# ASX ANNOUNCEMENT

2 August 2022

# ANALYSIS OF GEOPHYSICAL DATA AND MODELS INDICATE CENTRAL & MATILDA SOUTH PROSPECTS ARE LIKE NOVA

**Dundas Minerals Limited**

**Directors**

**Non-Executive Chairman**
Mark Chadwick

**Managing Director**
Shane Volk

**Technical Director**
Tim Hronsky

**Company Secretary**
Shane Volk

**Issued Capital** (ASX: DUN and DUNO)

| | |
|---|---|
| **Ordinary Shares:** | **60,180,216** |
| ASX Quoted: | 38,424,845 |
| Escrow: | 21,755,371 |
| **Listed Options:** | **30,090,138** |
| Unlisted Options: | 14,000,000 |




## Summary


- **Geophysical survey data and models from Dundas' Central and Matilda South prospects compared to like public domain data and models for the Nova Ni-Co-Cu deposit**
- **Central and Matilda South Audiomagnetotellurics (AMT) resistivity data and model anomaly values are low, like Nova**
- **Nova late-time ground EM survey conductors which are coincident to nickel sulphides correlate strongly to low resistivity model values from the Nova AMT survey**
- **Low resistivity values from AMT survey at Central correlate well to late-time airborne EM survey conductors (SkyTEM)**
- **Nova high resolution gravity and magnetic data clearly define an elongated boat-shape "eye" structure, interpreted as due to multiple intrusions into country-rock, much like geological structures evident at Central and Matilda South**


Dundas Minerals Limited (ASX: DUN) ("Dundas Minerals", "Dundas" or "the Company") is actively exploring for nickel, copper and gold in the prospective Albany-Fraser Orogen, Western Australia (Figure 1).

## Background

The Dundas Minerals exploration model for its Central and Matilda South prospects is magmatic sulphide nickel mineralisation associated with mafic-ultramafic intrusions, like the Nova-Bollinger Ni-Cu-Co deposit (Nova) located ~125km northeast of Dundas' Central target. Historically, the 1,200km$^2$ area of Dundas' exploration licences has been subject to limited exploration (deepest drill hole 64m). Reviews of historic reports indicate that the area has never been explored for mafic-ultramafic intrusions that may host Nova style mineralisation.

In March 2022, Dundas Minerals announced low resistivity (equivalent to high conductivity) anomalies from the modelling of preliminary audiomagnetotellurics (AMT) geophysical survey data at its Central and Matilda South prospects (ASX Announcements dated 16 and 29 March 2022, there is no material change to these models or data).

Final survey data has recently been received, modelled and compared to like data and reports covering the Nova deposit and its surrounds – the Nova information being now available on *"open file"* at W.A. Department of Mines Industry Regulation and Safety (DMIRS).

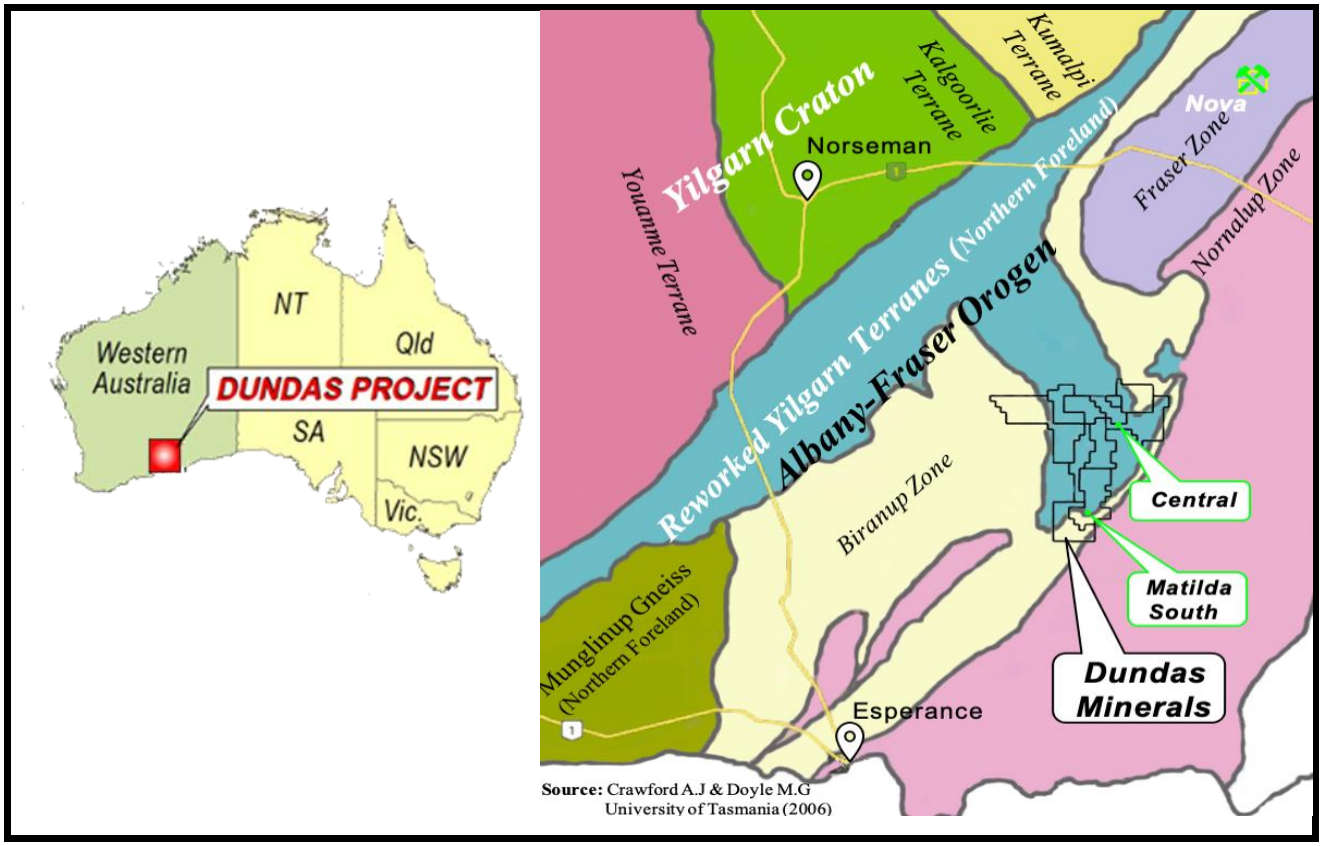



**Figure 1:** Dundas Minerals tenements (black), Central and Matilda South locations. The project area is interpreted as being in re-worked Archaean and Proterozoic (Biranup Zone) metamorphic rocks. The Nova mine is approximately 125km northeast of Central.

The aim of geophysical data and models comparisons was to understand which of the survey methods and models used at Nova were most definitive in identifying the Nova and Bollinger nickel sulphide ore bodies. Features of the most definitive survey methods were then compared to data and models from the various geophysical surveys that Dundas Minerals has completed within its tenements, with the Central and Matilda South prospects the focus.

Interestingly, with the exception of an initial EM survey, all of the geophysical surveys completed at Nova by the owner at the time – Sirius Resources NL (2012 – 2015), were after drilling had already discovered the deposit. The public domain Nova related geophysical survey data and reports obtained by Dundas Minerals are:

- detailed ground magnetic and gravity at prospect scale;
- ground electromagnetics (EM) including moving loop EM (MLEM) and fixed loop EM (FLEM);
- downhole EM;
- audiomagnetotellurics (AMT); and
- induced polarisation (IP).

The geophysical surveys that Dundas Minerals has completed, and which were compared against the Nova information are:

- high resolution aeromagnetic surveys covering all of the Dundas tenements;
- district scale ground gravity over all of the Dundas tenements;
- high-resolution ground gravity over the Matilda South and Central prospects;
- high power AEM (SkyTEM system) at Central and the northern part of Dundas' tenements; and
- AMT at Central and Matilda South.

## Outcomes from the Geophysical survey data and model comparisons

Ground Gravity and Aerial Magnetic surveys

Modelling of Dundas' gravity data indicates high density (values of 3.0 – 3.2 T/m³) mafic-ultramafic intrusions at the Central and Matilda South prospects. These anomalies are considered to be comparable with the modelling of gravity and magnetic data covering the Nova mafic-ultramafic intrusive deposit.

From Dundas' gravity and magnetic data, ovoid structures (in plan view) are observable at both Central and Matilda South. These structures appear similar to the "eye structure" that is apparent at Nova. Dundas' Central and Matilda South ovoid structures are interpreted as being due to multiple mafic-ultramafic intrusions that have, on intrusion, deformed the surrounding country-rock.

SkyTEM Electro-Magnetic (AEM) and ground Audiomagnetotellurics (AMT) surveys

At Central, late-time (channel 41) AEM anomalies occur along a strike length of approximately 10 km (Figure 2 and Figure 3). This conductive trend, which may indicate the presence of massive sulphides at-depth that are associated with the interpreted mafic-ultramafic intrusions (and may host nickel mineralisation), is spatially coincident with an interpreted major fault structure that is evident from high resolution aeromagnetic images.

The Central AMT survey was commissioned because of the AEM conductivity trend. The purpose of the AMT survey was to confirm the AEM conductors by measuring resistivity at depth. Any low resistivity anomalies are equivalent to high conductivity (possibly massive sulphides). Modelling of the final AMT data at Central has returned low resistivity anomalism from approximately 60m below the surface to a depth of 600m (Figure 4). The very low modelled resistivity values at Central (<1 Ohm-m) are comparable to the low resistivity values at Nova (2-12 Ohm-m) (Figure 5). At Nova, EM late-time conductive anomalies (measured by MLEM and FLEM surveys) are conclusively due to the massive sulphide nickel deposits. Drilling at Central will test if this is also the case.

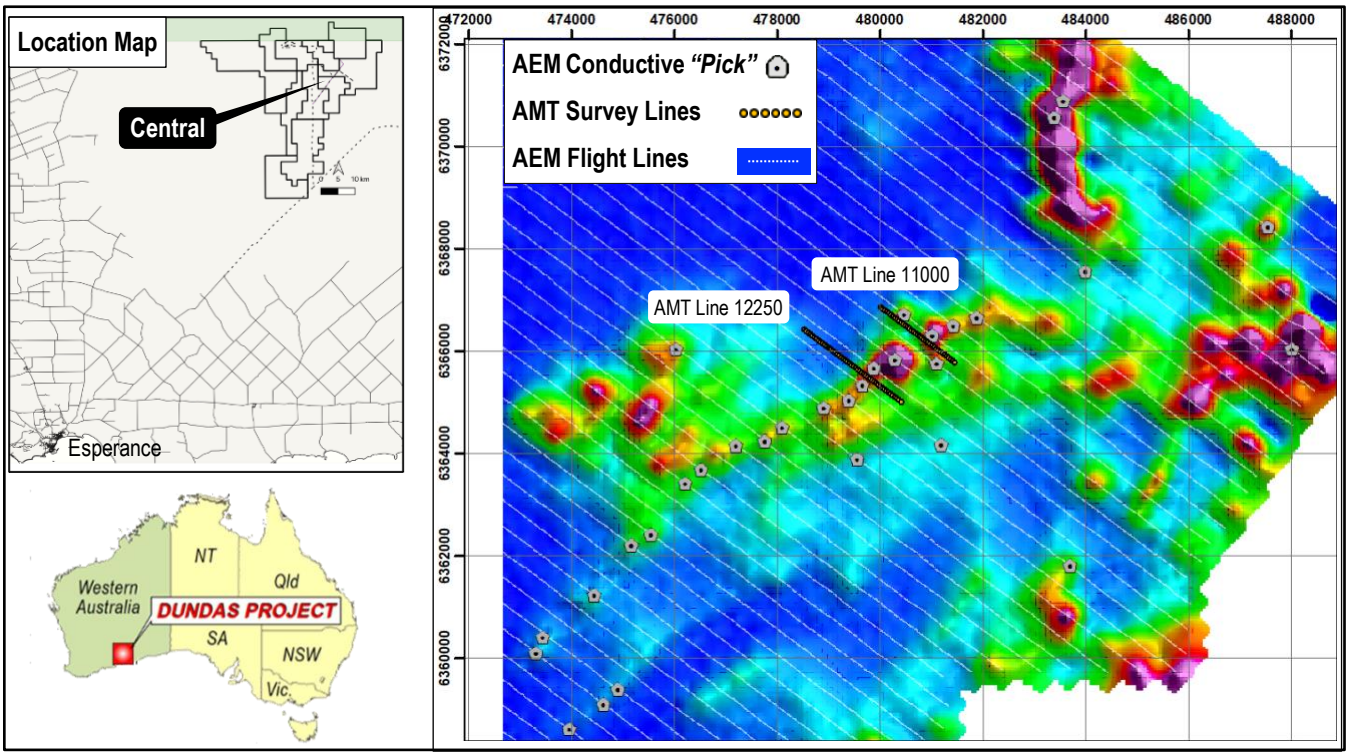



**Figure 2:** Central late-time (B Field-channel 41) AEM conductive "*picks*" anomaly trend, spanning ~10km

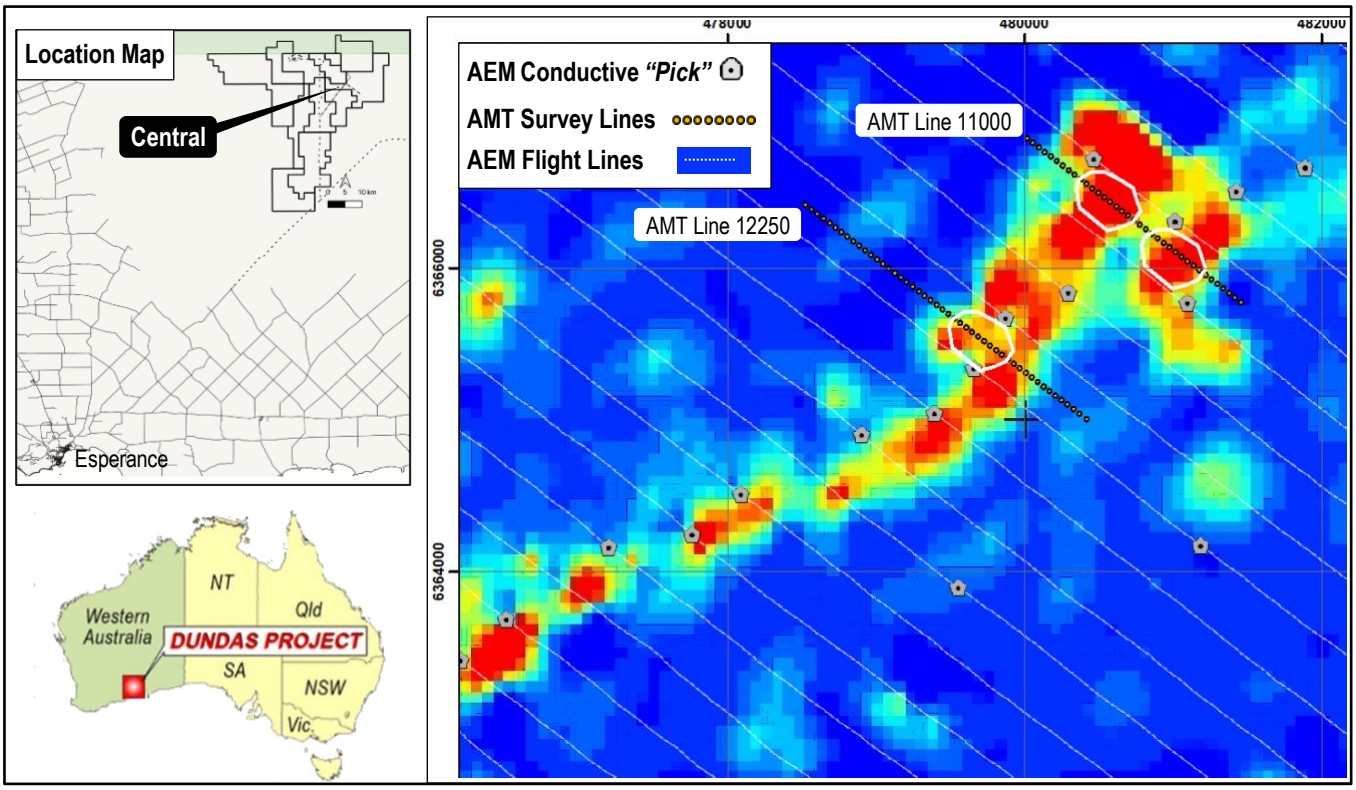



**Figure 3:** Central target area: AEM depth slice (180m). Areas circled in white represent AMT low resistivity (Figure 2), with conductive anomalies coloured red.

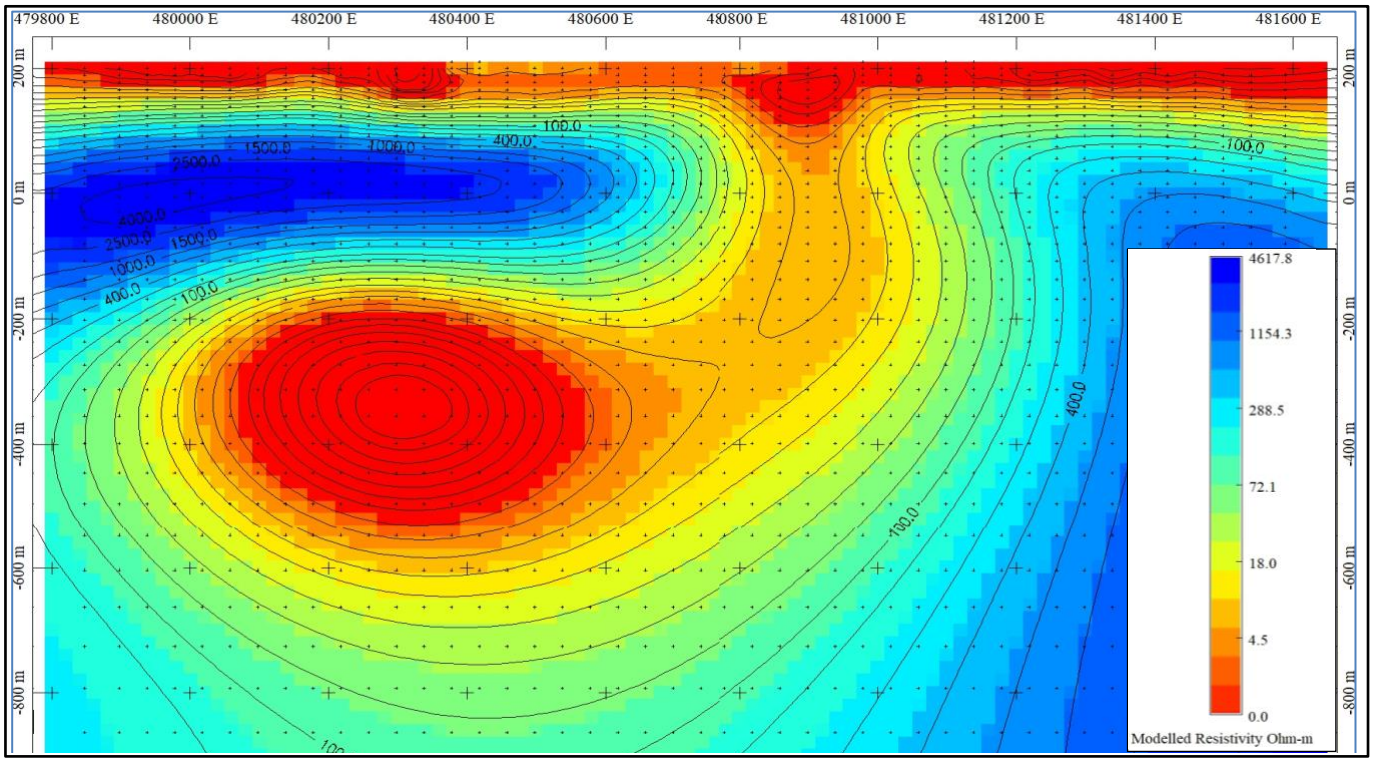



**Figure 4:** Central target – AMT Line 11000 resistivity model section (resistivity values <1 ohm-m, contoured on red colours)

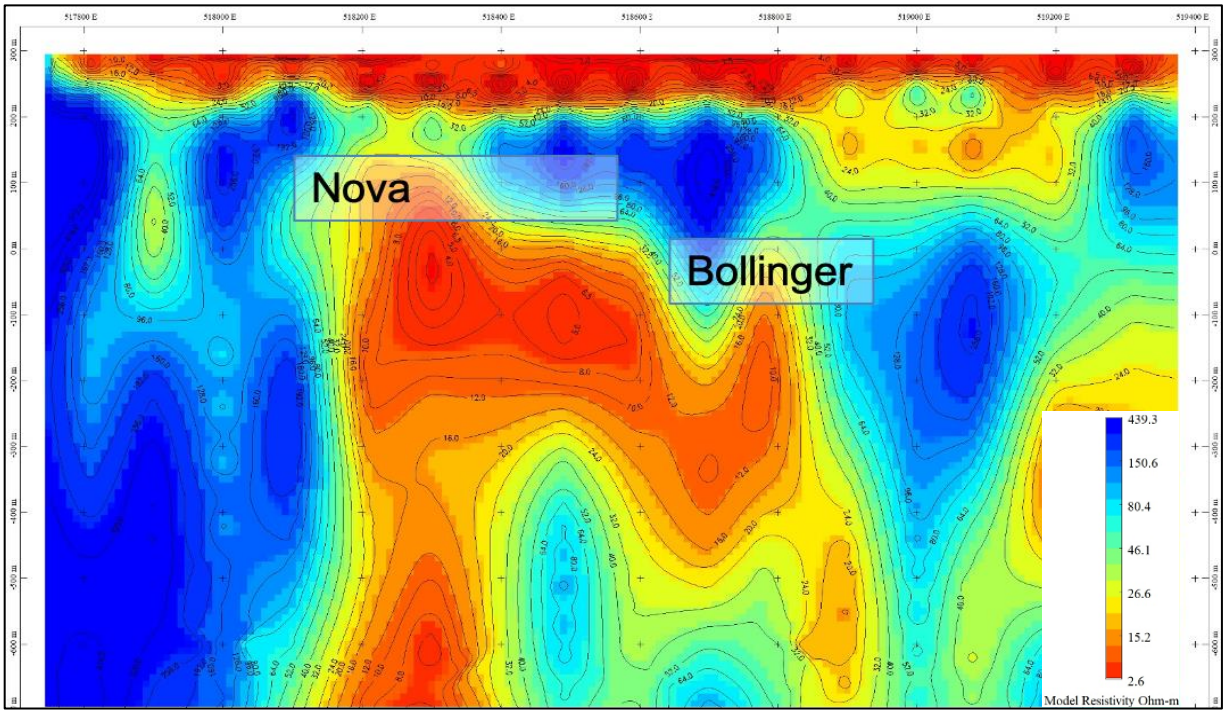



**Figure 5:** Nova-Bollinger AMT inversion model cross section (line 647700n). Very low resistivity values of 2-12 ohm-m (contoured on red colours) are extremely well correlated to the location and depth extent of massive sulphide mineralisation at the deposit.

Matilda South

A SkyTEM AEM survey was not flown across the Matilda South prospect. However, because of the prominence of the gravity anomaly, interpreted as a mafic-ultramafic intrusive (density 3.0 – 3.4T/m$^3$) and its conspicuous circular shape, an AMT survey was completed at Matilda South. Low to moderate AMT resistivity values of 50-70 Ohm-m commence at approximately 60m below surface and extend to a maximum depth of 700m (Figure 6). The resistivity structure is evident on all three AMT survey lines. The anomalies may represent an altered structure within the interpreted mafic-ultramafic intrusion. Drilling at Matilda South aims to test this.

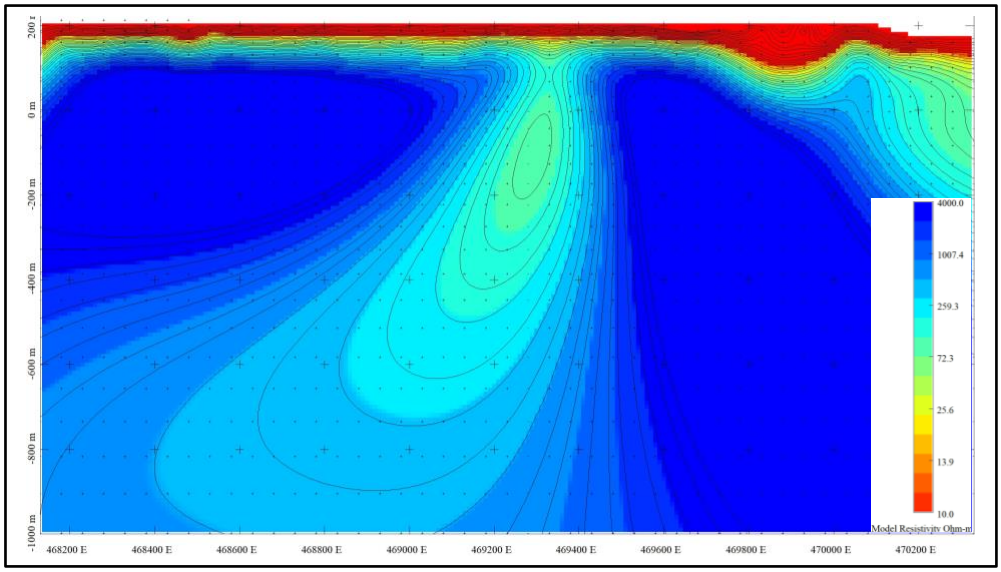



**Figure 6:** Matilda South AMT inversion model section (line 10,200). A 50-70 Ohm-m resistivity anomaly extending to depth is interpreted as due to alteration within very resistive country rock.

Drilling

Currently an initial 2 to 4 drill holes are envisaged at each of Central and Matilda South. Drilling is being planned to test the modelled AMT anomalies for the occurrence of massive sulphides and mineralisation. Drill hole designs are in the process of being finalised. Heritage clearance was completed in June 2022, for envisaged drill hole locations. Drilling is currently planned to commence in late September or early October 2022, after the completion of remediation works that are required to access tracks because of autumn and winter rains.

At Matilda South, a WA government co-funded drilling grant of up to $180,000 has been awarded for this drilling.

Nova-Bollinger nickel-copper-cobalt deposit

Information about the Nova-Bollinger nickel-copper-cobalt deposit, and the 2015 acquisition of Sirius Resources NL (that discovered the deposit), by Independence Group (ASX: IGO), is available via the following links:

https://www.igo.com.au/site/operations/nova

https://portergeo.com.au/database/mineinfo.asp?mineid=mn1574

https://miningdataonline.com/property/1425/Nova-Mine.aspx#Overview

Authorised by: Shane Volk (Managing Director and Company Secretary)

## COMPETENT PERSONS STATEMENTS

The information in this report relating to Geophysical Survey Results, Survey Results comparisons and Exploration Targets has been compiled by the Company's Technical Director, Mr Tim Hronsky, a competent person, and Member of the Australian Institute of Mining and Metallurgy (AusIMM). Mr Hronsky has sufficient experience relevant to the style of mineralisation and to the type of activity described 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 Hronsky is a shareholder in the Company and a Director. Mr Hronsky consents to the inclusion in this announcement of the matters based on his information in the form and content in which it appears.

The information in this announcement that relates to Preliminary Geophysical Survey Results is extracted from the reports entitled New Exploration Targets from Geophysical Surveys published on 18 November 2021, Mafic / Ultramafic Gravity Anomaly at Matilda South published on 18 January 2022, Highly Conductive Anomalies identified and Central Ni Cu Target published on 16 March 2022, and Conductive Anomalies Identified at Matilda South Prospect dated 29 March 2022. Each of the reports is available to view on the Company's web site: www.dundasminerals.com. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original reports. The Company confirms that the form and context in which the Competent Person's findings are presented in this report, have not been materially modified from the original market announcement.

## DISCLAIMERS AND FORWARD-LOOKING STATEMENTS

This announcement contains forward looking statements. Forward looking statements are often, but not always, identified by the use of words such as "seek", "target", "anticipate", "forecast", "believe", "plan", "estimate", "expect" and "intend" and statements that an event or result "may", "will", "should", "could" or "might" occur or be achieved and other similar expressions.

The forward-looking statements in this announcement are based on current expectations, estimates, forecasts and projections about Dundas and the industry in which it operates. They do, however, relate to future matters and are subject to various inherent risks and uncertainties. Actual events or results may differ materially from the events or results expressed or implied by any forward-looking statements. The past performance of Dundas is no guarantee of future performance.

None of Dundas's directors, officers, employees, agents or contractors makes any representation or warranty (either express or implied) as to the accuracy or likelihood of fulfilment of any forward-looking statement, or any events or results expressed or implied in any forward-looking statement, except to the extent required by law. You are cautioned not to place undue reliance on any forward-looking statement. The forward-looking statements in this announcement reflect views held only as at the date of this announcement.

**About Dundas:** Dundas Minerals Limited (ASX: DUN) is a battery-minerals and gold focussed exploration company exploring in the highly prospective southern Albany-Fraser Orogen, Western Australia. Dundas Minerals holds 12 contiguous exploration licences (either granted or under application) covering an area of 1,201km$^2$. All licences are 100% owned by Dundas and are located within unallocated Crown Land. The Albany-Fraser Orogen hosts the world-class Tropicana gold mine (AngloGold Ashanti ASX: AGG / Regis Resources ASX: RRL) and the Nova nickel mine (Independence Group ASX: IGO). The Dundas tenements are located ~120km south west of Nova, have not been subject to modern exploration and are deemed prospective for battery materials (nickel, copper and rare earths), and gold. Dundas Minerals listed on the ASX on 10 November 2021.

**Capital Structure:** Ordinary shares on issue (DUN): 60,180,216; ASX Listed Options (DUNO): 30,090,138 (Ex: $0.30, Exp 25-02-2024)
Unlisted Options: 3,000,000 (Exp. 3-11-24 Ex. $0.30); 4,000,000 (Exp. 1-7-24 Ex. $0.25 & $0.30); 5,000,000 (Exp. 1-7-26 Ex. $0.25 & $0.30); 2,000,000 (Exp. 10-11-26 Ex. $0.25 & $0.30)

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