



**31 July 2018**

## **Exploration Activities Update - Australia**

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### **Highlights**

- **Exploration for battery metals (Co, Cu, Mn) to commence Early August in SA.**
- **Drill targets for sediment hosted zinc established in the Northern Territory.**
- **Lorella Oxide Copper extensions drill tested.**

Pacifico Minerals Limited (“Pacifico” or “Company”) is pleased to provide an update on its exploration activities in Australia.

### **South Australia**

Reconnaissance geological mapping and rock chip sampling is planned to get underway in early August to evaluate and assess the recently granted licences in South Australia ahead of work programs to develop drill targets.

Up to 0.86% Co, 0.35% Cu, 58.1% Mn and 0.21% Zn have previously been obtained in rock chips taken at the historical Muttabee and Prouts mines on EL 6168 and 6169 respectively<sup>1</sup>. For further information, refer to ASX Announcement 8 June 2018.

The planned reconnaissance program will initially focus on confirming highly anomalous cobalt, manganese and zinc grades previously documented at the Muttabee and Prouts mines and through mapping and rock chip geochemistry, seek to extend the zone of mineralisation and develop a better understanding of the stratigraphic and structural controls on its origin.

Previous explorers have primarily relied on a syngenetic, or early diagenetic stratiform exploration model. Pacifico’s review of the prospectivity of the area has strongly suggested an alternative model whereby hydrothermal fluids, focused on prominent structures located across both tenements have largely controlled the distribution of Co-Cu-Mn mineralisation. Key structures, and a series of regional, long-lived faults identified from existing geophysical data, that host historical base metal mines and prospects, will be examined in more detail with a view to define targets for follow-up drill testing.

<sup>1</sup> Research thesis by Christopher Gregory at: <https://digital.library.adelaide.edu.au/dspace/handle/2440/105734>  
See Table 1 for further information.



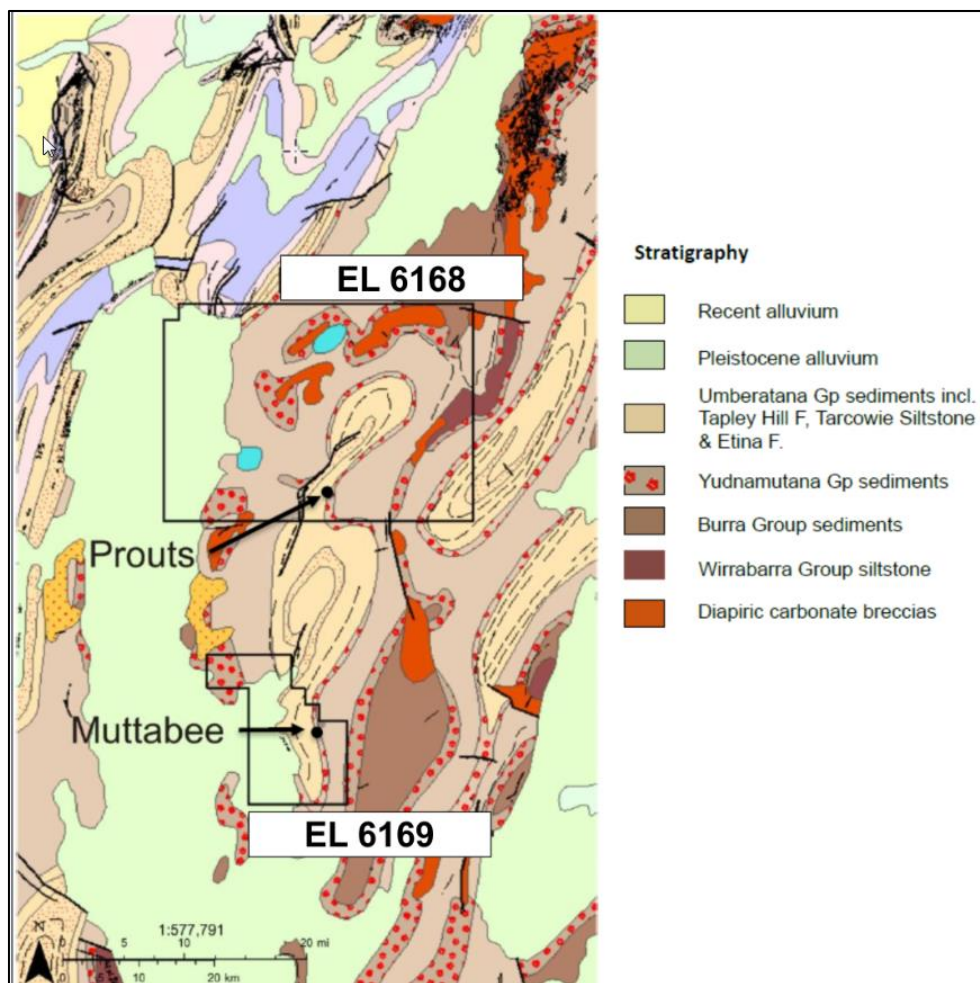


Figure 1: Pacifico’s EL’s, Geology Map and Sample Locations

Prospect	Sample ID	Latitude	Longitude	% Mn	% Co	% Cu	% Zn
Prouts	895-W5	-32.2723	138.4140	49.8	0.0113	0.1503	0.0222
Muttabee	895-113	-32.5022	138.4044	53.5	0.8626	0.3539	0.2134
Muttabee	895-161	-32.5022	138.4044	58.1	0.0074	0.0120	0.0098

Table 1: Previous Sample locations and Grades Recorded

**Limestone Creek, Northern Territory**

Limestone Creek (Zinc-Lead), Pacifico 100%

RC and diamond drill targets have been established to test strike extensive stratiform gossan containing zinc and lead surface rock chip values previously reported of up to 2.0%Pb and 0.49%Zn<sup>1</sup>.

<sup>1</sup> Quarterly Activities Report ASX Announcement 30 October 2017

**Borrooloola West Joint Venture Project, Northern Territory**

Mariner (Zinc-Lead) Borrooloola West Joint Venture with Sandfire Resources NL, Pacifico 51%

Mapping and rock chip sampling has confirmed a drill target (Figure 2) to test potentially mineralised Barney Creek Formation, north of the Mariner Project.

Geological mapping and portable X-Ray Fluorescence instrument reconnaissance previously identified anomalous lead and zinc rock chip geochemistry (values to 0.21% Pb and 510ppm Zn<sup>1</sup>) 2km north of the previous diamond drilling, confirming the prospectivity of this sub-basin of Barney Creek Formation, that extends north beneath Roper Group sediments.

1 Quarterly Activities Report ASX Announcement 30 October 2017

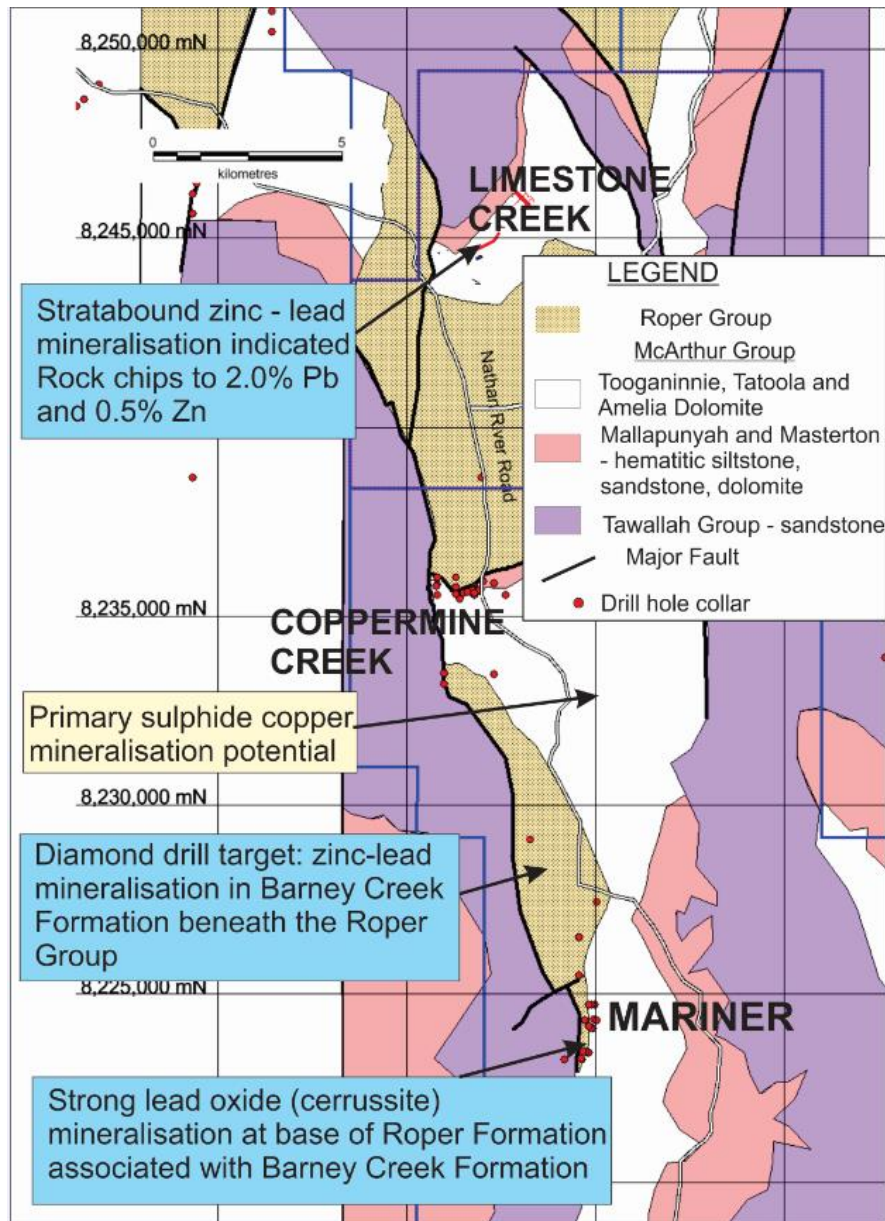


Figure 2: Geology at Limestone Creek, Coppermine Creek and Mariner Prospects

Coppermine Creek (Copper-Cobalt) Borroloola West Joint Venture with Sandfire Resources NL, Pacifico 51%

Copper mineralisation is extensive, stratabound, and gently dipping, with large areas where the depths of this layer are at only 50m to 250m depth. Anomalous cobalt has been intersected in previous drilling. Historical drill hole GPRC07 contained 30m of 0.04% Co (and 1.2% Cu)<sup>1</sup>.

Further geological mapping, geochemical sampling and mineralisation modelling are required to establish further diamond drill hole targets for large economic concentrations of copper (cobalt) mineralisation.

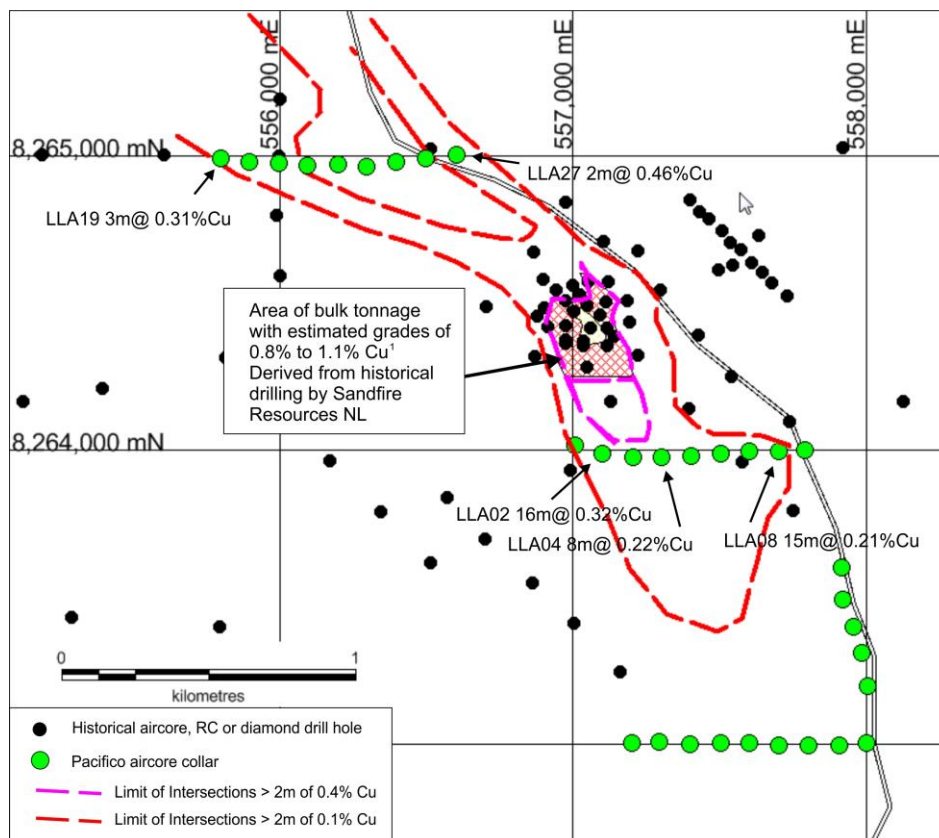
<sup>1</sup> ASX Announcement 20 November 2017

Lorella (Copper) Borroloola West Joint Venture with Sandfire Resources NL, Pacifico 51%

An aircore program of 37 holes for a total of 1,100m (Refer to Appendix 1 for Co-ordinates) intersected oxide copper mineralisation along strike from mineralisation previously identified by Sandfire Resources NL.

The best intersection in the current aircore program was in hole LLA02 with 16m of 0.32% Cu from 23m (Figure 3). Intersections (more than 2m of 0.1% Cu) are presented in Appendix 2.

The aircore program was designed to test for major extensions of the known oxide copper mineralisation along strike to the north and south. The potential size of material that may grade over 1% Cu (considered the minimum bulk grade that might be economic) is now shown to be limited, and it is unlikely that sufficient tonnage will be present to justify a significant heap leach operation.



**Figure 3: Lorella Prospect – Annotated Aircore Drill Results > 2m of 0.2%Cu (Refer to Appendix 2)**

***For further information or to be added to our electronic mailing list please contact:***

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***About Pacifco Minerals Ltd***

Pacifco Minerals Ltd (“Pacifco”) (ASX: PMY) is a Western Australian based exploration company with interests Australia, Mexico and Colombia. In Australia the company is currently focused on evaluating the Sorby Hills project in WA. Pacifco is also advancing the Borroloola West project in the Northern Territory which covers an outstanding package of ground north-west of the McArthur River Mine (the world’s largest producing zinc – lead mine) with high potential for the discovery of world class base metal deposits. Licences have been recently granted for ground prospective for cobalt and other ‘battery metals’ in South Australia. In Mexico Pacifco has acquired an option to purchase 100% interest in the Violin project which has high prospectivity for the development of a major gold-copper deposit. In Colombia the company is focused on advancing its Berrio Gold Project which is situated in the southern part of the prolific Segovia Gold Belt.

***Competent Person Statement***

The information in this announcement that relates to the South Australian exploration licence applications is based on information compiled by Mr Barrie Bolton, who is a Member of the Australian Institute of Mining and Metallurgy. Mr Bolton 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”. Mr Bolton consents to the inclusion in this announcement of the matters based on information in the form and context in which it appears.

The information in this announcement that relates to the Borroloola West projects in Australia is based on information compiled by Mr David Pascoe, who is a Member of the Australian Institute of Geoscientists. Mr Pascoe is contracted to Pacifco Minerals Limited. Mr Pascoe has sufficient experience which is relevant to the styles of mineralisation and types 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”. Mr Pascoe consents to the inclusion in this announcement of the matters based on information in the form and context in which it appears.

***Forward Looking Statements***

Certain statements in this document are or maybe “forward-looking statements” and represent Pacifco’s intentions, projections, expectations or beliefs concerning among other things, future exploration activities. The projections, estimates and beliefs contained in such forward-looking statements necessarily involve known and unknown risks, uncertainties and other factors, many of which are beyond the control of Pacifco, and which may cause Pacifco’s actual performance in future periods to differ materially from any express or implied estimates or projections. Nothing in this document is a promise or representation as to the future. Statements or assumptions in this document as to future matters may prove to be incorrect and differences may be material. Pacifco does not make any representation or warranty as to the accuracy of such statements or assumptions.

**Appendix 1: Aircore Drill Hole Co-ordinates and Depths, Lorella (Oxide Copper)**

Hole Number	Easting	Northing	Elevation	Total Depth
LLA01	557006	8264017	118	36
LLA02	557101	8263987	119	38
LLA03	557204	8263974	120	23
LLA04	557301	8263977	124	46
LLA05	557401	8263979	110	29
LLA06	557502	8263986	111	56
LLA07	557600	8263996	116	37
LLA08	557703	8263995	113	43
LLA09	557792	8264000	103	15
LLA10	557200	8263002	120	16
LLA11	557295	8263007	113	16
LLA12	557399	8262997	114	17
LLA13	557503	8263003	113	25
LLA14	557601	8263001	112	25
LLA15	557703	8262996	116	21
LLA16	557802	8262995	115	13
LLA17	557907	8262995	111	27
LLA18	558002	8263004	115	35
LLA19	555802	8264993	124	35
LLA20	555897	8264981	122	27
LLA21	555997	8264978	127	44
LLA22	556095	8264969	128	24
LLA23	556198	8264974	121	27
LLA24	556298	8264966	113	27
LLA25	556399	8264980	121	18
LLA26	556500	8264992	122	30
LLA27	556604	8265004	115	19
LLA28	557915	8263599	112	22
LLA29	557918	8263493	111	16
LLA30	557958	8263397	109	15
LLA31	557983	8263309	112	20
LLA32	558003	8263197	109	15
LLA33	559408	8262820	105	63
LLA34	559346	8262763	105	45
LLA35	559310	8262669	105	45
LLA36	559260	8262601	103	45
LLA37	559202	8262530	108	45

Note: Co-ordinates WGS 84, Zone 53S

All holes vertical

## Appendix 2: Summary of Aircore Drilling Results<sup>1</sup>, Lorella (Oxide Copper)

Hole ID	From (m)	To (m)	Interval (m)	Cu
LLA01	26	28	2	0.21%
LLA02	23	39	16	0.32%
LLA04	31	39	8	0.22%
LLA05	25	29	4	0.15%
LLA07	21	30	9	0.12%
LLA08	16	31	15	0.21%
LLA19	31	34	3	0.31%
LLA21	39	42	3	0.14%
LLA27	17	19	2	0.46%

<sup>1</sup> 37 aircore holes were drilled, results are presented for holes containing intersections of more than 2m of 0.1% Cu only

## JORC Code, 2012 Edition – Table 1 Report

### Section 1 Sampling Techniques and Data

Criteria	JORC Code Explanation	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>Sample results for the Borroloola Projects (apart from Lorella) and South Australian exploration licences have been reported previously.</li> <li>This announcement includes new aircore drill results from the Lorella Prospect, Borroloola Project, NT, and this JORC Table 1 refers to work and results relevant to the Lorella prospect</li> <li>Aircore drill samples at Lorella were sent to ALS Mt Isa for preparation, and ALS Brisbane for analysis. Sample were analysed using an aqua regia digestion and ICP-MS multi-element analysis.</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	Air core drilling at the Lorella Prospect, Borroloola Project, NT, Australia
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	Recoveries from aircore drilling variable. Results used for geochemical indication of mineralisation only, and not for resource estimates.
<b>Logging</b>	<ul style="list-style-type: none"> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	Aircore drilling geologically logged, but for qualitative use only, not to support Resource estimations.
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and</li> </ul>	<ul style="list-style-type: none"> <li>Samples collected at 1m intervals, geologically logged and geochemically scanned with a pXRF</li> <li>Pipe samples of aircore chips taken at selected meter intervals, for lab analysis</li> <li>Standard sample preparation undertaken</li> </ul>



Criteria	JORC Code Explanation	Commentary
	<p><i>appropriateness of the sample preparation technique.</i></p> <ul style="list-style-type: none"> <li>• <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li>• <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></li> <li>• <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Sample sizes taken (2kg) are correct for the sample type and styles of mineralisation sampled</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>• <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li>• <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></li> <li>• <i>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Aircore drill samples from Lorella sent to ALS Brisbane for analysis. Sample were analysed using an aqua regia digestion and ICP-MS multi-element analysis.</li> <li>• External standard reference material, blanks and duplicates inserted aircore samples from Lorella.</li> <li>• Sample results verified qualitatively with observed copper mineralisation and handheld pXRF results (not reported).</li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>• <i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li>• <i>The use of twinned holes.</i></li> <li>• <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li>• <i>Discuss any adjustment to assay data.</i></li> </ul>	<p>Aircore drilling carried out at Lorella regarded as qualitative, no quantitative verification required</p>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>Specification of the grid system used.</i></li> <li>• <i>Quality and adequacy of topographic control.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Soil and channel samples located by handheld GPS and accurate to 4 or 5m.</li> <li>• WGS 84 grid coordinates.</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>• <i>Data spacing for reporting of Exploration Results.</i></li> <li>• <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></li> <li>• <i>Whether sample compositing has been applied.</i></li> </ul>	<p>Exploration only, no Mineral Resources</p>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>• <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></li> <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>	<p>At Lorella oxide copper is interpreted as semi horizontal and vertical aircore holes are appropriate to give qualitative indication of thickness and grade</p>

Criteria	JORC Code Explanation	Commentary
<b>Sample security</b>	<ul style="list-style-type: none"> <li><i>The measures taken to ensure sample security.</i></li> </ul>	All samples stored securely on sites before sealed delivery to lab
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li><i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	None required at this preliminary exploration stage

## Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code Explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul style="list-style-type: none"> <li>The Borroloola West JV Project consists of EL's 26939, 30305, 26938, 28659, 28540, 28541, 28534, 28658, 30302, 28657, 28508, MLN 624 and ELA 26599. The Borroloola West Project is a joint venture with Sandfire. Pacífico is the operator. Some of the licence areas are covered by the Limmen National Park and permissions for exploration have been obtained from both the traditional owners and the Parks and Wildlife Commission.</li> <li>Lorella (EL26939) lies on Lorella Springs Station and permissions for exploration have been obtained from the traditional owners and from the station operator.</li> <li>100% Pacific EL31354 Limestone Creek lies in Limmen National Park and permissions for exploration have been obtained from both the traditional owners and the Parks and Wildlife Commission.</li> <li>Granted licences - No known security of tenure issues or anticipated impediments to operate in the area.</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>	Borroloola West Project - Various companies have explored the area now covered by the Borroloola West Project including Sandfire Resources NL, Nord Resources Ltd, Mount Isa Mines Ltd and BHP Exploration Pty Ltd.
<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 Borroloola West Project is considered prospective for sediment hosted massive sulphide zinc lead silver deposits and structurally controlled copper deposits in the Proterozoic sedimentary sequence (primary and oxide). Manganese deposits may be present in Cretaceous sediments. Diamonds may occur in concealed kimberlitic pipes.</li> <li>At the Lorella Prospect stratabound primary copper (cobalt-silver) mineralisation within the Proterozoic Amelia Dolomite which has been oxidised and upgraded by near surface supergene processes</li> </ul>
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:               <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	Aircore drill hole coordinates and details are provided in Appendix 1 of this report

Criteria	JORC Code Explanation	Commentary
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>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.</i></li> <li><i>The assumptions used for reporting of metal equivalent values should be clearly stated.</i></li> </ul>	<ul style="list-style-type: none"> <li>All samples for analyses were taken over 1m and no weighting techniques have been used. No grades have been cut. Cut-off grades are clearly stated.</li> <li>Aggregations of grades are listed in the intercepts in Appendix 2. No metal equivalent values have been calculated or used.</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li><i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> <li><i>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').</i></li> </ul>	Down-hole lengths only have been reported. The mineralisation is flat to gently dipping. All the drill holes reported in Appendix 1 are vertical and therefore reflect vertical thicknesses
<b>Diagrams</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	Maps provided (Figures 2 and 3)
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	All significant results reported
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	None relevant
<b>Further work</b>	<ul style="list-style-type: none"> <li><i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	No further work planned at the Lorella Prospect at this stage