NI 43-101 Technical Report on the TMC Property, Republic of Cameroon



Prepared for Technology Minerals Limited 18 Saville Row London, W1S 3PW United Kingdom

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April 30, 2021



IMPORTANT NOTICE

This report was prepared as a National Instrument 43-101 Technical Report, in accordance with Form 43-101, for Technology Minerals, by EurGeol Dr. Sandy M. Archibald, PGeo. The quality of information, conclusions, and estimates contained herein is consistent with i) information available at the time of preparation, ii) data supplied by outside sources, and iii) the assumptions, conditions, and qualifications set forth in this report. This report is intended for use by Technology Minerals Limited and is approved for filing as a Technical Report with the London Stock Exchange (LSE). The LSE can rely on this report without risk.

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Standard Units & Abbreviations

%	Percent
<	Less than
>	Greater than
٥	Degree
°C	Degrees Celsius
μm	Micrometre (micron)
a	Year (annum)
cm	Centimetre
Со	Cobalt
Cu	Copper
g	Gram
g/t	Grams per tonne
GPS	Global Positioning System
h	Hour
in	Inch(es)
k	Kilo (thousand)
kg	Kilogram
km	Kilometre
km ²	Square kilometre
kt	Thousand tonnes
m	Metre
M	Million
m ²	
Ma	Million years ago
masl	Metres above sea level
mm	Millimetre
Mn	Manganese
Mt	Million tonnes
Ni	Nickel
NI 43-101	National Instrument 43-101
P.GeoProfessio	onal Geologist (Canadian / Irish Designation)
ppm	Parts per million
pXRF	Portable X-Ray Fluorescence
QP	Qualified Person
t	Tonne (metric, 1,000 kg = 2,205 lbs)

1 SUMMARY

This report was commissioned by Technology Minerals Limited ("Technology Minerals") at 18 Saville Row, London, W1S 3PW, United Kingdom, and was prepared by EurGeol Dr. Sandy M. Archibald, P. Geo. The author is a "qualified person" who is "independent" of Compass Gold Corporation within the meaning of National Instrument 43-101 – Standards of Disclosure for Mineral Projects. As an independent geologist the author was asked to undertake a review of the available data and recommend (if warranted) further work on the five permits that comprise the Technology Minerals Cameroon ("TMC") property (the "Property"). The purpose of this report is to summarize historic work carried out on these material properties towards an acquisition and fund raising.

The TMC Property consists of five exploration permits covering an area of 2,456 km² and are situated in the East Region of southeastern Cameroon. All permits are currently under application by Technology Minerals Cameroon ("TMC") and are yet to be granted. Technology Minerals is using this report to demonstrate the property has exploration merit and funds should be raised to conduct additional exploration on the property.

Nickel laterites are known to occur in areas of intense tropical weathering of ultramafic rocks in equatorial regions. Nickel is typically dominant, but often appreciable quantities of cobalt and manganese are also present. Such is the case of Nkamouna is southeastern Cameroon, where a Measured and Indicated resource of 120.6 Mt @ 0.65% Ni, 0.23% Co and 1.35% Mn has been identified. The permits in the TMC Project are considered prospective for this style of mineralization as they occur in the same geological belt as Nkamouna, 35 km to the south.

Previous exploration on the Property has consisted only of geological mapping and geochemical sampling (grab samples, channel samples from pits and quarries, shallow soil sampling, and stream sediment sampling) that was confined to areas of good access. Heavily vegetated areas have not undergone any exploration. A preliminary remote sensing study by TMC identified plateau areas adjacent to serpentinite alteration zones. The presence of plateaus and serpentinite alteration suggest that weathered ultramafic units might be present on the Property.

Based on reviews of the limited historic exploration, and the initial work carried out by TMC, at least three permits are considered prospective for lateritic nickel-cobalt-manganese mineralization. A two-stage, contingent, work program is recommended for the Property. A work program consisting of data capture, remote sensing alteration study, and an airborne magnetic and radiometric geophysical survey are proposed for Phase One. If warranted, follow-up geological mapping, deep overburden power auger laterite geochemical sampling, and exploration air core drilling programme, will take place in Phase Two. The cost estimate for the Phase One program is £125,400 and of Phase Two is £220,100, for a total work programme cost of £344,500.

2 INTRODUCTION

2.1 Terms of Reference, Scope & Purpose of Report

In March 2021, Technology Minerals Limited ("Technology") retained Aurum Exploration Services (Canada) Limited to prepare a technical report in accordance with the requirements and standards of National Instrument 43-101, *'Standards of Disclosure for Mineral Projects'*, for the Leinster Lithium exploration project currently held by LRH Minerals Ireland Limited ("LRH"). Technology Minerals Limited is a London-based mineral exploration company focused on exploration of mineral resource projects in Ireland, Spain, Cameroon, and the USA. Technology Minerals is using this report for admission to the London Stock Exchange. Additional information about Technology, including press releases and public documents, can be viewed at the company's website www.technologyminerals.co.uk.

The technical report was successfully completed in April 2021 and is the author is responsible for the entire report.

The primary objectives of this report are to:

- consolidate and review all available past and present work
- identify risks and opportunities for the project
- make recommendations for a path forward and for further work

This report was prepared in accordance with the requirements and standards for disclosure of the stock exchanges overseen by the Canadian Securities Administrators, namely, NI 43-101, Companion Policy 43-101CP, Form 43-101F and the Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") Standards on Mineral Resource and Reserves – Definition and Guidelines.

2.2 Sources of Information & Data

The author prepared this report using information from the following sources:

- assay data obtained from the permit applicants, Technology Minerals Cameroon (TMC), through a program of field sampling and analytical laboratory processing of field samples
- academic literature from peer reviewed journals and government reports
- previously published NI 43-101 technical reports in the general area

The author has no reason to doubt the reliability of the information provided by TMC or the other sources listed.

2.3 Visit to the Property by the Qualified Person

Due to the ongoing COVID-19 pandemic it was not possible to complete a site visit.

3 RELIANCE ON OTHER EXPERTS

The evaluation of the TMC Property is based on historical technical information derived from published geological maps and technical reports from adjacent properties. Rock, soil and stream sampling and subsequent assay results are critical elements of this review. This work was performed by field geologists from Explorers 33 Consulting Group under the supervision of Tasin Godlove Bafon, MSc. The remote sensing study was performed by Dr. Neil Pendock (Dirt Exploration).

As of the date of this report, the author is not aware of any material fact or material change with respect to the subject matter of this technical report that is not presented herein, or which the omission to disclose could make this report misleading.

4 PROPERTY DESCRIPTION & LOCATION

4.1 Size and Location

The TMC Property consist of five exploration permits under application, four of which are contiguous (Atsiek, Malene, Mayos and SA exploration permits) and one isolated permit (Nkolbong permit) approximately 35 km east of the contiguous permits. The five exploration permits cover a total surface area of 2,456 km² and are situated in southeastern Cameroon (Figure 4-1). The contiguous permits and the isolated permit are located approximately 293 km and 418 km, respectively, from the capital city of Yaounde (pop. 2,765,600; 2015). Administratively, the TMC Property is situated in the Mindourou and Mbang Subdivisions of the Upper Nyong and Kadey Divisions, respectively, of the East Region of Cameroon. The Republic of Cameroon comprises a total area of 475,442 km² and is located between longitudes 8°E to 16°E and latitudes 2°N to 14°N. The country is bounded by Chad to the north, Central African Republic to the east, Equatorial Guinea, Gabon and Republic of Congo to the south, and Nigeria to the west.

Figure 4-1: Property Location



Source: Explorers 33 Consulting Group (2021)

4.2 Mineral Tenure

4.2.1 General Tenure Rights

The mining sector of Cameroon is regulated by the Mining Code, which was first adopted in 2001 (Law N° 2001/001 of 16 April 2001 to establish the Mining Code), amended in 2010 (Law N° 2010/011 of 29 July 2010 to amend and supplement certain provisions of Law No 2001/001 of 16 April 2001), with a new Mining Code adopted in 2016, which supersedes the 2001 Mining Code (Law No 2016/017 of 14 December 2016 establishing the Mining code of Cameroon. The decree for the implementation of the Mining Code in force is Decree N° 2002/648/PM of 26 March 2002 to lay down conditions for the implementation of Law No. 2001/1 of 16 April 2001 to establish the Mining Code. The decree for the implementation of the 2016 Mining Code is still in progress, which will supersede Decree N° 2002/648/PM of 26 March 2002.

The mining sector is administered by the Ministry of Mines, Industry and Technological Development (MINMIDT) through the Department of Geology and the Department of Mines. Mineral rights are awarded for reconnaissance, exploration, mining agreement and mining permits as described below (extract from 2016 Mining Code):

Reconnaissance Permit: Allows for reconnaissance or prospecting activities, granted for a period of one year renewable for a surface area not exceeding 1000 km².

Exploration Permit: Granted for an initial period of no more than three years, renewable three times for periods not exceeding two years. No more than five exploration permits can be issued to the same person. The maximum surface area at initial attribution of an exploration permit is 500 km² and during the first renewal this surface is reduced by 50%. The Mines Minister approves the work schedule and the budget proposed by the permit applicant.

Mining Agreement or Mining Convention: A partnership contract signed between the State and the holder of an exploration permit laying down the conditions for developing and mining a newly discovered mineral deposit, including mine closure and decommissioning operations. The mining agreement is signed by the Mines Minister prior to the attribution of the mining permit and is done for exploration permits where resources and reserves have been estimated and certified. The duration of the mining agreement corresponds to the duration of the mining title.

Mining Permit: Granted by decree of the President of the Republic for an initial period not exceeding twenty-years, and renewable for one or more periods not exceeding ten-years each. The granting of a mining permit automatically awards The Government of Cameroon a 10% free carry, which is non-dilutable in the event of share capital increase of the company. The Government of Cameroon may at its request (in addition to the 10% free carry) directly or through a public sector company increased its shares in the company under the terms and conditions agreed by mutual consent of the parties. The share increase may not exceed 25% and in such a case the State will be subject to the same rights and obligations as the other shareholders.

4.2.2 TMC Property Tenure Rights

The TMC property consists of five exploration permits: Atsiek, Malene, Mayos, SA, and Nkolbong; they were applied for by Technology Minerals Cameroon on the 25th of February 2021 and their granting is still pending. The permit areas are outlined in Figure 4-2. The corner points for the exploration permits were established by GIS software and corrected into cadastral format by MINMIDT using the cadastral software Flexi Cadastre (Table 4-1). The corner coordinate points have not yet been surveyed or marked on the ground and this will be done once the permits are granted as required under the Mining Law.





Permit	Node	Longitude/Easting	Latitude/Northing
	А	013° 41' 30.00" E	03° 36' 00.00" N
	В	013° 41' 30.00" E	03° 27' 30.00" N
	С	013° 39' 15.00" E	03° 27' 30.00" N
	D	013° 39' 15.00" E	03° 41' 00.00" N
	E	013° 45' 00.00" E	03° 41' 00.00" N
	F	013° 45' 00.00" E	03° 47' 00.00" N
	G	013° 51' 15.00" E	03° 47' 00.00" N
	Н	013° 51' 15.00" E	03° 41' 15.00" N
	I	013° 55' 15.00" E	03° 41' 15.00" N
ATSIEK	J	013° 55' 15.00" E	03° 38' 30.00" N
ATSIEK	К	013° 53' 30.00" E	03° 38' 30.00" N
	L	013° 53' 30.00" E	03° 35' 00.00" N
	М	013° 55' 15.00" E	03° 35' 00.00" N
	Ν	013° 55' 15.00" E	03° 33' 30.00" N
	0	013° 49' 00.00" E	03° 33' 30.00" N
	Р	013° 49' 00.00" E	03° 37' 00.00" N
	Q	013° 47' 00.00" E	03° 37' 00.00" N
	R	013° 47' 00.00" E	03° 38' 30.00" N
	S	013° 46' 15.00" E	03° 38' 30.00" N
	Т	013° 46' 15.00" E	03° 36' 00.00" N
	А	013° 16' 00.00" E	03° 46' 00.00" N
MALENE	В	013° 27' 15.00" E	03° 46' 00.00" N
WIALEINE	С	013° 27' 15.00" E	03° 33' 15.00" N
	D	013° 16' 00.00" E	03° 33' 15.00" N
MAYOS	A	013° 39' 00.00" E	03° 41' 00.00" N

Table 4-1: Property Tenure Corner Point Coordinates

Permit	Node	Longitude/Easting	Latitude/Northing
	В	013° 39' 00.00" E	03° 47' 00.00" N
	С	013° 42' 15.00" E	03° 47' 00.00" N
	D	013° 42' 15.00" E	03° 56' 15.00" N
	E	013° 44' 45.00" E	03° 56' 15.00" N
	F	013° 44' 45.00" E	03° 59' 45.00" N
	G	013° 52' 15.00" E	03° 59' 45.00" N
	Н	013° 52' 15.00" E	03° 56' 15.00" N
	I	013° 56' 15.00" E	03° 56' 15.00" N
	J	013° 56' 15.00" E	03° 59' 45.00" N
	К	014° 02' 00.00" E	03° 59' 45.00" N
	L	014° 02' 00.00" E	03° 57' 45.00" N
	М	013° 57' 45.00" E	03° 57' 45.00" N
	N	013° 57' 45.00" E	03° 54' 00.00" N
	0	013° 47' 15.00" E	03° 54' 00.00" N
	Р	013° 47' 15.00" E	03° 47' 00.00" N
	Q	013° 45' 00.00" E	03° 47' 00.00" N
	R	013° 45' 00.00" E	03° 41' 00.00" N
	А	013° 27' 15.00" E	03° 34' 45.00" N
64	В	013° 27' 15.00" E	03° 47' 00.00" N
SA	С	013° 39' 00.00" E	03° 47' 00.00" N
	D	013° 39' 00.00" E	03° 34' 45.00" N
	A	014° 12' 15.00" E	03° 37' 30.00" N
	В	014° 12' 15.00" E	03° 47' 15.00" N
INKULDUNG	С	014° 27' 00.00" E	03° 47' 15.00" N
	D	014° 27' 00.00" E	03° 37' 30.00" N

4.2.3 Obligations on the Property

Generally, holders of exploration permits are required to file semester and annual reports to MINMIDT describing the nature and results of exploration performed during each semester and year. The reporting periods are counted from the date of designation of the exploration permits. Also, the holder of an exploration permit is required to forward annual financial reports (calendar year) to the Minister of Finance through the Minister at MINMIDT. The permit entitles the holder to obtain a mining (exploitation) permit from the government of Cameroon if an economic mineral deposit is discovered on the permit.

Each property has a first year committed expenditure of 80,000,000 CFA (£106,000), a second-year expenditure of 150,000,000 CFA (£199,000), and a third year expenditure of 200,000,000 CFA (£265,000). The total expenditure for the full three years is 430,000,000 (£570,000) per licence, or £2,850,000 for the whole Property.

4.2.4 Surface Rights and Access

The holder of an exploration permit has the right to access and occupy the surface area covered by the exploration permit, and thus giving the holder of the permit the exclusive right to carry out exploration works within the permit. However, this should be done in respect of third-party rights as protected by the land, property, forestry and agricultural laws, and regulations in force.

4.2.5 Environmental Liabilities

The author is not aware of any existing environmental liabilities relating to the permits that comprise the Property. Forest reserves and parks do exist, the largest of which is the Dja Reserve lying immediately south of the town of Mindourou and approximately 15 km from the southern limit of the Malene permit, and as such does not constitute a liability.

4.2.6 Exploration Permits and Significant Risk Factors

The author is not aware of any significant factors and risk that may affect access, title, or the right or ability to perform work on the property. Logging concessions are in force in the region, some of which overlap the TMC permits. This is not considered a significant risk factor to access in the permits as mining companies in the region have operated together with forestry companies, and there is no reason why TMC exploration activities shall be hindered. The Ministry in charge of Mines as well as the Minister in charge of Forestry can mediate in case of conflicts.

No addition permits or government approvals are required to carry out the proposed work program.

5 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

5.1 Accessibility

The permits are in the East Region of Cameroon (Figure 5-1). The centroids of the Malene and SA, Atsiek and Mayos, and Nkolbong permits are 216 km, 248 km, and 313 km respectively East of Yaounde.

The Malene and SA permits can be accessed from the town of Mindourou, which is situated 293 km east from the capital city of Yaounde. The road to Mindourou is partly paved (Yaounde - Abong Mbang, i.e., national road N10), and partly unpaved (i.e., Abong Mbang – Mindourou on the P6 road). From Mindourou the permits are accessible by unpaved roads and village foot tracks. The P6 from Abong Mbang to Mindourou passes through the Malene permit from north to south.

The Atsiek, Mayos and Nkolbong permits are easily accessed from the town of Mbang, situated 418 km east of Yaounde. Access to Mbang from the capital city is by 281 km of paved road (N10) from Yaounde to Doume and then 137 km of unpaved road (Departmental Road D27) from Doume to Mbang. From Mbang, the Atsiek and Mayos permits are accessible via a 79 km unpaved road to the village of Atsiek and then village foot tracks.



Figure 5-1: Property Location and Access Routes

Source: Archibald (2021)

5.2 Climate

The TMC Property is located on the northwestern margin of the Congo River tropical zone. The climate of the region is classified as Type A Wet Equatorial climate (also known as Equatorial Guinea sub-type), characterized by distinct wet and dry seasons. The main rains fall between September and November, and the main dry season is from November to March (Figure 5-2). A short rainy season extends from March to May and a short dry season from June to September. Rain may fall throughout the year, except during the months of December and January, which traditionally are dry months. The annual rainfall may range from 1,600 mm to 2,000 mm. The annual average temperature is about 23°C. The prevailing wind is from the south and southwest, wind velocities are low.

Exploration can be conducted year-round, although during the peak wet periods of September to November, extra caution must be taken as the earth roads will be slippery and streams/river waters high.

	January	February	March	April	Мау	June	July	August	September	October	November	December
Avg. Temperature °C	26.2 °C	27.3 °C	26.6 °C	24.4 °C	23.2 °C	22.3 °C	21.7 °C	21.7 °C	21.9 °C	22.2 °C	23.5 °C	25.1 °C
Min. Temperature °C	19.5 °C	20.8 °C	21.4 °C	20.7 °C	19.9 °C	19.3 °C	18.9 °C	18.9 °C	18.9 °C	18.9 °C	19.3 °C	19.1 °C
Max. Temperature °C	32.9 °C	34 °C	32.6 °C	29.2 °C	27.4 °C	26.4 °C	25.8 °C	25.8 °C	26.1 °C	26.6 °C	28.6 °C	31.4 °C
Precipitation / Rainfall mm (in)	1 (0)	7 (0.3)	65 (2.6)	217 (8.5)	235 (9.3)	220 (8.7)	272 (10.7)	302 (11.9)	305 (12)	296 (11.7)	66 (2.6)	5 (0.2)
Humidity (%)	30%	33%	52%	76%	84%	85%	85%	86%	86%	85%	69%	41%
Rainy days (d)	0	1	6	16	20	19	20	21	20	20	6	1

F	A			and nation			
rigure 5-2:	Average tem	perature, p	recipitation,	ana rainj	an m Do	ите ру	month

Data from Climate-data.org

5.3 Local Resources

Cameroon is accessed and serviced via air, water, roadway, and a railway line running from the economic capital Douala through Yaounde to the north in Ngaoundere. Cameroon has two ports, Kribi and Douala, through which different material and equipment is shipped and then transported by road throughout the country. Most of the freight of the neighbouring landlocked countries, such as Central African Republic, Chad, and Congo, is handed through the ports of Douala and Kribi and then transported via the road network to the main distribution points in these countries.

There are nine civil airports in Cameroon with paved runways. Of these, only the Douala and Yaounde airports are international airports. Local flights are operated by the local state –owned airline, CAMAIR-CO (Cameroon Airlines Corporation).

The towns of Mindourou and Mbang are the closest towns to the permits, and both are the Subdivisional headquarters of the Mindourou and Mbang subdivisions respectively, headed by the Divisional Officer, supported by various government bodies and security agencies (Gendamerie and Police). The population of these towns are served by government district hospitals, health centres, schools, general stores, and small shops. The main industry is logging and associated sawmills. The main socio-economic activities of the population include logging by individuals, agriculture, hunting, fishing, gathering of forest products, animal husbandry and petty trading. Potable water

supply in these towns is provided by boreholes and there is no electricity supply. Individuals own generators which they use to power their businesses.

5.4 Infrastructure

There is no landline phone service, but there is mobile service provided by Orange, MTN and NEXTELL. The mobile signals are strongest in the main towns with poor reception as you move away from the towns.

5.5 Physiography

The TMC project lies on the Southern Cameroon Plateau at average elevations between 570 to 780 m above sea level. The area consists of gently rolling hills that are occasionally interrupted by elevated mesas and plateaus. The hills are generally erosional landforms, commonly terminating in entrenching river valleys.

The area is dissected by a dense dendritic pattern of small streams/rivers that drain into the Dja and Boumba Rivers, which flows southeast to join the Congo River some 600 km downstream that eventually empties into the Atlantic Ocean.

The vegetation of the area is dense equatorial forest type, which lies within the Congo Basin, and contains a very rich biodiversity. The forest has been degraded from place to place by the agricultural activities of the rural population. Rural settlements tend to lie close to the roads and tracks; hence the forest is for the most part undisturbed by agriculture.

6 HISTORY

Historic exploration in the region dates to 1981 when the United Nations Development Programme (UNDP), in cooperation with the Cameroon Ministry of Mines Minerals and Energy undertook a 5-year strategic regional geophysical and geochemical survey as well as geological mapping at different scales in Southeast Cameroon (United Nations, 1987). The objective of the project (UNDP Project CMR/005/81) was to evaluate the mineral potential of south-eastern Cameroon as well as understand the geology. In areas where important anomalies were discovered, these were followed up with more detailed exploration including ground geophysics (magnetics, gravity, and electric methods), detailed soil and stream sediment geochemistry, detailed mapping, pitting and in some cases drilling (with resource definition). Most of this work was to the south of the TMC Property.

The most significant anomalies were subject to detailed exploration such as nickel and cobalt in the Lomie area. Follow-up by drilling on one of the ultramafic massifs (Nkamouna) by GEOVIC Cameroon Limited intersected laterite, saprolite and serpentinite that contained up to 1% nickel and 0.19% cobalt. Ultramafic massifs with laterite caps were also identified northeast and east of Lomie, and these include Kongo, Mada, Rapodjombo, North and South Mang, Messea and Kongdong, which were also explored by GEOVIC, and subsequently led to a resource estimation (Volk et al., 2011).

Commercial exploration on the TMC Property has been restricted to two companies, Resource Capital Group (2007 – 2010?) and Lion Resources (2018-2020).

Resource Capital Group Cameroon Limited

The only know known work performed by Resource Capital was an airborne geophysical survey that covered parts of the SA and Atsiek exploration permits (Figure 6-1). Approximately 24,000-line km of combined magnetic (gradiometer) and radiometric survey was flown by New Resolution Geophysics, South Africa. A NI 43-101 report by Ingram (2007) stated that follow-up work consisting of the excavation of 150 pits (to an average depth of 15 m) was planned and that the company had also placed an order for diamond drilling equipment to complete a conditional 30,000 m drilling programme. It is not known if the recommended pitting or drilling programmes took place, and, if it did, it was unlikely to have be on the small areas on the TMC Property.





Source: Archibald (2021)

Lion Resources

Lion Resources held 5 permits between 2018 and 2020 (**Figure 6-1**). The exploration works completed was mainly field reconnaissance exploration, which consisted of geological mapping/sampling, pitting/sampling, and soil/stream (panned concentrate) sampling. A total of 267 samples were collected on the five exploration licences, which consisted of:

- o 150 rock (grab) samples
- o 75 soil samples
- o 18 channel samples collected from 2 hand dug pits and 1 quarry face
- o 24 stream sediment samples

The overall results of the field reconnaissance showed that the rock types outcropping in the permit areas are mica schist, gneiss, diorite, and amphibolite (mafic volcanic/intrusive rocks). All these units are covered by thick laterites, with some of them Mn-bearing, which is characteristic

of laterites in the GEOVIC permits at Nkamouna. Lion Resources concluded that the permits were prospective for Ni-Co laterite mineralization.

Cameroon Cobalt

Cameroon Cobalt (a private Cameroonian Company) held 5 permits between 2018 and 2020 (Figure 6-1). The exploration works completed was mainly field reconnaissance exploration, which consisted of geological mapping/sampling, pitting/sampling, and soil/stream (panned concentrate) sampling. A total of 337 samples were collected on the five exploration permits, which consisted of:

- o 167 rock chip samples
- o 71 soil samples
- o 41 channel samples collected from 3 hand dug pits and 4 quarry faces
- o 58 stream sediment samples

The overall results of the field reconnaissance indicated the exposed bedrock geology was in reasonable agreement with the published maps of the geological survey and noted the extensive laterite cover. Like Lion Resources, Cameroon Cobalt concluded that the permits were prospective for Ni-Co laterite mineralization.

Explorers 33 provided exploration field services to both Lion Resources and Cameroon Cobalt.

7 GEOLOGICAL SETTING & MINERALIZATION

7.1 Regional Geology and local Geology

Cameroon is underlain by Precambrian rocks, Cretaceous-Cenozoic sedimentary basins, and recent volcanic formations (Schlüter and Trauth, 2008; Figure 7-1). The Precambrian basement complex of Cameroon consists of two major litho-structural units; the Congo Craton and the Central African Fold Belt (CAFB) (Kankeu., 2018), while the sedimentary basin and recent volcanics represent the Post Pan African cover. The Congo Craton is composed of an Archean core, the Ntem Complex, and peripheral Paleoproterozoic rocks of the Nyong Complex along the northwest margin of the Ntem Complex (Van Schmus et al., 2008). The CAFB is a major collisional belt that underlies the region from the West African Craton to East Africa (Toteu et al., 2006b; Van Schmus et al., 2008), and is divided into three lithological domains namely, the Adamawa–Yadé (AYD), Yaoundé (YD), and Northwestern Cameroon (NWC) domains (Toteu et al., 2004; Van Schmus et al., 2008).



Figure 7-1: Simplified geology map of Cameroon

Source: Modified after Toteu et al. (2004). NC = Ntem Complex; NS = Nyong Series; YD = Yaounde Domain; AYD = Adamawa-Yade Domain; NWC North Western Domain; SF = Sanaga Fault; KCF = Kribi-Campo Fault; TBF = Tchollire-Banyo Fault; AF = Adamawa Fault

The geology of the area comprises Late Archean and Proterozoic metasediments and intrusive rocks. These have been metamorphosed and deformed by the Liberian and Eburnean Orogenies for the Ntem Group and by the Kibaran Orogeny for the Intermediate Series. The latest deformation event was associated with the Pan African Orogenic cycle that affected all geological units to a greater or lesser extent. Intrusive rocks are of various ages and are generally associated with the main orogenic events. The intrusive rocks of economic interest are the ultramafic (probably dunite) and mafic bodies of probable Kibaran age that are intruded into the Intermediate Series. Later deformation and alteration lead to serpentinization of the ultramafic rocks. One, but more probably two, periods of intense lateritization occurred during the Tertiary. These periods of intense tropical weathering resulted in the dissolution of nickel, cobalt, iron, and manganese from the serpentinites and redeposition into the laterite profile, where they are concentrated. The geology of the region is not well known, relative ages, intrusive and contact relationships are poorly understood due both to the deep laterite and the dense forest that blanket the region. In terms

of structure, basement reactivation was accompanied by the NE advancement of the Ntem calcoalkaline complex, with the subduction of the Congo Craton under the Adamawa Plate. The boundary is marked by a north-trending hinge zone. Movement along this hinge zone involved deep seated faulting and fracturing along which the intrusion of ultrabasic and other mafic intrusive rocks took place. The regional stratigraphy is summarised in Figure 7-12 below.



Figure 7-2: Simplified southern Mali geology map showing the location of the permits in this report

Source: Adapted from RCGC Ltd Technical Report (2007)

The Ntem Unit is composed of granulitic, calco-magnesian and charnokitic rocks containing orthopyroxene. These rocks are lain down as sedimentary rocks and were metamorphosed to gneisses and leptites to have originated from ancient sediments that were subjected to intense regional metamorphism during the Liberian and later orogenies and now form coarse- to fine-crystallized gneisses. The unit is intruded by syenites, granites, diorites, monzonites and gabbros of Pan African (Neoproterozoic) age.

The Ayina Unit is dominantly composed of fine-grained gneiss, coarse gneisses and amphibolites, subsequently intruded by granites, syenites and tonalites.

The Mbalam Series comprises of a low-grade metamorphic assemblage of iron-rich quartzites, amphibolites and a variety of schists (sericite-schist, chlorite-schist, and amphibole schists). The iron-rich quartzites contain an alternating thin layers of hematite and silica. The Mbalam Series was metamorphosed and deformed during later orogenesis (Liberian, Eburnean, Kibaran, and Pan African). These rocks are sub-vertical, folded and affected by brittle tectonics.

The Intermediate Series is also called the Yokadouma or Mbalmayo-Bengbis Series is of likely Paleoproterozoic age. The Intermediate Series is composed of pelites (metamorphosed shale) that have been subjected to migmatization and granitization during the Kibaran Orogeny (1200 Ma). The assemblage is made up of sub-horizontal schists, interbedded with quartzites. The schists are a heterogeneous group of chlorite-schists, sericite-schists to muscovite-biotite-schists, garnet-schists with quartz segregations. Near the base of this series are a sequence of felsic and mafic metavolcanics, and from an economic point of view, ultramafic units (likely intrusive), which are not representative as serpentinite bodies. The Intermediate Series underlies much of the TMC property, although ultramafic units have not yet been identified.

The Lower Dja Series is of likely Kibaran age (Mesoproterozoic) and comprises basal conglomerates and coarse-grained arkosic sandstones, overlain by red, grey, and green pelites and carbonate sediments. The Lower Dja Series are slightly folded and tilted to the north or northwest. The series is intruded by dolerite sills and contains widespread andesitic lavas.

The Tillite Complex is made up of glacial derived polymictic conglomerates. The tillites are discordant with the Lower Dja Series and represent a widespread glacial event (Snowball Earth) during the Neoproterozoic).

The Upper Dja Series is composed of a thick sequence of weakly deformed calcareous schists overlain by shales and chert. Deposition occurred in the Neoproterozoic.

7.2 Property Geology

As noted above, TMC permits overlie the Intermediate Series. The geology of the property is poorly understood owing to the scarcity of outcrops and the fact that not much exploration (no drilling) has been performed. The understanding of the geology is based on 1970 map published by the department of Mines and Geology in collaboration with BRGM (Figure 7-3) and a reconnaissance exploration campaign carried out by former holders of the permit Cameroon Cobalt Limited and Lion Resources.



Figure 7-3: Geology map of the TMC permits

Source: Department of Mines and Geology Map, 1970 (Drawn by Van den Hende, 1970)

The Malene and SA permits are predominantly underlain by meta-sedimentary rocks mainly schist and quartzites with the occurrence of some mafic units. Previous reconnaissance mapping identified similar rock types in the permits, capped by a laterite blanket.

The geology of the Atsiek and Mayos permits from the BRGM map and literature is made up of schist, quartzite, gneiss, and mafic rocks. Reconnaissance mapping has identified gneiss and schist (quartz-mica schist, chlorite schist), quartzites, meta-mafics (amphibolite) and granites. The mapped rock units correspond well with the reported BRGM geology and these rock units are capped by lateritic cover.

The underlying geology of the Nkolbong permit from BRGM data is dominantly made up of gneiss, schist, and granitic rocks. Field geologic mapping in the permit area did not identify any of the above-mentioned rock units except for a mapped diorite.

At present, the available geological information is relatively unsatisfactory and will only be improved when detailed mapping is done complemented by drilling data.

7.3 Mineralization

Bedrock mineralization has yet to be documented on the Property as only cursory exploration has been carried out. However, the TMC Property has many of the geological characteristics present with nickel-cobalt laterite mineralization noted 35-km to the south at Nkamouna mine.

The nickel-cobalt mineralization in southeast Cameroon occurs as tabular, stratiform nickel-cobalt horizons overlain by barren lateritic soil that varies in thickness from 0 to 15 m, but may attain a thickness of 60 m. The laterites are zoned and range from cuirass to ferallite, saprolite and unweathered ultramfics. The laterite profile is distinctly zoned, from the base up; ultramafics, saprolite, silcrete (may be missing), ferallite, lower ferricrete breccia, hardpan ferricrete, upper ferricrete breccia and upper laterite and the thickness of the different profiles vary. Nickel and cobalt mineralization are known to occur primarily within the ferralite, lower ferricrete breccia, and to a lesser extent, the saprolite. The lower ferricrete breccia contains concretions of the wad mineral asbolite (aggregate containing manganese and cobalt oxides) at its base. Figure 7-4 shows a typical laterite profile for nickel-cobalt mineralization in southeast Cameroon.

	que	}	
Depth	Why		Lithologies
GR 4m		UL	Upper Laterite: Dusky purplish-red, powdery clay texture, highly magnetic. it is typically barren.
UB 2m		UВ	Upper Ferricrete Breccia: Composed of dusky red sub-spherical ferruginous concretions with cores of yellow, brown, and black mottling. Contains blocks of harder ferricrete breccia in a matrix of UL, especially toward bottom, where it may constitute "Hardpan" is usually barren of Co and Ni.
LB 2m		LB	Lower Ferricrete Breccia: Reddish, with shade of black MnO. Concretionary, gradational with the overlaying breccias, may be very hard ("Hardpan" toward top). Has a matrix composed of Upper Laterite. Generally mineralized with Co, Ni, Mn.
FL 15m		LL	Lower Limonite / Ferralite: Underlies the ferricrete with sharp contact. Mottled, with varied shades of black, yellow, brown, and red. The texture is foliated. Manganese-rich and ferrous iron-rich zones are dark gray color. Upper part often mineralized with Co, Ni, Mi, with higher Ni content near base.
SI 0.5m		sı	Silcrete: Made up of platy secondary opaline and crystalline silica, which are intercalated with clay (green, black, yellow or red). The presence of this zone is often indicative of a nearby water table.
SP 3m		SP	Saprolite: Green and brownish, sticky clay, with fragments of partly weathered serpentinite. Grades into fresh serpentinite below.
SE >300m		SE	Serpentinite: Olive green to dark green, very hard, often foliated. it is the primary ultramafic source of cobalt and nickel.

Figure 7-4: Locations of identified gold occurrences in the project area

Source: Geovic Mining Corp Technical Report, 2011.

DEPOSIT TYPES 8

To date, the known nickel-cobalt deposit type in southeast Cameroon is a secondary type, mainly related to residual laterites that have formed by prolonged tropical weathering of ultramafic rocks. Large areas of mineralized laterite, each several square kilometers in extent, have been preserved on low-relief mesas or plateaus underlain by ultramafic rocks that stand above the surrounding dissected lowlands. The mineralization is normally formed by laterization, which is largely a chemical process whereby ground water and biological processes interact with surficial exposed ultramafics, resulting in the concentration of certain elements in the soil profile (e.g., Fe, Al, Co, Ni, Cr, Mn) while dissolving and removing other elements, e.g., Mg, Ca, Si (Figure 8-1), (Elias, 2002; Freyssinet et al., 2005, Marsh et el., 2013).

SCHEMATIC LATERITE PROFILE		APPROXIMATE ANALYSIS (%)					
		Ni	Co	Fe	MgO		
	RED LIMONITE	<0.8	<0.1	>50	<0.5		
	YELLOW LIMONITE	0.8 to 1.5	0.1 to 0.2	40 to 50	0.5 to 5		
	TRANSITION	1.5 to 4		25 to 40	5 to 15		
	SAPROLITE/ GARNIERITE/ SERPENTINE	1.8 to 3	0.02 to 0.1	10 to 25	15 to 35		
	FRESH ROCK	0.3	0.01	5	35 to 45		

Figure 8-1: Schematic laterite profile and metal abundances of a weathered ultramafic rock

Source: Brand et al., 1998.

The intensity of weathering is a function of time, climate, and bedrock characteristics (composition, fracturing, etc.). Sulphide minerals are typically not common in serpentinites, and did not play a significant role, if any, in the formation of the enriched cobalt-nickel profiles. This is in stark contrast to many other cobalt and nickel deposits such as in the African Copper Belt, for example Zaire and Zambia, Sudbury, Thompson, Voisey's Bay, and Raglan (Canada), Norilsk (Russia), Bou Azzer (Morocco), and others, which were formed by magmatic and/or hydrothermal processes wherein the presence of sulphide minerals is of supreme importance (Marsh et el., 2013).

The Cameroon laterites share similarities with other nickel-cobalt laterites found around the World (e.g., Western Australia, New Caledonia, Indonesia, Philippines, and Cuba). The Cameroon deposits are unusual in their low magnesium content, high cobalt to nickel ratio, coarsely aggregated asbolane (Co-rich manganese hydroxide) mineralization, abundance of maghemite (iron oxide), and occurrence of ferricrete breccias. Also significant is the concentration of most of the cobalt mineralization in the lower ferricrete breccia and upper portion of the ferralite zone. In other laterite deposits, cobalt is usually concentrated in the lower-most portion of the ferralite and upper saprolite zones.

9 **EXPLORATION**

Since applying for the permits in February 2021 Technology Minerals Cameroon performed a reconnaissance exploration on the five permit areas. This work has consisted mainly of geochemical evaluation through stream sediment sampling, shallow soil sampling, and lithogeochemical sampling of grab and channel samples. A total of 178 samples were collected during the field work (Figure 9-1). A preliminary remote sensing study was performed to identify the presence of plateaus, and a hyperspectral study to help characterize alteration associated with ultramafic rocks, that are the primary host to nickel-cobalt laterite deposits.



Figure 9-1: Locations of geochemical samples collect on the Property

Source: Archibald (2021)

9.1 Geological Verification

Limited geological verification took place over the permit areas in February 2021 by contract geologist from Explorers 33. As the field team drove through the Property, they visited roadside outcrops to check their observations against the published geological map. Generally, the geologists noted that the published geology matched reasonably well with the field observations. This suggested that the geology can be relied upon in areas of good outcrop exposure. Once the permits are granted additional geological mapping and verification will be performed in the most prospective areas.

9.2 Lithogeochemical Sampling (Grab and Channel)

A total of 24 rock (grab) and 33 channel samples taken from pits were collected during the reconnaissance sampling exercise in February 2021. The sample locations were determined based on the known geology and the availability of outcrops adjacent to unpaved roads.

Grab Samples

A total of 25 grab samples were collected during the sampling program. These consisted of 22 samples (and 1 duplicate) on the Property, and 3 samples off the property. Sample locations were chosen to sample the known lithologies identified from the published map. The locations were situated close to the roads and tracks which cut the Property. Both outcrop and rock fragments present within the lateritic soil were described and a 1 to 1.5 kg sample collected for 48-element geochemical analysis.

The nickel, cobalt, and manganese concentrations of these samples varied from 11 to 2110 ppm, 4.7 to 1560 ppm, and 65 to 150,000 ppm (15%), respectively. The samples with the highest nickel and copper and chromium were all collected on the Nkolbong permit and the metal association and high magnesium content suggest that an unmapped mafic igneous rock is present close to the sampling area.

The highest recorded manganese sample (42,000 ppm Mn / 5.44% MnO) on the Property was recorded on the Atsiek permit, along with samples elevated in nickel (1050 ppm) and cobalt (566 ppm) and were associated with Yaounde Group quartzites (Figures 9-2, 9-3, 9-4). These quartzites are also found adjacent to the ultramafic intrusions that host the Nkamouna Ni-Co mine, although there are no ultramafic units recorded from the area with the elevated elements. As noted in Section 8, economic nickel laterites typically have nickel concentrations of 5,000 to 20,000 ppm, and cobalt from 200 to 800 ppm. The sample with the highest cobalt (1,560 ppm) and manganese concentration (150,000 ppm) plots to the south of the property. The highest copper concentration (358 ppm) was recorded from the Mayos permit (Figure 9-4).



Figure 9-2: Thematic plot of nickel content from grab samples



Figure 9-3: Thematic plot of cobalt content from grab samples

Source: Archibald, 2021



Figure 9-4: Thematic plot of manganese content from grab samples

Source: Archibald, 2021



Figure 9-5: Thematic plot of copper content from grab samples

Pit Samples

A total of nine pits and quarry faces were sampled to test the vertical geochemical variation on four different rock units based on the published geology. Four locations were excavated on mafic to ultramafic rocks, four on gneiss and mica schist, and one on a granite (off permit). The depth of the pits varied from 3.2 m to 10.0 m, and 1 - 1.5 kg channel samples were collected from material on the pit walls. The metal concentrations of these samples varied from 18 to 232 ppm Ni, 2.2 to 35.9 ppm Co, and 65 to 1,020 ppm Mn. The samples with the highest nickel, cobalt, copper, and chromium were collected outside the Property, 10 km to the east, on the margin of a granite. The highest manganese concentration (1,020 ppm) was collected overlying a mapped amphibolite unit on the Mayos permit, and the highest cobalt samples recorded in the Property (14 ppm Co) were also from this same area.

No channel samples were collected on the Atsiek permit, which is considered to be the most prospective to host mineralization akin to that seen at Nkamouna.



Figure 9-6: Thematic plot of nickel content from channel samples collected in pits



Figure 9-7: Thematic plot of manganese content from channel samples collected in pits

9.3 Shallow Soil sampling

The were 76 shallow soil sample collected during the geochemistry programme which also included 3 field duplicates and 1 sample collected off permit. Sample weights typically varied from 1 to 2 kg and were collected from a depth of 50 cm. All samples were analysed using a 48-element geochemistry package at ALS (Johannesburg, RSA). Nickel concentrations ranged from 20.4 to 104 ppm (avg. 47 ppm) and cobalt from 2.7 to 54.5 (avg. 9.7 ppm). These concentrations are typical for shallow soils in tropical regions, where most metals are leached at the near surface. The distribution of the samples did not adequately test some of the most prospective part of the property due to access issues, plus it is unlikely that the 50 cm depth of the samples was sufficient to get below the highly leached surficial zone.



Figure 9-8: Thematic plot of cobalt content from shallow soil samples

9.4 Stream Sediment sampling

A total of 42 stream sediment samples were collected during the geochemical sampling programme; No samples were collected on the SA permit. Sample weights typically varied from 50 to 100 g and were collected from active streams close to the main roads and tracks utilized by the previous sampling methods. All samples were analysed using a 48-element geochemistry package at ALS (Johannesburg, RSA). The assay data were reviewed and thematic plots constructed for Ni, Co, Cu, and Cr. Stream sediment concentrations were low for nickel (5.1 to 37.6 ppm), cobalt (1.6 to 29.7 ppm), copper (5.4 to 212 ppm), and chromium (40-709 ppm). The low chromium concentrations likely suggest that the stream sediment did not sample a water course that flowed over (or eroded a mafic body).

The highest nickel concentrations, although still low, did correspond to a small mapped mafic unit in the Malene permit area while the highest cobalt values were associated with the northern part of the Atsiek permit. Cobalt anomalism was also noted at the mafic intrusion on the Mayos permit and the mapped contact between the Yaounde Group micaschist and gneiss on the Nkolbong permit.



Figure 9-9: Thematic plot of nickel content from stream sediment samples



Figure 9-10: Thematic plot of cobalt content from stream sediment samples

Source: Archibald, 2021

Overall, the geochemical programmes identified weak anomalies that should be followed up systematic, permit wide, programmes. This is especially true considering the remote sensing study performed after the work that noted addition targets on the Atsiek and SA permits.

9.5 Remote Sensing

In early April 2021, TMC commissioned DIRT Exploration to perform a remote sensing study on the Property. The aim of the work was to construct a digital terrain model (DTM) for the Property, and to produce a series of alteration maps using hyperspectral data from visible/near infrared (VNIR) / shortwave infrared (SWIR) satellite imagery.

Digital Terrain Model (DTM)

A high resolution DTM was constructed for much of the Property utilizing two ALOS-1 12.5 m Synthetic Aperture Radar (SAR) images collected on July 26, 2007, by the Japanese ALSO satellite. The DTM is important since it helps identify plateaus that are known to form in Cameroon when ultramafic rocks are weathered. However, a comparison of the geology near Nkamouna shows that quartzite units within the Yaounde Group also form plateaus when weathered, but these tend to be in contact with the ultramafic rocks.

The DTM image (Figure 9-9) shows the plateau areas are present over much of the SA permit, the southern part of the Mayos permit, and continue as smaller mesas to the east. An isolated mesa is present in the northeast corner of the Malene permit. A comparison of Figure 9-9 with Figure 9-1 indicates that much of the geochemical sampling took place away from the plateau and mesa areas, apart from the mesas in Atsiek permit (where grab samples showed enrichment in nickel and cobalt).



Figure 9-11: DEM for Property and Nkamouna mine area.

Source: Archibald, 2021 (data processing by DIRT Exploration)

Hyperspectral Study

A visible/near infrared (VNIR) / shortwave infrared (SWIR) and synthetic aperture radar (SAR) mapping study of the Lomie ultramafic complex was performed to determine if the characteristic alteration associated with the tropical weathering of ultramafic rocks was present. The key alteration products of mafic and alteration rocks are serpentine $(Mg,Fe,Ni,Al,Zn,Mn)_{2-3}$ (Si,Al,Fe)₂O₅(OH)₄, hematite (Fe₂O₃) and magnetic (Fe₃O₄).

The Nkamouna mine area is characterized by a strong serpentine abundance signature (Figure 9-10), and a much lower abundance for hematite (Figure 9-11). The abundance estimates for magnetite are corrupted by NNE noise present in the imagery. This is caused by a sensor calibration issue. Usually, the solution is to choose another image, but in this case, it is not possible due to the prevalent cloud cover for the historic images.



Figure 9-12: Serpentine alteration distribution on the Property and Nkamouna mine area

Source: Archibald, 2021 (data processing by DIRT Exploration)

The eastern part of the Atsiek permit contains the highest serpentine abundance within the Property (Figure 9-10). The serpentine high is associated with a mesa to the east of the main plateau (identified from the DTM) and trend southwards towards Nkamouna. Other serpentine alteration is seen to the SW of the plateau on the SA permit.

Hematite abundance is illustrated on Figure 9-11, and clearly define the presence of roads and streams on the Property, due to surface exposure. The Nkamouna mine area does not have a discernible hematite alteration signature. The greatest hematite abundance is present in the north of the Mayos permit.



Figure 9-13: Hematite alteration distribution on the Property and Nkamouna mine area

Overall, the remote sensing study identified areas of plateau and mesa development and confirmed the presence of serpentine alteration at the Nkamouna Mine and certain areas within the Property. The most prospective areas have not been sampled during the geochemical program and require ground follow-up to determine if Ni-Co laterites might be developed in the area.

10 DRILLING

TMC has not performed any drilling on the Property. There is no record of any drilling having previously taken place on the Property.

11 SAMPLE PREPARATION, ANALYSES & SECURITY

Three types of samples were collected by geologists from Explorer 33 on behalf of the property owners: Rock/grab samples and chip/channel (lithogeochemical) samples collected from pits, quarries, and road cuts; shallow soil samples; and stream sediment samples.

11.1 Lithogeochemical (Rock/Grab/Channel) Samples

Samples (typically 1-2 kg) were collected from outcrops or roadcuts and placed directly into clear plastic bags with a preliminary sample ID before being sealed by metal staples. If the samples were collected from hand-dug pits, roads cuts, or quarry faces, then the first procedure was to measure the section to be sampled. Samples were then collected using a hammer and chisel over (generally) 1 m intervals that also honoured boundaries of weathering, before being placed into a clear plastic bag, a preliminary sample ID added, and sealed by metal staples. The relevant sample information was recorded (location and sample type) and a sample number written on the outside of the bag in permanent marker.

The samples were taken to the Explorers 33 storage facility where they were sorted by sample type then duplicates, standards and blanks were added. All sample were bagged again, with new sample numbers added with a corresponding sample ticket inserted before being sealed by staples. All this work was performed under the supervision of at least one Explorers 33 senior geologist (Tasin Godlove Bafon or Cho Terence Ngang). At least two duplicates, two blanks and two standards were inserted in the sample stream at regular intervals (every 20 samples). The samples were taken directly to the Mississauga Mining and Exploration Cameroon (MMEC) laboratory in Yaoundé, for preparation, before being sent to the ALS assay lab in Johannesburg for geochemical analysis. MMEC claimed to have been audited and signed-off by Bureau Veritas as a geochemical preparation facility, however, when requested no proof was provided. ALS (Johannesburg) has ISO/IEC 17025:2005 Quality Management System accreditation.

At the MMEC laboratory all samples were dried, weighed, sieved to -180 μ m (80 mesh), and pulverized to 75 μ m. A 60 g fraction was then shipped to South Africa for analysis. When the samples arrived at ALS Johannesburg, they were reweighed, and a 0.25 g aliquot (from the 60 g sample received) was analyzed by four acid digestion with an ICP-MS finish (ALS lab code ME-MS61). The ME-MS61 assay method is a good assay method for a variety of elements (48 element package) with a wide range of concentrations. For nickel, the detection range is 0.2 to 10,000 ppm, cobalt is 0.1 to 10,000, and chromium is 1 to 10,000 ppm. No sample exceeded the ME-MS61 method upper detection limits, so no additional testing was required.

11.2 Soil Samples

Samples were collected at depths of 50 cm in hand-dug holes directly into plastic bags. A sample ID was written on the bag and a preliminary sample ticket added, prior to the bag being stapled closed. A similar procedure was followed to that rock samples, namely the re-bagging of samples, and their transport to the MMEC preparation lab. At the preparation laboratory all samples were dried, weighed, sieved to -180 μ m (80 mesh), and pulverized to 75 μ m, before being dispatched to ALS (Johannesburg) for assaying using the ME-MS61 method outlined above. All samples analysed did not exceed the upper limit of detection, so no additional assaying was required.

11.3 Panned Concentrate Samples

Samples were collected from material recovered from active streams and panned using a gold pan until at least 50 g of material was recovered. Samples were placed into clear plastic bags and the relevant sample information recorded (location, sample type, sample description) and a field sample number was written on the outside of each bag. Bags were sealed by metal staple. At the MMEC preparation laboratory all samples were dried, weighed, sieved to -180 μ m (80 mesh), and pulverized to 75 μ m, before being dispatched to ALS (Johannesburg) for assaying using the ME-MS61 method outlined above. No samples analysed exceeded the upper limit of detection, so no additional assaying was required.

A total of 200 samples were submitted in one batch to the preparation and assay laboratory, which included duplicates (10), blanks (10), standards (10), and 170 field samples. The two standards used were AMIS0282 (78 ppm Co, 4971 ppm Ni, 542 ppm Mn) and AMIS0282 (1,551 ppm Co). Cobalt and nickel assay results were in excellent agreement with the certified concentrations, except for one sample that failed high. The certified reference material (standards) used were sulphide-based and in future it is recommended that matrix-matched laterite samples are used, e.g., OREAS 182 – 195 oxide-based samples with typical nickel laterite concentrations.

The blanks used were 'pure' quartz supplied by the Mississauga Mining and Exploration Cameroon prep lab, and contained trace amounts of cobalt (1.7 to 3.3 ppm), nickel (7.8 to 9.7), and manganese (117-143 ppm). Generally, these concentrations were higher than some of the stream sediments for cobalt and nickel, whereas they were sometimes higher for the rock and channel samples. In future it is recommended that powdered certified blanks are used during analyses.

Duplicate samples showed excellent agreement the original sample, typically less than 2% difference for cobalt, nickel and manganese, and most of the other elements analysed.

Overall, the author is satisfied with the sample collection method, security, preparation, and analysis and of the field samples.

12 DATA VERIFICATION

Due to the ongoing COVID-19 pandemic the author was unable to visit the Property to verify the geology of the area or to observe the field relationship of the mineralization. The author held technical discussions with TMC's exploration contractor (Explorers 33) including Tasin Godlove Bafon, MSc, and Gilles Ngoran, MSc.

The author scrutinized the exploration geochemical data and was satisfied that all the information presented to him was true and accurate, and that samples collected by Explorers 33 on behalf of TMC followed industry best practices.

13 MINERAL PROCESSING & METALLURGICAL TESTING

This is an early-stage exploration project and to date no metallurgical testing has been undertaken.

14 MINERAL RESOURCE ESTIMATES

This section is not applicable at this time.

15 ADJACENT PROPERTIES

The TMC Property is located 35 km to the north of the Nkamouna and Mada cobalt-nickelmanganese project in the Haut Nyong Division in the East Province of Cameroon (Figure 15-1). The mineralization was formed by tropical weathering of serpentinite rocks. The deposits are found in large areas of mineralized laterite positioned on low-relief mesas or plateaus underlain by ultramafic rocks.

The lateritic weathering profile averages about 20 m-thick, while the mineralized laterite forms lenses that are generally more than 10 m thick (Lambiv Dzemua et al., 2013). The lenses are located parallel to the rolling topography of the plateau and are unusually enriched in Co and Mn but are Ni poor (Yongue-Fouateu et al., 2006). Nkamouna and Mada are estimated to contain 59.8 million tonnes (Mt) grading at 0.24% of cobalt, 1.37% of manganese and 0.68% of nickel in the Measured category and 60.8 Mt @ 0.22% cobalt, 1.32% manganese, 0.62% nickel in the Indicated category (Volk et al., 2011). Currently the resource is not being mined, and the mining rights are currently held by the Nkamouyna Mining Company Pty Ltd, which is a joint venture between Lionsgate Group (UK) and Mineral Intelligence Mining and Exploration Group (Australia). The company was formally established at the beginning of 2019 following a period of collaboration during 2018.



Figure 15-1: Geology map of the Nkamouna area showing the presence of several serpentinite massifs

Source: Lambiv Dzemua and Gleeson, 2012.

Cautionary statement: Investors are cautioned that the author has been unable to verify the information regarding adjacent properties disclosed above. Such information is not necessarily indicative of the mineralization on the TMC Property that is the subject of this report and has been provided for illustration purposes only. Currently, there is insufficient public information to verify the information.

16 OTHER RELEVANT DATA & INFORMATION

There is no other relevant information with respect to the Property as of the effective date of this report.

17 INTERPRETATIONS & CONCLUSIONS

The TMC Property has undergone only cursory exploration by previous permit holders, due in part to the lack of access caused by the presence of dense forest. The geology is poorly exposed, and generally conforms to the maps published by the geological survey. Reconnaissance sampling by TMC has shown sporadic geochemical anomalism in certain areas. No airborne geophysical surveys have been performed over the primary remote sensing or geochemical target areas, which would help identify the ultramafic rocks, which are critical in the development of lateritic nickel-cobalt mineralization.

The permits comprising the TMC Property show features that are considered important to the exploration for nickel-cobalt laterites, including:

- Presence of ultramafic rocks (south of Property)
- An area with tropical weathering (laterite development)
- Presence of plateaus and mesas that indicate weather ultramafic rocks (on Property)
- Geochemical anomalism in nickel, cobalt, and manganese

The TMC Property is an early-stage exploration project ("greenfield") and the significant risk for this project is the same as all other early-stage exploration properties in that there may be no economic mineral resource. As of the effective date of this report the author is not aware of any other significant risks that could affect, access, mineral title, ability to obtain permits, ability to undertake exploration, or the general economic viability of the property.

18 RECOMMENDATIONS

Most of the Property remains to be fully investigated due to the extremely limited amount of exploration performed by previous licensees, mainly due to the extensive vegetation obscuring the bedrock geology. Several target areas have been identified based on a preliminary remote sensing study and weak geochemical anomalism.

It is recommended that exploration of the TMC Property should include the following two phases of activities, if warranted, with the associated costs listed in **Table 18-1**.

Phase 1

- Desktop study of existing geology, geochemistry, and geophysics
- Additional remote sensing structure studies, consisting of structural and hyperspectral analysis using new (cloud-free) satellite images
- Airborne magnetic and radiometric survey

The expected total cost for Phase one is £124,400.

Phase 2

- Geological mapping and sampling
- Laterite power auger lithogeochemistry program to cover most of the prospective targets on each permit identified from the satellite hyperspectral and airborne magnetic surveys
- Limited air core drilling of the best targets (1,000 m)

Table 18-1: Summary of Proposed Expenditure

Phase 1							
Work Programme	Cost (€)	Cost (£)					
Project management and technical staff	20,000	17,400					
Satellite images	20,000	17,400					
Remote sensing study	15,000	13,050					
Airborne geophysical survey (3,000 lkm, mag/radiometrics)	75,000	65,250					
Subtotal	130,000	113,100					
Contingency 10%	13,000	11,310					
Total Phase 1	€143,000	£124,410					

Phase 2 (if warranted)		
Work Programme	Cost (€)	Cost (£)
Project management	30,000	26,100
Project technical staff	40,000	34,800
Geochemical Sampling (power auger)	50,000	43,500
Geological mapping	10,000	8,700
AC Drilling of best anomalies (1000 m / assaying)	100,000	87,000
Subtotal	230,000	200,100
Contingency 10%	23,000	20,010
Total Phase 2	€253,000	£220,110

Total (Phase 1 & 2) €396,000 £344,520

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Certificate of Qualified Person

I, Sandy M. Archibald, P. Geo., am a consulting geologist at Aurum Exploration Services (Canada) Limited, Durham Corporate Centre, 105 Consumers Drive, Whitby, Ontario, Canada, as an author of this report entitled "NI 43-101 Technical Report on the TMC Property, Republic of Cameroon" dated April 30, 2021 prepared for Technology Minerals Limited (the "Issuer"), do hereby certify that:

1. I am a Principal Consultant Geologist with Aurum Exploration Services (Canada) Limited.

2. I graduated with a B.Sc. (Hons) degree in Geology from University of Glasgow in 1992, was awarded an M.Sc. degree in Geology from Memorial University of Newfoundland in 1995, and a Ph.D. in Economic Geology from McGill University, Montreal, Canada in 2002.

3. This certificate applies to the technical report entitled "NI 43-101 Technical Report on the TMC Property, Republic of Cameroon" dated April 30, 2021 ("Technical Report") prepared for the Issuer.

4. I have been employed in my profession by Aurum Exploration Services since completing my final postgraduate degree in 2002. My relevant experience includes designing and implementing mineral exploration programs for a variety of commodities and deposit types, including mafic and ultramafic-hosted mineralization (UK, Sweden, Papua New Guinea, Mauritania, and Canada).

5. I am a member of the European Federation of Geologists (Title No. 873), I am a Professional Geologist (Title No. 193) associated with the Institute of Geologists of Ireland, and a Professional Geologist (Title No. 2860) associated with Professional Geoscientists Ontario. I am also a Fellow of the Society of Economic Geologists, and a Member of the Society for Geology Applied to Mineral Deposits.

6. I have read the definitions of "Qualified Person" set out in in National Instrument 43-101 – Standards of Disclosure for Mineral Projects ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfil the requirements to be a "Qualified Person" for the purposes of NI 43-101.

7. Due to travel restrictions related to COVID-19, I have been unable to visit the Property.

8. I am taking responsibility for all sections of the Technical Report.

9. I am independent of the Issuer applying all the tests in Section 1.5 of NI 43-101.

10. I am independent of the Vendor and the property that is the subject of the Technical Report.

11. I have had no prior involvement with the property that is the subject of the Technical Report.

12. I have read NI 43-101 and NI 43-101F1 and the Technical Report has been prepared in compliance with that instrument and form.

13. As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

"Signed Sandy M. Archibald"

EurGeol Dr. Sandy M. Archibald, P.Geo.

DATED this 30 day of April, 2021

