

## YUMBARRA AND FOWLER GRAVITY PROGRAM COMMENCED

### HIGHLIGHTS

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- **Geophysics (gravity) survey commenced at the Yumbarra and Fowler projects (South Australia)**
  - **The gravity results will be combined with recently identified historical data to define prospective drill targets, focussing on targets for nickel, copper and PGE**
  - **The survey is expected to be completed in November 2023**
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**Osmond Resources Limited** (ASX:OSM) (**Osmond** or the **Company**) is pleased to announce that after a thorough engagement with stakeholders, as of 25 October 2023, the helicopter supported ground based gravity programs over our South Australian Yumbarra and Fowler Projects have commenced. Experienced gravity survey provider Daishsat Geodetic Surveys is undertaking the survey. The program will be in operation over the course of several weeks through the remainder of October and into November 2023.

As detailed in previously, during 2022 Osmond engaged with the Far West Coast Aboriginal Corporation (FWCAC) and met with the Board of FWCAC in early 2023 to discuss planned gravity surveys over the Yumbarra and Fowler Projects. This was followed by plans being submitted to the Department for Energy and Mining (DEM) and subsequently approved.

### **Osmond Resources Executive Director, Andrew Shearer, commented**

*"We are energised about the potential of the Yumbarra and Fowler projects with the integration of the historical data. We are excited to finally complete the upcoming gravity surveys that will further enhance Osmond's ability to define drill targets, adding another valuable dimension to our exploration efforts."*

The Yumbarra and Fowler Projects are both considered prospective for critical base and precious metals, including nickel, copper, cobalt and platinum group elements (PGE). At the Yumbarra Project previous drilling undertaken by Dominion in 2001 reported anomalous nickel and cobalt (3m at 1357 ppm Ni and 1066 ppm Co in aircore hole 01YBAC042 ([See OSM Prospectus 22 April 2022](#)) within an interpreted layered ultramafic complex.

Historic drilling in 1998, 2015 and 2016 at the Fowler Project reported anomalous nickel, copper, chromium, cobalt, palladium and sulphur from the shallow reconnaissance drill holes. Osmond has designed the current gravity survey to better define the geological setting around the historic drilling.





*Figure 1: Commencement of gravity surveys at the Yumbarra and Fowler Projects (South Australia)*



*Figure 2: Yumbarra Project landscape*

### **Yumbarra Project (EL6417 - South Australia)**

The Yumbarra gravity survey aims to cover a series of inferred layered ultramafic intrusives to identify lithology contacts between mafic-ultramafic intrusives and surrounding meta-sediments as well as potential dense metallic sulphide accumulations, often concentrated on basal contact positions and adjacent breccias.

Gravity data will add one more layer of definition to already modelled detailed aeromagnetic, VTEM and MLTEM targets (Figure 3) and provide good definition for drill targeting. Wider spaced gravity stations are designed to add regional context to the detailed target areas as existing gravity coverage is extremely sparse.

The survey consists of 925 gravity stations with maximum spacing of 1km x 1km and minimum spacing of 250m x 250m.

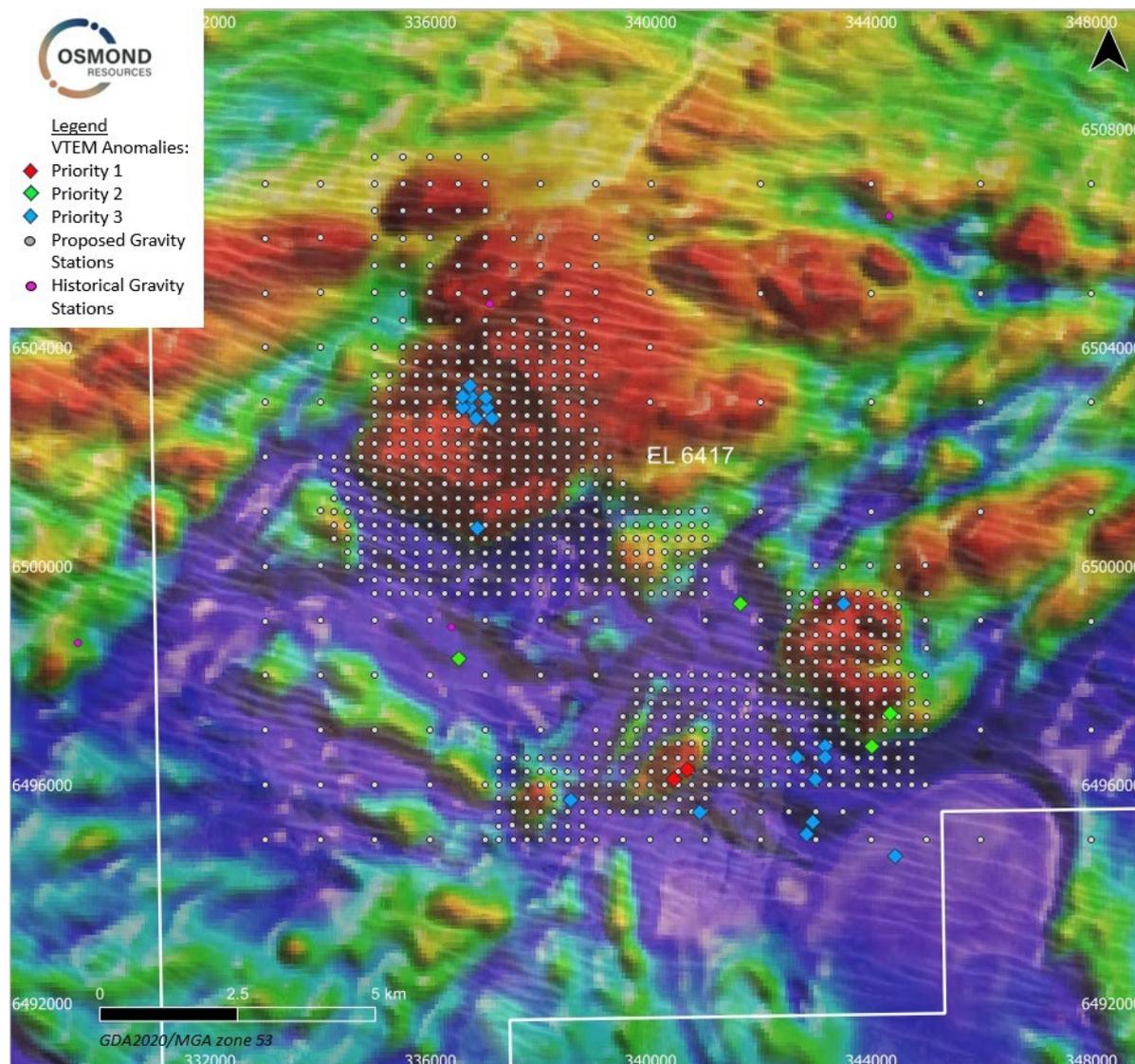


Figure 3: Yumbarra proposed gravity program with historical VTEM Anomalies (Iluka Annual Technical Report 2015-2016) on Total Magnetic Intensity image.

### Fowler Project (EL6603 and EL6604 South Australia)

The Fowler gravity survey covers the main target area (Figures 4a and 4b) which has previously been identified as a mafic intrusive, trending to ultra-mafic towards the north-east, with zones of elevated Ni, Cu, Pd and S. The program is designed to define the basal contact of the mafic-ultramafic intrusion and identify anomalously dense bodies which may represent metallic sulphides.

The proposed gravity survey consists of 457 gravity stations spaced on a 500m x 500m grid, offset from the existing gravity stations, which has the effect of reducing the spacing in parts of the target area to approximately 354m x 354m (Figure 5).

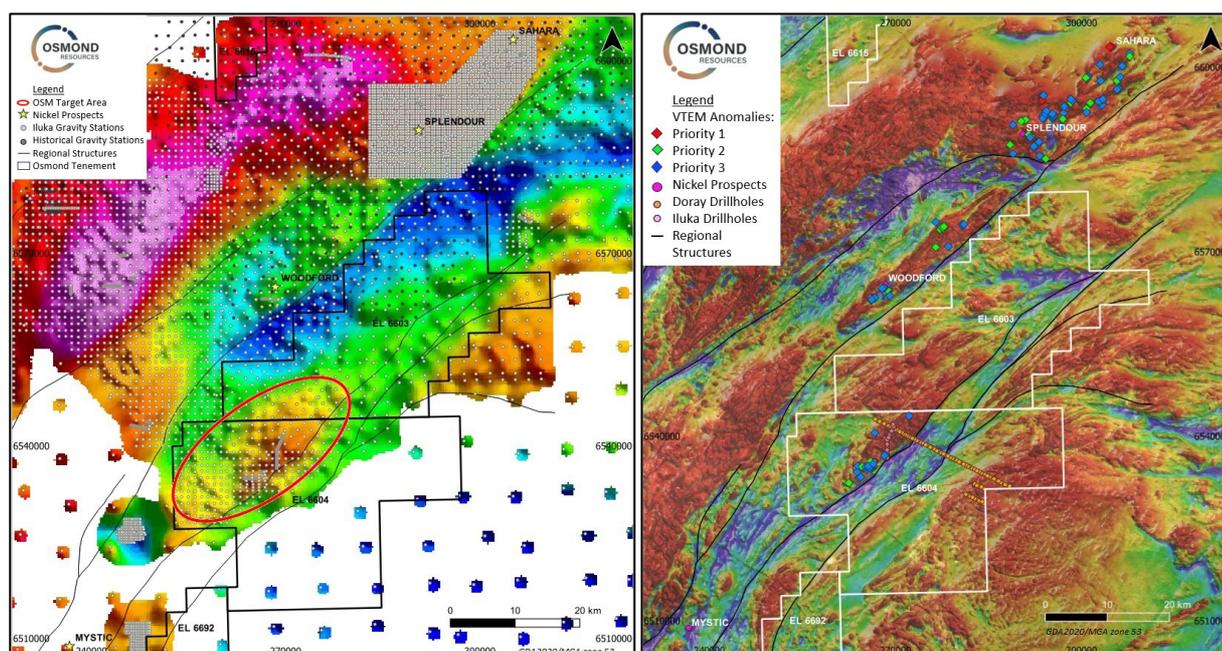
As reported by Osmond on [28 August 2023](#), results from historic reconnaissance drilling undertaken by Iluka in 2015, along with Doray in 2016 and North Mining Ltd 1998, confirmed that the high order magnetic units from the airborne magnetic survey correspond to rock types of mafic affinity. VTEM anomalism was confirmed to be associated with mafic intrusives and that mafic-ultramafic intrusives extend northward under the conductive cover.

Geochemical data from air core samples identified 5 main areas of elevated nickel, copper, chromium, cobalt, palladium and sulphur, with the highlights being:

#### Doray

- WGAC0105 – 2m at 593ppm Ni from 96-98m, in gabbro and laterite
- WGAC0114 – 1.5m at 116ppb Pd from 34.5-36m, in lignite and clay
- WGAC0146 – 1m 527ppm Cu @ 39-40m, in saprolite
- WGAC0151 – 1.5m at 137ppb Pd from 7.5-9m, in transported alluvium.
- WGAC0155 – 2m at 422ppm Cu and 4941ppm Cr from 72-74m; 1.5m at 2701ppm Ni and 437ppm Co from 73.5-75m, in dolerite and laterite.
- BAC78 – 2m at 1040ppm Cr and 470ppm Ni from 86-88m in Harzburgite (North Mining Ltd 1998)

Osmond has now ranked the prospective zones is now undertaking detailed gravity over the primary targets.



Figures 4a and 4b: Fowler Project, a) existing gravity dataset with target area for upcoming detailed gravity survey, b) VTEM anomalies identified by Iluka 2015 VTEM survey on detailed mag (see [ASX Announcement 28 August 2023](#))

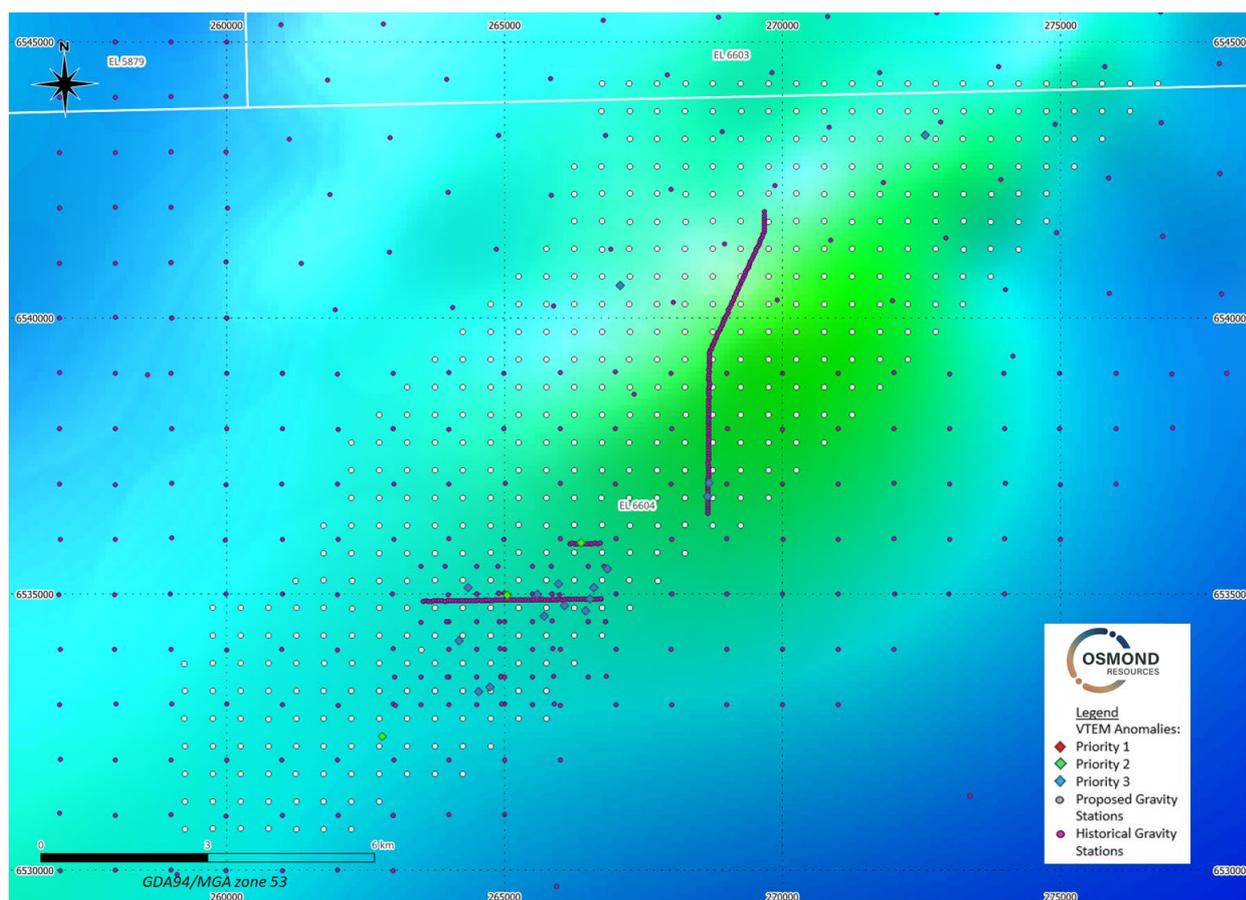


Figure 5: Proposed Fowler Gravity Survey with historic gravity stations, VTEM anomalies on existing regional Bouguer Gravity image.

### Future proposed work program

The gravity data from the current acquisition will be combined with the historical gravity data and modelled to inform drill targeting and potential further geophysics programs in combination with the historical detailed magnetic data, VTEM and Moving Loop Electro-Magnetics (MLEM - Yumbarra only).

Osmond Resources also intend to engage a litho-geochemical consultant to review all available geochemical and petrological data from historical drilling to provide vectors towards potential drill targets.

**-Ends-**

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

## CONTACT

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## ABOUT OSMOND RESOURCES

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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 Salt Wells Project** is located in Churchill County, Nevada, U.S., within close proximity to major highways and within 25 kilometres of the town of Fallon that has a population of over 8,500 people. The Project consists of 276 mineral claims, covering an area of ~36km<sup>2</sup> with surface salt samples in the northern area recording up to 810 ppm lithium, and 1% boron (5.2% boric acid equivalent) (see ABR ASX Release 25 May 2018, "American Pacific Borate and Lithium agrees earn in rights to acquire 100% interest in two Borate and Lithium exploration Projects in Nevada, USA"). Borates were produced from surface salts in the 1800's from the northern part of the Project area.

**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 Auebury-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.

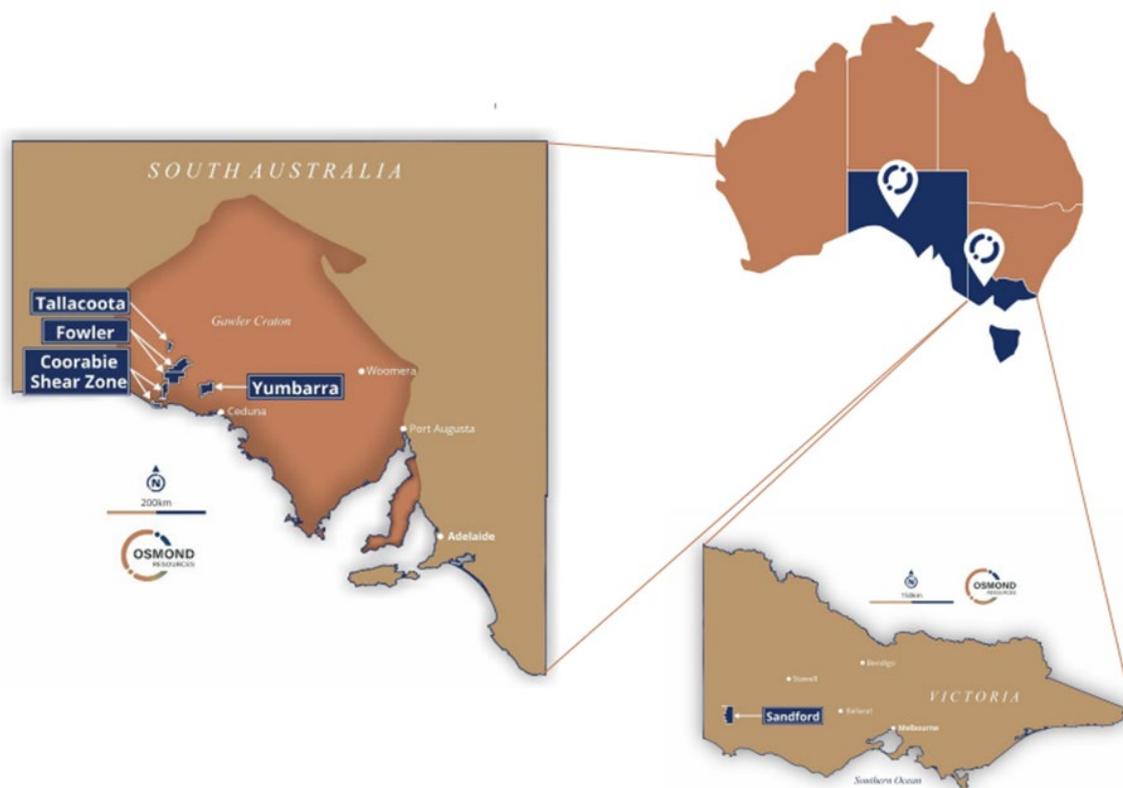


Figure 7 - Osmond Resources Projects

### 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