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**Projects**
Solonopole Lithium Project
(Ceara, NE BRAZIL)

Napperby Lithium Project
(NT, AUSTRALIA)

| | |
|---|---|
| **Shares on Issue** | 66,000,000 |
| **Tradeable Shares** | 36,414,000 |
| **ASX Code** | OCN |





**23 May 2023**

## Exploration Update

## Drilling commences at Solonópole Project; Potential Pegmatites identified at Napperby Project, NT

## Highlights

### Solonópole Project, Brazil

- Drilling commences at Bom Jesus de Baixo pit

### Napperby Project, NT

- Hyper Spectral survey completed with high quality data acquired.
- Several potential pegmatite bodies/dykes have been identified through alteration mineral maps that warrant further field investigation.
- Soil geochemical program also reveals several large linear Li anomalies, some of which are on the strike extension of pegmatite outcrop.
- Hyper-Spectral data interpretation underway to locate REE mineralisation potential in North Arunta.

Oceana Lithium Limited (**ASX: OCN, "Oceana" or "the Company"**) is pleased to provide the following exploration update for the Solonópole project in Brazil and the Napperby project in the Northern Territory, Australia.

**Solonópole Project**
The Company confirms that a 3,000 metre RC scout drilling program has commenced at our Solonópole Lihtium Project in Brazil. Contractor Servdrill successfully completed mobilization of all equipment and drilling team to site late last week and commenced the first hole in the program on 19 May.

Scout drilling on the Bom Jesus de Baixo pegmatite will initially focus around the pit area where high-grade spodumene Li mineralisation has been identified and will then move eastwards over the other two pegmatite outcrops (refer ASX announcement 26 April, 2023). These three linear outcrops lie over a combined east-west strike length of more than 500m. This first phase of drilling will comprise vertical holes on a 20m x 20m grid, designed to assist in determining the actual pegmatite dimensions and dip at each location, as well as its Li grade and mineralogy (**Figure 1**). In-fill drilling between the outcrops will then determine if they are linked.

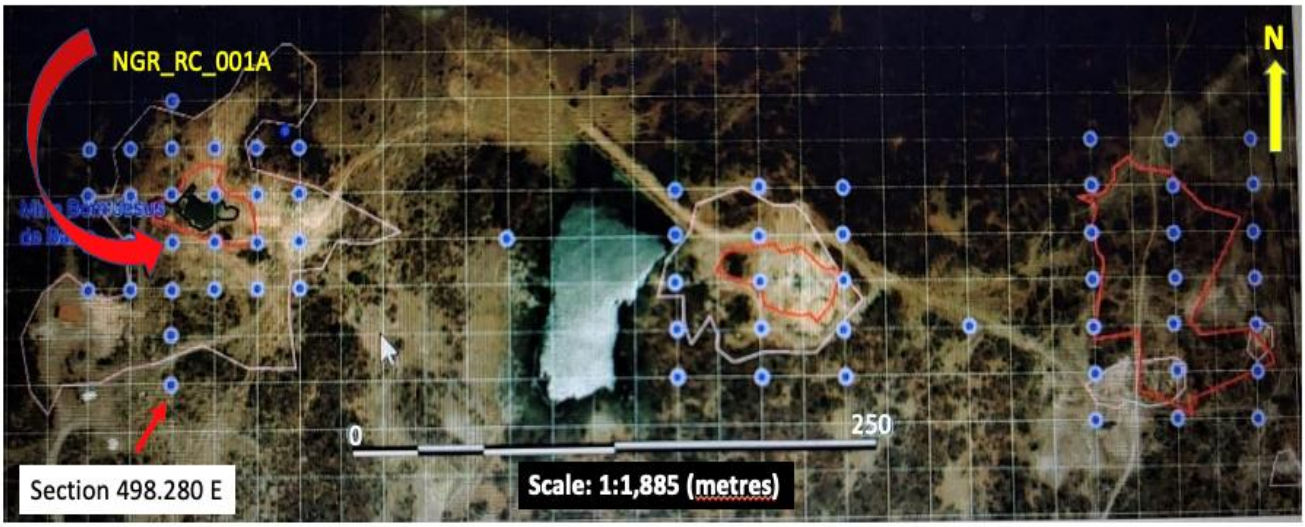


***Figure 1**: Google Earth image of Mina Bom Jesus de Baixo pit showing the 20m x 20m drill grids (blue dots proposed drill holes) starting in the west with first hole NGR_RC_001A. Drill plan is to move east over the other two (2) outcropping areas (red polygon being pegmatite outcrop; pink polygon being pegmatite rubble).*

***Figure 2:** First vertical RC Hole at Bom Jesus de Baixo pit*

***Figure 3**: Servdrill team undertaking RC drilling at Bom Jesus de Baixo*

**Napperby Project**

A detailed Hyperspectral Survey has been completed and high quality data acquired at the Napperby lithium and Rare Earths project in central Northern Territory, Australia. Oceana's in-house geologists and specialists from HyVista Corporation have reviewed and interpreted the data. Spectral data has confirmed previously mapped pegmatite outcrops with reasonable accuracy and revealed several potential new major pegmatite dykes previously unmapped by historical government studies or private explorers (**Figure 4**). Field work is ongoing to determine the true nature of a number of geological features that have been highlighted by the survey but do not coincide with previously mapped pegmatites. This includes several large north-west, south-east striking bodies with strike lengths in excess of 1km and widths over 250m.

This area is characterised by approximately 95% residual soil cover with just occasional outcrops of granite, pegmatite and occasional quartz blows. A study of the fertility of the granites for lithium-caesium-tantalum (LCT) pegmatite formation was carried out in the project area to gain a better understanding of the degree to which fractionation has occurred within the granite, providing spatial vectors towards prospective pegmatite in the tenement area.

Following the granite fertility study, the decision was made to conduct a soil geochemical sampling program in the southeast of the tenement area where the granite geochemistry shows the greatest degree of fractionation. Sample lines were initially spaced at a nominal 2km but due to the shape of the tenement

boundary, this was reduced as required in some locations to 1.5km. Along lines, the samples were spaced at 200m (see Appendix 1 for the sampling technique).

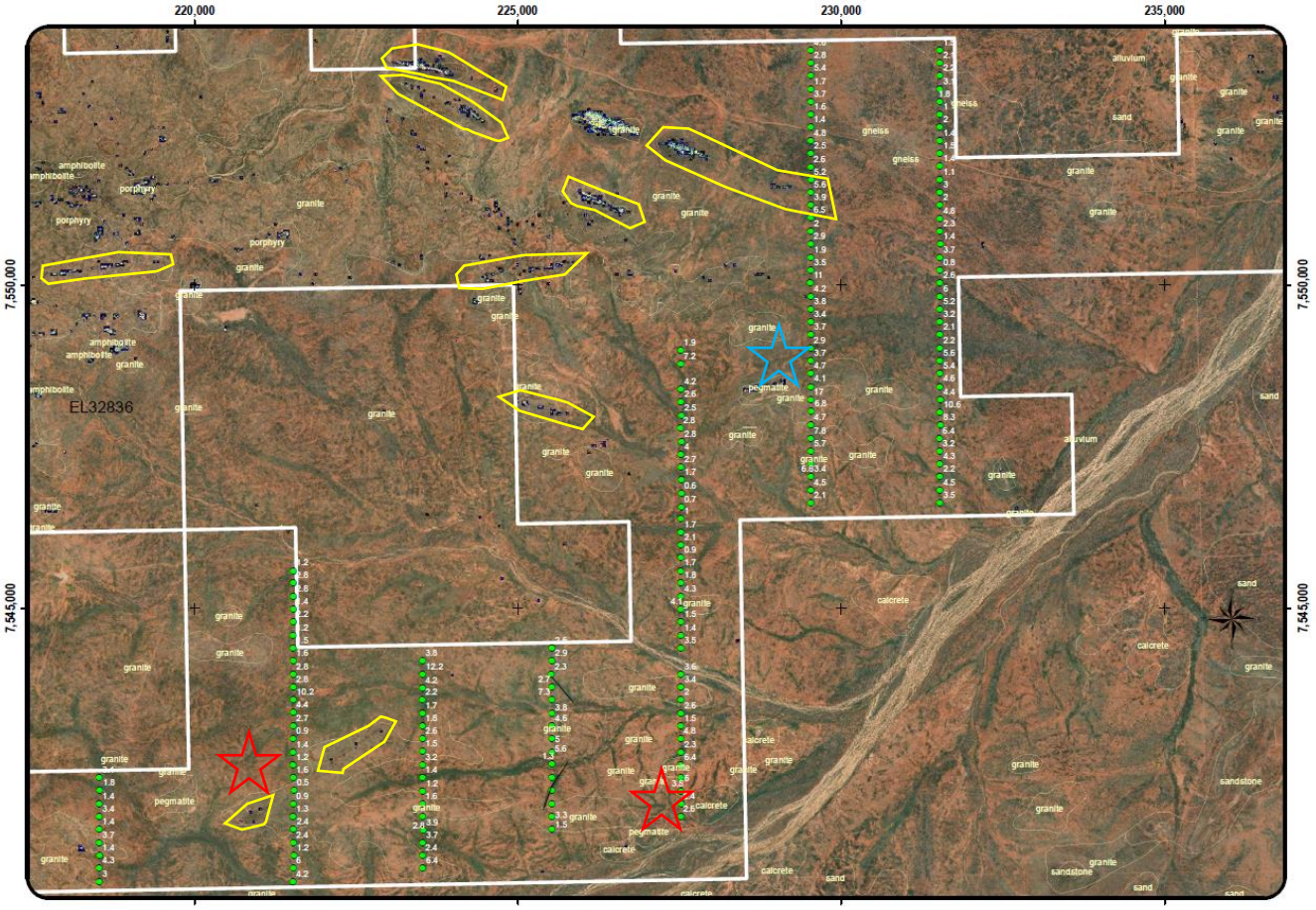


***Figure 4**: Hyper Spectral data map showing potential pegmatite outcrop or sub outcrops (major Hyper Spectral anomalies highlighted in yellow). Green dots are the soil geochemical sampling locations. Red stars mark pegmatite outcrop as mapped by the Government Geological Survey Dept. Note mapped pegmatite coincident with Hyper Spectral anomaly (blue star).*

### Soil geochemistry sampling results

A detailed soil geochemistry sampling program commenced in September 2022 and further work was completed in February 2023 (**Figure 5**).

The results of this sampling program have shown there are several zones of lithium anomalism, which are open ended and require closing off with future in-fill sampling. The most outstanding target zone is 5.5 km along strike and over 1.5km in width (**Figure 5**). This zone is in contact with what field observations confirm is an equigranular biotite rich granite. Lithium grades for this anomaly are in the vicinity of 10+ PPB Li against a background of 1-3 PPB Li. These Li anomalies are the immediate extension of a mapped pegmatite unit which has been identified by previous studies and the Hyper Spectral data of this program (**Figures 4 and 5**).

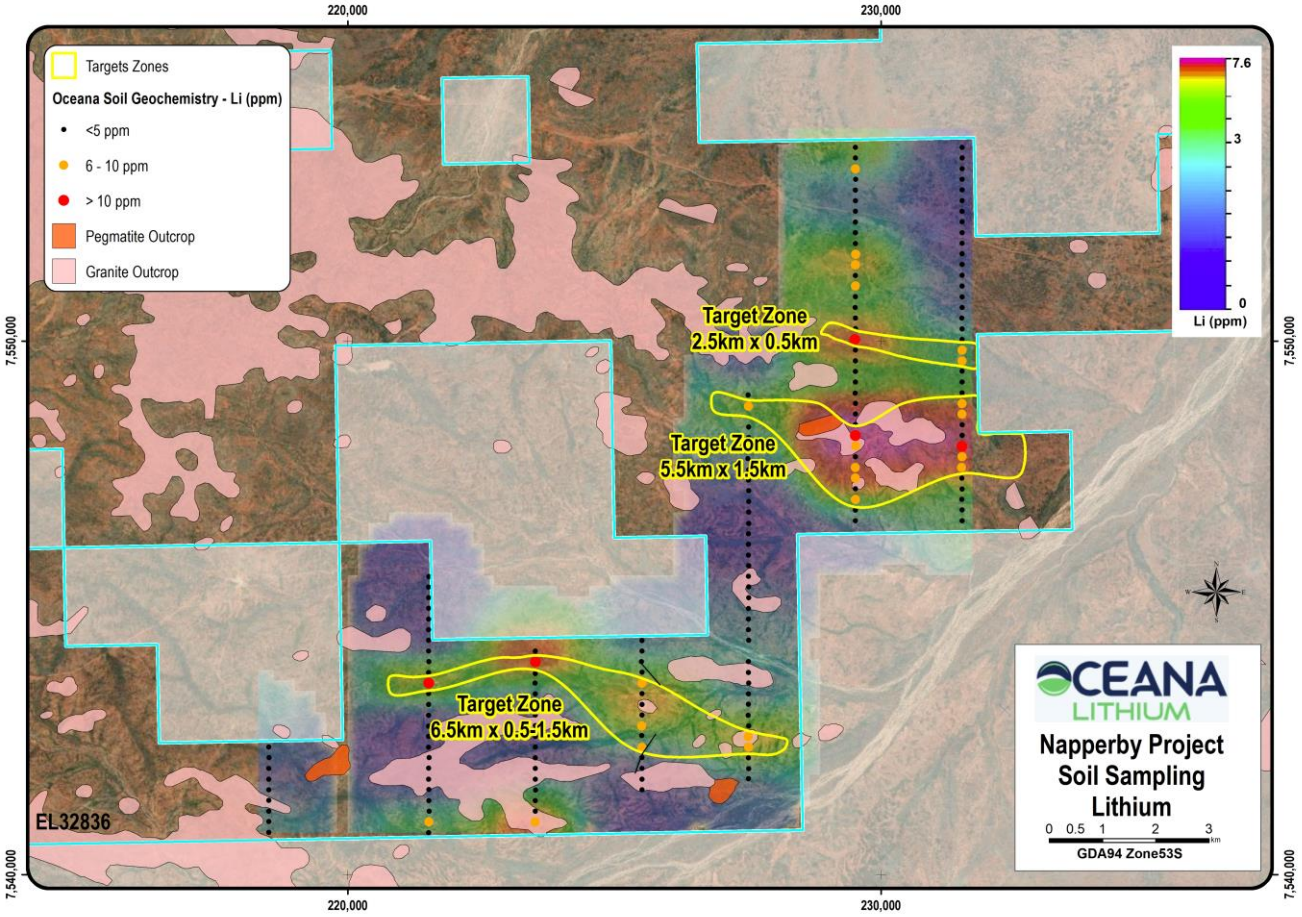


***Figure 5**: depicts a soil geochemistry Li heatmap with local geology, which highlights at least three open-ended east-west, and north-west south east trending Li anomalies.*

The soil samples taken were subjected to mobile metal ion (MMI) analysis using Ionic Leach™ partial leach technology. Ionic Leach™ is a proprietary partial leach technology that has been developed to extend the reach of geochemical exploration into areas that have been blanketed by post-mineralisation cover. This cover is typically transported, though well-developed residual cover sequences can also be suitable candidates. Soil and sediments are the media used for Ionic Leach™ surveys. Partial leaches such as Ionic Leach™ operate by separating and examining only a part of the chemical composition of the whole sample.

Because chemical, rather than physical, transport is typically responsible for "adding" a mineralisation signal from depth into exotic cover, analytical manipulation of leach chemistry data can be used to extract this signal out of the exotic cover substrate, into solution where it can be analysed. Ionic Leach™ is a chemical approach to excluding parts of a surface sample that dilute the signal that mineral explorers seek.

The two prominent Li anomalies identified to date, as well as the other single line anomalies, require detailed in-fill soil sampling work to better constrain them for further follow-up towards their origin (**Figure 5**).

**Future Exploration Program**

The Company is encouraged by both the results of the current hyperspectral data and the soil geochemical Li anomalies and plans to follow up initially with infill soil sampling lines to close off the Li anomalies and better define targets ready for drill testing. The in-fill sampling lines are likely to be closed to a 200m line spacings

with 25m sample centres. At the same time a detailed mapping exercise will commence over these areas, where an early outcrop discovery is possible within this type of terrain.

The discovery of significant rare earth element (REE) mineralisation at Nolans Bore in the central Arunta Province, Northern Territory has renewed interest in the Arunta area as a possible REE field. At EL 32836, apatite occurrence up to 25% has been marked on the map accompanying Explanatory Notes of Stewart (1982), which was linked to the REE rich Wangala Granite. According to Davies (1979) and Stewart et al (1980), REE rich apatite-mica schist occurs in an east-northeast trending belt over an area of about 2 km$^2$ within the Wangala Granite[1].

The Company is now conducting further interpretation of the hyperspectral data received to guide fieldwork and investigate the prospectivity of REE mineralisation on its tenements.

**Authorised for release by the Board.**

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**Competent Person Statement**

The information in this announcement that relates to exploration results is based on information reviewed, collated and fairly represented by Mr Graeme Fraser who is a Member of AusIMM. Mr Fraser visited the project site and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration, and to the activity which has been undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Fraser consents to the inclusion in this report of the matters based on this information in the form and context in which it appears. Mr Fraser confirms information in this market announcement is an accurate representation of the available data for the exploration areas being acquired.

**ABOUT OCEANA LITHIUM**

**Oceana Lithium Limited** is a mineral exploration and development company with advanced + early-stage Lithium Pegmatite projects in mining friendly jurisdictions in the state of Ceara, Brazil, and the Northern Territory, Australia. The Company's exploration effort is led and co-ordinated by James Abson, with Renato Braz Suez heading up the team in Brazil. James and Renato are supported by the Company's Non-Executive Director resident in Brazil, Simon Mottram, a widely experienced geologist fluent in Portuguese, and Non-Executive Director Dr Qingtao Zeng who based on local knowledge provides oversight of the Company's exploration effort at the Napperby project in the Northern Territory.

[1] Davies ER, 1979. Report on uranium exploration on Exploration Licence 1317 Mount Denison area Northern Territory in Annual Reports for Exploration Licences 1316 and 1317 for the year ending 19th April 1979. Northern Territory Department of Mines and Energy, Open File Company Report CR 1979-0103

Stewart AJ, Offe LA, Glikson AY, Warren RG and Black LP, 1980. Geology of the Northern Arunta Block, Northern Territory. Bureau of Mineral Resources, Geology and Geophysics Record 1980/63, BMR microform MF152.

# 1 JORC CODE, 2012 EDITION – TABLE 1 FOR NAPPERBY PROJECT

*Section 1: Sampling Techniques and Data*

| Criteria | Commentary |
|---|---|
| Sampling techniques | • **Rock Chip Samples**<br>Consultant geologist Graeme Fraser collected rock samples of 1 to 4 kg in weight for each sample. Samples were under the supervision of the geologist until submitted to the laboratory.<br>Sample location (using a hand-held GPS), descriptions and sample photos were recorded in the field.<br>Samples were submitted to Intertek in Alice Springs where they are prepped and dispatched to Brisbane for analysis.<br>Analysis for lithium and multi-elements using laboratory code 4A/MS48 R<br>• **Soil Samples**<br>• Soil samples of a weight of about 200 grams were taken from a depth of about 10 to 15 cm below surface. They were sieved on site to -2mm and placed in plastic snap seal bags for transport to the laboratory;<br>• The soil samples were taken at 200 metre spacings along lines spaced at 1.5-2km. The lines were oriented perpendicular to the overall mapped geological structure. Enough samples were taken to establish the background values of the metals and elements that can be used to determine a level of anomalies.<br>• The soil samples were taken using industry standard procedures and were only handled by the company's geologists. They were freighted using TNT Logistics from Alice Spring to Perth and sent to ALS Perth.<br>• Soil samples were analysed using ALS code ME_MS23 |
| *Drilling techniques* | • NA. No Drilling Reported |
| *Drill sample recovery* | • NA. No Drilling Reported |
| *Logging* | • Rock Chip and soil sample locations, descriptions and sample photos were recorded in the field. |
| *Sub-sampling techniques and sample preparation* | • Rock Chip Samples<br>All the rock chip samples are dry and weathered. The sub-sampling is considered standard industry practise for the exploration stage of the project.<br>• The size and distribution of the soil samples is appropriate for regional exploration within the scale of the Napperby project. |
| *Quality of assay data and laboratory tests* | • Both ALS and Intertek are accredited laboratories and insert blanks, standards and repeats to ensure the quality of their analysis. |
| *Verification of sampling and assaying* | • No significant adjustments to the assay data have been required. |
| *Location of data points* | • Rock Chip Samples and soil samples<br>Sample location, descriptions and sample photos were recorded in the field using Hand GPS Garmin 65. |

| Criteria | Commentary |
|---|---|
| *Data spacing and distribution* | • The project is in the early stage of exploration. The rock chip samples were collected based on field observation and outcrop conditions. There is no spacing or distribution considered.<br>• The soil samples were taken at 200 meter spacing along traverses at 1.5-2km spacings. |
| *Orientation of data in relation to geological structure* | • There are dominate east west trends in the area. The rock chip sampling of this program is to test whether there is any mineralization in the surface. No preference of orientation was followed for this program. |
| *Sample security* | • Rock Chip Samples<br>Consultant geologist Graeme Fraser collected rock samples of 1 to 4 kg in weight for each sample. Samples were under supervision of the geologist until submitted to the laboratory. |
| *Audits or reviews* | • There has been no review of the sampling techniques and data. |

*Section 2 Reporting of Exploration Results (Criteria listed in the preceding section also apply to this section.)*

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| *Mineral tenement and land tenure status* | • *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.*<br>• *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.* | • Oceana owns 100% of the tenements EL32836 and EL32841 in application through its fully owned subsidiary company Oceana Lithium NT Pty Ltd.<br>• The Company has been actively exploration the area under EL32836 and has no reason to believe there is any risk in its security of the tenure. |
| *Exploration done by other parties* | • *Acknowledgment and appraisal of exploration by other parties.* | • Northern Territory Geological Survey and previous explorers in the region for uranium. |
| *Geology* | • *Deposit type, geological setting and style of mineralisation.* | • LCT pegmatite intrusion. |
| *Drill hole Information* | • *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:*<br>  ○ *easting and northing of the drill hole collar*<br>  ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* | • Provided (no drilling carried out). |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | ○ *dip and azimuth of the hole*<br>○ *down hole length and interception depth*<br>○ *hole length.*<br>• *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.* | |
| *Data aggregation methods* | • *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.*<br>• *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.*<br>• *The assumptions used for any reporting of metal equivalent values should be clearly stated.* | • No drilling or sample aggregation undertaken. |
| *Relationship between mineralisation widths and intercept lengths* | • *These relationships are particularly important in the reporting of Exploration Results.*<br>• *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.*<br>• *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').* | • No drilling undertaken. |
| *Diagrams* | • *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.* | • Plan maps of soil geochemical results provided. |
| *Balanced reporting* | • *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be* | • All grades reported in Tables or map legends. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | *practiced to avoid misleading reporting of Exploration Results.* | |
| *Other substantive exploration data* | • *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.* | • Due to this project being early greenfields exploration in nature, there is no other meaningful or material exploration data available for this project at this stage. Oceana has commenced systematic and phased exploration of these project areas, which will improve the geological and economic understanding of these areas. New meaningful and material data will be reported on as it becomes available. |
| *Further work* | • *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).*<br>• *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.* | • The next phases of work will include soil sampling, and mapping as well as various results driven campaigns of potential RAB or RC core drilling. |