

# RESOURCES & ENERGY

Resources & Energy Group Limited

ASX/Media Release

13 September 2021

## Hints of Nickeliferous Sulphides at Springfield support historical BHP and CRA findings and potential for further discoveries at East Menzies.

Resources & Energy Group Limited (ASX: REZ or the Company) advise that results from Scout drilling investigations for gold at the Springfield Prospect (P29/2500) at East Menzies have returned anomalous intervals of Nickel Sulphide mineralisation.

The recent findings are supported by historical exploration results by BHP and CRA within the broader prospect area. Collectively the results raise the possibility of nickel sulphides with accessory base metal concentration and gold within a sequence of Felsic Volcanics and Pyritic meta-sediments. The prospective sequence rests above a suite of Ultra Mafic rocks which have been interpreted as Meta Komatiites.

The productive horizon is an "interflow" sequence which has been brought into a surface near position along the Springfield-Venn Fault Zone. This meta-sedimentary sequence interleaves with mafic and ultra-mafic rock type and outcrops along the south western side of the East Menzies Project Area for a distance of approximately 5km. As well as gold the package in general is now considered by the Company to be prospective for Nickel, with accessory Zinc, Lead and Chromite.

- Following ongoing review and work at Springfield, REZ obtained two historical drilling reports by CRA from 1969 and BHP from 1986.
- These reports both include strong intervals of Nickel sulphides.
- The 1986 BHP reported **"significantly high values of Ni with a maximum of 2.9%. Values greater than 1% included 3m @ 1.53% from 15m, 3m @ 2.27% from 31m and 2m @ 1.24% from 6m of depth"** This was at the Cepline prospect in the Springfield Venn zone, some 800m north of the Companies Scout Drilling program.
- The 1969 CRA reported surface Nickel Gossans of **0.95% to 1.43% Ni, 10ft of 1.49% Ni at 55ft to 65ft, and 15ft @.77% at 170ft to 185ft.** This was also at the Cepline prospect in the Springfield Venn Fault zone, also 800m north of the Companies Scout Drilling program.
- In response to this research, the company arranged multi-element analysis of two intervals of massive and semi-massive sulphide mineralisation from scout borehole SFRC01 and reviewed previous exploration in the area.
- Despite being 800m south of Cepline, results from multi- element analysis in borehole SFRC01 whilst not conclusive, included anomalous Nickel with a peak assay of **3m @ 0.16% Ni from 34-37m, and 6m@ 0.11% Ni from 61m down the hole.** SFRC01 also included a **peak gold assay of 1m @ 1.7g/t from 53m down the hole.**

The results from this recent and historical exploration suggest that the Nickel potential within the broader East Menzies Tenement Group has not been exhausted. The interflow sediments, when in close contact to underlying Komatiites are prospective for Nickel and base metals. An analysis of historical exploration indicates that there has been little or no focus on this prospectivity over the past 35 years or so and follow up investigations in today's commodity environment are warranted.

## Discussion

The Springfield area was identified by the Company following a review of historical exploration and gold mining activities along the west side of the project area. The documented occurrences of sulphides north of Springfield at Cepline, are prospective features for the occurrence of volcanogenic nickel and base metal deposits as well.

The Springfield area comprises three suites of volcano-sedimentary rocks which includes.

- I) Upper Mafic – High Mg Basalts
- II) Sedimentary- Pyritic Chert, slate, banded amphibolite, fuchsite, tuffaceous metasediments
- III) Lower Ultra Mafic - Meta komatiites (tremolite, actinolite, Talc, chlorite)

The scout program was investigating the potential for mineralisation along the Springfield-Venn fault zone and in particular interflow sediments, which were predicted to occur within a tightly folded and thrust faulted sequence of Mafic and Ultramafic rocks.

A total of 9 holes were drilled along the length of P29/2500 for an advance of about 900m. Three of the holes (SFRC02, 03 and 04) were terminated short, due to excessive water inflow, which appeared to be associated with adjacent historic gold workings that are flooded. Six of the holes reached the interpreted target zone, and three of these intersected sulphides, in the range 1 to 50%, and thicknesses in the order of 1 to 6m.

SFRC01 intersected two intervals of sulphidic sediments within 34-67m down the hole which includes 34-37m and 61-67m, refer figure 1. These interval contained up to 50% sulphides with pyrite, pyrrhotite and arsenopyrite being the dominant minerals. The most promising intervals in SFRC01 were submitted for follow up Multi Element analysis, and subsequently over-limit analysis for Nickel and Arsenic. The overlimit assays returned the following:

- **3m @ 0.16% Ni and 0.16% As from 34m**
- **6m @ 0.12% Ni and 0.05% As from 61m**

The presence of nickeliferous sulphides in the Springfield region is not an isolated occurrence. A literature search of open file Wamex records confirms that significantly high values of Nickel were also reported by BHP Minerals from the Cepline Prospect during a gold exploration program in 1986, (Report ID A19328).

The peak results for the BHP drilling were reported for Rotary drill hole JR011, one of 4 vertical holes completed by that Company in 1986 over the Cepline prospect in a single line across the Springfield Fault, refer figure1.

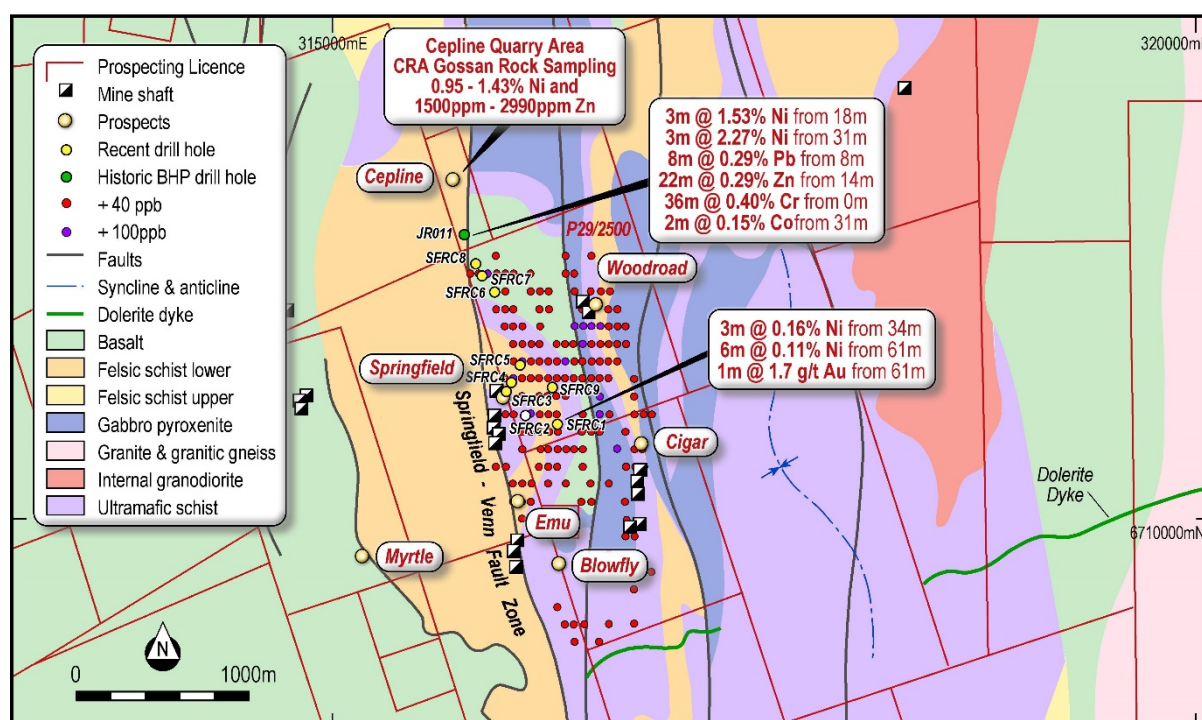
JR011 included **3m @1.53% Ni from 15m** and **3m @ 2.27% Ni from 31m**. Accessory minerals in JR011 included **22m @ 0.29% Zn from 14m**, **8m @0.29% Pb from 5m**, **2m @ 0.15% Co from 31m** and **36m @ 0.4% Cr from surface**. The high Chromium content was attributed to Fuchsite, which is believed to be derived from hydrothermal alteration of an underlying sequence of Komatiite lavas.

In an earlier report, CRA also sampled a gossanous outcrop at Cepline in 1969, (Report ID A1014) with focus on Nickel. The Cepline prospect is also held by REZ and is approximately 1km north of Springfield and is host to the same geological sequence. Peak results for the CRA investigations include **10ft of 1.49% Ni at 55ft to 65ft, and 15ft @.77% at 170ft to 185ft** from auger drilling. Microscopic evaluation of the auger cuttings identified Pyrite as the dominant sulphide, with very small inclusions of Covellite

(Cu Sulphide), and possibly Pentlandite (Nickel Iron Sulphide) which was not positively identifiable at the time.

The location of investigations completed by CRA at Cepline have not yet been verified but are believed to be in the vicinity of a quarry in P29/2942 where Fuchsite has been locally quarried for specimen samples. The quarry location is marked on plan as "Cepline", refer figure 1.

The sequence recently drilled at Springfield, includes logging descriptions of BIF sulphide facies, Ultramafic rocks with Actinolite, Tremolite and Fuchsite alteration and Pyrite, Pyrrhotite, and Arsenopyrite mineralisation. Talc and porphyroblasts of unknown composition have also been described in the logs.



**Figure 1 Borehole Location Plan Showing Geology and Intervals of Sulphide Mineralisation**

The six recent holes which reached completion depths also reported low tenor gold mineralisation, which is distributed across both the Metasedimentary and Ultramafic rock suites. The peak gold results were also obtained in SFRC01, with 1m @ 1.7gt/au from 53m down the hole. Complete details including collar and assay results for the Scout program are presented in the accompanying table 1. The supporting JORC 2012 Table 1 check list including commentary on the historical investigations are provided in appendix 1 of this release.

### Next Steps

The Nickel results obtained from recent and historical exploration are encouraging, and warrant follow up investigation. As part of this process the three holes which reached the target zone, will be re-submitted for Multi Element assays including Ni, and PGE's. Sample from these holes will be deslimed and submitted for petrological and mineral microscopy. This will assist in identifying the nature of the mineralisation and the prospectivity of the Sulphides which occur in the Meta sediments above the Lower Ultra Mafics.

### Competent Persons Statement and Consent

The information in this release that relates to Exploration Results is based on and fairly represents information compiled by Mr. Michael Johnstone Principal Consultant for Minerva Geological Services (MGS). Mr Johnstone is a member of the Australasian Institute of Mining and Metallurgy and has sufficient experience that is relevant to the reporting of Exploration Results to qualify as a Competent



Persons as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr. Johnstone consents to the inclusion in this release of the matters based on their information in the form and context in which it appears.

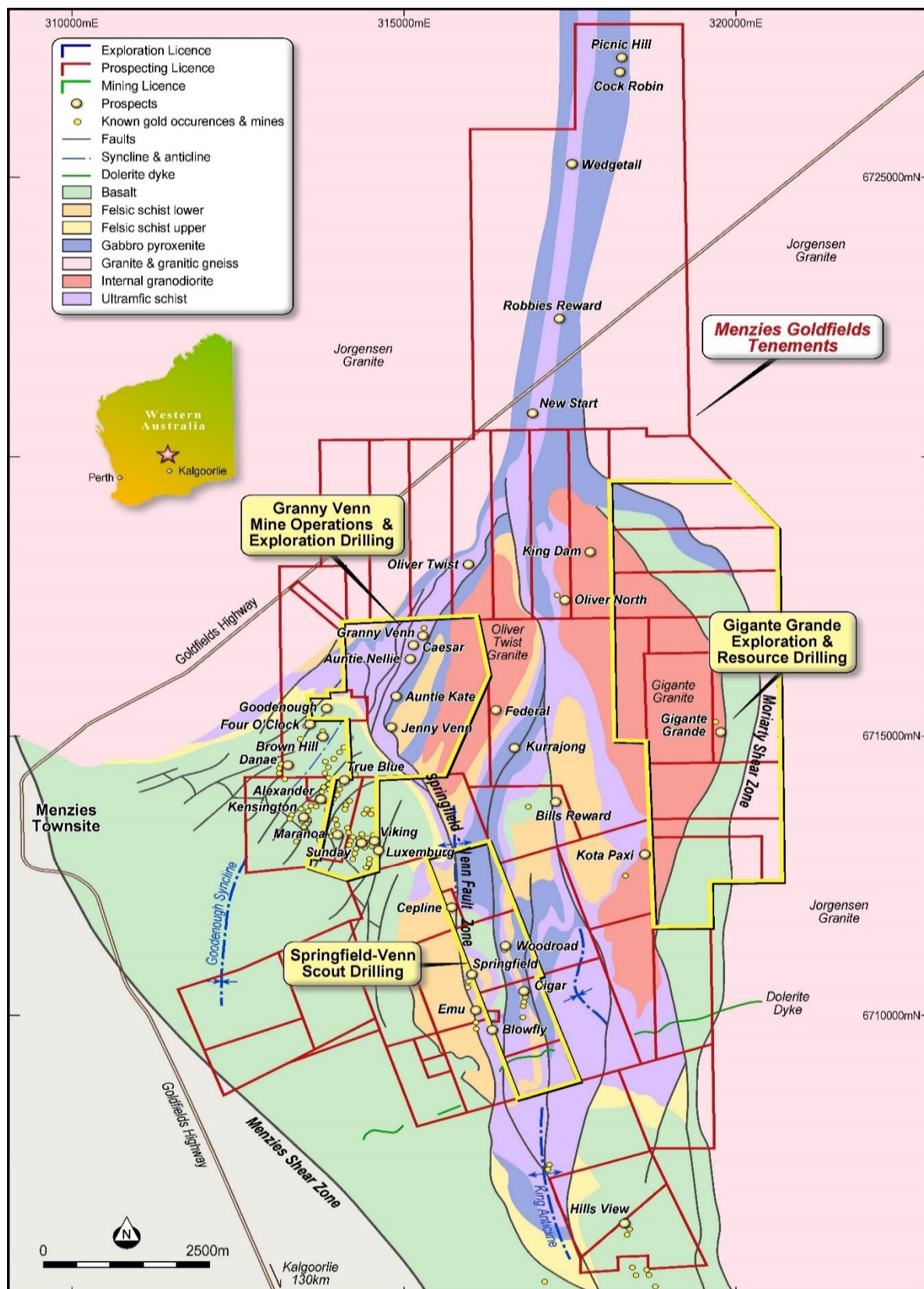


Figure 2 East Menzies Gold Project tenement and Operations Plan

## About Resources and Energy

Resources and Energy Group Limited (ASX: REZ) is an independent, ASX-listed mineral resources explorer, and miner with projects located in premier mining jurisdictions in Western Australia and Queensland. In Western Australia, the company's flagship is the East Menzies Gold project (EMGP), situated 130km north of Kalgoorlie. The EMGP represents a +100km<sup>2</sup> package of contiguous mining, exploration, and prospecting licenses, which are located within a significant orogenic lode gold province figures 2 and 3.

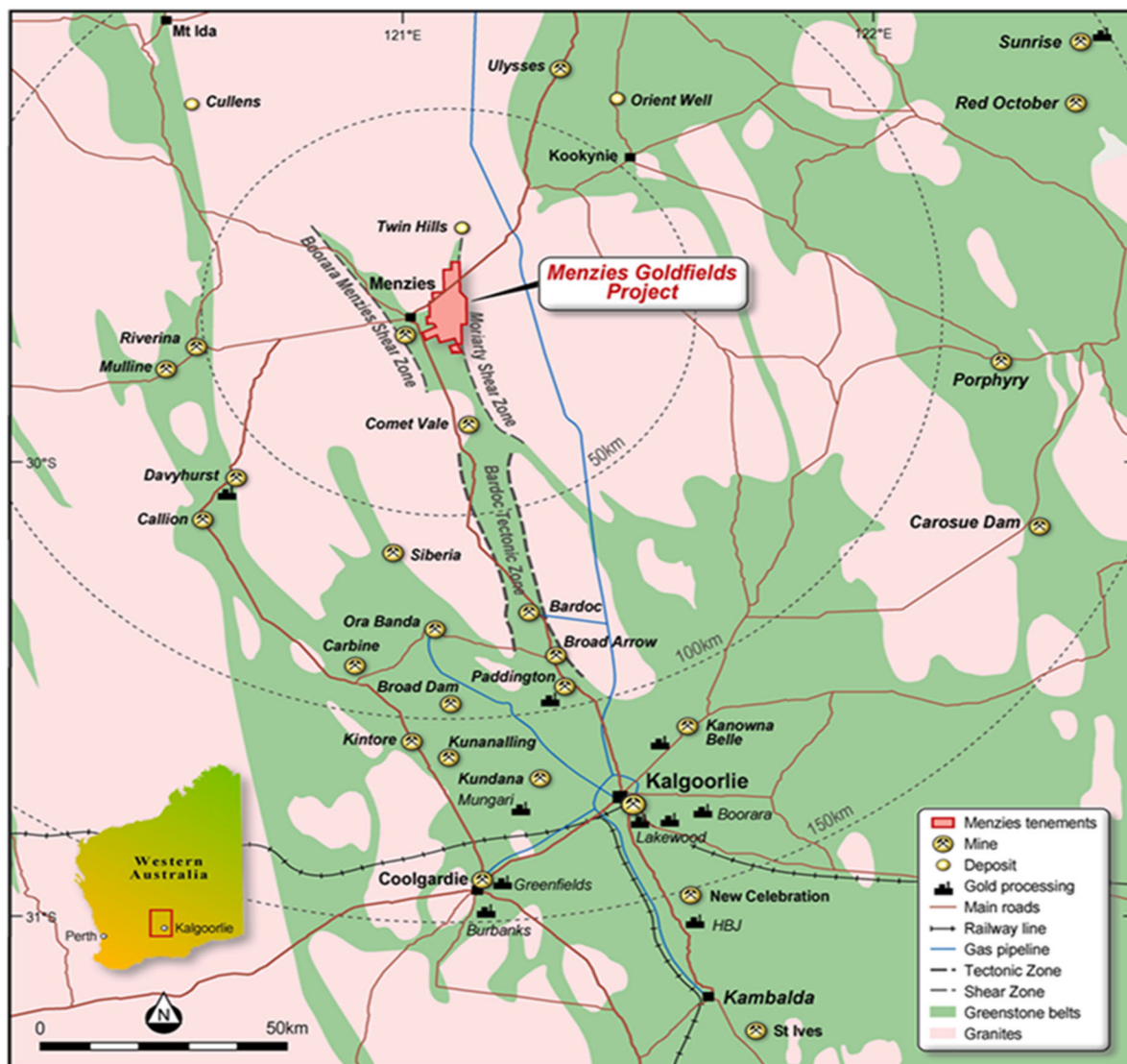


Figure 3 East Menzies Gold Project Regional Location Plan

For resource growth, the company's focus is presently exploring the eastern and southwestern sides of the project area (Gigante Grande and Springfield Prospects). On the western side of the project area studies to investigate opportunities for renewed mining operations in M29/189 Granny Venn, M29/141 Goodenough, and M29/427 Maranoa have commenced. Most recently the company completed grade control drilling within the Granny Venn open pit and has resumed mining operations at the Granny Venn Open Pit Gold Mine. As of End July 2021, the Company has combined gold and silver resources (JORC 2012) of 192k oz/au and 862k oz/au ag; refer to table 1.

Deposit	Material	Cut-off (gt/Au)	Indicated					Inferred					Indicated and Inferred				
			Tonnes (kt)	Au (g/t)	Ag (g/t)	Au (koz)	Ag (koz)	Tonnes (kt)	Au (g/t)	Ag (g/t)	Au (koz)	Ag (koz)	Tonnes (kt)	Au (g/t)	Ag (g/t)	Au (koz)	Ag (koz)
Mount Mackenzie <sup>(1)</sup>	Oxide	0.35	500	1.09	8	18	136	700	0.96	4	21	87	1200	1.02	6	39	223
	Primary	0.55	1200	1.25	13	48	482	1030	1.28	5	42	157	2220	1.27	9	90	639
Goodenough <sup>(2)</sup>	Primary	1	634	1.84		38		82	1.99		5.2		716	2.07		43	
Granny Venn <sup>(3)</sup>	Primary	1	134	2.03		9		41	2.14		2.9		175	2.1		12	
Maranoa <sup>(4)</sup>	Primary	1						46			8	8.05	46	5.7		8	
<b>Total</b>			2468			113	618	1899			79	252	4357			192	862

**Table 1 Gold and Silver Resource Summary**

In Queensland, the company has a 12km<sup>2</sup> Mineral Development Licence over the Mount Mackenzie Mineral Resource and retains a further 15km<sup>2</sup> as an Exploration Permit. These Development and Exploration Licences are in the Connors-Auburn Arc and are prospective for high, intermediate, and low sulphidation gold and base metals mineralisation. The current resource has been estimated at 3.42Mt @ 1.18g/t gold and 9g/t silver for a total of 129,000 oz gold and 862k oz silver. A metallurgical test program is currently underway to investigate processing options for primary mineralisation below the current resource extents.

Further information:

Richard Poole  
 Executive Director  
 E: [communications@rezgroup.com.au](mailto:communications@rezgroup.com.au)  
 P: +61 2 9227 8900

Approved for Release by the REZ Board

## Appendix 1

**Table 1 Collar details and Assay Intervals**

Hole Ref	TD (m)	Easting Mga Z51	Northing Mga Z51	RL	Azimuth (Mn)	Dip	From (m)	To (m)	Length (m)	Au (ppm)	Ni (%)	As (%)
SFRC1	150	316299.2	6710553	439.53	90	-55	10	11	1	0.24		
							33	50	17	0.06		
							34	37	3		0.16	0.16
							53	54	1	1.7		
							61	67	6		0.11	0.04
							139	140	1	0.46		
SFRC2	66	316103.4	6710594	440.84	65	-55				NSR		
SFRC3	72	315994.6	6710744	438.57	70	-55				NSR		
SFRC4	96	316020.2	6710782	439.44	70	-55				NSR		
SFRC5	84	316070.6	6710886	439.15	60	-55	38	46	8	0.31	ND	ND
							82	84	2	0.25	ND	ND
SFRC6	102	315923.6	6711301	441.86	65	-55	72	73	1	0.2	ND	ND
SFRC7	150	315856.2	6711397	450.75	65	-55	112	114	2	0.65	ND	ND
							113	114	1	1.04	ND	ND
SFRC8	150	315816.2	6711468	453.73	65	-55	87	88	1	1.26	ND	ND
SFRC9	150	316257.2	6710757	444.01	90	-55	38	39	1	0.42	ND	ND
							79	80	1	0.39	ND	ND

## Appendix 2 JORC Code, 2012 Edition – Table 1

### Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>The results are based on samples recovered from a combination of RAB, Auger and RC Drilling programs.</li> </ul>
	<ul style="list-style-type: none"> <li><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></li> </ul>	<ul style="list-style-type: none"> <li>The RC samples for Au assay were collected for every 1 meter drilled using a cone splitter. A 1m primary sample was collected from the splitter, with a second field duplicate sample generally collected every 20th metre. Samples were reported dry and free flowing. The Multi Element samples were collected from the whole of the reserved RC sample retained at site. The Historic Rotary Air Blast and Auger samples were collected as grab samples for each metre down the hole.</li> </ul>
	<ul style="list-style-type: none"> <li><i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></li> </ul>	<ul style="list-style-type: none"> <li>The report includes RC drilling results from recent drilling activities, and some historical results from earlier work by BHP Minerals in 1986 and CRA in 1969. Details of these reports including references are provided in the body of the report.</li> </ul>
	<ul style="list-style-type: none"> <li><i>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</i></li> </ul>	<ul style="list-style-type: none"> <li>Industry standard RC drilling was used to obtain one metre samples from which 3kg for each sample and pulverised and sub-divided in the laboratory to produce a 500gm charge for Photon Assay or 25gm for fire. The whole of reserved RC sample was collected in the field over selected intervals of interest to produce a primary sample for Multi Element analysis. The sampling method are industry standard. The BHP RAB and CRA Auger sampling methods are not stated in the reports but assumed to be industry standard.</li> </ul>



Criteria	JORC Code explanation	Commentary
	<i>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.</i>	
<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>• The exploration results are based on a combination of Reverse Circulation drilling using a 141mm face sampling percussion hammer. The drill hole diameter for the BHP and CRA drilling was not specified in the log sheets.</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> </ul>	<ul style="list-style-type: none"> <li>• Recoveries for RC samples were visually assessed in the field and weighed and recorded at the laboratory. Results are uploaded into the database and sample weights were analysed as part of QAQC protocols. The BHP chip and CRA auger sample recoveries were not stated.</li> </ul>
	<ul style="list-style-type: none"> <li>• Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> </ul>	<ul style="list-style-type: none"> <li>• Field procedures included checking the splitter every sample to ensure no residue remained from the previously drilled interval. The cyclone and housing are also checked regularly and cleaned with compressed air. Checks on splitter level are made using a spirit level. Each calico sample collected weighed on average 3kg. The BHP chip and CRA auger sample recoveries were not stated in the Companies Reports but are assumed to be Industry standards prevailing at the time.</li> </ul>
	<ul style="list-style-type: none"> <li>• Whether a relationship exists between sample recovery and grade and whether sample bias may</li> </ul>	<ul style="list-style-type: none"> <li>• No relationship has been identified at this stage.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<i>have occurred due to preferential loss/gain of fine/coarse material.</i>	
<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> </ul>	<ul style="list-style-type: none"> <li>RC and RAB samples have been geologically logged with alteration, colour, weathering, texture, mineralisation, and main lithology reported.</li> </ul>
	<ul style="list-style-type: none"> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> </ul>	<ul style="list-style-type: none"> <li>Logging is qualitative and descriptive using look up tables. Chip trays for recent drilling are labelled and photographed and have been retained and stored for future reference. The BHP and CRA samples are presumed to have been discarded.</li> </ul>
	<ul style="list-style-type: none"> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>100% of the recent and historical drilling has been logged and has lithological information present.</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> </ul>	<ul style="list-style-type: none"> <li>Not applicable.</li> </ul>
	<ul style="list-style-type: none"> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> </ul>	<ul style="list-style-type: none"> <li>For RC samples, a cone splitter was used to obtain 1m sub samples with a weight of approximately 3kg. In the majority cases the sample has been classified dry. The Multi Element assays were based on whole of reserve RC samples which were collected over selected intervals of interest. Three RC holes encountered unmanageable water flows and were terminated before reaching the targeted intervals. The BHP samples were grabbed from piles of drill cutting-presumably with a scoop or shovel. The method CRA applied for sampling auger holes is not stated in the referenced reports.</li> </ul>
	<ul style="list-style-type: none"> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> </ul>	<ul style="list-style-type: none"> <li>The field procedures adopted for RC drilling are industry standard, adequate and appropriate. After initial collection in the field all subsequent sample preparation is carried out in a laboratory, under controlled conditions and specified by the relevant standards. It is assumed that BHP Minerals would have also applied appropriate industry standards for the RAB drilling. The CRA reports do not specify method of sample preparation or assay.</li> </ul>
	<ul style="list-style-type: none"> <li>Quality control procedures</li> </ul>	<ul style="list-style-type: none"> <li>The programme QAQC involved inserting Certified Reference Materials, blanks and collecting field</li> </ul>

Criteria	JORC Code explanation	Commentary
	<i>adopted for all sub-sampling stages to maximise representivity of samples.</i>	duplicates samples per 20 metres drilled. The field duplicates were collected from the 2 <sup>nd</sup> chute of the cone splitter. CRMs were typically inserted in zones of interest. Random duplicates were inserted into the RAB drilling sample.
	<ul style="list-style-type: none"> <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> </ul>	<ul style="list-style-type: none"> <li>Pre-numbered continuous Primary and Duplicate calico samples were collected every metre drilled. Blanks and CRMs were inserted every 20 metres, with multiple grade ranges of appropriate matrix material selected for the CRMs. Laboratory procedures also include the use of certified reference samples and blanks for internal QA/QC assurance. Random duplicate samples were inserted into the sampling stream by BHP field geologists. The frequency of these is not stated.</li> </ul>
	<ul style="list-style-type: none"> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>Sample sizes for the RC sampling were typically 3kg which is considered appropriate given nature of the material being sampled. Sample sizes for the Multi Element assays were typically 8 kg each. Grab samples for the historic RAB and Auger drilling results are assumed to have been industry standard.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<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> </ul>	<ul style="list-style-type: none"> <li>The primary assay technique used was PA500 by MinAnalytical Laboratory in Kalgoorlie, which given the high-grade / coarse gold nature of Menzies-Style mineralisation is considered an appropriate assay technique. Photon Assay is highly accurate, chemical-free, and completely non-destructive of the sample. The 500g single-use jars allow for bulk analysis with no chance of cross contamination between sample. The Photon Assay technique uses x-ray bombardment to “see” gold even if it is not liberated from the ore, providing accurate results on crushed but non-pulverised samples. MinAnalytical has National Association of Testing Authorities (NATA) accreditation for the technology, in accordance with ISO/IEC-17025 testing requirements. The Multi Element assays for RC samples were tested by ALS (ME-MS42) which uses Aqua regia digestion with ICP MS finish. The overlimit assays for Ni and As use a four acid digestion followed by ICP AES. The BHP RAB samples were tested by Comlabs using Fire Assay for Gold, and XRF for Multi Elements. All of the methods used for assaying and laboratory procedures are appropriate and to industry standards</li> </ul>
	<ul style="list-style-type: none"> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including</li> </ul>	<ul style="list-style-type: none"> <li>Not applicable, the results are not based on these instruments.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<i>instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i>	
	<ul style="list-style-type: none"> <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>Exploration is at an early stage and is too early to provide an assessment. Recent RC sample datasets have been analysed, with no significant issues related to bias to date. PA500 has precision issues at approximately 0.1ppm which does not impact detecting Menzies style of mineralisation. Sub 1ppm CRM material has been included in the sample streams, results to date have indicated none of the gold mineralisation encountered in drilling has been masked by the PA500 technique. The BHP RAB and CRA Auger sampling was not that extensive to provide any discussion on bias.</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> </ul>	<ul style="list-style-type: none"> <li>All drilling intersections are verified by the Field Geologist, who has been present on site during the complete drilling process. The sampled intersections are also checked by the Supervising Geologist by reference to hole number, drilling depths, sample numbers, blanks and standards introduced into the sampling stream. The log sheets included in the BHP reporting indicate a good level of project supervision and checking of results and sample references. The CRA results, whilst comprehensive, do not provide insight as to the level of supervision.</li> </ul>
	<ul style="list-style-type: none"> <li></li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>
	<ul style="list-style-type: none"> <li>The use of twinned holes.</li> </ul>	<ul style="list-style-type: none"> <li>No twin holes have been carried out.</li> </ul>
	<ul style="list-style-type: none"> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> </ul>	<ul style="list-style-type: none"> <li>The primary data was collected at the drill site as drilling progressed by the Field Geologist and Field Technician. The Field Geologist recorded all lithological logging data directly into digital format via a rugged computer. The sample data, including allocation of sample number to interval, sample quality/recovery data, and insertion of QA/QC samples was recorded on a field sheet by the Field Technician and reviewed by the Field Geologist in the field. This data was later validated against assay files and checked by the Supervising Geologist. For recent drilling field sheets are kept on file and digital data backed up. The project data is stored in a MS access database on a cloud server. The BHP and CRA data are stored as digital image files in the Companies project data base, which has a cloud storage back-up.</li> </ul>



Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>No adjustments have been made to the assay data.</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> </ul>	<ul style="list-style-type: none"> <li>All EMGP drill collars were initially located in the field by hand-held GPS, a final relocation survey has been carried out using a dGPS by a qualified surveyor. Down-the hole surveys were completed using a north seeking Axis Champ Gyro which sits behind the overshot taking surveys every 30m during drilling operations to monitor deviation, and a continuous survey at the completion of each hole. The BHP and CRA holes were not surveyed. The location of the BHP drilling has been established by reference to borehole location trace plans and distance bearing from surface features to accuracy of +/- 50m. The CRA work does not provide any clear indication as to precise location, and are considered to be +/- 150m</li> </ul>
	<ul style="list-style-type: none"> <li>Specification of the grid system used.</li> </ul>	<ul style="list-style-type: none"> <li>The grid system used is MGA94_51s.</li> </ul>
	<ul style="list-style-type: none"> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>Topographic controls have not been undertaken and are not relevant to the results being reported.</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> </ul>	<ul style="list-style-type: none"> <li>The RC holes are close spaced and typically less than 100-400m apart. The RAB holes were typically 25m apart</li> </ul>
	<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> </ul>	<ul style="list-style-type: none"> <li>This is not applicable as a Mineral Resource or Ore Reserve is not being determined.</li> </ul>
	<ul style="list-style-type: none"> <li>Whether sample compositing has been applied</li> </ul>	<ul style="list-style-type: none"> <li>Drill holes have not been composited.</li> </ul>
<b>Orientation of data in</b>	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling</li> </ul>	<ul style="list-style-type: none"> <li>Based on present understanding, the drill holes have been orientated 60/090 and 60/060. These orientations are reasonably perpendicular to the interpreted Springfield Fault structure which is</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>relation to geological structure</b>	<i>of possible structures and the extent to which this is known, considering the deposit type.</i>	believed to be dipping west. The BHP hole is vertical, and thickness would be slightly apparent.
	<ul style="list-style-type: none"> <li><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></li> </ul>	<ul style="list-style-type: none"> <li>The selected orientation has minimized potential for introducing sampling bias.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li><i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>A chain of custody procedure was put in place. Samples were checked against the sample record sheet in the field prior to collection into sequentially numbered plastic bags. The plastic bags were sealed with cable ties before being secured along with sample submission sheets. The sample batches were loaded by the field team and transported directly to the Laboratory. Sample security measures for earlier drilling are not known. The sample batches were loaded by the field team and transported directly to the Laboratory by a 3<sup>rd</sup> party contractor. The receiving laboratory verified sample numbers against the sample submission sheet/manifest and confirmed receipt. After receipt, the samples were bar coded and tracked through the entire analytical process.</li> </ul>
<b>Audits or re-views</b>	<ul style="list-style-type: none"> <li><i>The results of any audits or re-views of sampling techniques and data.</i></li> </ul>	<ul style="list-style-type: none"> <li>No audits have been undertaken.</li> </ul>

## Section 2 Reporting of Exploration Results

Criteria	IORC 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> </ul>	<ul style="list-style-type: none"> <li>The results have been obtained from prospecting licenses P29/2500 and P29/2492 These tenements are wholly owned by Resources and Energy Group through a purchase agreement completed in December 2018. The land, from which the Exploration Results have been derived does not encompass Strategic cropping lands, wilderness, or protected landscapes.</li> </ul>
	<ul style="list-style-type: none"> <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>At the time of writing, the tenements are in good standing. There are no known impediments which would prohibit operations in accordance with the license conditions.</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>Exploration on the tenements has been completed over a number of campaigns and years with significant contributions by CRA who completed mapping over the area in the late 1960's. In 1985 geologists (J.E Martyn I G Johnson) mapped the Springfield area and provided key observations as to the nature of the Interflow Sediments, and Komatiites in the area. During the 1994-1998 Golden State Resources completed a number of RAB and Auger drillholes over the Springfield area, which at that time was known as Merry Well. The work was focussed on gold exploration but provides a good reference for the geology of the area. In 2012 Dr D Gee completed a review and data compilation of the area on behalf of Resource Assets Pty Ltd. In 2014 Stratum Metals commissioned a HeliTem survey by Fugro Pty Ltd over the greater East Menzies Goldfield and an interpretation of results by Core Geophysics Pty Ltd. In 2015-2016 Menzies Goldfield Pty Ltd completed 2 programs of MMI sampling over the prospect area.</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>The Springfield Area occurs within an Archaean Geological Terrane, which is part of the Wiluna-Norseman Greenstone Belt-a significant Orogenic lode gold province. At prospect scale the project comprises three suites of volcano-sedimentary rocks which includes.</li> </ul>

		<p>I) Upper Mafic – High Mg Basalts</p> <p>II) Sedimentary- Pyritic Chert, slate, banded amphibolite, fuchsite, tuffaceous metasediments</p> <p>III) Lower Ultra Mafic - Meta komatiites (tremolite, actinolite, Talc, chlorite)</p> <p>The documented occurrences of sulphides are prospective features for the occurrence of volcanogenic nickel and base metal deposits as well as gold. The scout program was investigating the potential for mineralisation along the Springfield-Venn fault zone and in particular sulphidic interflow sediments, which were predicted to occur within a tightly folded and thrust faulted sequence of Mafic and Ultramafic rocks. The metamorphic grade ranges from upper green schists to lower amphibolite.</p>
<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 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> </ul>	<ul style="list-style-type: none"> <li>Co-ordinate locations, elevation, depth, dip, and azimuth of all recent drillholes is provided in the accompanying documentation. Downhole length, interception depths and assay results have been furnished the accompanying documentation.</li> </ul>
	<ul style="list-style-type: none"> <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>All RC drilling results which are available to the company have been included in the accompanying documentation.</li> </ul>
<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</li> </ul>	<ul style="list-style-type: none"> <li>The appendix 1 shows all the holes that have been drilled within the prospect area, whether or not they have significant intercepts. No grades have been changed or truncated. The mineralisation tabulated within the Appendix 1.1 are only the grades that are &gt;0.1ppm. Holes with NSR indicated No</li> </ul>



	<p><i>grades) and cut-off grades are usually Material and should be stated.</i></p> <ul style="list-style-type: none"> <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>	<p>Significant Results encountered. Holes with ND indicate result Not Determined.</p> <ul style="list-style-type: none"> <li>The broad nature of the mineralisation interpretation means in some instances shorter intervals of higher grade may be present within an individual drill hole. However, most of the intervals are reported at 1m in length for RC Au assays, and between 3 and 6m for the recent samples for Multi Element analysis. The BHP Multi Element assays are simple mathematical averages over the reported intervals.</li> <li>Metal equivalents have not been used.</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> </ul>	
	<ul style="list-style-type: none"> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> </ul>	<ul style="list-style-type: none"> <li>The drillholes are believed to be reasonably perpendicular to mineralisation.</li> </ul>
	<ul style="list-style-type: none"> <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>All sample intervals have been reported as down hole lengths.</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>The accompanying documentation includes plans showing specific areas of interest within the project area.</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>Comprehensive reporting of all material data has been adopted.</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>This is in an early stage of investigation, which has not yet generated any other substantive exploration data.</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> </ul>	<ul style="list-style-type: none"> <li>Recommendations for future work are contained within the announcement and accompanying maps.</li> </ul>
	<ul style="list-style-type: none"> <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>Maps that shows possible extensions to mineralisation have been included in the main body of the release</li> </ul>