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**ASX ANNOUNCEMENT**  
**20 JANUARY 2022**

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**NICKELX DEFINES HIGH-PRIORITY NICKEL TARGETS AT COSMOS SOUTH**

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**HIGHLIGHTS**

- NickelX has defined geophysical targets at the recently acquired<sup>1</sup> Cosmos South Nickel Project within the prolific, nickel producing Wiluna Greenstone Belt (WGB).
- The Wiluna Greenstone Belt is currently dominated by BHP (**ASX: BHP**) and now IGO (**ASX:IGO**), with the A\$1.1B takeover in progress of Western Areas Limited (**ASX:WSA**)
- The geophysical data review and modelling of the historic surface EM data consisted of a low frequency Moving-Loop EM (MLEM) survey with follow up Fixed-Loop EM (FLEM) survey over the CS1 target identified from the MLEM data.
- Surface EM data over Cosmos South successfully defined a large, highly conductive feature (CS1), modelled at less than 100m from surface.
- The modelled plate from both MLEM and FLEM data is coincident with magnetic lineaments observed from regional data over the project location.
- Ultramafic rocks, which host nickel mineralisation to the north and south, are interpreted to strike through Cosmos South.
- The Company is progressing shareholder approval to approve the acquisition as well as a magnetic survey<sup>1</sup> to refine drill targets, while permitting to commence drilling 4 diamond holes in the March Quarter is underway.

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NickelX Limited ("NickelX" or "The Company") is pleased to report that it has completed geophysical data re-processing and defined high priority nickel targets at the Cosmos South Nickel project which is located 10km south of the world-class, high-grade Cosmos nickel operations (**ASX:IGO**) and 20km North of the world class large scale Leinster nickel operations (**ASX:BHP**), within the prolific Wiluna Greenstone Belt (**WGB**).

Surface EM data re-processing over the Cosmos South Project has successfully defined a large, highly conductive feature (**CS1**), modelled at less than 100m from surface. The modelled plate from both MLEM and FLEM data is coincident with magnetic lineaments observed from regional aeromagnetic data over the project location. The EM data suggests the conductor may extend south beyond the limits of the MLEM data coverage.

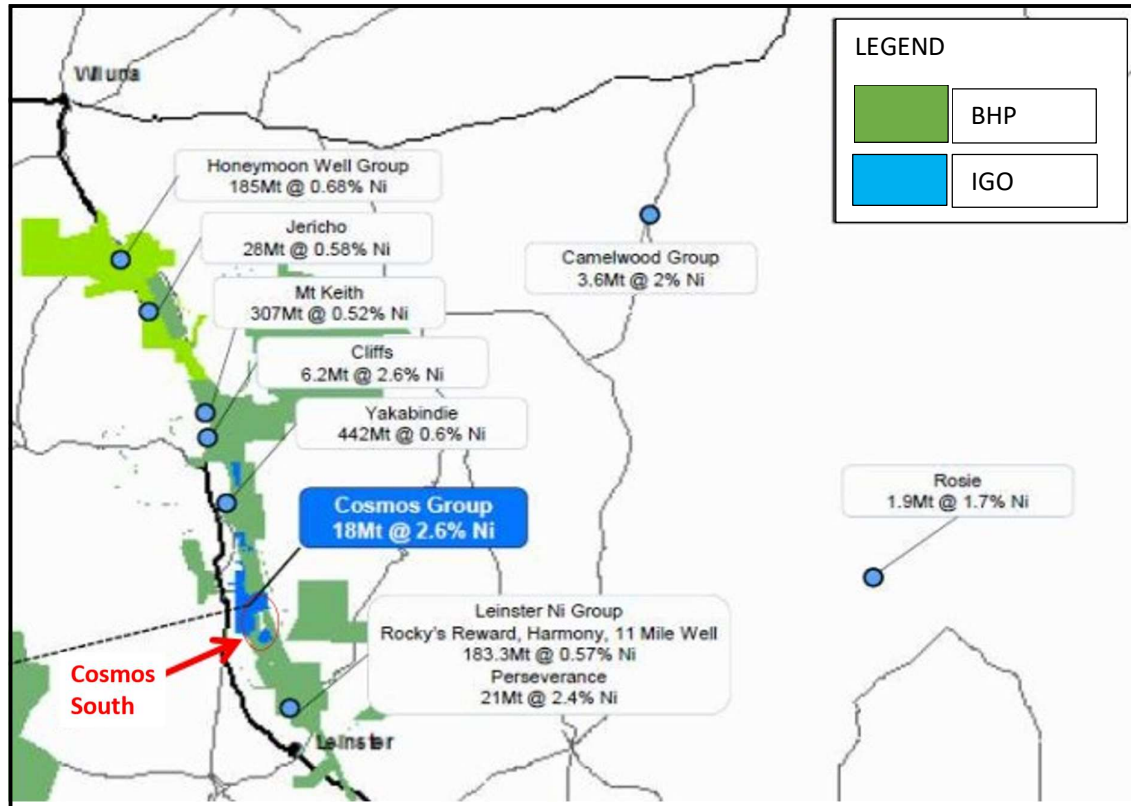
**NickelX Managing Director Matt Gauci commented:**

*"Cosmos South represents a very strong nickel target ideally located in a world-class nickel producing belt dominated by BHP and now IGO. The recently completed geophysical data re-processing has successfully defined a near surface, large, highly conductive feature with the company now progressing shareholder approval, magnetic surveys and drilling contracts to progress this target".*

1. NKL will seek shareholder approval to acquire Cosmos South. Further information will be set out in a notice of meeting which will be lodged onto the Company's ASX platform this month.

### Cosmos South Nickel Project Summary

Cosmos South M36/580 is situated within the highly nickel-endowed region of the Agnew-Wiluna Greenstone belt. The belt hosts world class nickel deposits of the Leinster nickel operations, Mt Keith, Yakabindie, Honeymoon Well and Cosmos (Figure 1).



**Figure 1. Cosmos South project location within the Wiluna Greenstone Belt**

The majority of M36/580 is covered by alluvium draining into Lake Miranda as are the Prospero, Tapinos and Anomaly 3 nickel deposits at the nearby Cosmos nickel operations, where the nickel mineralised systems are buried under deep transported material within the Lake Miranda drainage system. The southern portion of the NickelX tenure gently rises southwards where the bedrock is covered by residual laterite material, which is developed over and/or shed off from the subcropping-outcropping Archaean rocks to the south. The latter are host to the nearby Taurus, Sir Samuel and Sir Tristram nickel mineralisation, which are highly anomalous in nickel geochemistry that continues up into the southern area of M36/580.

Despite being surrounded by major nickel miners (Figure 1), M36/580 has undergone very limited exploration to date. The areas of outcropping-subcropping bedrock to the south and north of M36/580, on the other hand, have undergone considerable exploration resulting in the discovery of nickel mineralisation to the immediate south at the Taurus, Sir Samuel and Sir Tristram prospects. M36/580 is almost entirely covered by transported alluvial deposits and no systematic drilling has been undertaken on the tenure.

Despite poor coverage over this area, the available First Vertical Derivative (1VD) aeromagnetic image indicates that the ultramafic sequences that host nickel mineralisation surrounding the tenement extend into M36/580. In particular, the magnetic ultramafic rocks appear to strike through the northern portion of the tenement, which contains the CS1 target.

A MLEM survey (Figure 2), completed by Vortex Geophysics at M36/580 prospect in April 2017, was primarily designed to identify massive sulphide targets. A total of 68 stations encompassing a total of 6 line kilometres were completed at the M36/580 Prospect. The data quality is excellent throughout the survey. A significant anomalous response (CS1 - Figure 2) was identified at mid- to late delay times.

CS1 is interpreted to consist of multiple large conductors of high to very high modelled conductance ranging from 6,000 to 12,000 Siemens. The time constant is estimated to be around 500ms consistent with massive sulphides conductors.

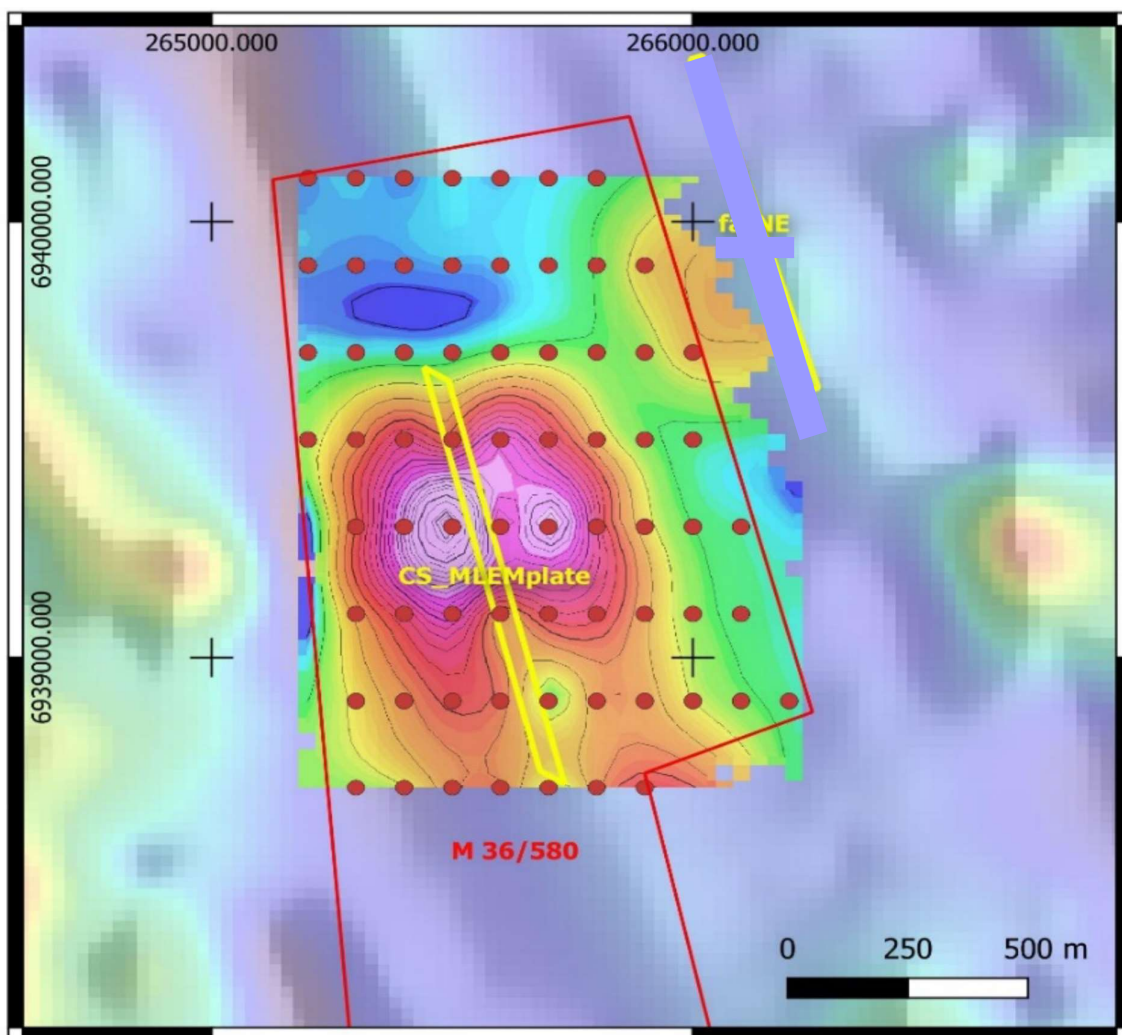
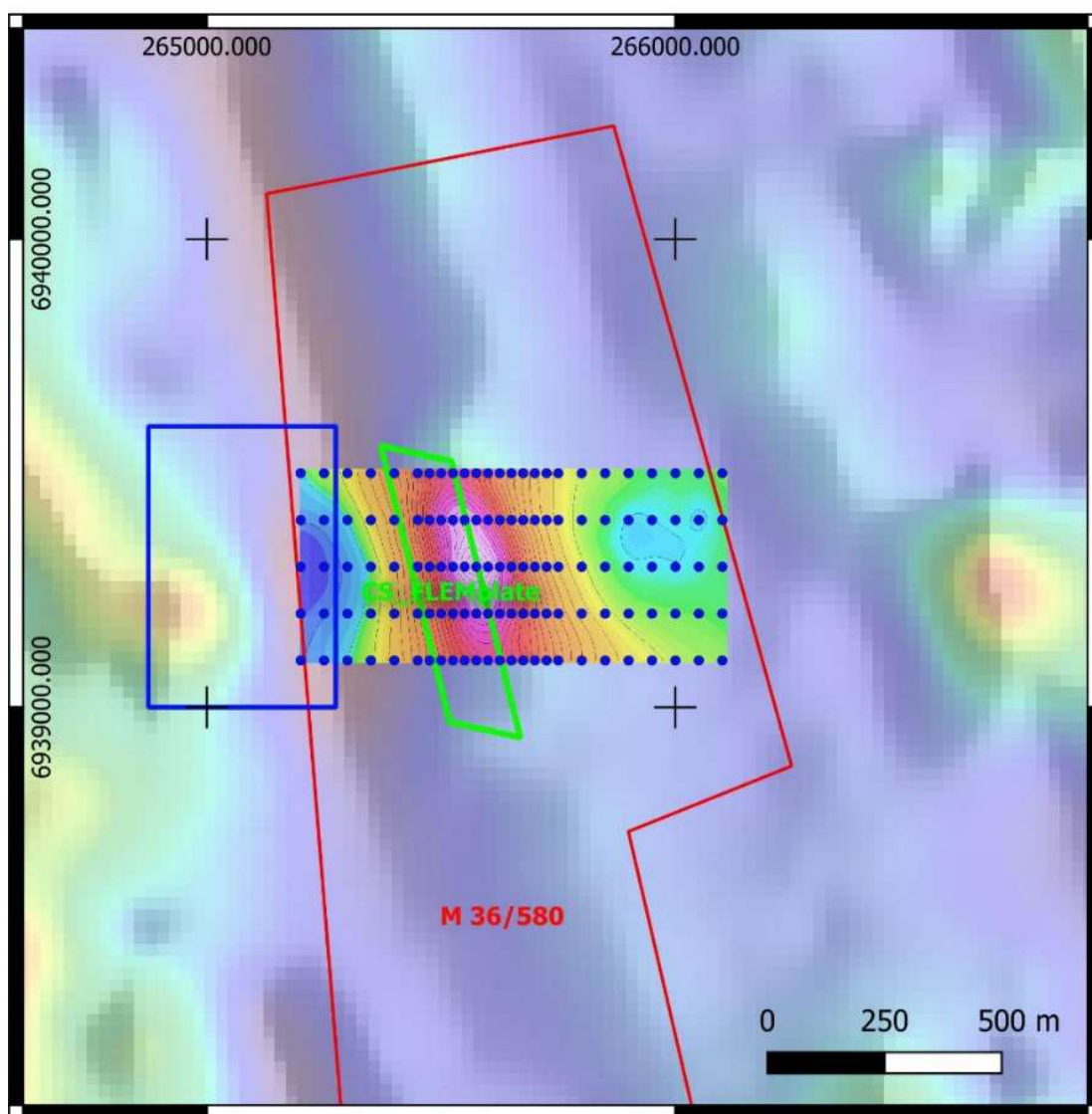


Figure 2. Cosmos South project plan view of MLEM stations and late time Ch40 contoured image over RTP 1VD magnetics.

The MLEM survey was followed up by a Fixed Loop EM survey (FLEM – Figure 3). The CS MLEM conductivity anomaly was confirmed by the follow-up FLEM survey, which revealed a large bedrock conductor with a strike length of 565m and depth extent of 850m (Figure 6). The modelled conductance of the FLEM plate is interpreted to be 11,300 Siemens consistent with the upper conductance range as obtained by the MLEM survey. The depth to the top of the conductor is interpreted to be around 80m below surface, approximately 30m deeper than suggested by the MLEM survey results. The conductive source is interpreted to dip steeply (73 degree) to the west. The estimated time constant of 700ms and modelled conductance of 11,300 Siemens are consistent with a massive sulphides source. All prior drilling on the project is shallower than the interpreted 80m depth to the top of the conductivity anomaly.



**Figure 3. Cosmos South project plan view of FLEM stations, loop position and late time Ch40 contoured image over RTP 1VD magnetics.**



**Planned Exploration:**

Contingent upon shareholder approval, NickelX plan to conduct a detailed drone airborne magnetic survey over the entire tenement. This survey will help to better delineate the magnetic strata interpreted to represent continuations of the ultramafic komatiite lithologies that host nickel mineralisation to north and south of M36/580. This information will be critical for drill hole planning, targeting the most promising parts of the interpreted conductor/ultramafic package.

A maiden drill program consisting of 4 diamond drill holes is expected to commence in the March Quarter 2022.



This announcement is authorised for ASX release by Matt Gauci, Managing Director of the Company.

**ENDS.**

**CONTACT:**

**Matt Gauci**  
**NickelX Limited**  
[info@nickelxlimited.com](mailto:info@nickelxlimited.com)  
**+61 8 417 417 907**

**David Tasker**  
**Chapter One Advisors**  
[dtasker@chaperoneadvisors.com.au](mailto:dtasker@chaperoneadvisors.com.au)  
**+61 8 433 112 936**

**ABOUT NICKELX LIMITED**

NickelX Limited is an Australian, ASX listed, Nickel and Gold exploration company primarily exploring for high-grade Nickel sulphide deposits, initially in the world class Albany Fraser Orogen (AFO) and, based on the company's inhouse Nickel prospectivity database, generating additional projects including the Cosmos South Project in the prolific Leinster Nickel Belt, all located in Western Australia.

**Competent Person's Statement**

The information in this announcement that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr Tony Donaghy who is a Registered Professional Geoscientist (P.Geo) with the association of Professional Geoscientists of Ontario (PGO), a Recognised Professional Organisation (RPO). Mr Donaghy is an employee of CSA Global, an ERM Company, and is contracted as Exploration Management Consultant to Nickel X Limited. Mr Donaghy has sufficient experience which is relevant to the style of mineralisation and types of deposit under consideration and to the activity being 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 Donaghy consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

**Forward Looking Statements**

Some statements in this announcement regarding estimates or future events are forward-looking statements. Forward-looking statements include, but are not limited to, statements preceded by words such as "planned", "expected", "projected", "estimated", "may", "scheduled", "intends", "anticipates", "believes", "potential", "could", "nominal", "conceptual" and similar expressions. Forward-looking statements, opinions and estimates included in this announcement are based on assumptions and contingencies which are subject to change without notice, as are statements about market and industry trends, which are based on interpretations of current market conditions. Statements regarding plans with respect to the Company's mineral properties may also contain forward looking statements.

Forward-looking statements are provided as a general guide only and should not be relied on as a guarantee of future performance. Forward-looking statements may be affected by a range of variables that could cause actual results to differ from estimated results expressed or implied by such forward-looking statements. These risks and uncertainties include but are not limited to liabilities inherent in exploration and development activities, geological, mining, processing and technical problems, the inability to obtain exploration and mine licenses, permits and other regulatory approvals required in connection with operations, competition for among other things, capital, undeveloped lands and skilled personnel; incorrect assessments of prospectivity and the value of acquisitions; the inability to identify further mineralisation at the Company's tenements, changes in commodity prices and exchange rates; currency and interest rate fluctuations; various events which could disrupt exploration and development activities, operations and/or the transportation of mineral products, including labour stoppages and severe weather conditions; the demand for and availability of transportation services; the ability to secure adequate financing and management's ability to anticipate and manage the foregoing factors and risks and various other risks. There can be no assurance that forward-looking statements will prove to be correct.