ASX Announcement

19 September 2022

GEOPHYSICS MODELLING IDENTIFIES EMERGING TARGETS

HIGHLIGHTS

- **Interpretation of existing geophysics data over South Australian projects identifies emerging targets**
- **Reprocessing and interpretation of historical geophysical data has identified multiple prospective AEM conductors in the core of the Yumbarra layered ultramafic intrusive, targeting nickel**
- **At Yumbarra a helicopter supported ground based gravity program over the AEM targets has been designed and awaiting permitting**
- **At the nearby Fowler Project interpretation of the existing geophysical data and design of a gravity survey is underway**
- **Sandford soil samples have been dried and are currently being analysed with handheld XRF prior to sample selection for assay**
- **A number of new project opportunities have been presented to the company and continue to be evaluated**

Osmond Resources Limited (ASX:**OSM**) (**Osmond** or **the Company**) is pleased to provide an update to shareholders on the Company's recent exploration activities across our South Australia and Victorian Projects.

Several highly prospective targets have emerged from the ongoing review for the reprocessing and modelling of existing AEM and magnetic data. Osmond have been able to access high quality and detailed airborne and ground geophysics data, which includes 100m & 40m flight line Magnetic and Radiometric data, 200m flight line Airborne Electro-Magnetic data, broad spaced gravity and high resolution Gradient Array IP survey data. These have been used to create an integrated 3D inversion model of the Yumbarra Project Area (Figure 1).

Osmond Resources Executive Director, Andrew Shearer, commented:

> *"Osmond have been able to capitalise on a valuable and extensive collection of high-quality historical data across the Yumbarra and Fowler Project Areas and are the first to apply 3D inversion modelling to that data to identify some very exciting targets for follow up testing.*
>
> *We are eagerly awaiting commencement of the gravity survey and the results of our maiden soil program over the Sandford Project Area in Victoria which are currently being processed."*

The Company has engaged experienced geophysical consultant, David McInnes, to undertake a review of all available geophysical data across the South Australian tenements. Magnetic and conductive anomalies have been identified in locations, inferred to be the basal contact of the ultra-mafic intrusive. Other significant conductors are located in the demagnetised core and hinge zones of the ultramafic complex.

A detailed 915 station helicopter supported ground based gravity program (Figure 2) has been designed to cover the Yumbarra Project Area to aid in basement lithological and structural interpretation and to identify any potential dense metallic sulphide deposits. The spacing of the gravity stations will range from 250m to 1,000m. This will significantly improve the resolution versus the existing 7km spaced stations.

The gravity survey is scheduled for late October 2022 with the regulatory approvals process currently underway. The survey will take approximately 4 weeks to complete.

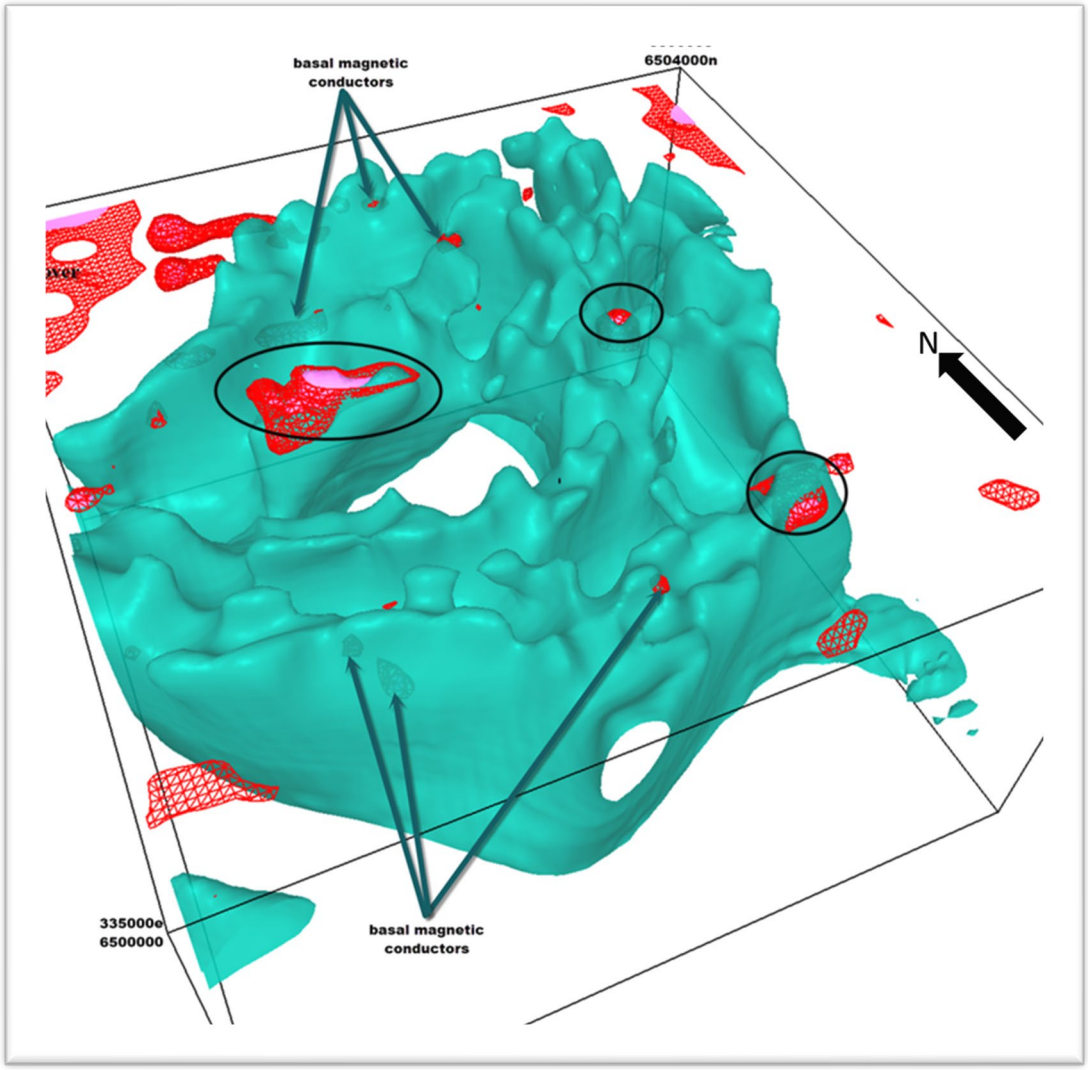

Figure 1 – Magnetic model susceptibility shell (0.1 SI units) defining the layered ultramafic magnetic units. Circled AEM anomalies are in demagnetised core zone and hinges of the complex. Also identified are high priority potential sulphide sourced basal contact conductors.

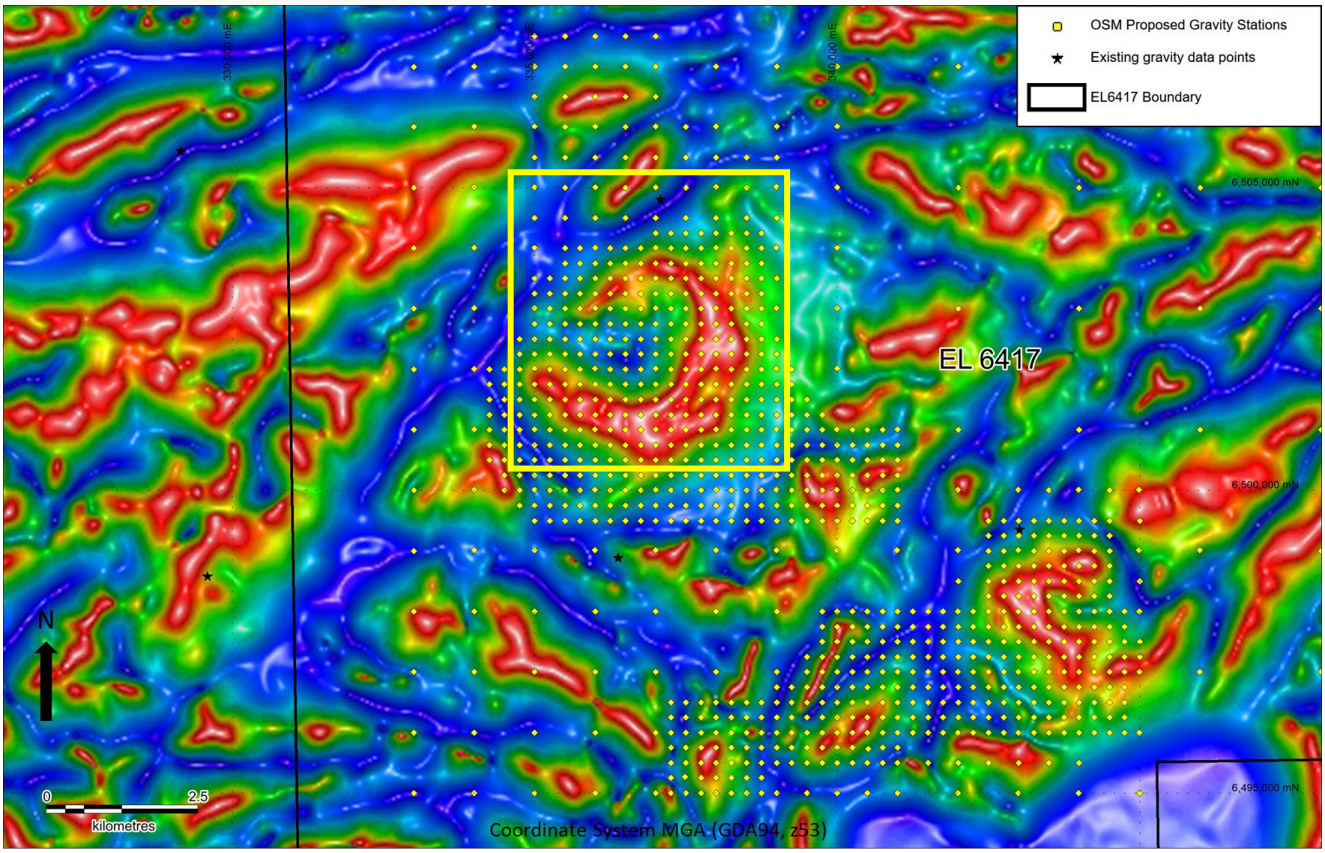

Figure 2 – Proposed gravity program over the Yumbarra Prospect, EL6417. (Image background Magnetic RTP). Yellow square highlights bounds of Figure 1

At the **Fowler Project** (Figure 3) preliminary findings of the ongoing geophysical review has identified a strong coincident gravity and magnetic anomaly located in the northern area of tenement EL6604 on the same trend as IGO Limited (ASX:IGO) nickel prospect Mystic.

EL6604 is one of the two tenements held by Osmond in JV with Kimba Minerals Pty Ltd. A follow up program of detailed ground based gravity is currently being designed and expected to occur 4th quarter 2022 or 1st quarter 2023 depending on contractor availability.

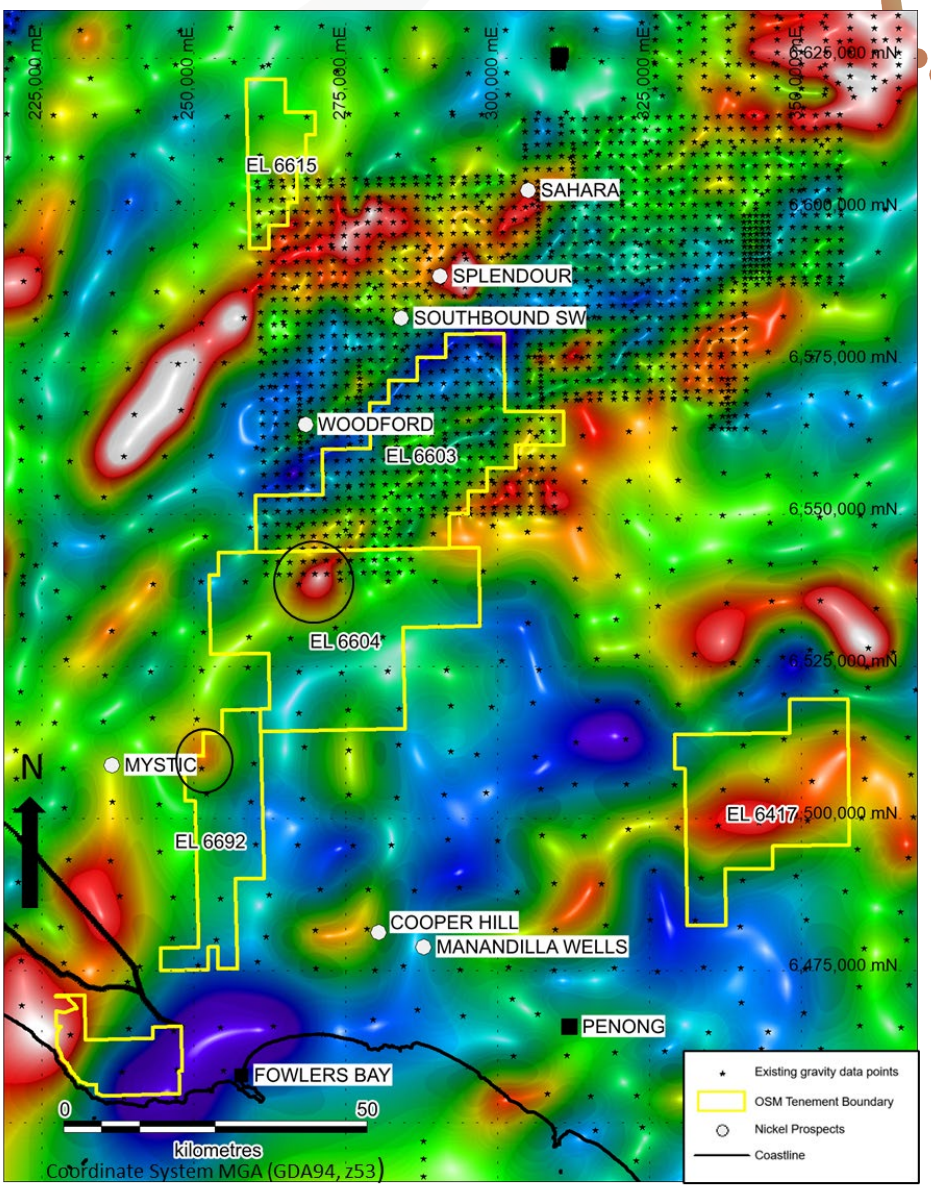

Figure 3 – Residual Gravity image showing gravity data station density (black stars) and local Nickel Prospects. Priority targets areas are circled.

-Ends-

This announcement has been approved for release by the Board of Osmond Resources.

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ABOUT OSMOND RESOURCES

Osmond Resources Limited is a mineral and exploration company committed to increasing shareholder wealth through the exploration, development and acquisition of mineral resource projects.

Osmond was formed with the purpose of assembling a portfolio of projects predominantly located in the Gawler Craton region of South Australia and the Glenelg structural zone of western Victoria. (Please refer to maps below.) Since its incorporation, the Company has secured agreements in respect of a number of tenements that are considered highly prospective for gold, copper, nickel and REE. The Company is excited by recent exploration successes in these frontier areas for gold and base metals.

Osmond has entered into acquisition agreements in South Australia, with Fowler Resources Pty Ltd (Fowler) for exploration tenements EL6417 (Yumbarra Tenement), EL6615 (Tallacootra Tenement) and EL6692 (Coorabie Tenement) and with Kimba Resources Pty Ltd (Kimba) (being a wholly-owned subsidiary of ASX-listed Investigator Resources Pty Ltd (Investigator)) for EL6603 and EL6604 (together, the Fowler Tenements); and in Victoria with Providence Gold and Minerals Pty Ltd (Providence), for EL6958 (Sandford Tenement).

PROJECTS

The Fowler Domain Projects straddle the boundary of this geological domain in far western South Australia. These major crustal scale domain bounding structures that traverse the tenements have potential to host structurally upgraded magmatic Ni-Cr-Cu-PGE; layered intrusive-hosted Ni-Cr-PGE; IOCG (Hiltaba Suite) deposits; intrusion-related (Tunkillia-type) Au; and orogenic Au. While the proximity of the Fowler Domain Projects to nearby mineral occurrences is no guarantee that it will be prospective for an economic reserve, recent discoveries by Western Areas Limited (ASX:WSA) in the Fowler Domain have indicated the nickel-copper sulphide pedigree of the region.

The Yumbarra Project located in the Nuyts Domain of the Gawler Craton contains a highly magnetic feature that is interpreted as a layered ultramafic intrusive. Historical drilling has reported a best intersection of Ni-Co anomalism in basement drilling of 1357 ppm Ni and 1066 ppm Co (further details provided on page 46 and 78 of the Independent Geologist Report in the Osmond Prospectus). There are also identified electromagnetic surveying targets yet to be drilled on this target.

The Sandford Project located in western Victoria is considered prospective for Avebury-style nickel; SEDEX base metals; porphyry Cu-Au; porphyry Mo-Au; (R)IRGS style deposits; and orogenic Au deposits related to major structures that pass through the tenement. In addition, rare earth element (REE) potential is recognised within the tenement, for clays developed at the base of the extensive duricrusts that formed from the deep weathering of basement granitoid bodies with elevated REE concentrations. Initial targeting on the Sandford Project has commenced and will seek to identify prospective regions for the formation of the REE hosted clays and also base and precious metal occurrences.

Figure 4:Osmond Resources Projects

Competent Persons Statement

The information in this report that relates to Mineral Resources is based on information compiled by Mr Charles Nesbitt. Mr Charles Nesbitt is a full-time employee of Osmond Resources Ltd. Mr Charles Nesbitt has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as Competent Persons as defined in the 2012 edition of the Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC code). Mr Charles Nesbitt consents to the inclusion of this information in the form and context in which they occur.

1 JORC CODE, 2012 EDITION – TABLE 1 REPORT TEMPLATE

1.1 **Section 1 Sampling Techniques and Data**

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *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.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *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.*	• Not applicable
Drilling techniques	• *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).*	• Not applicable
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *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.*	• Not applicable
Logging	• *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.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• Not applicable

Criteria	JORC Code explanation	Commentary
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *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.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• Not applicable
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *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.* • *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.*	• Not applicable
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• Not applicable
Location of data points	• *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.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• Grid system used for diagrams in this report is in Map Grid of Australia (GDA94, z53)
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *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.*	• Historical Magnetic Data is 200m and 40m spaced flight lines. • Historical Airborne Electro-Magnetic data is 200m spaced flight lines. • Historical Gravity data is broad spaced with maximum spacing 7km x 7km square grid and minimum spacing 2km x 2km square grid.

Criteria	JORC Code explanation	Commentary
	• *Whether sample compositing has been applied.*	
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *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.*	• Not applicable
Sample security	• *The measures taken to ensure sample security.*	• Not applicable
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• Not applicable

1.2 **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.* • *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.*	• Osmond has entered into acquisition agreements in South Australia, with Fowler Resources Pty Ltd (Fowler) for exploration tenements EL6417 (Yumbarra Tenement), EL6615 (Tallacootra Tenement) and EL6692 (Coorabie Tenement) in South Australia; • Osmond has entered into an acquisition agreement with Kimba Resources Pty Ltd (Kimba) (being a wholly owned subsidiary of ASX-listed Investigator Resources Pty Ltd (Investigator)) for EL6603 and EL6604 (together, the Fowler Tenements) in South Australia; • Osmond has entered into an acquisition agreement with Providence Gold and Minerals Pty Ltd (Providence), for EL6958 (Sandford Tenement) in Victoria.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	Historical exploration work across Osmond Resources' South Australian tenements targeting basement were undertaken by the following companies: • CRA/Stockdale JV, EL1524, 1988: Targeting Au-Cu-Fe-Pb-U. Carried out Gravity, Gmag, sparse drilling • Poseidon/Stockdale JV, EL1704, 1992. Targeting Cu-Pb-Zn. Carried out Gravity, Gmag, sparse RC drilling.

Criteria	JORC Code explanation	Commentary
		• SA Dept Mines and Energy, 1993. Targeting all metals and diamond. Carried out RC drilling. • Geopeko, EL1865, 1993-1998. Targeting Au and base metals. Carried out AC drilling. • North Limited, EL2555, 1998-1999. Targeting Cu-Au Hiltaba Magnetic Highs. Carried out Aeromag and AC Drilling. • Dominion Gold Ops, EL2685, 2001. Targeting Au-Cu-Ni (Yumbarra magnetic anomaly). Carried out AC drilling. • Doray Minerals/Iluka, EL5539, 2014-2019. Targeting Au (PACE funded Project). Carried out AC Drilling, resampled Iluka drill holes. • Doray Minerals/Iluka, EL5685, 2015-2020. Targeting Au (PACE funded project). Carried out AC drilling and resampled Iluka drill holes. Historical exploration work across Osmond Resources' Victorian tenement were undertaken by the following companies: • Continental Oil, EL58/59, 1956. Targeting Phosphate. Carried out re-assay of old drilling. • WMC, EL458, 1973-1974. Targeting Base Metals (Nolan's Creek). Carried out Stream sediment sampling, soils, IP survey, and 2 RC holes. • WMC, EL686/687, 1978-1982. Targeting Coal in Eumeraella Fm. 43 holes drilled. • Asarco Australia, EL669, 1978-1979. Targeting Base and precious metals (Nolans) Carried out mapping, rock chip sampling, ground. • Ashton Mining, EL744/745, 1988-1989. Targeting Diamond bearing Kimberlites. Carried out gravel and loam sampling, intrusives. • Rosscraft Mins, EL1317, 1983-1988. Targeting VHMS, Nolans Creek, Major Creek. Carried out Ground mag, EM, soils and 7 Diamond drill holes. • Pan Aust Mining, EL2215, 1988-1989. Targeting HM Sand, Dorodong Sand. Carried out 62 RC holes, good results, <100mt. • CRAE, EL1352, 1985. Targeting HM sands, Carried out Airborne mag, 14 RC holes. • CRAE, EL2617, 1989-1994. Targeting Volcanogenic Au-

Criteria	JORC Code explanation	Commentary
		base metal, Ni. Carried out mapping, rock-chips, 2 streams. • CRAE, EL3232, 1989-1994. Targeting Hydrothermal, skarn Au-base met. Carried out mapping, Mag, IP, rock-chip. • CRAE, EL2392/2393, 1991-1993. Targeting GRMC precious & base metals, Sn. Carried out mapping, laterite sampling. • CRAE, EL3920, 1996-1997. Targeting Porphyry Cu-Au, skarn Au base m. Carried out EM, QUESTEM. • Delta Gold Exploration, EL3918, 1997-1998. Targeting Base metals – Au, Nolans Ck. Carried out rock-chips, QUESTEM. • Strand/Minotaur, EL4349, 1998-2001. Targeting HM sands (good results – no JV). Carried out mapping, GMag, 200 RC holes. • Eromanga Hyd, EL4223/4275, 1999-2000. Targeting HM, Nolans Robertsons Au-Cu Ni. Carried out soils, rock-chips, Gmag. • Basin Mineral, EL4404/4458, 2000-2001. Targeting HM sands. Carried out Sat imagery, 40 RC AC holes. • Inco Resources, EL4876, 2005-2006. Targeting Ni – Hummock's serpentinite. Carried out soils, rock-chips, mag modelling. • Accord Mining, EL5143, 2007-2009. Targeting Ni – Avebury style. Carried out desk-top study, no field work. • Leichhardt Res, EL5082, 2007-2012. Targeting Coal Seam Gas (a viable resource). Moratorium was in place – no work carried out. For further information, refer to Osmond Resource Independent Geologist's Report, included in the Osmond Resources Prospectus.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The Fowler Domain Projects (EL6615, EL6603, EL6604 and EL6692) straddle the boundary of this geological domain in far western South Australia. These major crustal scale domain bounding structures that traverse the tenements have potential to host structurally upgraded magmatic Ni-Cr-Cu-PGE; layered

Criteria	JORC Code explanation	Commentary
		intrusive-hosted Ni-Cr-PGE; IOCG (Hiltaba Suite) deposits; intrusion-related (Tunkillia-type) Au; and orogenic Au. While the proximity of the Fowler Domain Projects to nearby mineral occurrences is no guarantee that it will be prospective for an economic reserve, recent discoveries by Western Areas Limited, now IGO Limited (ASX:IGO) in the Fowler Domain have indicated the nickel-copper sulphide pedigree of the region. • The Yumbarra Project (EL6417) located in the Nuyts Domain of the Gawler Craton contains a highly magnetic feature that is interpreted as a layered ultramafic intrusive. Historical drilling has reported a best intersection of Ni-Co anomalism in basement drilling of 1357 ppm Ni and 1066 ppm Co (further details provided on page 46 and 78 of the Independent Geologist Report in the Osmond Prospectus). There are also identified electromagnetic surveying targets yet to be drilled on this target. • The Sandford Project located in western Victoria is considered prospective for Avebury-style nickel; SEDEX base metals; porphyry Cu-Au; porphyry Mo-Au; (R)IRGS style deposits; and orogenic Au deposits related to major structures that pass through the tenement. In addition, rare earth element (REE) potential is recognised within the tenement, for clays developed at the base of the extensive duricrusts that formed from the deep weathering of basement granitoid bodies with elevated REE concentrations. Initial targeting on the Sandford Project has commenced and will seek to identify prospective regions for the formation of the REE hosted clays and also base and precious metal occurrences.
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:* ○ *easting and northing of the drill hole collar* ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* ○ *dip and azimuth of the hole* ○ *down hole length and interception depth* ○ *hole length.*	• No applicable

Criteria	JORC Code explanation	Commentary
	• *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.* • *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.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• Not applicable
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• Not applicable
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.*	• All diagrams are to scale and have a reference to scale. The coordinate system used in Map Grid of Australia (GDA94, zone 53)
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 practiced to avoid misleading reporting of Exploration Results.*	• Not applicable
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.*	• New 3D inversion modelling of gravity, magnetics and 1D inversion modelling of airborne electro-magnetic data has been presented in this report. All modelling is based on publicly available historical data.
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Proposed Yumbarra gravity survey will be ground based but helicopter supported thus making it non ground disturbing. The program will consist of 915 stations at a maximum spacing of 2km x 2km square grid pattern and minimum of 250m x 250m square grid pattern.

Criteria	JORC Code explanation	Commentary
		• Proposed gravity program for Fowler Project area is still in the process of design and will be reported in subsequent releases.

1.3