



## MONSOON UPDATE - TWIN HOLES INTERSECT NARROW, HIGH GRADE GOLD MINERALISATION

### Key points

- Diamond holes twinning previous broad, high grade intercepts in two RC drillholes intersect narrow but very high grade gold mineralization
- Results confirm the presence of high grade narrow vein mineralization, of limited continuity, with nuggety free gold
- Testing of various sub-samples from original RC drilling also verifies the presence of high grade and nuggety gold in these samples
- Difference between overall intercepts in original RC and diamond twins explained by geological complexity, and possibly localised “smearing” of high grade nuggety gold during RC drilling
- Diamond rig is currently drilling down plunge of known mineralization at Baloo

S2 Resources Ltd (“S2” or the “Company”) advises that results have been received for two diamond holes drilled to twin the original high grade gold intercepts in RC holes SPBC0313 and SPBC0320 previously reported in the Company’s ASX announcement of 21<sup>st</sup> July 2016. In each case, the diamond twin holes were drilled approximately 3-5 metres from the collar position of the original RC hole.

Diamond hole SPBD0344, which twinned previous RC hole SPBC0313, intersected:

- 0.5m @ 2.88g/t gold from 78m, **0.5m @ 29.4g/t** gold from 132.5m, and 1m @ 4.58g/t gold from 137.5m

Diamond hole SPBD0345, which twinned previous RC hole SPBC0320, intersected:

- 0.4m @ 0.83g/t gold from 72.5m, **1.5m @ 27.6g/t** gold from 85m, 0.7m @ 0.8g/t gold from 87.7m, and **0.92m @ 117g/t** gold from 107.03m

These results support the previously expressed view (see ASX announcements of 19<sup>th</sup>, 28<sup>th</sup> and 30<sup>th</sup> September 2016) that the gold mineralization at Monsoon appears to reside in discrete, narrow structures with highly variable grade, and the presence of both free gold and arsenopyrite (see Figure 1) also supports the previously expressed view (see ASX announcement of 28<sup>th</sup> September 2016) that there is a component of nuggety free milling gold together with a component of refractory gold.

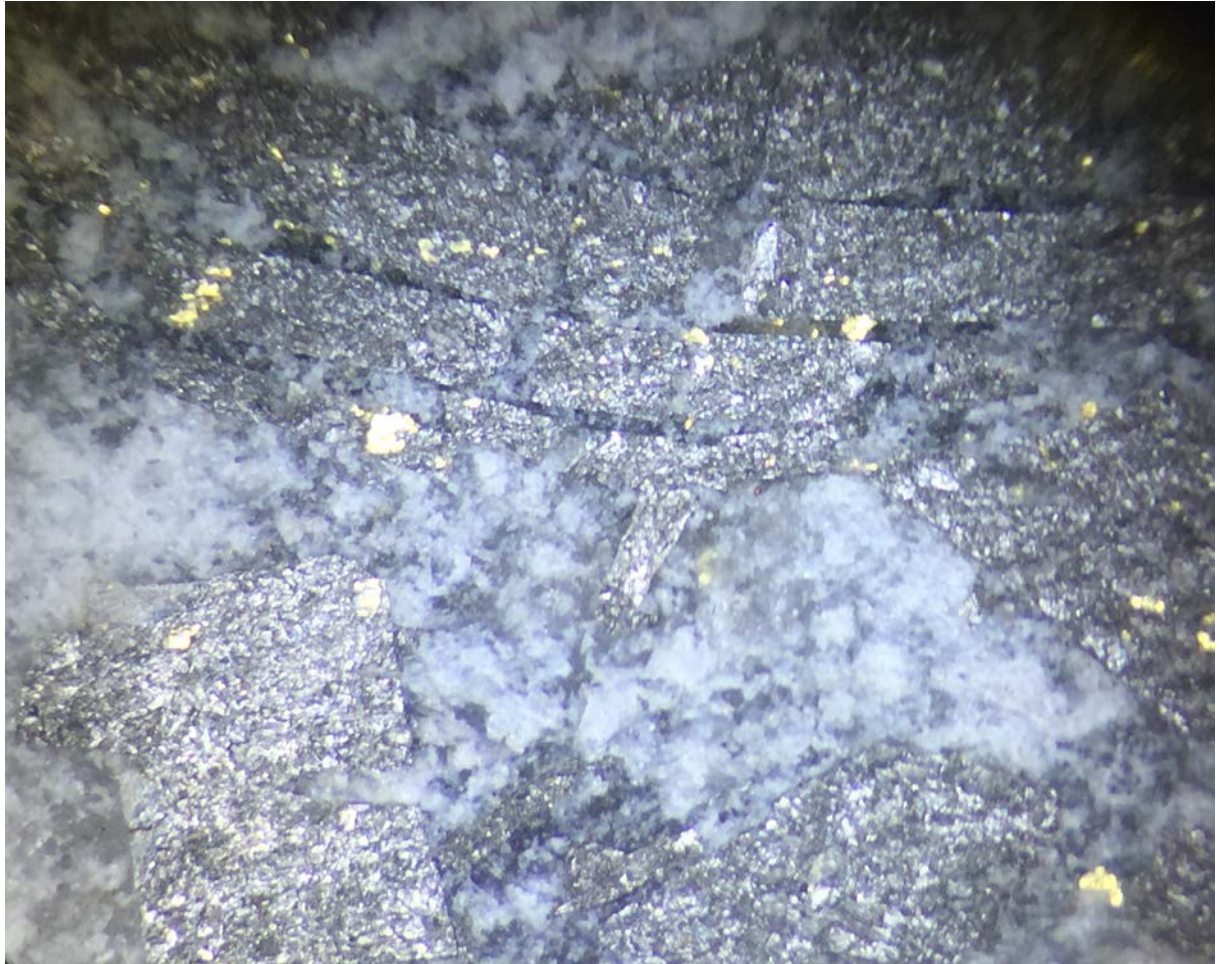


Figure 1. Highly magnified view showing blebs of free gold (yellow) associated with arsenopyrite crystals (silver) within a quartz vein from the intercept of 0.92m @ 117g/t gold from 107.03m in diamond hole SPBD0345 (twinning RC hole SPBC0320).

Individual veins are narrow, have random orientations, and appear to be discontinuous, forming a nebulous zone best described as a stockwork, largely hosted by basalt close to the sub-vertical sheared basalt-shale contact. Gold mineralization appears to be associated with a smaller set of sheared quartz-arsenopyrite veins that dip steeply to the west, within and parallel to the overall shear foliation, and dipping in the same direction as the previous westerly directed follow up drilling.

The location of the high grade gold mineralization and/or vein structures within the twin diamond holes is within the same overall mineralized interval as in the original RC holes, but the extent of each of these zones intersected in the diamond twin holes is much more restricted than the overall mineralized intercepts in the RC drilling.

Concurrently with the twin drilling, all metre by metre duplicate samples and bulk samples from the original RC holes (which are always routinely collected at the time of drilling) were re-assayed at a different laboratory to the original samples. The aim of this was to provide further confirmation that there was no sampling error or laboratory error with the original RC samples, by seeing if there is any substantial variation in gold between each of the three sub-samples collected from the same metre interval in each of the RC holes, and also by seeing if there is any substantial difference in gold results between different laboratories.

The results from this are shown in Figures 2 and 3, and show that:

- Overall, all three sub-samples from each metre sample from every metre interval in both RC holes have broadly similar gold contents
- In some cases, different sub-samples have varying gold content, but that this variation is random (ie, not consistently higher or lower in one particular sub-sample set)
- There is close agreement in the gold results from the same sub-sample (the original sample) analysed at two different laboratories

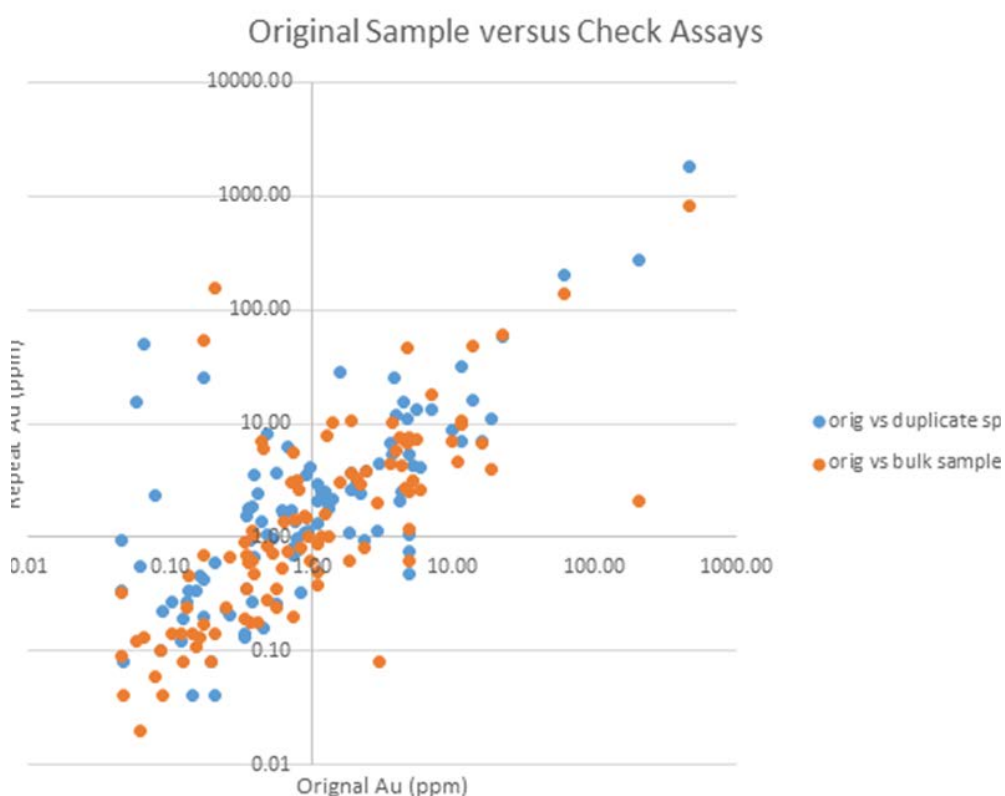


Figure 2. Correlation of gold assays between sub-samples from the same metre interval in the original two RC holes. Blue dots compare the correlation between the original sub-sample and the duplicate sub-sample from each individual metre interval, and orange dots compare the correlation between the original sub-sample and the bulk sub-sample from each individual metre interval. The tight clustering shows high correlation and the loose clustering shows higher variability between sub-samples (ie, a nugget effect caused by highly variable concentrations of free gold particles within the samples).

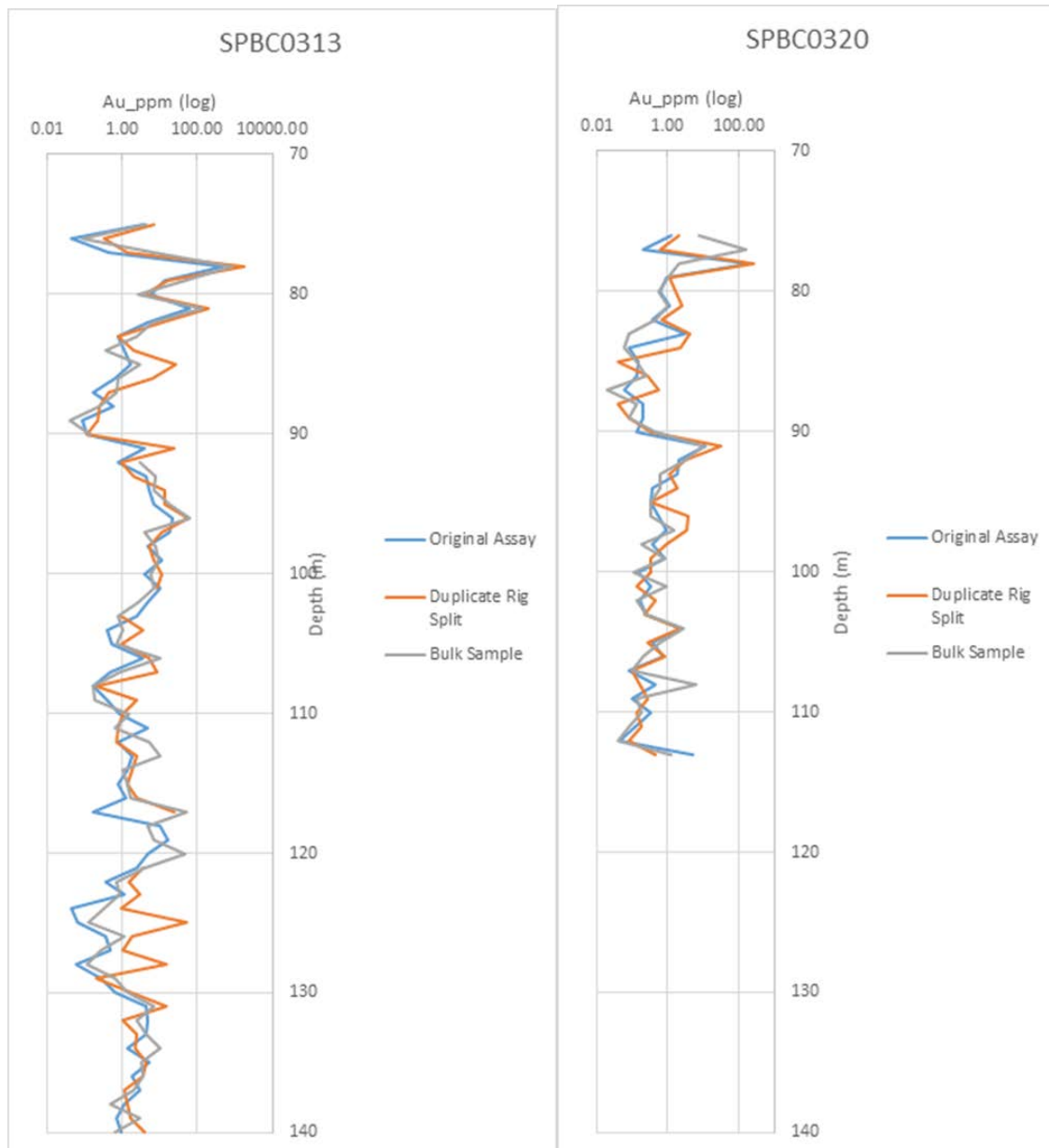


Figure 3. Metre-by-metre correlation of gold assays between all three sub-samples (original, duplicate and bulk) from the original two RC holes.

These outcomes indicate that:

- There is high grade nuggety gold present in the RC holes
- There was no error during collection of the samples from the RC drill rig
- The analyses at both laboratories are accurate

As previously described (see ASX announcement of 19<sup>th</sup> September 2016), there is no obvious indication that sample quality (ie, as measured by sample recovery, sample wetness, and visible sample contamination) may have caused a spurious over-representation of gold in the original RC intercepts.





Additionally, the new testwork supports the integrity of the RC samples and the accuracy of the analysis of these, and the results from the twin drilling confirm the presence of very high grade but spatially restricted and highly variable nuggety gold mineralization. A possible explanation for the broader difference between the original RC holes and their diamond twins, other than highly variable geology and grade, and complex geometry, is that particles of free gold, being much denser than the enclosing rock, may have preferentially “bled” down the RC holes during drilling as a result of a density separation effect, thereby partially contaminating less mineralized material further down the hole despite there being no obvious indication of such a phenomenon, or way to determine or measure this.

Weather conditions have restricted the diamond rig’s access to the area so the diamond rig has moved to the Baloo gold prospect where it is exploring for down plunge extensions to the Baloo deposit.

**For further information, please contact:**

Mark Bennett  
 Managing Director  
 +61 8 6166 0240

Anna Neuling  
 Executive Director  
 +61 8 6166 0240

**Competent Persons statement**

The information in this report that relates to Exploration Results is based on information compiled by John Bartlett who is an employee of the company. Mr Bartlett is a member of the Australasian Institute of Mining and Metallurgy. Mr Bartlett has sufficient experience of relevance to the style of mineralisation and the types of deposits under consideration, and to the activities undertaken, to qualify as Competent Persons as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Bartlett consents to the inclusion in this report of the matters based on information in the form and context in which it appears.

**Annexure 1**

The following Tables are provided to ensure compliance with the JORC code (2012) edition requirements for the reporting of exploration results.

Hole No.	Zone	Total Depth	North	East	RL	Dip	Azim	From, m	To, m	Width, m	Au, ppm	Comment
SPBC0312	Monsoon	120	6476802	394390	262	-60	90	75	78	3	1.18	
AND								85	86	1	5.22	
AND								96	102	6	0.54	
SPBC0313	Monsoon	140	6476801	394362	262	-60	90	74	140	66	11.4	EOH (4.2 g/t cut)
INCLUDING								77	85	8	70.5	(11.0 g/t cut)
INCLUDING								77	81	4	139	(20.0 g/t cut)
AND, INCLUDING								90	103	13	8	
INCLUDING								95	99	4	14.4	
AND, INCLUDING								110	123	13	3.6	
INCLUDING								117	119	2	13.5	
AND, INCLUDING								130	138	8	3.3	

SPBC0314	Monsoon	120	6476801	394329	262	-60	90			NSI		
SPBC0315	Monsoon	95	6476802	394417	262	-60	90			NSI		
SPBC0316	Monsoon	115	6476758	394390	262	-60	90	59	60	1	1.1	
AND								82	83	1	0.59	
AND								95	98	1	1.09	
SPBC0317	Monsoon	110	6476758	394359	262	-60	90	38	39	1	2.22	
AND								75	76	1	0.53	
SPBC0318	Monsoon	130	6476759	394331	262	-60	90			NSI		
SPBC0319	Monsoon	70	6476840	394407	262	-60	90			NSI		
SPBC0320	Monsoon	140	6476840	394379	262	-60	90	75	113	38	6.41	(1.78 g/t cut)
INCLUDING								75	83	8	26.7	(4.70 g/t cut)
AND, INCLUDING								90	99	9	2.1	
AND, INCLUDING								103	106	3	1.11	
AND, INCLUDING								112	113	1	4.93	
SPBC0321	Monsoon	120	6476841	394348	262	-60	90	64	65	1	0.82	
SPBC0322	Monsoon	120	6477431	393809	262	-60	90			NSI		
SPBC0323	Monsoon	140	6477429	393770	262	-60	90	105	107	2	24.7	(15.5 g/t cut)
AND								110	111	1	2.16	
SPBD0324	Monsoon	171.5	6476800	394485	262	-55	270			NSI		
SPBD0325	Monsoon	264.9	6476800	394485	262	-70	270	76	76.9	0.9	1.75	
SPBD0326	Monsoon	228.9	6476840	394520	262	-60	270	194	196	2	1.64	
AND								213	214	1	38	
SPBD0327	Monsoon	243.7	6476902	394470	262	-70	270	97.5	99	1.5	1.02	
AND								131	133	2.1	2.49	
AND								158.5	159.4	0.9	1.24	
AND								161.6	167	5.4	1.76	
SPBC0328	Monsoon	115	6476780	394405	262	-60	270			NSI		
SPBC0329	Monsoon	120	6476780	394425	262	-60	270	58	59	1	3.64	
AND								62	63	1	4.98	
AND								115	116	1	1.23	
AND								118	119	1	0.92	
SPBC0330	Monsoon	120	6476780	394445	262	-60	270	16	17	1	0.87	
SPBC0331	Monsoon	130	6476780	394465	262	-60	270			NSI		
SPBC0332	Monsoon	60	6476800	394405	262	-60	270			NSI		
SPBC0333	Monsoon	95	6476800	394425	262	-60	270			NSI		
SPBC0334	Monsoon	120	6476800	394445	262	-60	270	16	18	2	1.1	
AND								103	104	1	1.08	
SPBC0335	Monsoon	110	6476820	394440	262	-60	270			NSI		
SPBC0336	Monsoon	110	6476860	394420	262	-60	270			NSI		
SPBC0337	Monsoon	120	6476860	394440	262	-60	270	88	91	3	32.1	(21.8 g/t cut)
AND								95	96	1	1.01	
SPBC0338	Monsoon	120	6476860	394460	262	-60	270	58	60	2	1.42	

SPBC0339	Monsoon	120	6476860	394480	262	-60	270	119	120	1	3.00	(EOH)
SPBC0340	Monsoon	150	6476900	394420	262	-60	270	15	16	1	1.29	
SPBC0341	Monsoon	130	6476900	394440	262	-60	270	65	66	1	1.43	
SPBC0342	Monsoon	120	6476900	394460	262	-60	270	24	25	1	1.07	
AND								81	82	1	1.13	
SPBC0343	Monsoon	30	6476900	394480	262	-60	270			ABD		
SPBD0344	Monsoon	165.9	6476806	394362	262	-60	90	78	78.5	0.5	2.88	Twin of SPBC0313
AND								132.5	133	0.5	29.4	
AND								137.5	138.5	1	4.58	
SPBD0345	Monsoon	174.9	6476844	394379	262	-60	90	72.5	72.9	0.4	0.83	Twin of SPBC0320
AND								85	86.5	1.5	27.6	
AND								87.7	88.4	0.7	0.8	
AND								107.03	107.95	0.92	117	

**Table 1:**

The following Tables are provided to ensure compliance with the JORC code (2012) edition requirements for the reporting of exploration results.

#### **SECTION 1 SAMPLING TECHNIQUES AND DATA**

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<p><i>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.</i></p>	<p>The mineralised trend at Monsoon is sampled by aircore, RC and diamond drilling with 20 to 40 m hole spacing and on nominal 20 to 80 m lines. Aircore holes were drilled to refusal. For RC sampling, a 1 metre split is taken directly from a cone splitter mounted beneath the rigs cyclone. The cyclone and splitter are cleaned regularly to minimise any contamination. A second reference split is also taken from each metre and stored on site.</p> <p>Aircore holes are sampled using an aluminium scoop to produce a four metre composite sample.</p> <p>Diamond core is drilled either Triple Tube PQ3 or HQ3. Core is cut in half and sampled.</p>
	<p><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used</i></p>	<p>Sampling and QAQC procedures is carried out using S2 protocols as per industry best practice.</p>

Criteria	JORC Code explanation	Commentary
	<p><i>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</i></p>	<p>Reconnaissance aircore samples are composited at 4 m to produce a bulk 3 kg sample. Samples were dried, pulverised (total prep), and split to produce a 25 g sub sample which is analysed using aqua-regia digestion with ICP-MS finish with a 1 ppb detection limit.</p> <p>A 1m end of hole sample was collected for all aircore holes. Sample preparation was the same as above and were analysed using a four acid digest with an ICP/OES and fire assay. The following elements are included in the assay suite: Ag, Al, As, Au, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cu, Fe, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Sc, Sr, Te, Ti, Tl, V, W, Zn.</p> <p>RC drilling is sampled a 1m "cone" split sample, to produce a bulk 3 kg sample. Diamond core is cut by an automatic Almonte core saw and bagged for assay preparation. Sample preparation was the same as for the aircore drilling. A nominal 50gram sub-sample was collected and analysed by Samples were to produce a sub sample for analysed by fire assay with an AA finish.</p>
<p><b>Drilling techniques</b></p>	<p><i>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).</i></p>	<p>Diamond is by either PQ3 or HQ3 core size.</p> <p>RC drilling is carried out using a face sampling hammer with a nominal diameter of 140mm.</p> <p>Aircore drilling is carried out using a 3 ½ inch blade bit. Where necessary a 3 ½ inch face sampling hammer is employed to penetrate through hard zones.</p>
<p><b>Drill sample recovery</b></p>	<p><i>Method of recording and assessing core and chip sample recoveries and results assessed</i></p> <p><i>Measures taken to maximise sample recovery and ensure representative nature of the samples</i></p> <p><i>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.</i></p>	<p>Sample quality of RC and aircore drilling is qualitatively logged on a metre basis, recording recoveries, sample condition (ie wetness) and observable contamination.</p> <p>For diamond core, recoveries are measured on a metre basis to give a percentage recovered.</p> <p>All data is recorded in the company database.</p> <p>Various drilling additives (including muds and foams) have been used to condition RC and aircore drill holes to maximise recoveries and sample quality.</p> <p>Drill cyclone, splitter in the case of RC or sample buckets in the case of Aircore are cleaned between rod-changes and after each hole to minimise down hole and/or cross-hole contamination.</p> <p>For diamond drilling PQ and HQ triple tube is used to maximise recoveries and drillers will complete short runs where necessary to minimise core loss.</p> <p>Reviews of the drill data have been completed and there is no observable/discernible consistent relationship between grade and the 3 criteria used to spot/measure potential problems (ie, wetness, recovery, visual contamination).</p> <p>Coarse nuggetty gold, observed in diamond core may, in RC drilling, result in particles of free gold, being much denser than the enclosing rock, preferentially "bleeding" down the RC holes during drilling as a result of a density separation effect, thereby partially contaminating less mineralized material further down the hole which would not be observable nor able to be quantitatively measured</p>
<p><b>Logging</b></p>	<p><i>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.</i></p>	<p>Lithology, alteration and veining is recorded directly to a digital format and imported into S2 Resources central database. The logging is considered of sufficient standard to support a geological resource.</p>



Criteria	JORC Code explanation	Commentary
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i>	Logging of RC Diamond and aircore records lithology, mineralogy, mineralisation, weathering, colour and other features of the samples, and is qualitative in nature. All core is photographed both wet and dry and stored digitally.
	<i>The total length and percentage of the relevant intersections logged</i>	All drillholes were logged in full.
<b>Sub-sampling techniques and sample preparation</b>	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	The core was cut in half and sampled to geology with sampling at intervals of between 0.3 and 1.25m with sampling
	<i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i>	Aircore samples consist of a 4 metre composite samples, collected using an aluminium scoop. RC was sampled on a metre basis by collecting directly from the on board cyclone using a cone splitter: (i) calico sample that is submitted to the laboratory for analysis (ii) a second calico that is used as a field duplicate and is stored and (iii) remainder of sample collected into a green plastic bag and stored next to the drill hole. Samples were collected both wet and dry.
	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	The sample preparation follows industry best practice in sample preparation All samples are pulverised utilising Essa LM1, LM2 or LM5 grinding mills determined by the size of the sample. Samples are dried, crushed as required and pulverized to produce a homogenous representative sub-sample for analysis. A grind quality target of 85% passing 75µm has been established and is relative to sample size, type and hardness.
	<i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i>	Quality control procedures include submission of Certified Reference Materials (CRM's), blanks and duplicate samples with each batch of samples. Selected samples are also re-analysed to confirm anomalous results. Grind size checks are routinely completed to ensure samples meet the industry standard of 85% passing through a 75µm mesh.
	<i>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.</i>	Field duplicates are taken at regular intervals. Samples are selected to weigh less than 3kg to ensure total preparation at the pulverisation stage.
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	Sample sizes are considered appropriate for gold mineralisation.
<b>Quality of assay data and laboratory tests</b>	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	RC and diamond core samples are analysed for Au only using a 40g or 50g Lead Collection Fire Assay with an AAS finish. Initial assaying was carried out at Minanalytical Laboratories in Canning Vale Perth, with check sampling carried out at Bureau Veritas Laboratories in Canning Vale, Perth and samples from the twin diamond holes assayed at Bureau Veritas Laboratories in Kalgoorlie.  4m composite samples from AC drilling are analysed for Au only using a 25g aqua-regia digestion with an ICP/MS finish. The method gives a near total digestion of the regolith intercepted in aircore drilling and is suitable for the reconnaissance style sampling undertaken.  All aircore holes have a 1m end-of-hole sample is collected for all AC holes. An extensive multi-element suite (including Ag, Al, As, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cu, Fe, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Sc, Sr, Te, Ti, Tl, V, W, Zn) is analysed using a four acid digest with an ICP/OES and ICP/MS finish. Au, Pt And Pd is analysed for using 25g or 50g Lead Collection fire assay with an ICP/MS finish.

Criteria	JORC Code explanation	Commentary
	<i>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.</i>	No geophysical tools were used to determine any element concentrations used in this resource estimate.
	<i>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.</i>	Sample preparation checks for fineness were carried out by the laboratory as part of their internal procedures to ensure the grind size of 85% passing 75 micron was being attained. Laboratory QAQC involves the use of internal lab standards using certified reference material, blanks, splits and replicates as part of the in house procedures.
<b>Verification of sampling and assaying</b>	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	The Exploration Manager of S2 has visually verified significant intersections.
	<i>The use of twinned holes.</i>	Two RC holes that intersected broad zones of high grade gold (SPBC0313 and SPBC0320) were twinned using diamond drilling to validate earlier results.
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	Primary data was collected using a set of standard Excel templates using lookup codes. The information was sent to an external database consultant for validation and compilation into a Perth based SQL database.
	<i>Discuss any adjustment to assay data.</i>	No adjustments or calibrations were made to any assay data reported.
<b>Location of data points</b>	<i>Accuracy and quality of surveys used to locate drillholes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i>	Drillhole collars were surveyed by DGPS with an accuracy is +/- 0.05m. RC and Diamond holes are gyro surveyed downhole.
	<i>Specification of the grid system used.</i>	The grid system used at Polar Bear is GDA94 (MGA), zone 51.
	<i>Quality and adequacy of topographic control.</i>	A topographic surface has been created from aerial geophysical data. This has been calibrated with DGPS survey data. All reconnaissance drill holes have been corrected to this surface where DGPS pickup is not available.
<b>Data spacing and distribution</b>	<i>Data spacing for reporting of Exploration Results.</i>	Data spacing is currently defined by the geological criteria regarded appropriate to determine the extents of mineralisation. Reconnaissance AC drilling is on a nominal spacing of between 80m x 40m and 160m x 40m drill pattern. RC drilling is on various spacing's although a notional 20m x 20m and 40m x 40m pattern has been used.
	<i>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.</i>	Drilling is currently preliminary in nature had the mineralised domains have not yet demonstrated sufficient continuity in both geological and grade continuity to support the definition of Mineral Resource and Reserves, and the classifications applied under the 2012 JORC Code.
	<i>Whether sample compositing has been applied.</i>	No compositing has been applied to the exploration results.
<b>Orientation of data in relation to geological structure</b>	<i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i>	The drilling is not necessarily drilled perpendicular to the orientation of the intersected mineralisation. All reported intervals are downhole intervals and not calculated true width. This will be established with further drilling.
	<i>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.</i>	The orientation of mineralisation is currently unknown and as such no comment can be made as to any sampling bias as a result of the orientation of mineralised structures.

Criteria	JORC Code explanation	Commentary
Sample security	<i>The measures taken to ensure sample security.</i>	Chain of custody is managed by S2 Resources. Samples in calico bags are bagged directly from the splitter at the drill rig by an S2R geotechnician. Samples are stored on site and either delivered by S2 personnel directly to the assay laboratory in Perth, or delivered to either the nominated Minanalytical depot at Kalgoorlie or Centurion Transport and delivered direct to the assay laboratory. Whilst in storage, they are kept on a locked yard. Tracking sheets have been set up to track the progress of batches of samples.
Audits or reviews	<i>The results of any audits or reviews of sampling techniques and data.</i>	A review of the sample quality (recovery, wetness and contamination) as recorded by the geologist on the drill rig against assay results has been carried out with no obvious issues identified.

## SECTION 2 REPORTING OF EXPLORATION RESULTS

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	The Monsoon prospect is located within Exploration License E63/1142, which is located within the Polar Bear Project, 100% owned by Polar Metals Pty Ltd, a wholly owned subsidiary of S2 Resources Ltd.  All projects are situated within the Ngadju Native Title Claim (WC99/002).
	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 tenement is in good standing and no known impediments exist on tenement actively explored.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<u>Gold Exploration</u> Plutonic Operations Limited and Homestake Gold of Australia Limited conducted reconnaissance AC drilling (PBAC prefix) over Lake Cowan on predominantly 100 m drillhole spacing and 800 m line spacing from 1997-1999. Location of these drillholes cannot be verified as the collars are now mostly obscured.  AC sampling was done by 4 m composites with 1 m re-splits on samples greater than 0.1 g/t. Samples were assayed by aqua-regia digest with AAS finish although this cannot be verified as the original laboratory.
Geology	Deposit type, geological setting and style of mineralisation.	The Polar Bear project is situated within the Archaean Norseman-Wiluna Belt which locally includes basalts, komatiites, metasediments, and felsic volcanoclastics.  The primary gold mineralisation is related to hydrothermal activity during multiple deformation events. Indications are that gold mineralisation is focused on or near to the stratigraphic boundary between the Killaloe and Buldania Formation.

Criteria	JORC Code explanation	Commentary
<b>Drill hole Information</b>	<p>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:</p> <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>	Refer to Annexure1 in body of text.
<b>Data aggregation methods</b>	<p>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.</p>	<p>All reported assays have been length weighted. A nominal 0.2 g/t Au lower cut-off is used to report AC intersections. A nominal 0.5 g/t Au lower cut-off has been used to report RC results. Where isolated high grade intervals have been intersected, then a top cut of 30 g/t Au has been used and is reported in addition to the uncut intercept.</p>
	<p>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.</p>	High grade gold intervals internal to broader zones of mineralisation are reported as included intervals.
	<p>The assumptions used for any reporting of metal equivalent values should be clearly stated.</p>	No metal equivalent values are used for reporting exploration results.
<b>Relationship between mineralisation widths and intercept lengths</b>	<p>These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. 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').</p>	<p>The trend of mineralisation at <i>Monsoon</i> is not known at present due to the lack of deeper drilling and the early stage of exploration.</p> <p>Refer to Annexure 1 and Figures in body of text.</p>
<b>Diagram</b>	<p>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.</p>	Refer to Figures in body of text.
<b>Balanced reporting</b>	<p>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.</p>	The accompanying document is conserved to represent a balanced report with grades and/or widths reported in a consistent manner.
<b>Other substantive exploration data</b>	<p>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.</p>	<p>Preliminary bottle roll cyanide leach testwork has been carried out on selected samples from SPBC0313. The testwork was carried out by Bureau Veritas (Perth), on a nominal 500g sample with 1000ml of cyanide solution (500 ppm CN) for 24 hours. The with an AAS analysis of the solution and a fire assay of the residual solid to provide an estimate of the likely recoverable gold</p>

Criteria	JORC Code explanation	Commentary
<b>Further work</b>	<p>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive</p>	<p>Further evaluation of existing drill results, including petrology and multi-element to ascertain if any pathfinder elements exist prior to any additional drilling</p>