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The Company Announcements Office  
ASX Limited Via E Lodgement

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## **On-going Exploration Reveals Multi-Commodity Potential at Shepherds Well Project**

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### **HIGHLIGHTS**

- **Regional shear-zone hosting soils with anomalous gold (5ppb to 1g/t), rare-earth, nickel and base-metals identifying three prospects which are drill-ready.**
- **Awassi rare-earth prospect is a potential alkaline igneous or carbonatitic source with soil samples returning cerium to 320 ppm, lanthanum to 123 ppm and praseodymium to 31 ppm.**
- **Dorper prospect is ultramafic, chromium-rich intrusive with nickel in soils to 0.36%.**
- **Suffolk is a zone of sheared and quartz-veined felsic rocks with zinc in soils to 0.16% and lead in soils to 0.2%.**

Coziron Resources Limited (ASX:CZR) ("Coziron" or Company") is pleased to announce an update on the activities on the Shepherds Well (E08/2361) Project which has emerging gold, rare-earth and base-metals prospects ready for drilling.

Shepherd's Well with an area of 77km<sup>2</sup>, is located about 60km south-west of Karratha and covers 15km of a regional shear-zone that separates the Regal Terrane from the Jean Well Granodiorite and about 22 km of the unconformity at the base of the Fortescue Basalt (Fig 1). The one to two kilometre wide shear-zone is prospective for a range of mineralisation types, while the unconformity is being explored over a wide area of the Pilbara as a source of detrital gold mineralisation.

Coziron is using soil and rock-chip sampling to follow up targets identified from a detailed magnetic and radiometric survey and past reports of mineralisation (ASX Releases: 29 July 2014, 28 June 2016, 13 September 2016 and 11 October 2017). The Company recently collected 325 soil-samples, sieved

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at -2mm in the field, to bring the total number of soils on the tenement with assays to 1,474. The samples were sent to Bureau Veritas Laboratories in Perth for whole-rock XRF and full-suite trace-element ICP on fused disk and fire-assay gold, platinum and palladium (full details in Appendix 1).

Results now outline several clusters of soil samples with anomalous gold ( $Au > 5 \text{ ppb}$  to  $1\text{g/t}$ ) requiring further follow-up work and three prospects with anomalous rare-earth and base-metal (nickel, lead, zinc) samples which are now drill-ready (Fig 1).

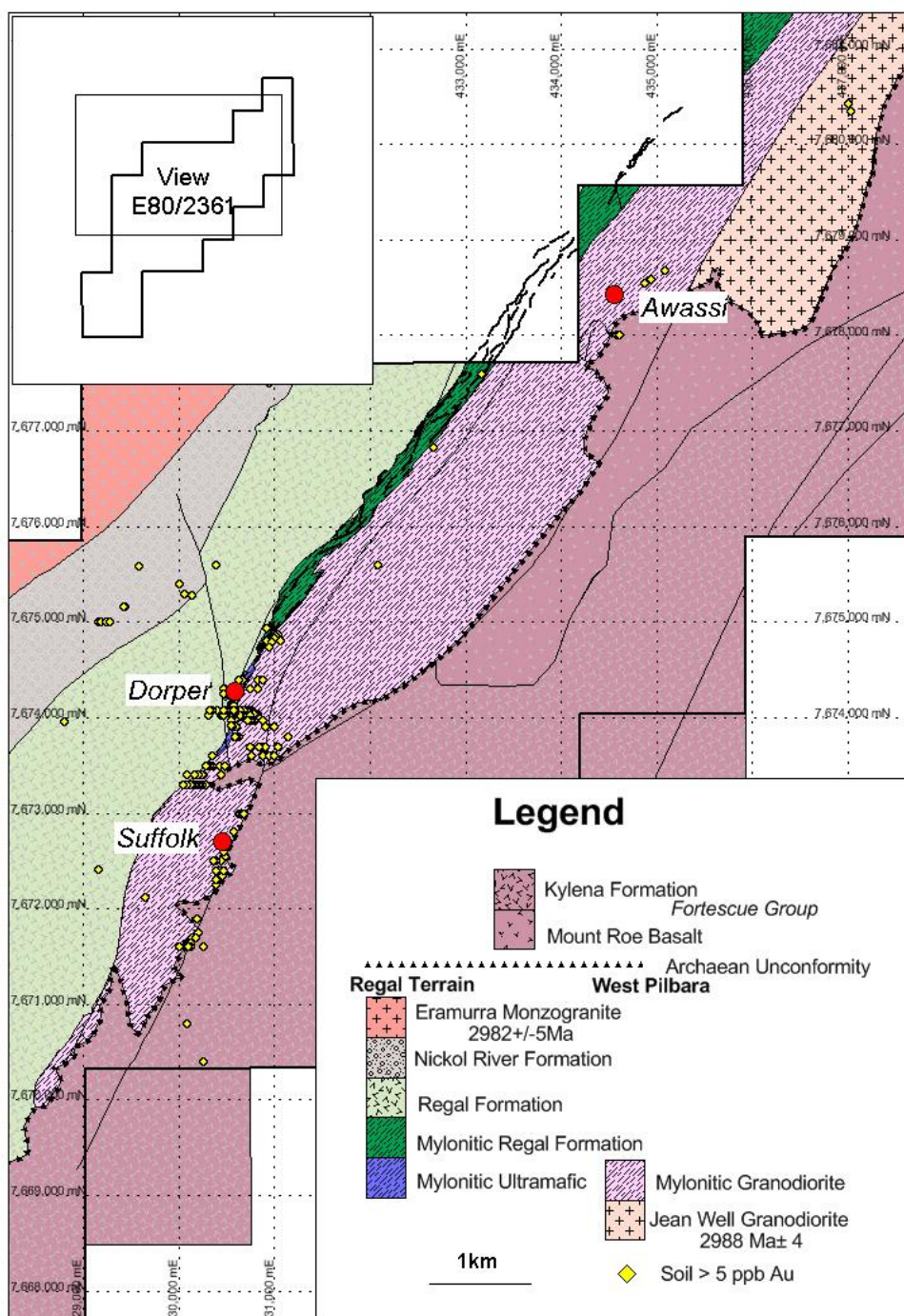


Fig 1 The location of Coziron soil samples with gold between 5 ppb and 1 g/t and the mineralised prospects overlain on the Geological Survey of Western Australia mapped 500,000 scale geology of the Shepherds Well project (E08/2361).

**Awassi Rare-Earth Prospect**

Samples from Awassi cover a 400m diameter radiometric anomaly hosted by a mylonitised interval of the Jean Well Granodiorite. The soil samples are potassic ( $K_2O > 4\%$ ) and low phosphorus (100 ppm) but report anomalous total rare-earth contents up to 500 ppm with cerium to 318 ppm, lanthanum to 123 ppm and praseodymium to 30 ppm. The phosphorous-poor geochemistry from the samples reflects the potential for rare-earth carbonates and perhaps an alkaline igneous or carbonatitic source.

Follow-up work is planned as rare-earth metals have become of strategic importance for the efficient generation and use of electrical energy.

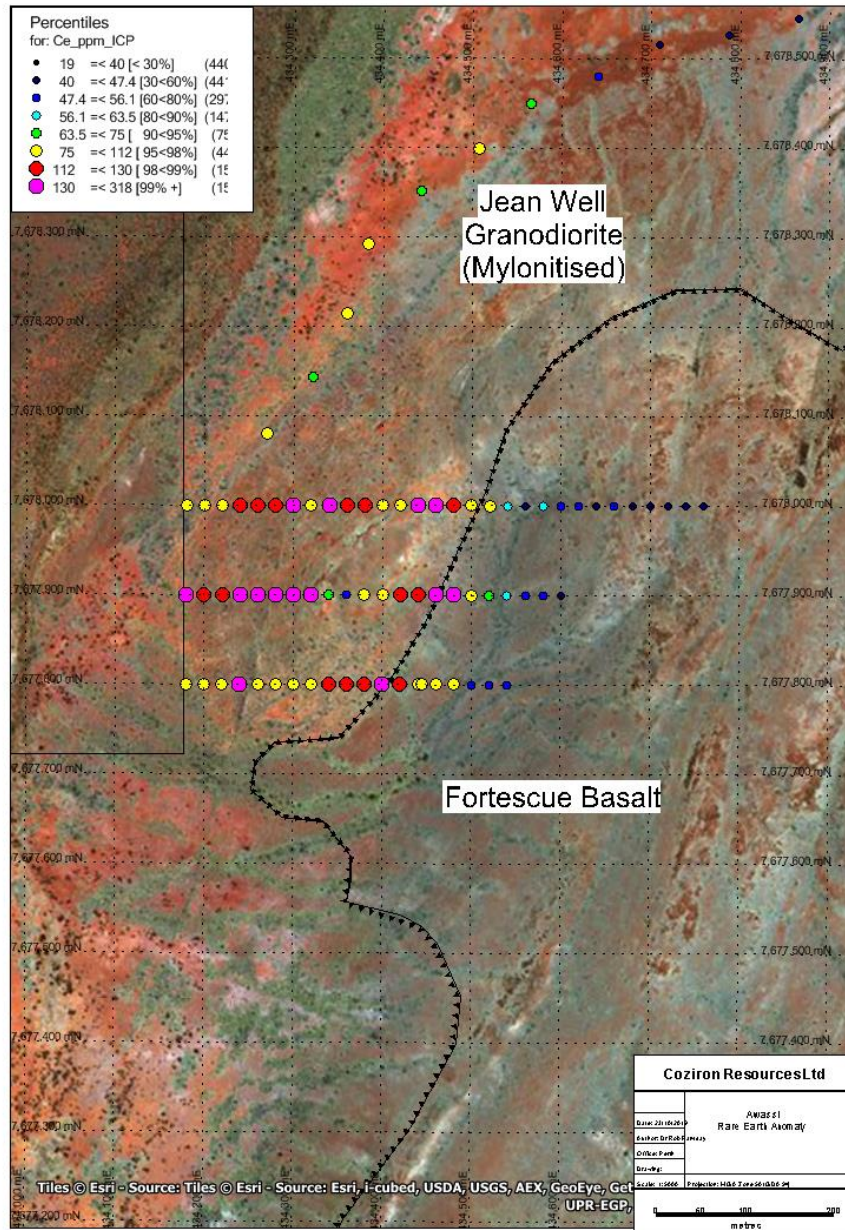


Fig 3 Distribution of cerium on the Awassi soils grid at Shepherds Well overlain on the ESRI satellite imagery with the trace of the edge of the almost flat-lying Fortescue Basalt over the older basement of the Jean Well Granodiorite.



### Dorper Nickel Prospect

Samples from the Dorper prospect cover an outcrop of carbonated ultramafic located in a flexure of the sheared contact between the Regal Terrain and the Jean Well Granodiorite. Soils from the outcropping ultramafic rocks on the prospect report nickel to 0.36%, cobalt to 173 ppm and gold to 220 ppb. The elliptical trace of the ultramafic in the flexure of the shear-zone may be indicating that the rock has an intrusive origin with prospectivity for disseminated and massive nickel-rich sulphides.

The primary target is approximately 100 m long and 50 m wide at the surface and follow up work will include exploratory drilling.

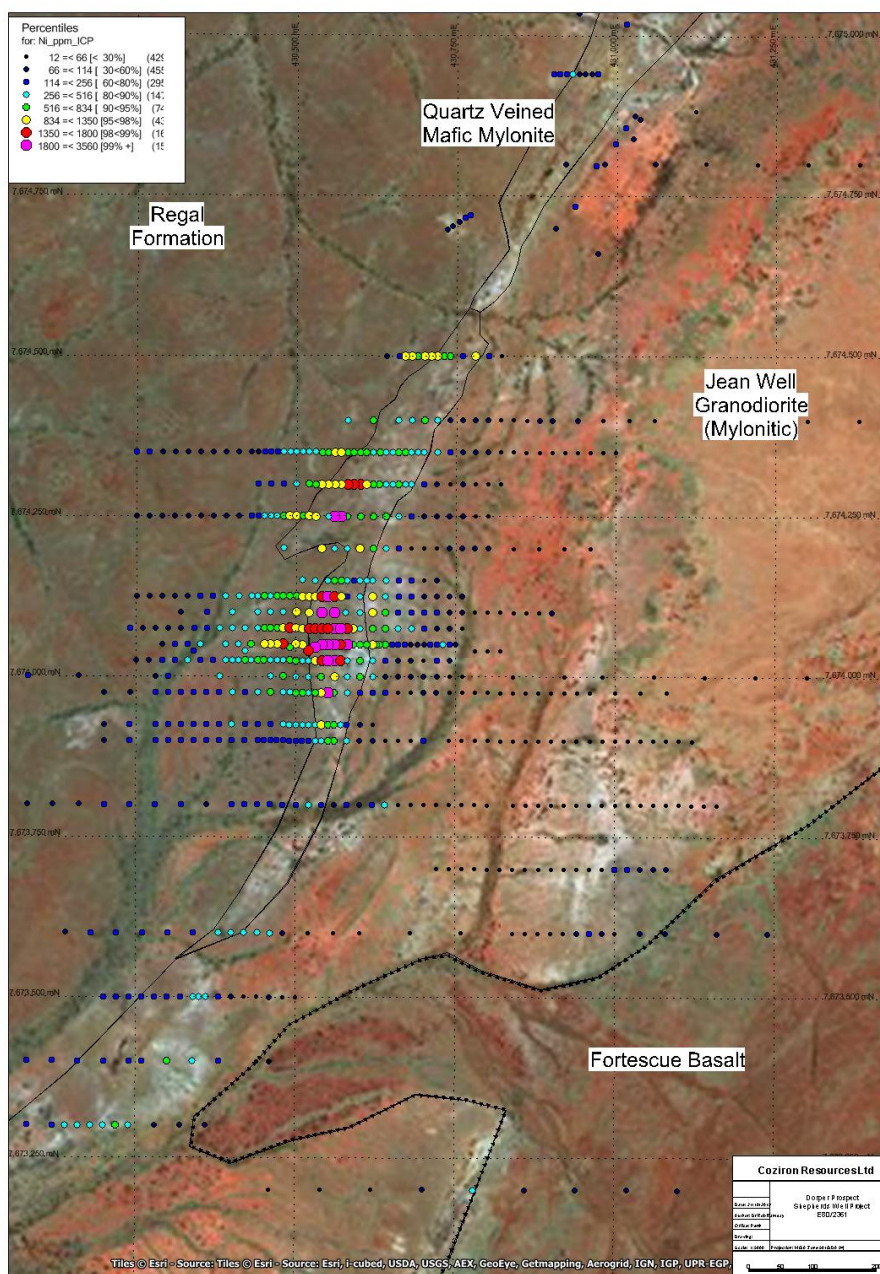


Fig 3 Distribution of nickel on the Dorper soils grid at Shepherds Well overlain on the ESRI satellite imagery with the trace of the edge of the almost flat-lying Fortescue Basalt over the older Jean Well Granodiorite.

### Suffolk Zinc-Lead Prospect

Samples from Suffolk cover a zone of shearing and quartz veining in the Jean Well Granodiorite that has soils which are anomalous in zinc to 0.16%, lead to 0.2% and gold to 25 ppb. The southern extension of the system is covered by the younger units of the overlying Fortescue Volcanics. The narrow, westward extensions of the Fortescue Volcanics also trace the extent of clastic and volcanic fill into ancient valleys and channels into the Jean Granodiorite. These show that the basal unconformity to the Fortescue Volcanics is a non-planar surface and highlights potential trap-sites for any detrital gold that may have been being transported across the surface.

The next planned phase of work will include exploratory drilling of the base-metal anomaly and sampling of any detrital rocks in the channels on the unconformity surface for gold.

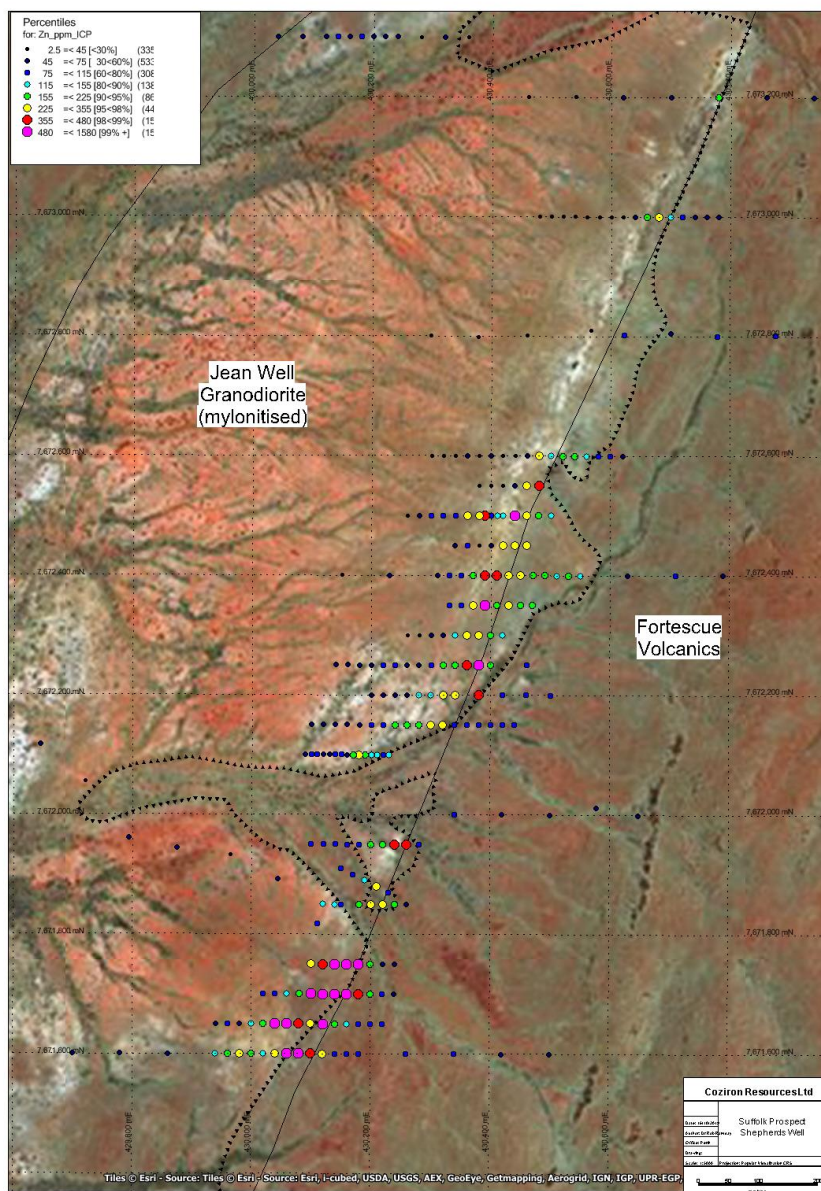


Fig 3 Distribution of zinc on the Suffolk soils grid at Shepherds Well overlain on the ESRI satellite imagery with the trace of the edge of the almost flat-lying Fortescue Basalt over the older basement of deformed Jean Well Granodiorite.

For further information regarding this announcement please contact Adam Sierakowski or Rob Ramsay on 08 6211 5099.

## Competent Persons Statement

The information in this report that relates to mineral resources and exploration results is based on information compiled by Rob Ramsay (BScHons, MSc, PhD) who is a Member of the Australian Institute of Geoscientists. Rob Ramsay is a full-time Consultant Geologist for Coziron and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Rob Ramsay has given his consent to the inclusion in this report of the matters based on the information in the form and context in which it appears.

### Appendix 1 – Reporting of exploration results from the Yarraloola Project - JORC 2012 requirements.

Section 1 Sampling Techniques and Data		
Criteria	JORC Code explanation	Commentary
Sampling techniques	<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> </ul>	Coziron Geologists collect 1-2kg of either -2mm screened soil from 5 to 10 cm beneath the surface or 1-2kg of representative rock-chips from outcrop.
	<ul style="list-style-type: none"> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> </ul>	1-2kg of material is collected is collected according to physical features such as lithology, grain-size and alteration.
	<ul style="list-style-type: none"> <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>	1-2kg of rock-chips were crushed, dried and pulverized. A sub sample was fused and the major oxides and selected trace-element analysis are collected using XRF Spectrometry or laser ablation as a digest with and mass spectrographic finish. Gold, platinum and palladium are measured using a fire-assay on a 50g sample with an ICP-MS finish to 1ppb detection. All analytical work was undertaken at Bureau Veritas Laboratories in Perth, Western Australia.
Drilling techniques	<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>	No drill samples were included in this phase of exploration
Drill sample recovery	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> </ul>	No drill chips or drill core have been recovered in this phase of exploration.
	<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>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>	
Logging	<ul style="list-style-type: none"> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> </ul>	No drill core or drill chips were logged in this part of the exploration
	<ul style="list-style-type: none"> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> </ul>	Rock-chips are described for colour, rock-type, and grainsize.
	<ul style="list-style-type: none"> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	No core was obtained in this phase of exploration



<i>Sub-sampling techniques and sample preparation</i>	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> </ul>	No core was collected for this study
	<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>	No core drill material was collected for this study
	<ul style="list-style-type: none"> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> </ul>	Rock chip sampling is a method of providing representative surface samples with indications of mineralization to high-light mapped lithologies which require future drill assessment. Soil samples are 1-2kg of -2mm field screened material collected 5 to 10 cm beneath the surface.
	<ul style="list-style-type: none"> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> </ul>	Multiple samples are collected from each lithology
	<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>	In early stage exploration, a number of 1-2kg rock-chip samples are collected at different outcrops to provide an indication of compositional variations associated with each lithology.
	<ul style="list-style-type: none"> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	In finer grained rocks, 1-2kg is sufficient to provide an indication of lithological composition.
<i>Quality of assay data and laboratory tests</i>	<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>	All analyses at Bureau Veritas Laboratories in Perth. Major-element oxides and a suite of 62 minor elements were determined by XRF and laser ablation ICPMS on fused disks. Precious metal (Au, Pt, Pd) is determined by fire assay with ICP finish at a detection limit of 1ppb.
	<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> </ul>	No hand-held geophysical tools or hand-held analytical tools were used for the reported results.
	<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>	Laboratory QAQC involves the use of internal lab standards using certified reference material, blanks, splits and replicates as part of their in-house procedures. Results highlight that sample assay values are accurate and that contamination has been contained.
<i>Verification of sampling and assaying</i>	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> </ul>	No intersections are reported.
	<ul style="list-style-type: none"> <li>The use of twinned holes.</li> </ul>	No drilling was undertaken
	<ul style="list-style-type: none"> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> </ul>	Assay data is received electronically and uploaded into an access database. All hand-held GPS locations are checked against the field logs.
	<ul style="list-style-type: none"> <li>Discuss any adjustment to assay data.</li> </ul>	No adjustment or calibrations were made to any assay data presented.
<i>Location of data points</i>	<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>	Sample locations were determined using hand held Garmin 72h GPS units, with an average accuracy of ±3m.
	<ul style="list-style-type: none"> <li>Specification of the grid system used.</li> </ul>	The grid system is either Latitude-longitude or MGA GDA94, zone 50, local easting's and northings are in MGA
	<ul style="list-style-type: none"> <li>Quality and adequacy of topographic control.</li> </ul>	SRTM90 is used to provide topographic control and is regarded as being adequate for early stage exploration.
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> </ul>	Reconnaissance rock-chip and soil sampling is being used to examine prospects with the potential for mineralisation.
	<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>	Rock-chip and soil sampling data is not being used to generate either Mineral Resources or Ore Reserve estimations.

	<ul style="list-style-type: none"> <li>Whether sample compositing has been applied.</li> </ul>	No data compositing has been applied.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> </ul>	Mineralization is lithologically controlled and sampling collects representative material from different lithologies.
	<ul style="list-style-type: none"> <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>	No drilling was undertaken
Sample security	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	Samples are collected and labelled by Coziron Geologists, packed into bulka bags on pallets. The sealed bulka bags are collected by a transport contractor from Fortescue Roadhouse near the tenement and transported directly to Bureau Veritas laboratories in Perth.
Audits or reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	

### Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> </ul>	E08/2361 is held by 70% by Coziron and 30% by Croydon Gold Pty Ltd. The tenement is covered by the Yaburara and Mardudhunera Native Title Claim and a relevant heritage agreement is in place.
	<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>	The tenements are in good standing and no known impediments exist.
Exploration done by other parties	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<p>In 1998-1990, Cyprus Gold and Arimco explored the area for Au and base-metals using stream sediment, rock-chip and soil samples based mainly on local grids. Three RC drill holes were drilled on the area of E08/2361 but the area was then relinquished. RC drill results reported up to 3.0% Zn, 1.7% Pb, 0.2g/t Au,</p> <p>In 1994, CRA Exploration explored the area for gold and base-metals collecting soil samples on local grids and some rock-chip samples. There are 4 RC drill holes from the exploration programme on the current tenement area but the area was relinquished.</p> <p>In 2009, Ord River Diamonds collected two rock-chip samples within the tenement but there was no follow-up reported.</p>
Geology	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	The tenement has a basement of Archaean-age meta-volcanics and metasediments of the Cleaverville Terrain which is intruded by granite and overlain by the Fortescue Flood basalt. The tenement is prospective for iron-ore in the metasediments, base-metals and gold associated with the meta-volcanics.
Drill hole Information	<ul style="list-style-type: none"> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</li> </ul>	No drill holes are reported
	<ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> </ul>	
	<ul style="list-style-type: none"> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> </ul>	
	<ul style="list-style-type: none"> <li>dip and azimuth of the hole</li> </ul>	
	<ul style="list-style-type: none"> <li>down hole length and interception depth</li> <li>hole length.</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>	
Data aggregation methods	<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> </ul>	No weighting or truncation has been applied to the geochemical data and no intercept values are reported.
	<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> </ul>	
	<ul style="list-style-type: none"> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	No metal equivalents are presented.
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> </ul>	Magnetite mineralization is hosted within bedded lithologies the style and geometry of other styles of mineralization have yet to be determined. No drill-hole intercepts are reported.
	<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>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>	
Diagrams	<ul style="list-style-type: none"> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	Refer to Figures... in body of text
Balanced reporting	<ul style="list-style-type: none"> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	All relevant samples on the maps and in the text are reported
Other substantive exploration data	<ul style="list-style-type: none"> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul>	Relevant geological information is reported on the maps and analysis tables in the text.
Further work	<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>	Mapping, soil and rock-chip sampling of the base-metal and gold targets is proposed.
	<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>	