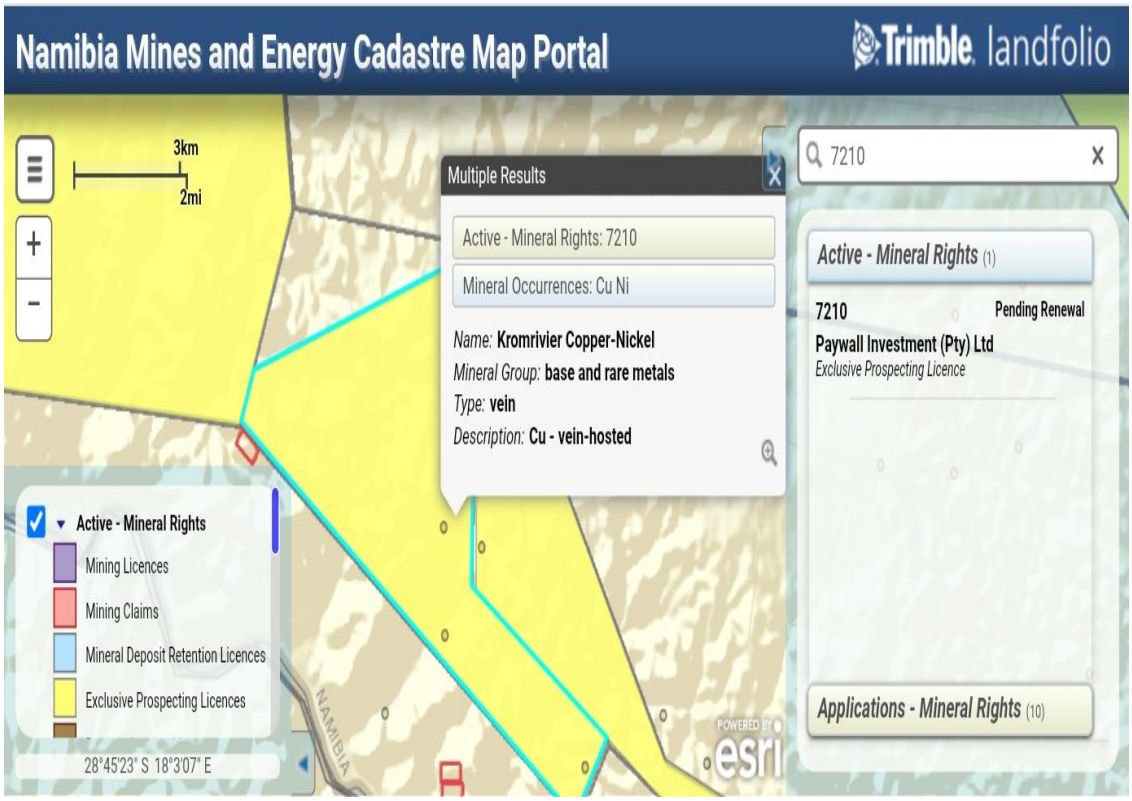
Paywall Investment (Pty) Limited EPL 7210: Prospective for Nickel-Copper Sulphide Mineralization hosted within Mafic –Ultramafic Rock Units



Tenement EPL 7210 with Ni-Cu-veins hosted mineralization at the farm Kromrivier Copper-Nickel Occurrence.

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Executive summary

The Exclusive Prospecting Licence (EPL) 7210 is located in the //Kharas Region, southern Namibia, adjacent to South Africa border and about 3 km north of the Orange River. It covers an area of 3 420.99 hetares of land surface partly overlying state land, farms Kromrivier 359, Haakiesdoorn and Tsams 360.

The EPL 7210 is owned by Paywall Investment (Pty) Limited and is issued in respect of base and rare metals, dimension stones, industrial mineral and precious metals. Highly prospective base and rare metals bedrock geology has underlain the tenement area. Bedrock geology is comprises of Vioolsdrift Suite and Pella Domain within the Richtersveld Magmatic Arc (RMA) in the Namaqua-Natal Metamorphic Province (NNMP).

There exists *Cu-Ni-veins* mineral occurrences hosted within andesite, dacite and rhyolite rock units and granodiorite, leucrogranite, gabbro, diorite of the Khiesian age on the property – EPL 7210. *Ni-Cu-PGE* ore bodies are being investigated by Orange River Pegmatite (Pty) Ltd on its land package holdings (*EPL 5047, 6940 and 7295*) in Kum Kum Intrusive Suite prospects and surroundings in the close proximity to Paywall Investment (Pty) Limited EPL 7210.

The property is, also, prospective for LCT-type pegmatites that host Lithium and Tantalum deposits currently being prospected and mined at Tantallite Valley mine on the Orange River Pegmatite's EPL 5047.

Paywall Investment (Pty) Ltd plans to conduct surface sampling surveys and to map out all *Ni-Cu* mineral occurrences on the EPL 7210. Invasive and detailed field prospecting activities will entail, initial reconnaissance Rotary Air Blast (RAB), Reverse Circulation (RC) or Diamond core (DD) drill surveys to drill-test *Ni-Cu* mineralization and further target zones, expect to be defined by surface sampling surveys.

1. Introduction

The EPL 7210 is underlain by highly base metals and rare metals prospective geology. There exist some *Ni-Cu* mineral occurrences on the property, but no record of mineral deposits discovered within the property EPL 7210 as of yet, therefore, it is considered as to have an upside potential for *Ni-Cu* deposits discovery.

1.1 EPL 7210 Description and Location

The tenement EPL 7210 is located approximately 3 km north from the might Orange River in the //Kharas Region and within the south-trending Namaqua-Natal Metamorphic Province (NNMP) in southern Namibia.

It has an irregular shaped morphology and a rugged topography. It covers a total of 3 420.99 hectares which is a larger area enough to accommodate mining operations and tailing dams facility and overlain partly farmland, such as; Haakiesdoorn/state land, Kromrivier 359 and Tsams 360 – figure 1-1.

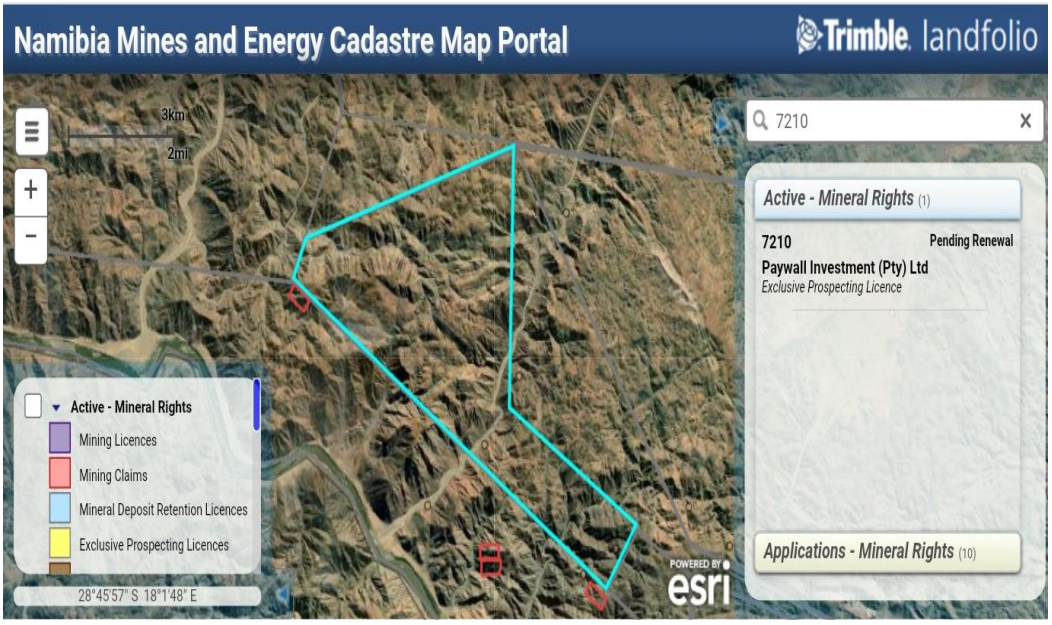

Figure1- 1. Locality of EPL 7210 . Source: MME cadastre map portal, September 2023

This is a desktop technical overview, assessing *Ni-Cu* mineralization hosted within the mafic and ultramafic - andesite, dacite, rhyolite, granodiorite, gabbro and diorite rocks in the EPL 7210.

1.2 Mineral Tenure

The EPL 7210 is owned by Paywall Investment (Pty) Limited, a Namibia registered entity and owned by individual Namibians. Its application status on the cadastre map portal at Ministry of Mines and Energy (MME) indicates a "Pending Renewal" status for the tenement. Environmental Impact Assessment study for the property was conducted and an application for Environmental Clearance Certificate (EEC) was submitted to the

Ministry of Environment, Forestry and Tourism (MEFT) last year 2022. The ECC application is still under review at MEFT. Paywall Investment (Pty) Limited holds mineral exploration rights to conduct surface prospecting activities on the EPL 7210.

EPL has been issued in respect of and to prospect for base and rare metals (BRM), dimension stones (DM), industrial mineral (IM) and precious metals (PM).

2. Access, Climate, Infrastructure and Physiography

2.1 Access to Property

The EPL 7210 is easily accessible via a series of gravel roads, either from Noordoewer or Warmbad settlement.

2.1 Climate

The EPL 7210 is located within an arid to semi-arid climatic condition region with average rainfall ranges from 50mm – 100mm per annum, Hattingh (2021). So, the area can be described as semi-desert with seasonal thunderstorms during summer rainfall months (December – April). Average daily temperatures range from 18^0C- 19^0C but can exceed 50^0C in summer and in winter sub-zero temperatures are expected.

2.3 Infrastructure

There is a well-maintained gravel road within the EPL 7210 vicinity to the town of Karasburg. Railway line connect Keetmanshoop to the port of Luderitz is reliable. The towns of both Keetmanshoop and Karasburg and Warmbad settlement can supply semi-skilled and skiled labourers required for exploration activities and mining supplies can be acquired from these towns.

2.4 Physiography and Vegetation

The property area is characterised by a rugged topography with elevation of approximately 300 metres above sea level to 500 masl. Vegetation is sparse. Wild Mammalia include kudus, springboks and zebras.

3. Regional Geological Setting, Local Geology and Mineralization

The southern Namibia's lithological units comprised of the basal Palaeoproterozoic (1700 – 2000 Ma) Richtersveld Sub-province within the 100 – 400 km wide Mesoproterozoic (1600 – 1200 Ma) Namaqua – Natal Metamorphic Province (NNMP), figure 3-1. The NNMP spans southward across the sub-continent(in Namibia and South Africa) and developed as a result of accretion of juvenile Mesoproterozoic supracrustal and plutonic intrusions and reworking of the Kheisian aged continental crust, Mullins, Petzer and Andrew 2022; Miller, 2008; Hattingh 2021 and Johnson, 2017.

The NNMP is subdivided into terranes and sub-provinces, separated by major structure, such as the Pofadder shear Zone (PSZ). These sub-divisions within the NNMP are from west to east, the Richtersveld Sub-province, Bushmanland Sub-province, Kakamas, Areachap and

Kaaien terranes. In Namibia, the NNMP lithological units are pre-tectonic gneisses and ortho-amphibolites, tholeiitic mafic-ultramafic intrusions which hosts Ni-Cu-PGE mineralization, Hattingh (2021).

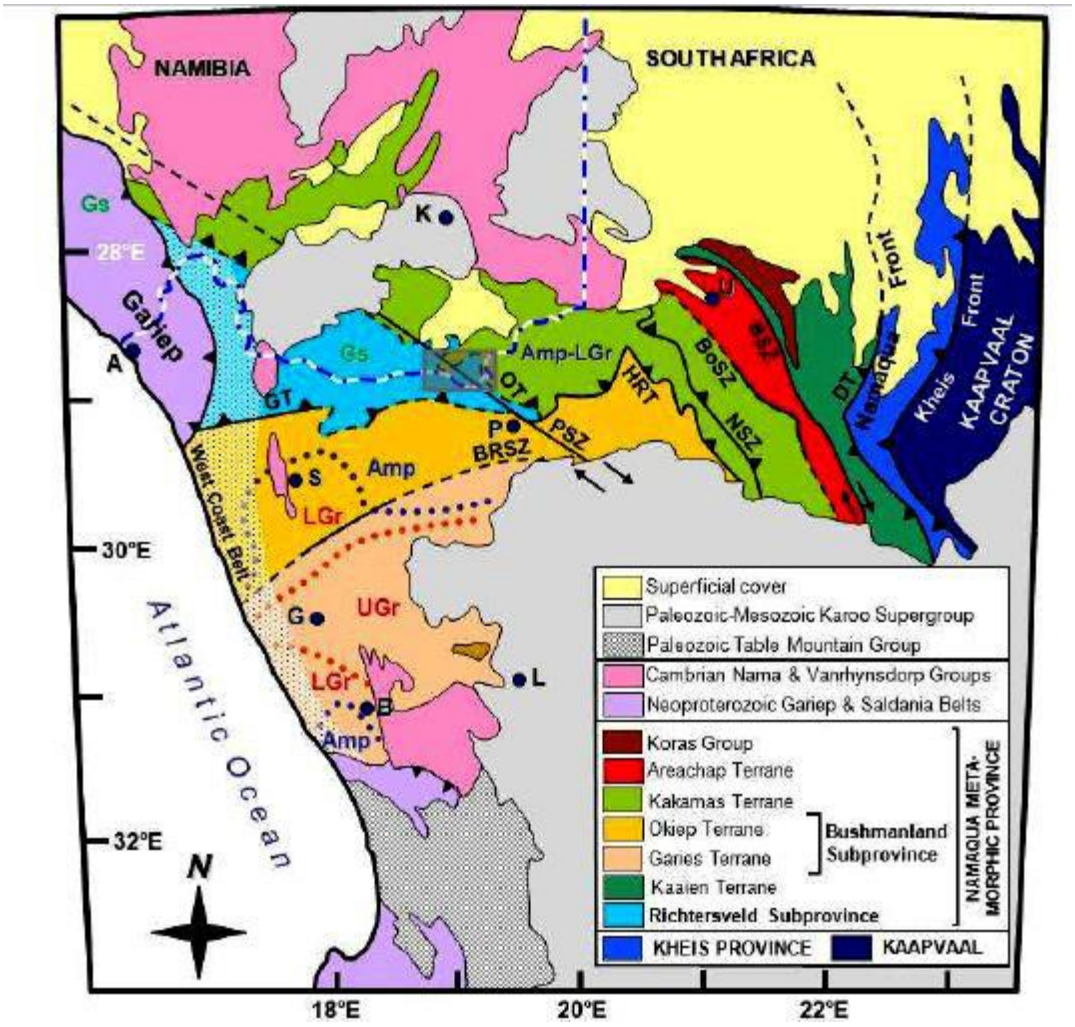

Figure 3- 1. Tectonostratigraphic and metamorphic subdivision of the NNMP as well as the major crustal features and terrane. Boundaries. OT = Onseepkans Thrust; PSZ = Pofadder Shear-zone. Source: Hattingh, 2021

3.1 Richtersveld Magmatic Arc (RMA)

The Richtersveld Sub-province forms an approximate 200 km wide within the NNMP. In Namibia, from Tantalite Valley, it extends southwest across the Orange River and into South Africa. It is further subdivided into low-grade greenschist facies Vioolsdrift Suite to the northwest and a medium-grade amphibolite facies Pella Domain to the southeast – figure 3-2 (Hattingh, 2021 and Johnson, 2017) .

Predominant rock units within the Richtersveld Magmatic Arc consists of volcano-sedimentary sequence which was intruded by voluminous granite and granodiorite, interpreted to represent relics of Palaeoproterozoic island arc (Hattingh, 2021). It is believed that continuous presences of boudins and shears separate the arc from other terranes.

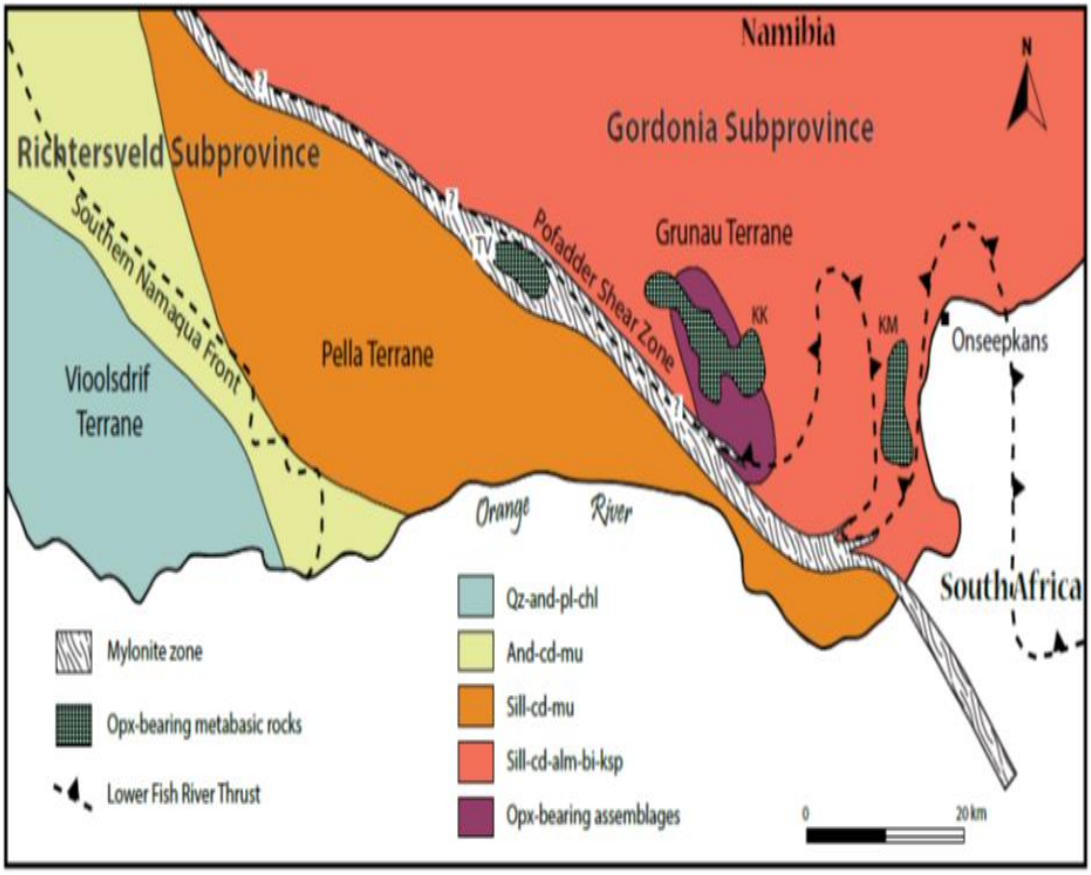

Figure 3- 2. Location of the NW-SE trending Pofadder Shear Zone (PSZ). Source: Johnson, 2017

3.1.1 Vioolsdrift Suite

Vioolsdrift Suite rock units comprises of calc-alkaline magma series – granite gneiss, metagabbro, metadioriteand granodiorite – prospective form Ni-Cu-PGEs sulphide mineralization similar to or analogue to Kum Kum prospects. It also contain basalt to rhyolite units of the Orange River Group which is intruded by voluminous plutons and hypabyssal rocks of the Vioolsdrift Intrusive Suite – "subvolcanic rocks ranging from ultrabasic to highly acidic in composition", Indongo (2017).

3.1.2 Pella Rock Units

The Pella terrane occupy the eastern part of the Richtersveld Subprovince and consists of the Amphibolite facies rock units that suffered strains and are juxtaposed against the western Vioolsdrift terrane. Indongo (2017) documented that "Pella Domain within the RMA is represented by pretectonic rocks of both the Orange River Group and the Vioolsdrif Intrusive Suite and syntectonic Namaqua granitoids".

3.2 Pegmatite Belt

The late-stage shearing and un-roofing of the Namaqua- Natal Metamorphic Province was accompanied by the emplacement of the late-stage granites and the regionally widespread pegmatite intrusions throughout the NNMP and across the terrane boundaries. The north-westerly trending Pofadder Shear Zone (PSZ) is closely associated with the pegmatite belt in the Northern Cape of South Africa and the southern //Kharas Region in Namibia.Pegmatite are host rocks for lithium mineralization.

The pegmatites form an extensive 16 km wide approximately 450 km long, continuous west-east trending belt from Vioolsdrift to Kenhardt in South Africa. In Namibia it is believed that, it extends as far as Ai-Ais (figure 3-3). Pegmatite intruisions spread across both Vioolsdrif and Pella Domains.

Two sets of Lithium-Caesium-Tantalum (LCT) pegmatites episodes have been documented in the NNMP as:

- the older pegmatites that have a schistose fabric, unzoned, generally uneconomic and intruded into the gneisses and schist country rocks. They were emplaced prior to regional metamorphism and deformation.
- the younger pegmatites cross-cut the older pegmatite intrusions and quartz-veins. They are coarse-grained, garnet-bearing and contain tantalite, lepidolite, spodumene, beryl and traces of copper and nickel, Johnson (2017), Mullins et al., (2022).

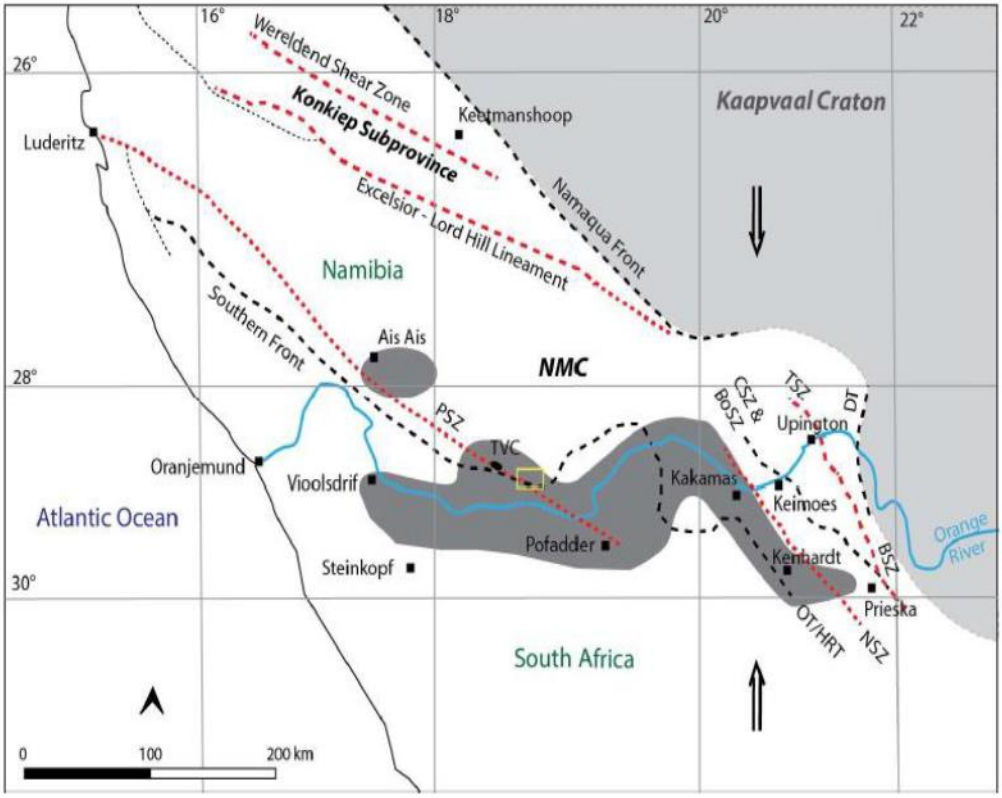

Figure 3- 3. The NW-SE trending structural features within the NNMP. Abbreviated structures; OT = Onseepkans Thrust; PSZ = Pofadder Shear-zone; HRT = Hartbees River Thrust; CSZ = Cnydas Shear-zone; BoSZ = Boven Rugzeer Shear-zone; NSZ = Neusberg Shear-zone; TSZ = Trooilapspan Shear-zone; BSZ = Brakbos Shear-zone; DT= Dabeep Thrust. Source: Hattingh, 2021

3.3 Property Geology

The bedrock geology of the EPL 7210 comprises of Nous Formation rock units, Tsams Formation and Vioolsdrift Intrusive Suite rock units. Nous Formation consists of basaltic-andesite and andesite lavas and minor volcanic breccia and tuffs. Tsams Formation is predominantly composed of volcanics of dacite, rhyolite and minor andesite. Vioolsdrift Intrusive Suite are mostly mafic intrusive subsuite(Vuurdood and Goabis), intrusive

subsuite (Goodhouse) and felsic granitic intrusive subsuite (Ramansdrift) intrusive subsuite (Indongo, 2017).

3.4 Mineralization within the tenement EPL 7210 and immediate Environs

Mineralization within the NNMP, specifically in the Tantalite Valley Mine area (EPL 5047) is hosted within the volcano-sedimentary sequence intruded by the coarse-grained gabbroic unit. The volcano-sedimentary sequence consists of the felsite, sandstone and intrusive acid dykes, diorite to quartz diorite and metagabbro and Kum Kum Intrusive Suite hosts *Ni-Cu-PGE* ore bodies.

Several concordant (younger) mineralized pegmatites and older discordant pegmatites host the white to grey massive quartz, crystalline perthite feldspar, lithium muscovite and sugary albite as major minerals. Minor minerals include spodumene, beryl, lepidolite, muscovite, apatite, fluorite, biotite, tantalite and microcline.

3.4.1 Nickel-Copper Mineral Occurrences within the tenement EPL 7210

In the Kum Kum Intrusve Suite – covering Orange River Pegmatite's EPL 5049 and EPL 7295, *Ni-Cu-PGE* deposits are hosted within the mafic-ultramafic rock units, (Hattingh 2021). The Kum Kum Intrusive Suite is in close proximity to the EPL 7210.

There are three sites of *Ni-Cu* mineral occurrences within the EPL 7210 described as veins-hosted and are hosted within andesite, dacite and rhyolite lithologies and granodiorite, leucogranite, gabbro, diorite of the Kheisian age – figure 3-4. Table 1 lists Ni-Cu mineral occurrences on the property. The EPL was not explored with modern exploration tools and mineral occurrences (***Ni-Cu***) at this point only regarded as mineral point observations. This means that these occurrences never been drill-tested to determine the extent of mineralization or deposit below surface exposures.

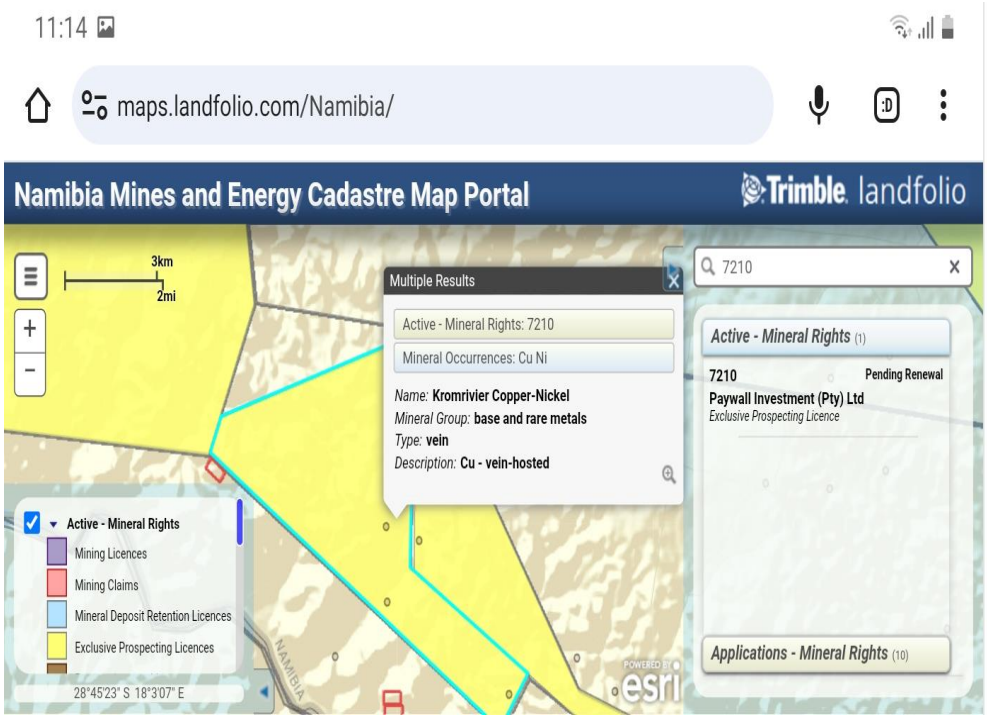

Figure 3-4. *Ni*-Cu - veins hosted mineral occurrences on the EPL 7210. Source: MME cadastre map portal, September 2023

Table 1- 1. Ni-Cu mineral occurrences on the property – EPL 7210.

Site	Mineralization	Host Rocks	Description
1	Ni-Cu	Andesite, Dacite and Rhyolite	Veins hosted
2	Ni-Cu	Andesite, Dacite and Rhyolite	Veins hosted
3	Ni-Cu	Granodiorite, Leucogranite,	Veins hosted
		Gabbro and Diorite	

4. History

Ni-Cu mineral occurrences have been delineated within the property itself by earlier mineral prospectors. Detailed and intense prior exploration ground activities were mostly concentrated on the Tantalite Valley deposit, located to the east of the EPL7210.

Rio Tinto conducted some prospecting activities within the Region. Falconbridge Exploration Limited prospected for base metals on the farm Kromerivier 359 and delineated *copper, nickel, lead and zinc* mineral occurrences, Lee (1975). Kazera Global PLc has been mining Tantalite Valley Deposits (ML77) and Orange River Pegmatite (Pty) Ltd carried out and discovered the lithium mineralization (ML23) within their tenement (EPL 5047) that hosts the Tantalite Valley Mine and *Ni-Cu-PGE* prospects in Kum Kum Intrusive Suite.

5. Proposed Exploration Programme

5.1 Surface Sampling and Geological mapping

Reconnaissance geological mapping and grab sampling would initially target to sample and map out – ground truthing all existing *Ni-Cu* mineral occurrences on the farm Kromrivier 359, hosted within andesite, dacite and rhyolite rock units and granodiorite, leucogranite, gabbro and diorite rock units. All mineral (*Ni-Cu*) showings defined on the property to date are described as vein hosted.

5.2 Ground Geophysics (ground Magnetics and IP) surveys

Ground Magnetics and Induced Polarization (IP) surveys and will be prioritized.

5.3 Airborne Geophysics and Initial drill testing surveys

Airborne Electromagnetic ("airborne EM") survey is expected to commence soon followed by drill-testing (RAB, RC and DD) campaigns.

5.4 Recommendations and Conclusions

The project area is underlain by an attractive geology for base metals and rare metals deposits. This is evidenced by the existing of *Ni-Cu* mineral occurrences on the property and presence of pegmatite intrusions.

The Orange River Pegmatite (Pty) Ltd's Kum Kum *Ni-Cu-PGE* deposits are in close proximity to the EPL7210 and hosts the Tantalite Valley Mines and lithium deposits - ML77 and ML223.

Lithium mineralized pegmatites within the NNMP are intruded into the volcano-sedimentary units, as concordant, younger pegmatites and cross-cut the older, discordant pegmatites.

Paywall Investment (Pty) Limited will kick-start with ground investigation to map out mineralized pegmatites and will conduct a systematic field ground investigations for *Ni-Cu* mineralization. This will be follow- up with invasive and detailed exploration surveys to test-drill defined targets. It, would, initially include channel sampling, RAB or RC and then diamond core drill survey to test mineralization below cover.

6. References

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