



Silver Swan North Project
Omrah & Wise Nickel Prospects

Final Report
DAG2022/00460852
M27/263

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Date:	June 2022
Distribution:	WA Department of Mines, Industry Regulations and Safety Moho Resources Ltd

BIBLIOGRAPHIC DATA SHEET

Project Name	Silver Swan North
Grant Number	DAG2022/00460852
Tenement Numbers	M27/263
Tenement Holder	Moho Resources Ltd
Tenement Operator	Moho Resources Ltd
Report Type	Final
Report Title	Silver Swan North Project EIS Final report
1:250 000 Map Sheet	Kurnalpi (SH51-10)
1:100 000 Map Sheet	Gindalbie 3237
Target Commodity	Ni, Cu
Geodetic Datum	MGA94_Zone 51
Project Zone	51
Number of Holes Drilled	14 reverse circulation (RC) holes & 1 diamond tail (DD)
Total Metres Drilled	3,060 m (RC) & 319.4 m (DD)
Assays	Au, Ni, Cu, As, Zn, Pb, Fe, Mn, Bi, Ti, Co, S

ABSTRACT

Location:	The Silver Swan North project is located 50 km north-northeast of Kalgoorlie, WA on the Kurnalpi (SH51-10) 1:250 000 map sheet.
Drilling:	The 14 hole, 3060m reverse circulation drilling program was completed by D&B Drilling from 28 November 2021 to 22 January 2022. The 1 Diamond hole, 319.4m was completed by Bluespec Drilling from 11 March to 20 March 2022.
Geology:	The stratigraphic sequence recognised in the area comprises a lowermost succession of tholeiitic basalts and felsic to intermediate volcanoclastic rocks known as the Morelands Group. These are overlain conformably by the Gindalbie Group which consists of komatiites and high magnesium basalts, with lesser units of intermediate intrusives and sediments.
Work:	RC and DD drilling was undertaken in a previously under-explored area (Omrah & Wise Prospects) of M27/263 to target a large area of potential komatiites. The following work was completed in relation to the drilling grant; Drilling, geological logging, structural readings, multi-element assaying and geochemical interpretation.
Conclusions:	Drilling (RC & DD) across the Omrah and Wise prospects did not intersect any significant Nickel sulphides. The diamond tail on one of the Omrah Prospect holes did, however, intersect a historically modelled EM Conductor Plate.

1. Introduction

On 13 October 2021, Moho Resources Ltd (Moho) was notified that it had been awarded a co-funded drilling grant of up to \$150 000 from the DMIRS Exploration Incentive Scheme (EIS). Moho's aim was to test for the Black Swan Komatiite Complex (BSKC) and gain vital stratigraphic information across M27/263 (Figure 1). The lithologies include altered ultramafics ([+/- tremolite chlorite schist], volcanics/felsic volcaniclastics [andesite to rhyolite]), undivided felsic volcanic and volcaniclastics with minor basaltic andesite, dacite, mafic intrusives and sedimentary rocks derived from epiclastic felsic volcanic and volcaniclastics. The rock morphologies in this tenement appear to change rapidly between lithologies when the tenement is traversed in any direction. The presence of a modelled EM anomaly (Mithril, 2008) further adds interest in this tenement.

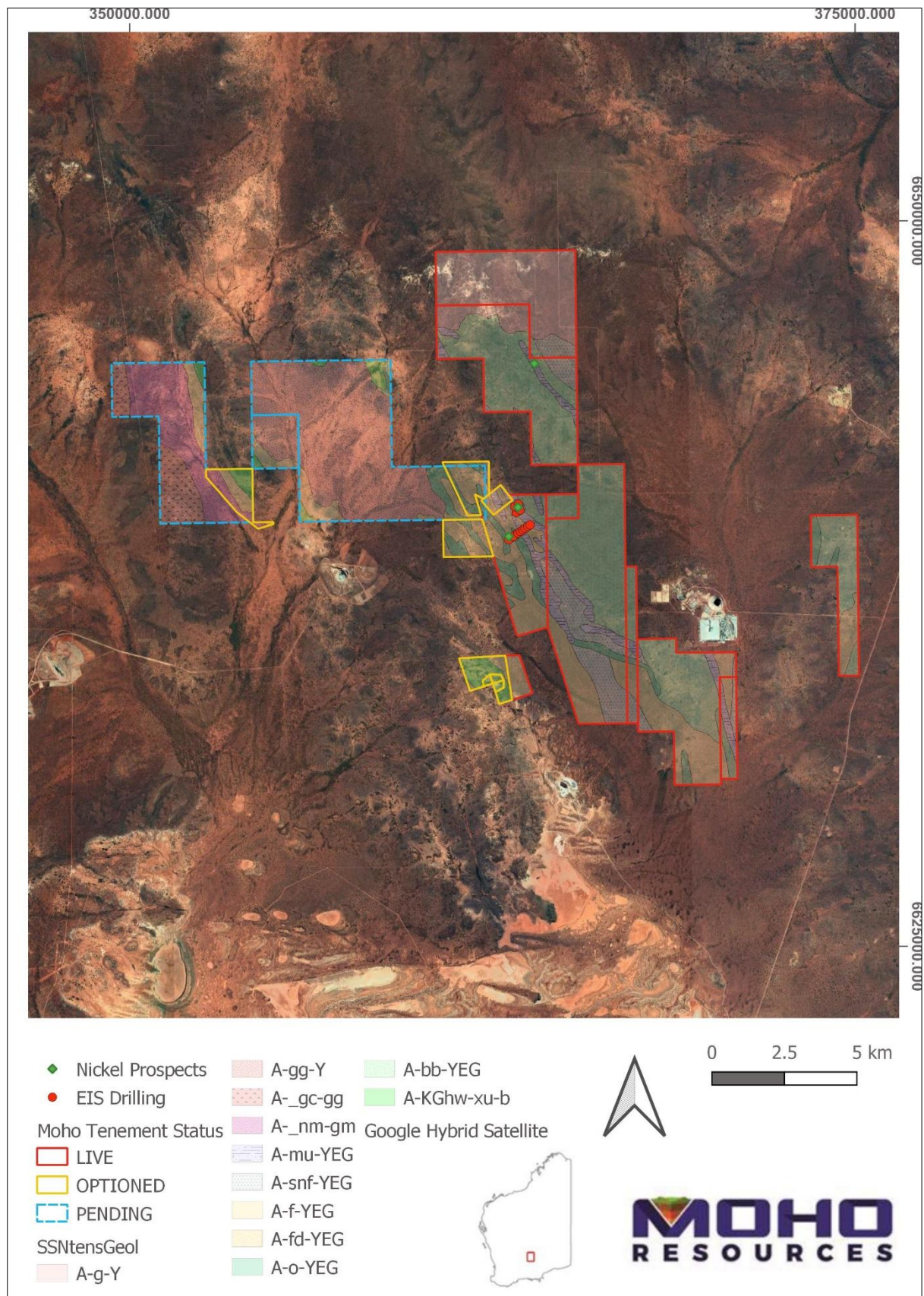


Figure 1: Overview of the Silver Swan North project, Local Interpreted Bedrock Geology (from DMIRS 2022), Local Nickel Prospects and EIS drilling.

2. Location

The Silver Swan North Project is located approximately 50km NNE of Kalgoorlie, covering an area of approximately 16 000 km². The project area extends west of Poseidon's Black Swan Mine over the Gordon Sirdar Mine area. Access to the site is via Yarri Road and several station and exploration tracks.

The project area is comprised of gently undulating land with saltbush dominant open Eucalyptus woodland and is classified as a dry, semi-arid environment. It is poorly drained with ephemeral water courses. Access via Yarri Road from Kalgoorlie and further through station tracks is good, except in the case of excessive rainfall, when Yarri Road can be closed to all traffic.

3. Tenement Status

The Silver Swan Gold and Nickel Project consists of six granted exploration tenements (E27/528, E27/613, E27/623, E27/626, E27/633 and E27/641), three granted prospecting tenements (P27/2232, P27/2390, P27/2441), and one granted mining tenement (M27/263 in partnership with Odin Metals Ltd). Moho Resources Ltd (Moho) also has two pending tenements (E24/235, E27/687) and six Nickel optioned tenements with Frederick Saunders (P27/2216, P27/2217, P27/2218, P27/2200, P27/2226), Peter Melville and Kenneth and Rodney Hodges (P27/2229).

Table 1: Silver Swan Nickel Project Tenement Details.

Tenement	Grant Date	Expiry Date	Current Holder	Expenditure	Status	Area Size (ha)
M27/488	14/07/2015	13/07/2036	HODGES, KENNETH JOHN; HODGES, RODNEY CHARLES	\$ 10,000.00	GRANTED	55.3513
P27/2229	30/11/2015	29/11/2023	MELVILLE, PETER	\$ 7,920.00	GRANTED	197.2421
E24/235	PENDING		MOHO RESOURCES LTD	\$ 15,000.00	PENDING	1480.4796
E27/528	10/11/2015	9/11/2025	MOHO RESOURCES LTD	\$ 50,000.00	GRANTED	2045.3284
E27/613	27/08/2019	26/08/2024	MOHO RESOURCES LTD	\$ 15,000.00	GRANTED	1480.785
E27/623	14/12/2021	13/12/2026	MOHO RESOURCES LTD	\$ 20,000.00	GRANTED	1177.2821
E27/626	17/07/2020	16/07/2025	MOHO RESOURCES LTD	\$ 15,000.00	GRANTED	1184.9316
E27/633	29/03/2022	28/03/2027	MOHO RESOURCES LTD	\$ 15,000.00	GRANTED	547.271
E27/641	5/07/2022	4/07/2027	MOHO RESOURCES LTD	\$ 20,000.00	GRANTED	2664.8239
E27/687	PENDING		MOHO RESOURCES LTD	\$ 10,000.00	PENDING	296.0973
P27/2232	8/03/2016	7/03/2024	MOHO RESOURCES LTD	\$ 8,000.00	GRANTED	199.8384
P27/2390	4/02/2019	3/02/2023	MOHO RESOURCES LTD	\$ 3,720.00	GRANTED	92.136
P27/2441	22/04/2022	21/04/2026	MOHO RESOURCES LTD	\$ 8,000.00	GRANTED	198.0209
M27/263	3/07/1997	7/07/2039	MOHO RESOURCES LTD; ODIN METALS LTD	\$ 79,300.00	GRANTED	792.8457
P27/2200	23/02/2015	22/02/2023	SAUNDERS, FREDERICK CHARLES	\$ 7,760.00	GRANTED	193.8854
P27/2216	15/10/2015	14/10/2023	SAUNDERS, FREDERICK CHARLES	\$ 2,000.00	GRANTED	9.7971
P27/2217	15/10/2015	14/10/2023	SAUNDERS, FREDERICK CHARLES	\$ 2,000.00	GRANTED	9.9381
P27/2218	15/10/2015	14/10/2023	SAUNDERS, FREDERICK CHARLES	\$ 2,000.00	GRANTED	8.0746
P27/2226	16/11/2015	15/11/2023	SAUNDERS, FREDERICK CHARLES	\$ 7,400.00	GRANTED	157.2992

4. Regional Geology

The stratigraphic sequence recognised in this area comprises a lowermost succession of tholeiitic basalts and felsic to intermediate volcanoclastic rocks known as the Morelands Group. These are overlain conformably by the Gindalbie Group which consists of komatiitic lavas and high magnesium basalts, with lesser units of intermediate intrusives and sediments. These komatiitic lavas consist of olivine cumulate channel facies rocks and thin flow spinifex-textured facies units, which alter to talc-carbonate assemblages, serpentinites and tremolite-chlorite rocks respectively.

Nickel sulphide deposits in the Yilgarn Craton are almost exclusively hosted by high magnesium komatiites. Komatiites exhibit an array of unusual igneous textures including dendritic spinifex and/or cumulate olivine and pyroxene textures. These deposits are spatially linked to magmatic plumbing systems, where large volumes of magnesium and iron-rich magma penetrate the Earth's crust or erupt over it. The critical geological considerations are the presence of large structures and sufficiently large reservoirs of magma from which nickel sulphides can segregate into potentially economic accumulations.

The Silver Swan Nickel Project is located within the Kalgoorlie and Kurnalpi Terranes of the Yilgarn Craton, Western Australia. The regional northwest-trending Mount Monger-Moriarty Fault, which runs through the north-eastern corner of the project area, is the tectonic boundary between the Kalgoorlie and Kurnalpi Terranes (Cassidy et. al., 2006). The project area essentially straddles this fault with tenements lying within both Terranes.

There are several established mines close to the project area including Poseidon Nickel Ltd Black Swan and Silver Swan deposits. The Gordon Sirdar Gold Mine and Kanowna Belle Gold Mine also lie along strike adjacent to the Scotia Dome in the west. komatiites in conjunction with the felsic units within the project area are of particular interest in that they can host significant nickel deposits in other locations, such as the nearby Poseidon nickel Black Swan Mine.

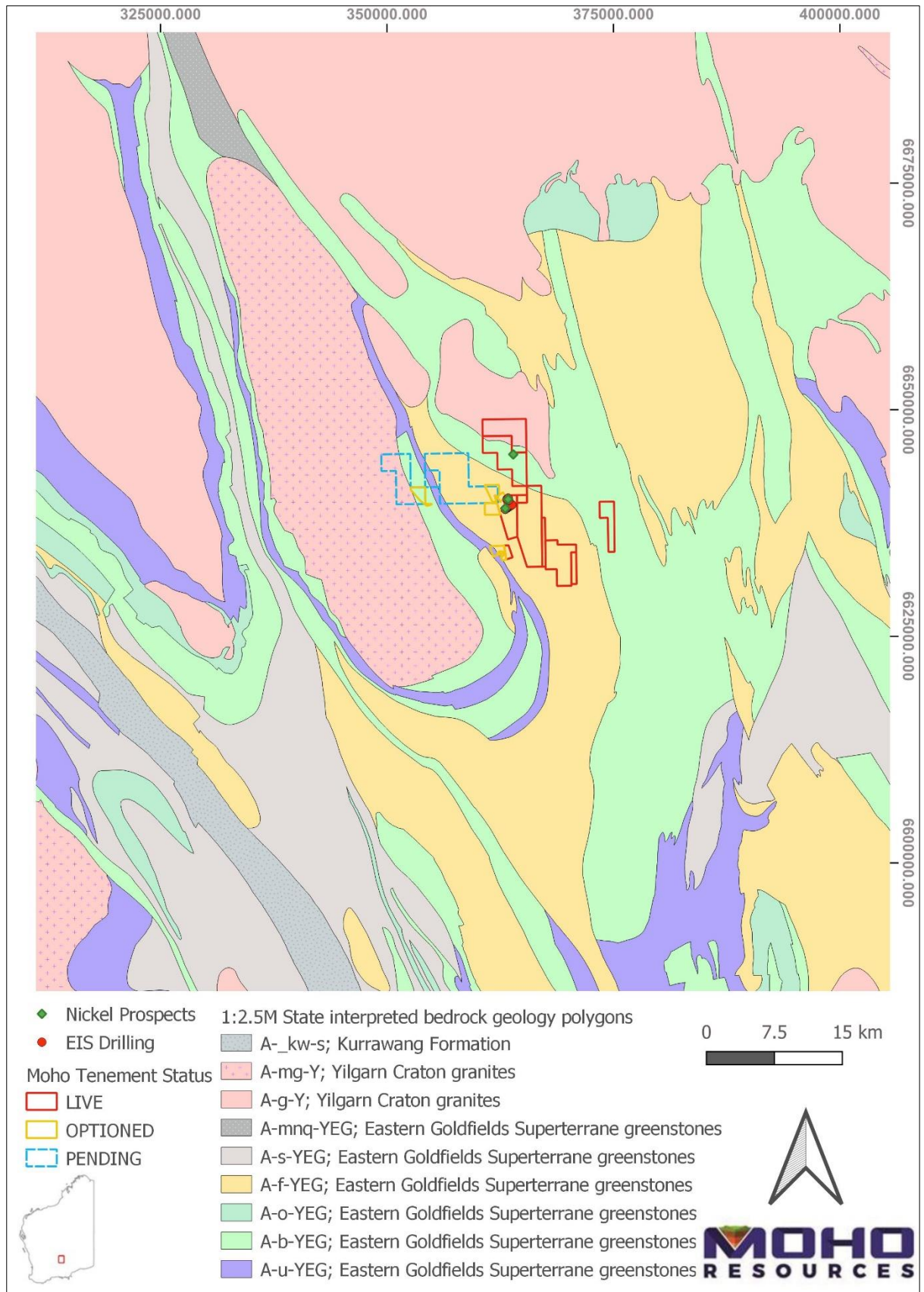


Figure 2: 1:250 000 000 Regional Interpreted Bedrock Geology (from DMIRS 2022).

5. RC Drilling

RC drilling was undertaken on M27/263 by D&B Drilling from 28 November 2021 to 22 January 2022 (shutdown over Christmas period). A total of 14 holes were completed totalling 3,060 metres of drilling (Table 2, Figure 2).

The drilling targeted a large, poorly explored area of potential komatiites within M27/263 in the northern part of the tenement. Although there have been several phases of modern exploration for both gold and nickel in the area, this part of the tenement is relatively underexplored. The coeval eruption of komatiites and dacites and early emplacement of the high-grade Silver Swan North deposit, with felsic stratigraphic units present in the area indicate the possibility of another Silver Swan style mineralisation.

Table 2: Reverse Circulation drilling collar details.

HoleID	Z51_East	Z51_North	RL	Depth	Azi	Dip
21SSC001	363133	6639066	402	198	232	-60
21SSC002	363301	6639180	404	162	232	-60
21SSC003	363060	6639016	401	186	232	-60
21SSC004	363219	6639124	404	198	232	-60
21SSC005	363385	6639237	400	165	232	-60
21SSC006	363468	6639293	405	198	232	-60
21SSC007	363552	6639350	406	201	232	-60
21SSC008	363633	6639405	405	198	232	-60
21SSC009	363718	6639463	405	192	232	-60
21SSC010	363799	6639517	407	198	232	-60
21SSC011	363325	6639950	402	300	232	-60
21SSC012	363450	6640031	404	264	232	-60
21SSC013	363275	6640155	393	300	232	-60
21SSC014	363400	6640237	404	300	232	-60

The EIS application stated that the aforementioned drilling program was designed to test the stratigraphy and subsequent nickel sulphide mineralisation potential and would use follow up diamond tails on any encouraging RC holes. The RC drilling program can be divided into two phases, the first focusing on drilling the Omrah nickel prospect and the second phase on the Wise nickel prospect, as illustrated in Figure 3 below.

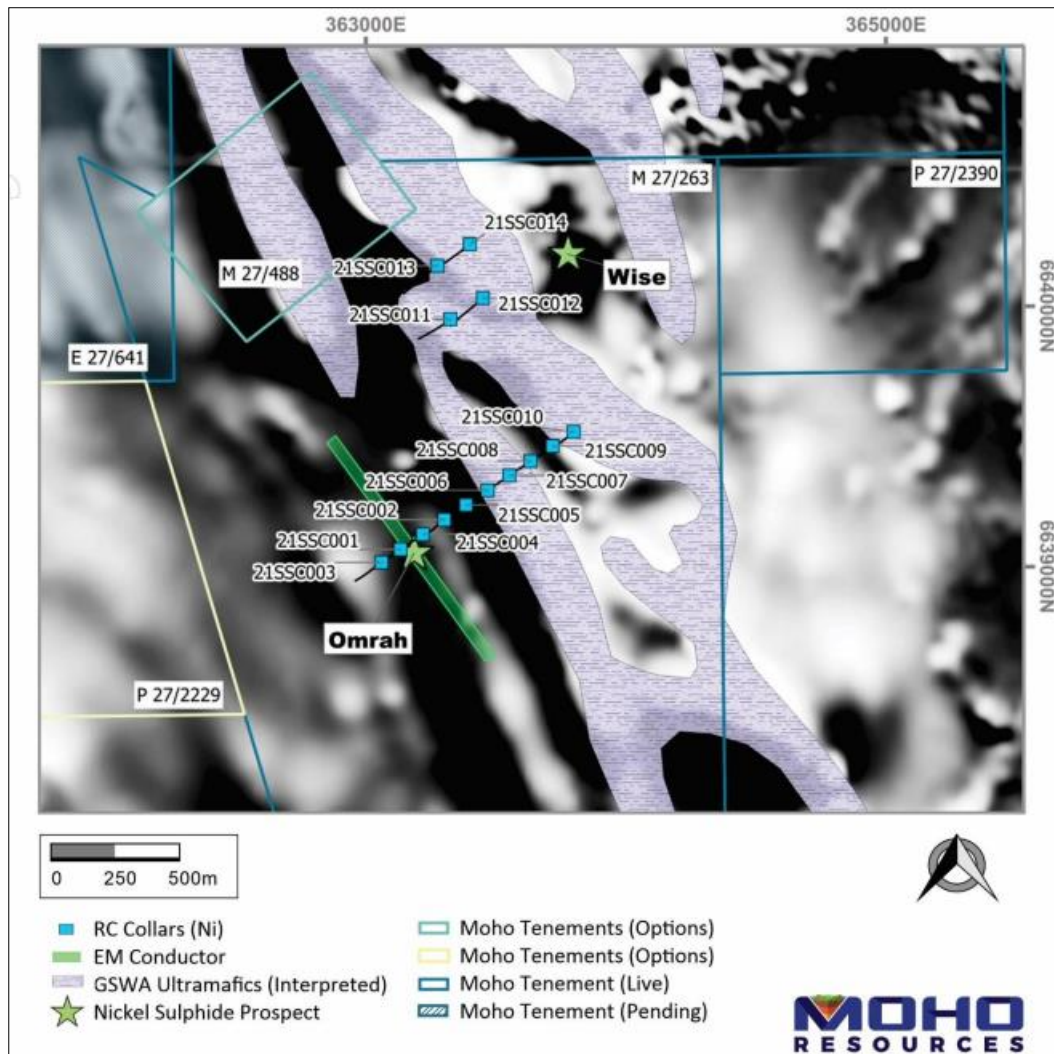


Figure 3: Location of RC drill holes in relation to the Omrah and Wise Nickel prospects and historic drilling (overlain on 0.5VD grey magnetics).

The Omrah prospect contains an EM conductor plate (+/- 500m long, centred at 155m deep) which has been identified in multiple historic EM surveys with no historic drilling having intersected the conductor. RC drillholes 21SSC001- 10 were drilled west-east across the Omrah prospect. The holes 21SSC001 – 004 were designed to intersect the EM plate, whilst 21SSC005 – 010 were designed as stratigraphic holes to explore and test for Nickel sulphide mineralisation. The Wise prospect contains a large magnetic anomaly coincident with favourable ultramafic rocks with up to 1% Nickel as identified by historic drilling results. The holes 21SSC011-014 were drilled to test these results.

Geochemical (field pXRF derived) results showed that the RC drillholes 21SSC001-010 failed to intersect ultramafic lithologies with any visible sulphide mineralisation over 1%. They also failed to reach sufficient depths to intersect the EM conductor modelled to be present in the area. Figure 4 shows a cross-section of lithologies intersected in the Omrah drill holes.

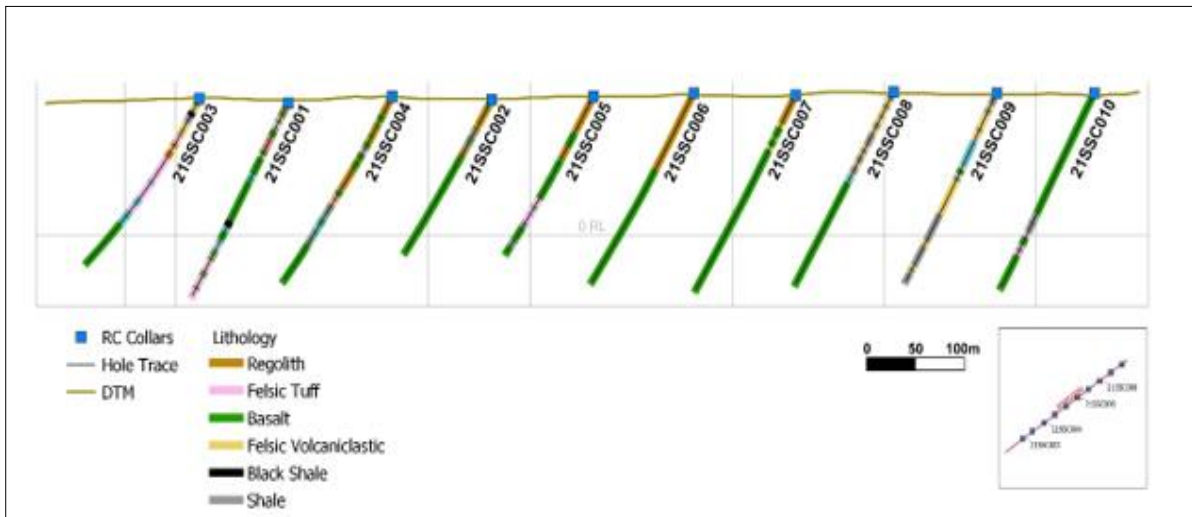


Figure 4: Omrah cross-section looking NW.

Drillholes 21SSC011-014, in the Wise Prospect, intersected ultramafic units in all four holes. However, the preliminary pXRF data showed no anomalous Nickel present and no visible nickel sulphides (<1%) were evident in the chip logging (Figure 5).

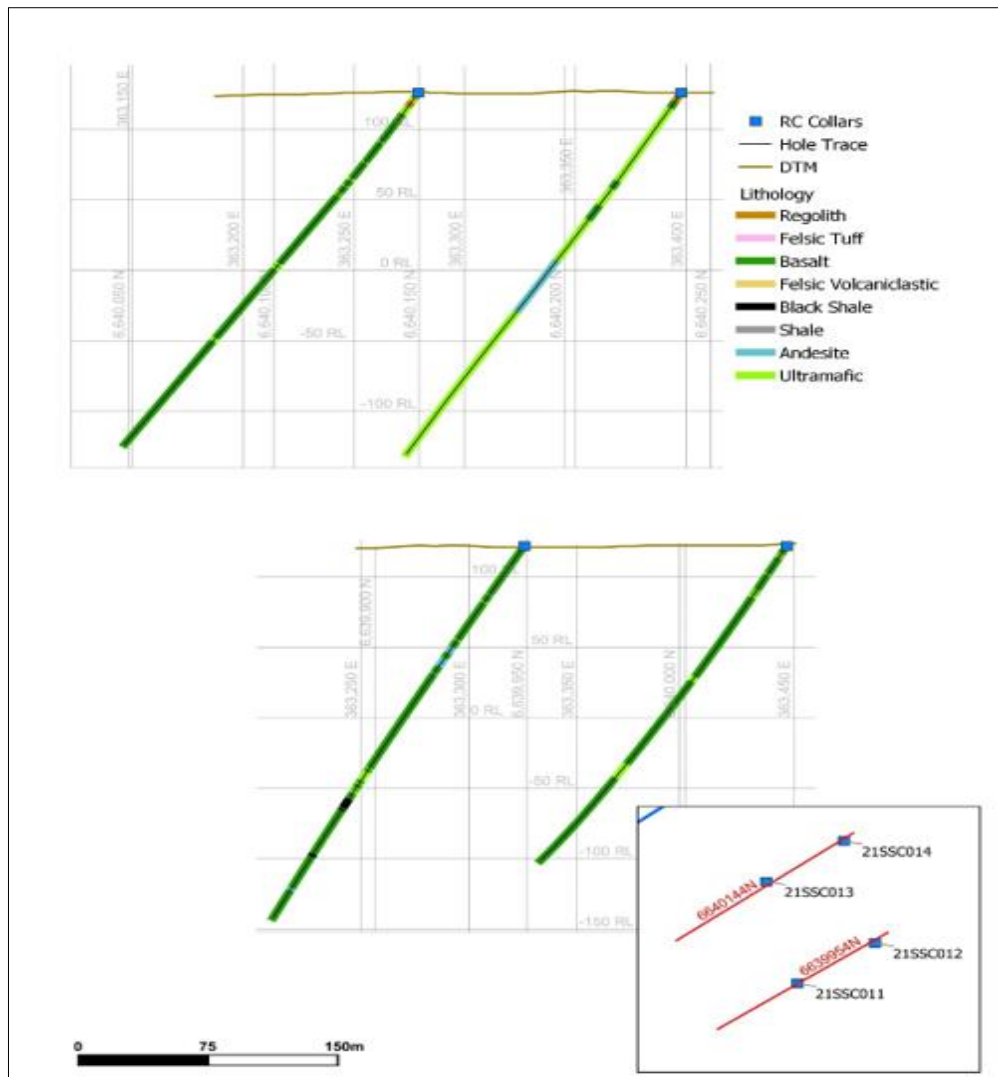


Figure 5: Wise cross-section looking NW.

6. Diamond Drilling

Diamond drilling was undertaken on M27/263 by Bluespec Drilling from 11th March to 20th March 2022. Only one diamond tail was drilled for a total of 319.4m (484.5m total depth) continuing the original 21SSC005 RC hole. The tail extended the hole from 165m to 484.5m (Table 3, Figure 5).

Table 3: Diamond drilling collar details (projection: MGA94, Zone 51)

HoleID	Type	Z51_East	Z51_North	RL	Depth	Azi	Dip	Comment
21SSC005	RC	363385	6639237	400	165	232	-60	
21SSC005	DD	363385	6639237	400	484.5	232	-60	Diamond tail



Figure 6: 21SSC005 Diamond tail (DD Hole Trace).

The RC drillhole 21SSC005 was chosen to have a diamond tail as it was the most likely to intersect the inferred position of the previously mentioned EM Conductor Plate. The RC hole was conditioned to 165m (bottom of hole) and NQ diamond core drilling extended the hole to its present depth (484.5m).

The EM Conductor Plate was identified in multiple electromagnetic surveys and was further modelled by Mithril in 2008. This modelling indicated a conductive body centred at 363190E, 6639035N at a depth of 155m. The 2008 modelled dip of the body is 70 degrees which is

supported by the previous ground EM data which indicated a conductor along the eastern



margin of this response.

Figure 7: Black shale with massive Pyrrhotite.

Lithologies intersected in the diamond tail include both mafic and intermediate tuffs and volcanoclastics at varying depths, interspersed with andesites, basalts and gabbros. There are several shale horizons including the black shale hosted primary EM conductor unit and intermediate shales in addition to various chert horizons. Sulphides including pyrrhotite, pyrite and chalcopyrite appear to be mainly associated with black shales and dacites.

7. Assays

Litho-geochemical samples for the Omrah and Wise holes were sent to Bureau Veritas for multi element analysis via Aqua Regia Digest. Elements assayed for include. Au, Ni, Cu, As, Zn, Pb, Fe, Mn, Bi, Ti, Co and S

8. Results

Lithologies encountered in the Omrah holes included mainly meta-basalts and dolerites, with some felsic tuffs towards the western end of the line. The rocks were strongly foliated to sheared within most of the holes along this line. Sulphides were present in trace to minor amounts of disseminated pyrite, arsenopyrite to chalcopyrite in all holes, mainly associated with shear zones.

Lithologies found in the Wise holes included serpentinised ultramafics, metamorphosed basalt-dolerites to gabbros, black shales with disseminated sulphides both within the shale and within sericite(?) veins in the black shale. The black shales appeared to lie along fault structures. Mafic volcanoclastics, shales, andesite, dunite and peridotites were also present, particularly in the north easternmost holes (21SSC013-14). Sulphides in these four holes were present in the form of pyrite, pyrrhotite, arsenopyrite and chalcopyrite, again in minor to trace amounts. These sulphides also appear to be fault controlled.

The initial design of the diamond hole was to intercept the inferred position of the EM conductor at +/- 405m downhole, however conductive lithologies were intercepted at +/- 377.25m. Downhole logging indicated the source of the primary EM conductor (at +/- 377.25m) to a Black Shale unit associated with massive pyrrhotite mineralisation (Figure 6).

However, this position caused uncertainty with the modelled EM data and subsequent remodelling indicated an additional conductor sitting at +/-480m downhole. The secondary EM conductor was logged to be a shear zone, indicated by extremely broken up core, loss of water reported by the driller and oxidation of drill core.

No ultramafic lithologies were intersected by the diamond tail on the RC drillhole 21SSC005 and no anomalous nickel has been intersected based on preliminary XRF data.

Litho-geochemical analyses for the program are currently awaiting final QAQC before use.

9. Conclusions

Overall, drilling failed to intersect any ultramafic lithologies that resemble facies related to the Black Swan Komatiite complex nor did drilling intersect any anomalous nickel. 21SSC001 – 21SSC010 ended in mostly mafic lithologies.

21SSC011 – 014 intersected ultramafic lithologies but preliminary XRF data indicates low level Nickel concentrations highlighting the presence of ultramafic units. The geochemical data acquired for the drillholes will undergo litho-geochemical fingerprinting to better understand their associated signatures and where they may sit in the channel facies. Full geochemical analysis is awaiting QAQC and subsequently not yet available at the time of writing this report.

Although drilling has failed to intersect any Nickel sulphide mineralisation, it has opened up the Wise prospect for further exploration. The Omrah drill prospect is considered less prospective for Nickel Sulphide mineralisation. Full geochemical analyses have been submitted for further geochemical fingerprinting and will be used to ascertain the fertility of the ultramafic units intersected.