

ASX ANNOUNCEMENT

15th November 2023

Exploration Update

Exploration activities continue at the Doherty Project with Field crews undertaking orientation geochemistry and community consultation. Aerial geophysical survey booked to commence on 24 November 2023.

HIGHLIGHTS

- **Great Dirt Resources LTD (“Great Dirt”) successfully lists manganese projects in the New England Orogen, NSW, where battery grade (74.3%) and metallurgical grade (46%) manganese oxide was mined as a direct ship ore.¹**
- **Field work continues at the Doherty Project with rock chip and orientation soil geochemistry ongoing.**
- **Thomson Aviation Pty Ltd awarded contract for aerial geophysical survey, scheduled to begin on 24 November 2023. Community consultation is ongoing.**

Great Dirt Resources Limited (ASX:GR8) (‘Great Dirt, or ‘the Company’) is pleased to announce that exploration is underway at the Doherty Project.

Ongoing field work at the Doherty Project includes orientation soil geochemical sampling and rock chip sampling of strike extents, of known deposits and mineral occurrences.

Orientation geochemical surveys are the first step, prior to more systematic sampling over areas of known mineralisation. The purpose of this survey is to determine what the background values of elements of interest are in non-mineralised areas, helping to define thresholds which determine what constitutes an anomalous response. The surveys will enable Great Dirt to determine the nature and extent of dispersion patterns related to manganese mineralisation and the distribution and behaviour of elements of interest against background.

¹ JORC Independent Geologists Report – Great Dirt Prospectus – ASX Announcement dated 8 November 2023.

The systematic grided soil geochemistry that follows will then map the dispersion of manganese in the soil profile above background, highlighting strike extensions away from historical mines and areas of known mineralisation.¹

With assistance from Michael Leu, a specialist with twenty-seven years of local experience in this part of the New England Orogen, geological staff will explore the northern and southern strike extents of each of the historical mines, Doherty and Junior, and evaluate how they relate to other mineral occurrences at Neranghi, Neranghi North and Dailey's Deposit. The proximity of these mines and mineral occurrences can be seen in Figure 1 below.

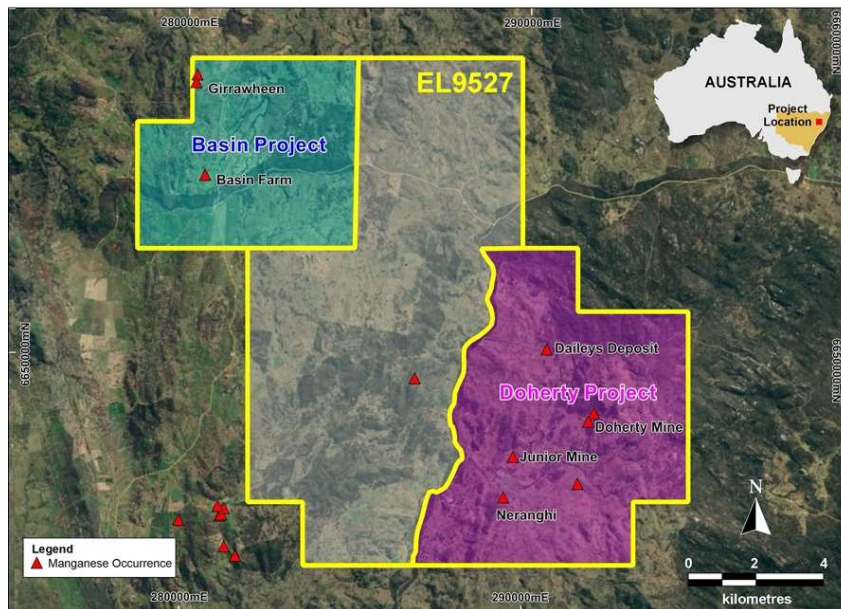


Figure 1 : Doherty Project, historical manganese workings and mineral occurrences

The Doherty Mine produced 6,000t, of battery (74.3%) and metallurgical (46%) grade manganese oxide, over a two-decade period from 1940 to 1960. Mining was ceased at the Doherty Mine due to loss of market, as such mineralisation remains in place. Located just to the north of the Doherty Mine is North Neranghi where several ore lenses were worked as part of the broader operation. North Neranghi represents the northern extension of the Doherty Mine and will be a priority for investigation, as well as a recorded mineral occurrence to the south.¹

The Junior Mine produced 3,000t of mostly metallurgical, with some battery grade, manganese. The immediate northern and southern extents of the ore zones will be tested with geochemistry, with special interest paid to the Neranghi manganese occurrence. It is reported that 3 truckloads of ore were removed from this locality, but potentially more significantly is that numerous deposits remain even further south that were never mined. Ore from this occurrence assayed 50%Mn.¹

Daileys deposit will also be investigated to see if it represents the far northern extension of the Junior Mine sequence. Petrological samples will be sent to Dr Paul Ashley of Paul Ashley Petrographic and Geological Service. Dr Ashley has over 40 years' experience in the mineralisation

of the New England Orogen and was previously an Associate Professor teaching Economic Geology at the University of New England. Petrographic studies of these samples will elucidate the history of formation of the deposits and their genetic setting.

Thomson Aviation Pty Ltd has been awarded a contract to conduct a magnetic and radiometric survey over the Doherty project and surrounds. The survey is booked to commence on 24 November 2023 and will take approximately 4 days depending on weather. This survey should enable the modelling of stratigraphic units and any structural controls related to their presentation.

Radiometric surveys detect and map natural radioactive emanations, gamma rays, from rocks and soil. All gamma radiation detected in surveys come from the natural decay products of three elements, uranium, thorium and potassium (U, Th, K). The combination and variation of the relative amounts of these three elements as determined by the survey should define changes in stratigraphy and is an invaluable tool for geological reconnaissance. Furthermore, these variations can also define areas affected by mineralising solutions, metamorphic processes, leaching and supergene alteration, and can assist in locating some intrusion-related mineral deposits. This method can also directly define uranium mineralisation. Magnetic surveys are the most common form of exploration for mineral deposits and are generally considered to be the most cost-effective tool for large scale reconnaissance surveys. The survey will detect disturbances in the earth's magnetic field by buried magnetised materials. Types of geological formations that can affect the earth's magnetic field for example are basic igneous rocks, rocks that contain iron oxide, mineralisation or rock types that contain magnetite and pyrrhotite.

Great Dirt's Managing Director, Marty Helean said

"It's fantastic to be listed on the ASX and we thank all our shareholders for backing the team and our projects. We're dedicated to tapping into the hidden potential of crucial minerals. Our ongoing fieldwork signals a fresh era of discovery, and the beginning of our exploration program is a major milestone in our journey. Keep an eye out for exciting updates as we reveal the results of our exploration in the weeks to come!"

Authorised for release to the ASX by the Board of Great Dirt Resources LTD.

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About Great Dirt Resources LTD

Great Dirts' Doherty and Basin Projects are contained within EL 9527, located near the Barraba township, in northern NSW. These projects are prospective for high-grade manganese, with both projects having produced metallurgical and battery grade manganese historically. The Doherty Project comprises the old Doherty and Junior Mines, plus other workings and occurrences of manganese. The Basin Project contains several smaller manganese workings.

From 1941, for two decades, mines of the Doherty Project produced around 9,000 tonnes of battery and metallurgical grade manganese, both from opencut and underground operations. The battery grade ore was delivered to Eveready in Sydney for use in dry cell batteries, the metallurgical grade ore was purchased by BHP for use in steel production.

Great Dirt believes that historical work, while having discovered manganese, is unlikely to have located all sources in the area. Floaters, large rock fragments in the soil profile, of high-grade manganese ore reported outside known mine areas are a direct indication of unidentified manganese mineralisation. Additionally, notes on the mineral occurrences of the area refer to extensions and deposits along strike that were not mined.

A program of modern, systematic, geochemical and geophysical surveys will test known targets and their extents and could locate previously unrecognised blind deposits. Subsurface geophysical methods and drilling is likely to yield further targets that could be developed into projects to produce metallurgical and battery grade manganese.

No New Information

Except where explicitly stated, this announcement contains references to prior exploration results, all of which have been cross-referenced to previous market announcements made by the Company. The Company confirms that it is not aware of any new information or data that materially affects the information included in the relevant market announcements.

Forward Looking Statement

This report contains forward looking statements concerning the projects owned by Great Dirt Resources LTD. If applicable, statements concerning mining reserves and resources may also be deemed to be forward looking statements in that they involve estimates based on specific assumptions. Forward-looking statements are not statements of historical fact and actual events and results may differ materially from those described in the forward-looking statements as a result of a variety of risks, uncertainties and other factors. Forward looking statements are based on management's beliefs, opinions and estimates as of the dates the forward looking statements are made and no obligation is assumed to update forward looking statements if these beliefs, opinions, and estimates should change or to reflect other future developments.