list-style-type: none"> <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 (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<ul style="list-style-type: none"> <li>All samples were analysed for gold at Western Mining Corporation's Kalgoorlie laboratories using sampling, preparation and analytical procedures described below:</li> <li>Samples were dried to 140°C, crushed to -6mm and pulverised in Terna Swing mills</li> <li>Primary samples were analysed for Au, Ni, Cu, Bi and As</li> <li>Infill sample analysed for Au only</li> <li>Ni &amp; Cu - A 0.2g sample is digested in a mixed nitric-perchloric acid solution, evaporated to dryness, leached with hydrochloric acid, made to volume and the base metal concentrations are determined by Atomic Absorption Spectroscopy</li> <li>As &amp; Bi - An aliquot from the base metal analysis (see above) was taken and mixed with potassium iodide-ascorbic acid solution. This was passed through hydride evolution equipment and sodium borohydride solution or pellet added, the evolved gas was determined by Atomic Absorption.</li> <li>Au - A 25g sample was digested with aqua regia, the gold is extracted using aliquot DIBK and the solvent backwashed. The gold concentration was determined by Atomic Absorption</li> <li>No geophysical tools, spectrometers or handheld XRF instruments used.</li> <li>QAQC procedures not located in previous explorers' reports.</li> <li><b>GSM sampling</b></li> <li>ULTRAFINE+™ ANALYSIS by Labwest</li> <li>The &lt;2um fraction is separated from the submitted ~200g soil or regolith sample using water and a dispersant</li> <li>The clay fraction is digested in aqua-regia under high pressure and temperature using microwave apparatus</li> <li>Elemental concentration is determined using a combination of ICP-MS &amp; ICP-OES</li> <li>49 assayed elements received,</li> <li>Ag, Al, As, Au, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Fe, Ga, Ge, Hf, Hg, In, K, La, Li, Mg, Mn, Mo, Nb, Ni, Pb, Pt, Rb, S, Sb, Sc, Se, Sn, Sr, Ta, Te, Th, Ti, Tl, U, V, W, Y, Zn, Zr</li> </ul>
<b>Verification of sampling and assaying</b>	<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>No drill data located.</li> </ul>
<b>Location of data points</b>	<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>Previous Explorers used AMG84 Z51 grid depending based on established baselines. AMG84 Z51 sample locations converted to GDA94 MGAZ51 by transformation.</li> <li>GSM uses Garmin handheld GPS using GDA94 MGA Z51 coordinates</li> </ul>
<b>Data spacing and</b>	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> </ul>	<ul style="list-style-type: none"> <li>Previous explorer primary survey designed on</li> </ul>

Criteria	JORC Code Explanation	Commentary
<b>distribution</b>	<ul style="list-style-type: none"> <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>	<p>interpreted magnetic trends on a 400m x 100m grid (WAMEX A31251) with 100m x 40m infill on reconnaissance east west orientated lines</p> <ul style="list-style-type: none"> <li>GSM used two reconciliation lines over previous geochemical survey lies using 100m spaced centres</li> <li>No composite sampling of soil samples.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<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>Historic and GSM geochemistry sampling was reconnaissance in nature, being relatively wide spaced and the orientation of potential mineralised structures is yet to be confirmed.</li> <li>There is insufficient information to determine if the reconnaissance geochemistry sampling were orientated perpendicular to potential mineralised structures.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>Previous explorer's security not documented in WAMEX report</li> <li>All GSM samples were collected and delivered to Labwest by GSM personnel under the supervision of GSM management</li> </ul>
<b>Audits or reviews</b>	<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>Not documented in WAMEX report</li> <li>GSM data reviewed by industry consultant revealing some positive correlations</li> </ul>

## Section 2: REPORTING OF EXPLORATION RESULTS-FOUR MILE WELL PROJECT:

Criteria	JORC Code Explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<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 Four Mile Well Project is located approximately 9km north of Laverton, Western Australia and consists of two granted exploration licences (E38/3282 &amp; 3633) and one exploration license applications (E38/3632) covering approximately 258 square kilometres.</li> <li>Tenement E38/3282 was granted on 2/07/2018 &amp; Tenement E38/3633 was granted on 5/01/2022. The tenement holder is Crown Mining Pty Ltd., a wholly owned subsidiary of Golden State Mining Ltd.</li> <li>The granted tenements are in good standing.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>For details of relevant previous exploration completed by other parties at the Four Mile Well Project, refer to the Independent Geologists Report ('IGR') included in the Golden State Mining Ltd prospectus (2018). Previous work on, or adjacent to, the Four Mile Well project was completed by Kennecott Exploration Australia Pty Ltd, Uranium and Nickel Exploration NL, WMC, Metex Resources Ltd, Triton Gold, Poseidon Gold, Stratum Metals Ltd and Ishine International Resources Ltd.</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>For details of the geological setting of the Four Mile Well Project refer to the Independent Geologist's Report included in the prospectus.</li> </ul>
<b>Drill hole Information</b>	<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</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>No drill data located</li> </ul>



Criteria	JORC Code Explanation	Commentary
	<p>sea level in metres) of the drill hole collar</p> <ul style="list-style-type: none"> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> <p>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.</p>	
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>Soil lag sample values extracted from previous explorers' WAMEX report 31251 with no weighting averaging, maximum and/or minimum grade truncations or cut off grades applied.</li> <li>No historic drill intercepts reported.</li> <li>No historic drill intercepts reported so no assumptions used for any metal equivalent values</li> <li>GSM applied no weighting averaging, maximum and/or minimum grade truncations or cut off grades</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<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 (eg 'down hole length, true width not known').</li> </ul>	<ul style="list-style-type: none"> <li>No drill data located.</li> </ul>
<b>Diagrams</b>	<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>Appropriate summary diagrams are included in the announcement</li> </ul>
<b>Balanced reporting</b>	<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><b>Historic lag assay values range from:</b> <ul style="list-style-type: none"> <li>(WAMEX A31251 : 1-62 ppb Au)</li> <li>WAMEX A31251 : 0.1-16.4 ppm Bi)</li> <li>WAMEX A31251 : 1-80 ppm As)</li> </ul> </li> <li><b>GSM soil values range from:</b> <ul style="list-style-type: none"> <li>(1-5 ppb Au)</li> <li>(0.352-0.535 ppm Bi)</li> <li>(6.3-13.6 ppm As)</li> </ul> </li> </ul>
<b>Other substantive exploration data</b>	<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>Other exploration data considered relevant for the Four Mile Well Project has been included in the Golden State Mining prospectus (2018).</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>A proposed air-core reconciliation program to establish depth to basement and underlying lithologies</li> </ul>