

Desktop Study on the Kromrivier Copper and Lithium Project



LITHIUM EPL 7210

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Prepared for: Elyon Commercial Services

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The author has compiled a Desktop Study (“the Report”) on the Lithium potential contained within Exclusive Prospecting Licence (EPL) 7210, which is located 35 km east of Noordoewer, as shown in Figure 1 below.



2. Introduction & Scope

The author has compiled a Desktop Study (“the Report”) on the mineral potential of the Exclusive Prospecting Licence (EPL) 7210, which is located 35 km to the east of Noordoewer. The EPL comprises of an area of 4592 hectares.

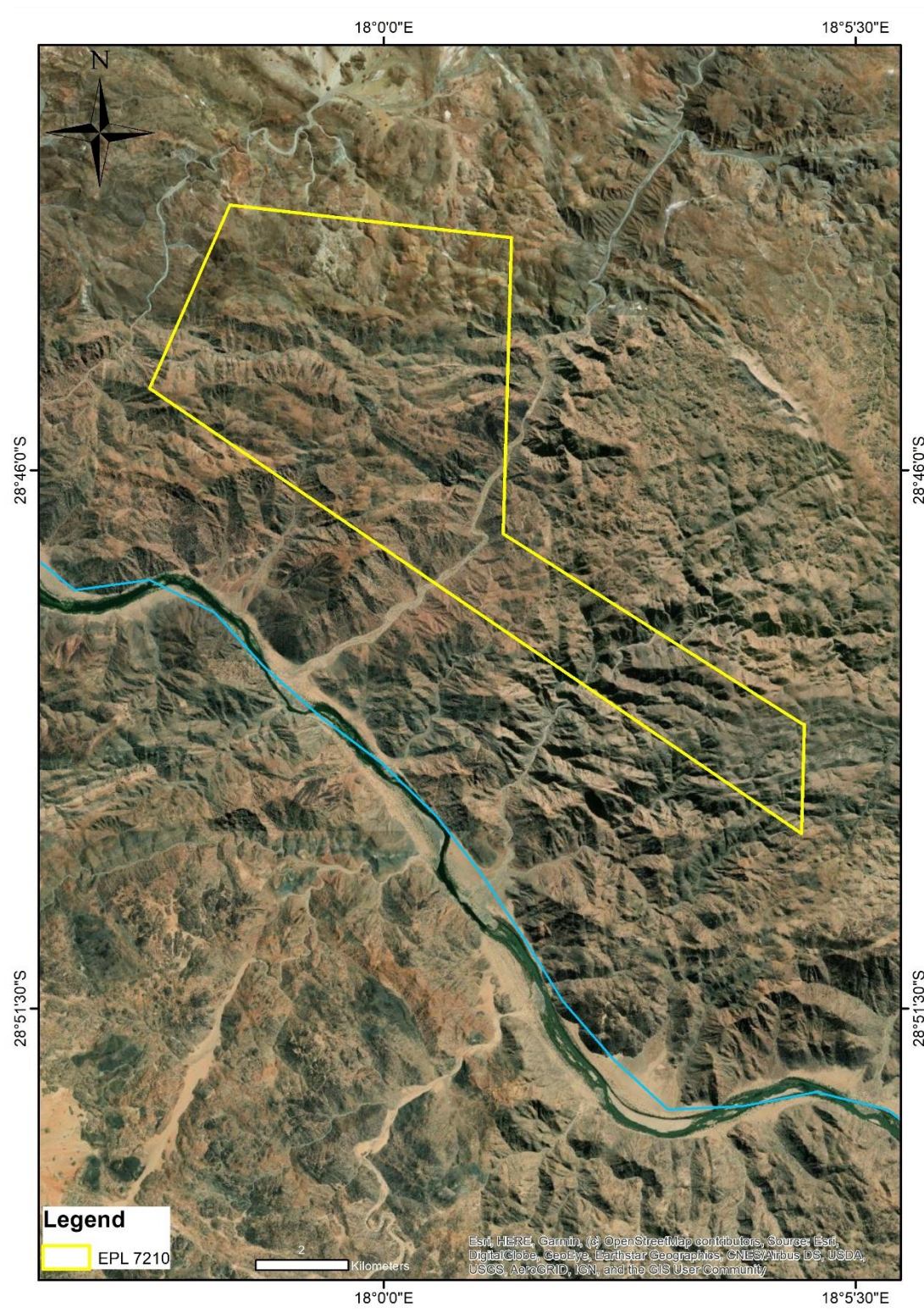


Figure 2 Google earth satellite image of the project area

In the preparation of the report, all technical and literature information available has been utilized.

3. Project Description

3.1 Location

The concession area lies 35 km to the east of Noordoewer. Access to the area is obtained via the D213 and then D208 road. A map of the area is shown below.

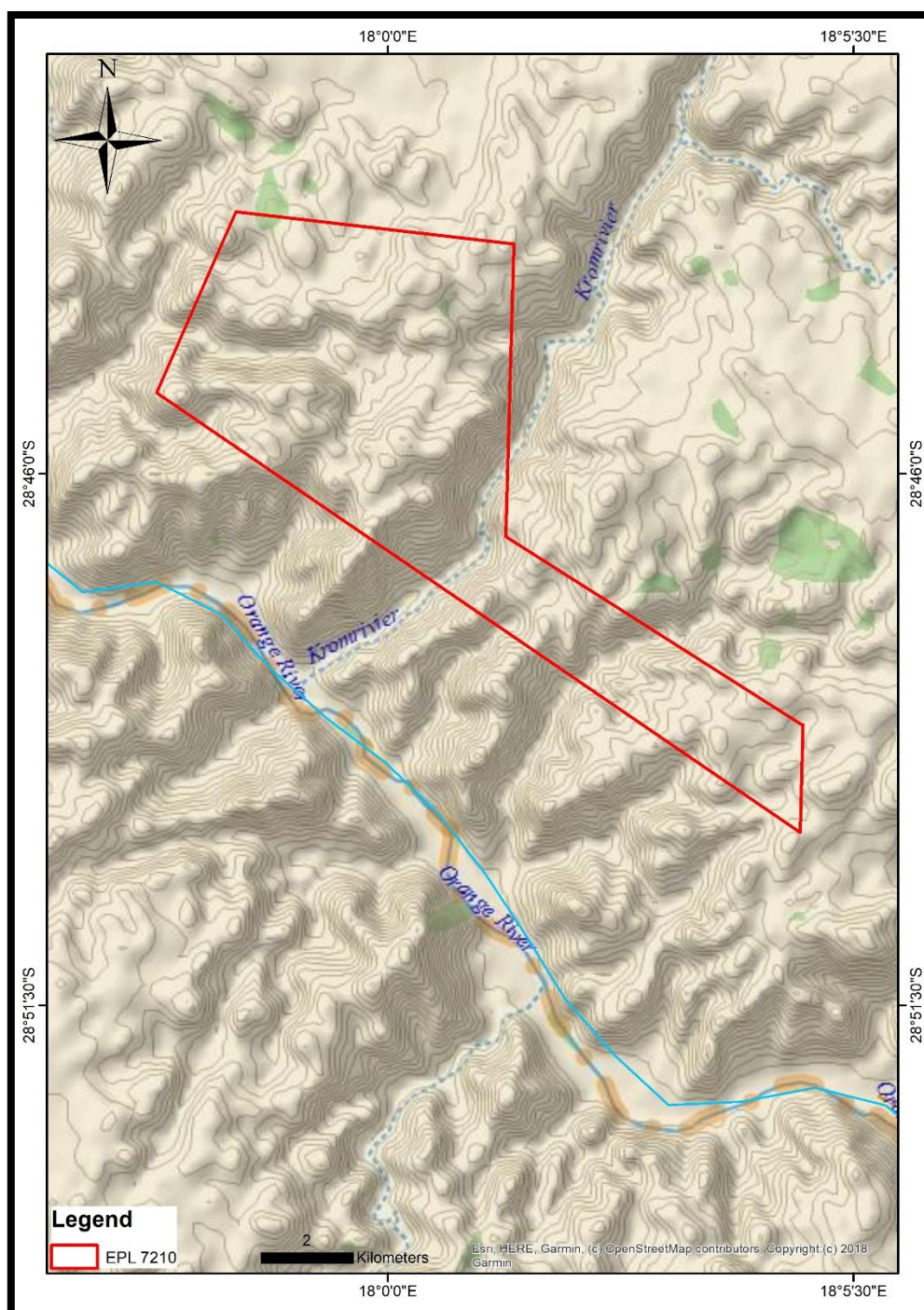


Figure 3 Map showing the location of EPL 7210

Within the area numerous minor tracks provide good access. The prospecting property is located within the Karasburg district of the Karas Region.

3.2 Climate

EPL 7210 is contained within an area which is characterized by low rainfall with extreme temperature ranges typical of an arid environment. Annual summer rainfall periods are December to March and dry winter months are June to August. Temperatures in the area vary from -5°C (in winter) to 37.9°C (in summer). The coldest months are June, July and August; the warmest months are October, November and December. The prevailing wind field is from the east and east-southeast and stronger winds are experienced during August, September and October.

3.3 Topography

The topography of the area generally consists of valleys with rocky outcrops.

3.4 Political Climate

Namibia (previously known as South West Africa (SWA)) attained its independence on 21st March 1990 and was established as a sovereign, secular, democratic, and unitary state. In accordance with the doctrine of separation of powers, the government is divided into three branches: The executive, the legislative, and the judiciary whereby each branch is responsible for a different function of the government.

Namibia has been voted by the African Spotlight Website as the second most peaceful and best-governed country in Africa, after Botswana. Namibia has a stable and mining-friendly government whereby mining presently accounts for about 20% of the Country's GDP. Mining companies are required to pay royalties of 3%, whilst company tax is based on the South African system whereby basic tax is 30% with a secondary tax component applicable which raises tax to a maximum of 37.7%.

4. Legal Aspects and Tenure

4.1 Exploration Rights

All exploration rights to the relevant farms contained in EPL 7210 reside exclusively with Elyon Commercial Services CC. The exclusive prospecting number is 14/2/1/4/2/7210. The Exclusive Prospecting Licence (EPL) 7210 was granted in February 2020 and will be valid up to February 2023, with the option of renewing for a further term, at the Minister's discretion.

Identify

Identify from: <Top-most layer>

2020_JUNE_WGS_1984_UTM_ZONE_33S_NAMIBIA_MINERAL_LICENCES selection

EPL-7210

Location: 18°0'0.931"E 28°43'50.927"S

Field	Value
FID	2556
Shape	Polygon
Code	7210
TypeGroup	Exploration
Type	Exclusive Prospecting Licence
StatusGrp	Active
Status	Active
Jurisdic	Namibia Mines MIN
DteApplied	14/06/2018
DteGranted	28/02/2020
DteExpires	27/02/2023
Parties_Ne	Elyon Commercial Services CC
AreaValue	4592.6106
AreaUnit	Hectares
Name	EPL-7210
TypeCode	EPL
DtePegged	<null>
DteRenewal	<null>
Renewal	0
MapRef	Namibia,Karas,Karasburg; V; 2817, 2818

Identified 1 feature

4.2 Farms

The exclusive prospecting licence partially covers farm Haakiesdoorn, Kromrivier, and Tsams. The title deed information is available at the Ministry of Land and Resettlement's office in Windhoek.

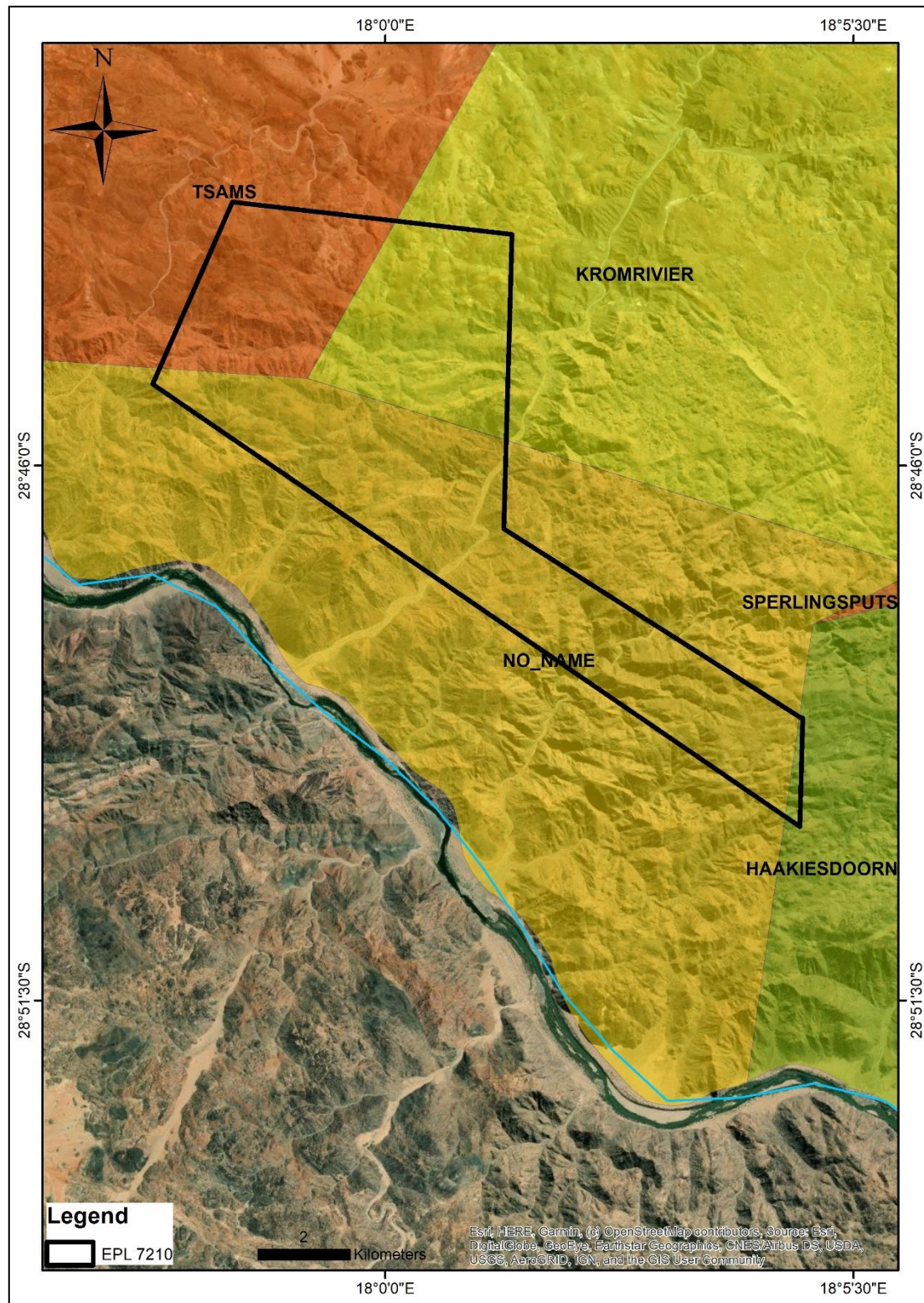


Figure 4 Map of the farms that are contained in EPL 7210

5. Geological Setting

5.1 Regional Geology

EPL 7210 is located within part of the Richtersveld geological province. The area lies within the Vioolsdrif volcanic suite of andesitic lavas, intercalated with acidic volcanics and tuffs, intruded by granites, granodiorites and adamellites dated around 1800 My. The main EPL area is underlain by the Vioolsdrif granite complex and gneisses of the Namaqua Metamorphic Complex.

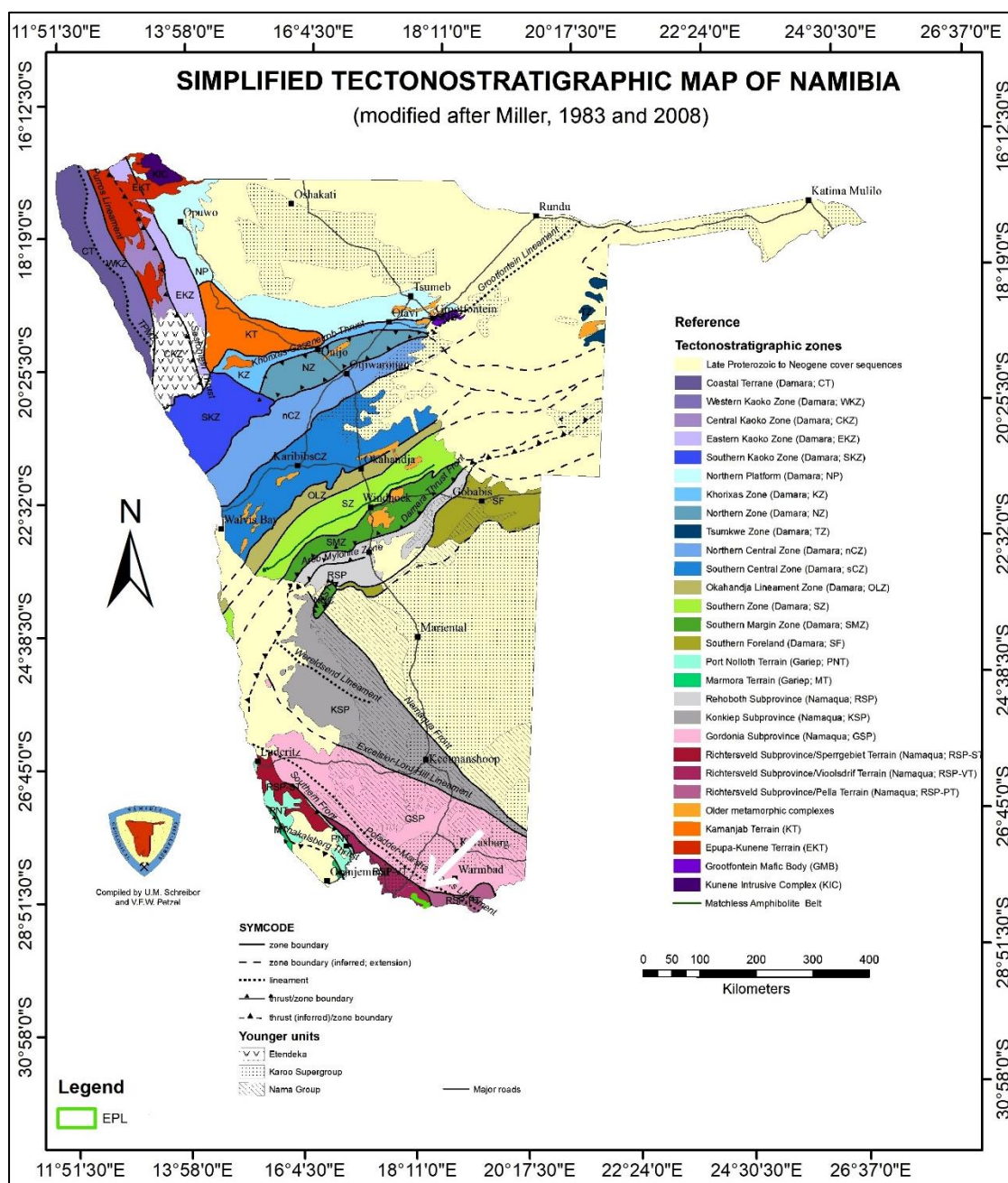


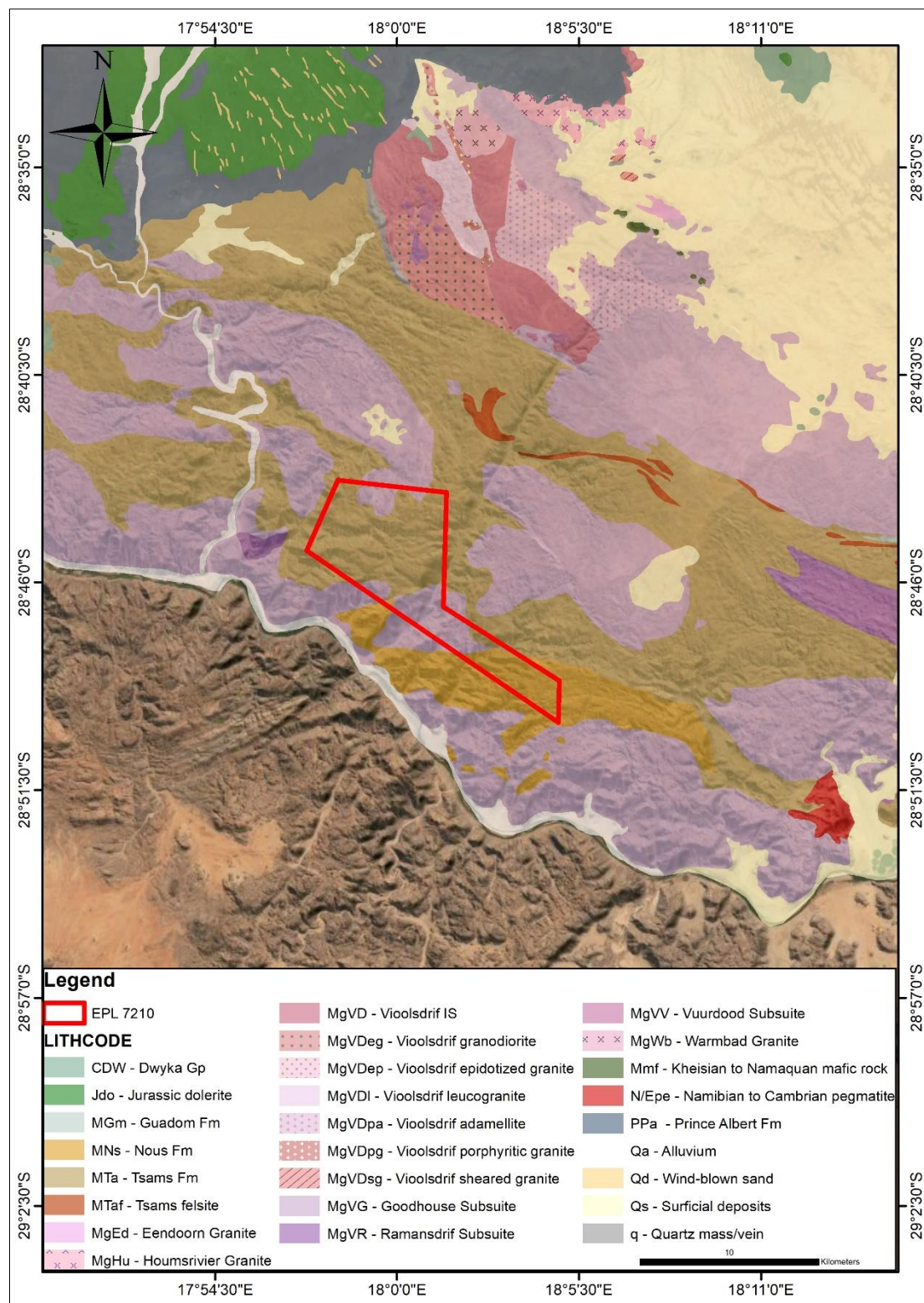
Figure 5 Simplified tectonostratigraphic map of Namibia which shows the regional setting of the EPL area. (Modified after Miller 1983 and 2008)

The major rock types are medium-grained pink feldspar gneisses with a grey weathered surface and medium to coarse-grained biotite gneisses containing minor pegmatitic veins and quartz veins. The biotite gneisses contain up to 90% biotite and have been intruded locally by medium to coarse-grained alaskitic pegmatites comprised of quartz, feldspar, and minor biotite. White alaskite pegmatites outcrop in some areas, occurring as sills and irregular intrusions, the largest of which is reported to be 800 m by 2,000 m. The igneous rocks are subdivided into the 1730-2000 Ma and 1000-1200 Ma groups, which represent the two periods of igneous activity.

6.2 Local Geology

The Vioolsdrif Suite is part of the former and, together with the volcanic rocks of the Orange River sequence, constitute the calc-alkaline Orange River igneous belt. The Vioolsdrif Suite has a large range in compositional varieties ranging from peridotite to adamellite. The Gladkop Suite intrudes both the Eenriet and Khurisberg Subgroups and constitutes the bulk of the Steinkopf Domain. It represents a suite of intrusives with compositions ranging from granodiorite to granite. Isotopic characteristics suggest a time-equivalence with the Vioolsdrif Suite, while structural and metamorphic characteristics point to a spatial separation of the two intrusive suites. Both the Vioolsdrif and Gladkop Suites, pre-date the Namaqua tectonogenesis. The Richtersveld Province is bounded to the north and south by ramp - structures, i. e. the Lower Fish River and Groothoek Thrusts. The Orange River event in the Richtersveld Province is manifested in macroscopic fold structures, penetrative axial

plane foliations, extension lineations and a greenschist grade metamorphic imprint, which all pre-date the emplacement of the Vioolsdrif Suite.



7. Previous Work

7.1 Tantalite and Lithium

The old voolesdrif scheelite workings are located in an east-west trending valley, which has a confluence with the Krom River. The main scheelite-bearing zone which has been worked is about 1,5m wide over a strike length of 100 metres (east-west). However, scheelite and lithium mineralisation has been found in a zone about 1km across by 3 km strike length. The main workings are at an elevation of about 100m above the valley floor.

The mineralisation occurs in green schist bands, of similar composition to those of Kaalbeen, but of consistent thickness and strike. These schists are interbedded with highly sheared granites (up to 10m thick) and felsic metavolcanics. Pegmatites (up to 2m thickness) intrude the sequence conformably and irregularly. The main trend of mineralised schists is east-west, but the recently discovered "reef" trends north-south. This may be an important feature which has hitherto not played a part in exploration.

In the mined-out areas, scheelite was very finely disseminated in the wall rocks, and on the dumps several thumb-nail size fragments were in evidence. In the excavated area, very good, coarse scheelite was seen, some up to 8 cm across. This mineralisation is intimately mixed with quartz. The scheelite is a powder blue to white colour indicating the lack of contaminants such as molybdenum.

The schists dips approximately 80° towards the north. It is recommended that to evaluate the deposit, surface traverses with lamp and the taking of grab samples be done, followed by diamond drilling to test for extensions in depth. It seems as if several parallel zones are mineralised, facilitating open-cast mining followed by an operation from underground.

In a bulk sample, which was processed at the Kaalbeen plant by Boart, a recovery grade of 0,5% - 0,75% scheelite was obtained from a 4-ton sample. This recovery is very good.



Figure 7 An image of one of the pegmatites found on the property

The pegmatites of the area contain tantalite and spodumene. The tantalite has a very high Ta:Nb ratio, apparently increasing its value. Tantalite is at present being worked on the property near the scheelite workings. Several stockpiles of spodumene exist on the property.

7.2 Kromrivier Copper Deposit

This deposit is situated 35 km east of Noordoewer on state land immediately south of the farm Kromrivier 359. The workings are situated on the west bank of the Kromrivier approximately 400 m upstream from its confluence with the Orange River. The terrain is overlain by metalavas of the Haib Subgroup intruded by granite and quartz syenitic variants of the Vioolsdrif Suite. The rocks are cut by northeasterly trending shear faults as well as minor tension fractures striking north.

Copper minerals are prominent in a 1-m-wide zone of irregular stringers on the northwest side of a shear zone 15 m wide, striking 500 to 700 and dipping 750 NW; it roughly parallels the contact between andesitic and rhyolitic metalavas. Although most of the stringers are oriented parallel to the shear, some cut obliquely across it.

Malachite, chrysocolla, cuprite, azurite, brochantite, chalcocite and a little bornite occur mainly in quartz-poor syenitic host rock. Copper coatings are especially prominent along joints and tension fractures filled with quartz crystals; ore blebs are also common in the host rock up to 100 m away from the shear fault. Though generally quite fresh, the granite-syenite is locally somewhat chloritised and kaolinised while the metalava is altered to hematite-rich rock on the north side of the main silicified fault zone. The structure can be traced for some 2 km northeastwards, but associated mineralisation quickly diminishes in that direction (Lee, 1975). A small tonnage of ore recovered during prospecting in 1948-1949 was delivered to the Nababeep smelter.

All samples of pyritic rhyolite tuff from the copper prospect on Kromrivier 359, 35 km east of Noordoewer, gave assay results above 0.05 g/t gold.

7.3 Lead and Zinc

The farm Kromrivier 359 is underlain by metamorphosed volcanic and sedimentary rocks of the Haib Subgroup intruded by granitoid rocks of the Vioolsdrif Suite and some basic stocks and dykes. Exploration was aimed at the location of copper deposits resembling the well-known “Haib Prospect” situated nearby. The background was about 25 ppm lead and 65 ppm zinc. In the northern portion a lead anomaly registered about 3 times background, while a zinc anomaly in the southeastern corner peaked at 340 ppm (Lee, 1975).

On State Land, south of Kromrivier, lead values of 55 and 64 ppm were found about 3 km from the boundary. A peak zinc value of 150 ppm was located 1.5 km south of the boundary to the east of the Kromrivier.

8. Proposed Exploration Program

Drilling is an accepted form of exploration used for the detailed delineation of deposits. Reverse circulation drilling is, and has been the preferred drilling method, as all the sample is always retained. Alternatively, excavation with heavy excavators could also be attempted.

A possible exploration programme is outlined below:

Phase One Exploration programme	Time frame	Expenditure
Stage 1: ➤ Literature review ➤ Presentation and promotion to investors.	3 Months	N\$ 15 000.00
Stage 2: ➤ Detailed Mapping ➤ Field Reconnaissance ➤ Detailed Geophysical Survey	6 Months	N\$ 180 000.00
Total:		N\$ 195 000.00

Phase Two Exploration programme	Time frame	Expenditure
Stage 4: ➤ Percussion Drilling ➤ Reverse Circulation and Lithium Drilling	8 Months	N\$ 1 150 000.00
Stage 5: ➤ Sample Assaying and Interpretation	3 Months	N\$ 75 000.00
Stage 6: ➤ Geological Models ➤ Resource Models ➤ Pre-Feasibility Study ➤ Feasibility Study	12 Months	N\$ 1 120 000.00
Total:		N\$ 2 345 000.00

9. Conclusion and Recommendations

To the Opinion of the author, the scheelite quality is superior and the tonnage and grade potential is by far the best. Potential exists for a high tonnage - low grade operation initially open cast, but eventually by underground stopping methods.

Considering the data evaluated it can be stated that:

- The Kromrivier Copper Deposit seems has significant potential but has not been subject to recent exploration methods.
 - Lead and Zinc occurrences have been found in the area previously.
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10. References

Lee, J. (1975). Report on Kromrivier Prospecting Grant M46/3/377, for period November 1971 to August 1975. . *Falconbridge Explorations (Pty) Ltd.*

Mortensen, E. (1975). Final report on project SWA-7 (prospecting grant M46/3/483C). *Unpubl. rep., Placer Development (South Africa).*
